

The impact of aid on maternal and reproductive health

A systematic review to evaluate the effect of aid on the outcomes of Millennium Development Goal 5



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List of abbreviations

ANC	Ante-natal Care
ASRH	Adolescent Sexual and Reproductive Health
Ausaid	Australian Government's Overseas Development Aid Programme
AYA	African Youth Alliance
BCC	Behaviour Change Communication
BMI	Bono Materno Infantil
BMJF	Bono Mujer Jefe de Familia
CARE	Cooperative for Assistance and Relief Anywhere
CAS	Country Assistance Strategy
CI	Confidence Interval
CIDA	Canadian International Development Agency
CmSS	Community Support Systems
CPE	Country Programme Evaluation
CPR	Contraceptive Prevalence Rate
DFID	Department for International Development
DHMT	District Health Management Team
DSI	Dinajpur Safe Mother Initiative
EAP	Equity and Access Programme
EmOC	Emergency Obstetric Care
FCI	Family Care International
FHP	Family Health Project
FP	Family Planning
FPHP	Fourth Population and Health Project
GFATM	Global Fund for AIDS, TB and Malaria
GHI	Global Health Initiatives
GoB	Government of Bangladesh
GTZ	German Technical Cooperation Program
HAART	Highly Active Antiretroviral Therapy
HAI	Health Alliance International
HIV	Human Immunodeficiency Virus
HPP	Health and Population Project
HSSP	Health Sector Support Project
IDA	International Development Association
IEC	Information Education Communication
IEG	Independent Evaluation Group
IEGWB	Independent Evaluation Group of the World Bank
IP	Implementing Partner
IUD	Intrauterine Device
JICA	Japan International Cooperation Agency
JOICFP	Japanese Organization for International Cooperation in Family Planning
JSI	John Snow International
KAP	Knowledge Attitudes Practice
KPC	Knowledge Practice Coverage
LDP	Leadership Development Programme
LIP	Low-Intensity Partnership
MCDI	Medical Care Development International
MCH	Maternal Child Health
MDG	Millennium Development Goal

MOFCOM	Chinese Ministry of Trade and Commerce
MoH	Ministry of Health
MOHFW	Ministry of Health and Family Welfare
MMR	Maternal Mortality Ratio
NGO	Non-Governmental Organisation
NMMS	National Maternal Mortality Survey
ODA	Official Development Assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Cooperation and Development
PAHO	Pan American Health Organisation
PAMI	Programme de Alimentacion Materno Infantil
PATH	Program for Appropriate Technology in Health
PHC	Primary Health Centre
POPTECH	Population Technical Assistance Project
PPAR	Project Performance Assessment Report
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSA	Public Service Agreement
R.s	Rupees
RCTs	Randomized control trials
SBAs	Skilled Birth Assistants
SCI	Skilled Care Initiative
SD	Standard Deviation
SMP	Safe Motherhood Project/Programme
SPSS	Statistical Package for the Social Sciences
SRHC	Sexual Reproductive Health Care
SSMP	Support to Safe Motherhood Programme
STI	Sexually Transmitted Infection
SWAp	Sector-wide approach
TBAs	Traditional Birth Assistants
TPCSP	Toliara Province Child Survival Project
UN	United Nations
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organisation
YFS	Youth-Friendly Services

Abstract

Background

The Millennium Development Goal 5 (MDG 5) aims to improve maternal and reproductive health outcomes by: a) reducing the maternal mortality ratio by 75%; and b) achieving universal access to reproductive healthcare, by 2015. Current estimates suggest that only 23 countries out of 181 are likely to reduce maternal mortality by 75%. The adoption of the Paris Declaration on Aid Effectiveness in 2005 represented a global agenda to improve aid management and delivery, partly in order to address the slow progress towards the MDGs. In 2008, the Principles set out in the Paris Declaration to guide changes in international aid were re-affirmed in the Accra Agenda for Action.

This review assesses available evidence of how aid delivered under the Principles adopted in the Paris Declaration is impacting upon development outcomes, focusing specifically on maternal and reproductive health (MDG 5). The review question is:

What is the evidence of the impact on MDG 5 outcomes of delivering aid in line with Paris and Accra aid effectiveness principles? How does this compare to the evidence of the impact of aid in general on MDG 5 outcomes?

Methods and Results

The review involved a comprehensive search of the literature to identify studies that met specific criteria. The studies had to address maternal and reproductive health in developing countries, had to concern activities funded by international aid, and had to provide evidence of the impact of the aid on maternal and reproductive health. By using broad criteria on the MDG 5 indicators and broad definitions of aid we made the review as inclusive as possible. An initial yield of 209 reports was screened using clearly defined inclusion and exclusion criteria to produce a total of 30 causal and correlation studies for synthesis and analysis.

The review identified discernible gaps in the evidence base about the impact of aid on MDG 5, which are of concern if these targets are to be met by 2015. The studies suggest that aid-funded health care interventions, whether delivered using the Paris Principles or not, might be associated with better health outcomes. However, these findings should be interpreted with caution due to methodological limitations associated with the study designs. The data do not allow for a meaningful comparison of outcomes between aid delivered according to the Paris Principles and aid delivered outside this framework.

Conclusions and Recommendations

On systematic reviews and research methodology:

- There was considerable variation in the design and objectives of the studies included. Impact evaluation literature asserts that studies based on experimental design (e.g. randomised control trials) present the most plausible evidence of impact. A more flexible approach to evaluating the impact of aid is required in order to capture contextual factors affecting how aid works.

On evaluating on aid effectiveness:

- Future primary studies seeking to explore the impact of aid on outcomes in specific sectors need to provide full information about the aid intervention. Likewise studies on aid effectiveness and aid modalities need to go further in

providing robust data for evaluating outcomes. Ongoing work in advance of the next High Level Forum on aid effectiveness at the end of 2011 might begin to fill this gap.

On interventions in maternal and reproductive health:

- Before claims about cause and effect can be made, we need robust baseline data to couple with later data. We are also concerned that there is too great an emphasis on healthcare interventions, with inadequate attention to social, political and economic factors, including gender politics and class, affecting maternal and reproductive health.

Executive Summary

Background

This review is concerned with two key aspects of international development debates: maternal health and aid effectiveness.

Maternal health has increasingly emerged as a core priority for several of the world's largest donors, with both the UK Department for International Development (DFID) and the United States Agency for International Development (USAID) leading the bilateral effort, and the Global Fund for AIDS, Tuberculosis and Malaria (GFATM) and the World Bank dominating in terms of multilateral funding (Greco et al. 2008). Millennium Development Goal 5 (MDG 5) aims to improve maternal and reproductive health outcomes by: a) reducing the maternal mortality ratio by 75%; and b) achieving universal access to reproductive healthcare, by 2015. Maternal health was re-affirmed as a primary commitment at the UN Summit in New York in September 2010, where 40 billion US dollars was pledged for a Global Strategy for Women's and Children's Health. It is also a field where large philanthropic organisations are playing a growing role. In conjunction, more research is being conducted in this field. Despite this sustained and renewed interest, current estimates suggest that only 23 (out of a surveyed 181) countries are on track to achieve a reduction in maternal mortality by 75% (Hogan et al. 2010) by 2015.

The adoption of the Millennium Development Goals came at a time when new approaches to aid were being promoted. In 2005, international institutions, donor agencies and recipient governments adopted the Paris Declaration on Aid Effectiveness which set out the Principles of ownership, alignment, harmonisation, managing for results and mutual accountability. In 2008, these Principles were re-affirmed in the Accra Agenda for Action. New aid modalities have also been adopted, including general and sector budget support. The question of whether this new agenda has had a tangible impact on development outcomes is becoming increasingly salient. This review feeds into ongoing evaluation work of the impact of the Paris Declaration on development results and outcomes. It explores the existing evidence of the impact of aid on maternal health as well as the gaps in our knowledge.

Objectives

This review assesses available evidence of how aid delivered under the Paris Principles is impacting upon development outcomes, focusing specifically on maternal and reproductive health (MDG 5). The review question addressed is:

What is the evidence of the impact on MDG 5 outcomes of delivering aid in line with Paris and Accra aid effectiveness principles? How does this compare to the evidence of the impact of aid in general on MDG 5 outcomes?

The specific objectives of this review are:

- To review systematically all available evidence about the impact of different types of aid upon MDG 5 indicators;
- To compare the effects on MDG 5 outcomes of aid delivered under the Paris Principles and aid delivered outside this framework;
- To produce a synthesis of the evidence;
- To appraise the quality of this evidence;

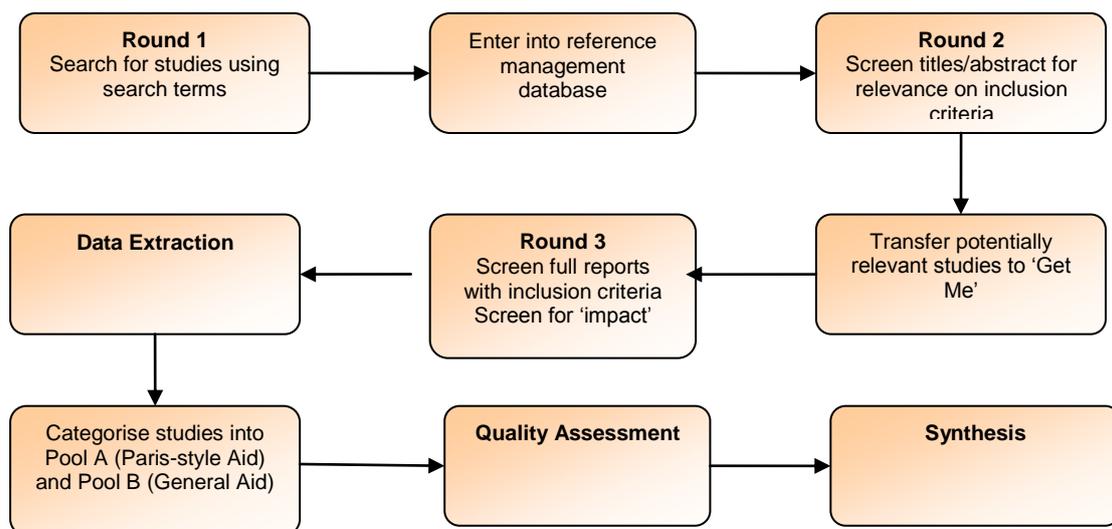
- To identify gaps in the current evidence-base and
- To comment on the implications and scope for future research in this area.

Methods

The review involved a broad search of the literature on aid interventions and maternal health outcomes. By using broad criteria on the MDG 5 indicators and broad definitions of aid we made the review as inclusive as possible. Only studies meeting pre-defined criteria were included in the review. These were:

- **Participants:** Studies had to refer to developing countries or developing regions of the world.
- **Interventions:** External financing had to be reported. This could be aid delivered under the Paris Principles, aid in general, or studies making a direct comparison between types of aid.
- **Outcomes:** Studies had to concern MDG 5, MDG 5 indicators, or MDG 5 outcomes. Note that this review is concerned with the ultimate health outcomes rather than the immediate or intermediate outputs from aid interventions. The associations between aid interventions and outputs are arguably easier to discern than between interventions and longer-term outcomes which are affected by myriad externalities.

The methods employed a round of systematic searching for potentially eligible studies and two rounds of screening to identify studies that met the above criteria, and especially demonstrated impact, i.e. provided evidence of the impact of the aid on maternal and reproductive health. Eligible studies were categorised into Pool A (aid delivered according to the Paris Principles or ‘Paris-style aid’) and Pool B (general aid). The quality of the study designs and findings in relation to aid were checked using a quality assessment tool designed by the review team. Quality assurance checks were undertaken throughout to ensure that the review was systematic and replicable. The flow diagram below illustrates the major steps in the review.



Results: studies identified

An initial yield of 209 reports was screened using clearly defined inclusion and exclusion criteria to produce a total of 30 studies for synthesis and analysis. The studies covered 27 countries and interventions from bilateral donors, multilateral donors and non-governmental organisations.

Ten of the thirty studies concerned Paris-style aid. Five of these detailed interventions delivered in ways which closely adhered to the Paris Principles, e.g. concerning sector-wide approaches and harmonisation. The others adhered to fewer of the Principles but demonstrated considerable alignment or recipient ownership.

We found no existing systematic review on this topic. We also found no studies which answered the review question in its entirety, i.e. no studies compared the impact on the MDG 5 indicators of aid delivered using the principles set out in the Paris Declaration on Aid Effectiveness with aid delivered outside this framework. The study types and objectives were wide-ranging, and most were not designed to evaluate the impact of different ways of delivering aid. They concerned few developing countries and a small number of aid donors. Most of the studies predated the adoption of the Paris Declaration and many did not engage directly with the Principles. The studies which captured most clearly the Paris Principles were four which evaluated sector-wide approaches in health, which covered a range of aid modalities including sector budget support and, indirectly, general budget support.

The review identified discernible gaps in the evidence. We found only one study which provided data on the impact of aid on MDG 5.4 (adolescence birth rate) and only two studies on MDG 5.6 (unmet need for family planning).

Results: synthesis of findings

The studies suggest that aid interventions, whether delivered using the Paris Principles or not, might be associated with some positive changes in the target areas of intervention as demonstrated by changes in the outcome data. However, this conclusion should be interpreted with caution as the claims are of association rather than causality, data are not comparable across the studies which cover different countries and time periods, and reporting on confounding factors and alternative explanations is generally weak. Therefore we cannot be confident that changes are happening because of the manner in which aid is delivered.

The data do not allow for a meaningful comparison between aid delivered according to the Paris Principles and aid delivered outside this framework. This points to a need for more targeted primary research to answer questions such as that posed in this review. This also highlights that while policy moves quickly, robust research often takes a long time to produce (most studies available at the time of this review are based on data which predate the Paris Declaration). Furthermore, we should anticipate a considerable time-lag between the adoption of new approaches to aid delivery and significant changes at the level of outcomes.

Conclusions and Recommendations

On systematic reviews and research methodology:

- The complexity of the review question raised concerns that a scoping review might have been more appropriate than a systematic review in a

first phase. The included studies had widely differing objectives and designs, and the narrow focus on data on outcomes failed to capture broader socio-political, economic and gender issues which affect how aid works in this field. Some systematic review methods, such as meta-analysis, do not appear conducive to this type of question, and we would advocate more innovative approaches to evaluating impact within systematic reviews, including the use of qualitative research.

- Impact evaluation literature asserts that studies based on experimental design present the most plausible evidence of impact. Mounting primary studies of this type in the field of aid would pose great challenges, especially in controlling for all the contextual factors which affect how aid functions. Theory-based evaluations and outcome-mapping would be more appropriate.
- Evaluations of international aid in health systems could usefully exploit the methods developed by researchers of complex health interventions to overcome some of the challenges inherent in tracking aid flows within recipient nations and their effect on MDG 5.

On evaluating on aid effectiveness:

- This review highlights gaps that should be filled with primary studies bringing together aid effectiveness and health outcomes research. A more balanced approach for evaluating development outcomes is required that captures the whole chain. We observe that the aid effectiveness literature focuses too much on the aid and policy side; and much of the literature on health focuses too much on providing and analysing information on health alone.
- To do this, studies on health outcomes (or outcomes in other sectors) need to provide full information about the aid intervention as well as outcome data, e.g. how much funding, how it flows, how it is managed, clear information on the relationship between external and local actors, and information on other donors or aid-funded activities in the sector. This information was sparse in many of the studies explored in this review, making it impossible to ascertain depth of adherence to the Principles. The studies being prepared in advance of the next High Level Forum might begin to plug this gap, but they would also need to be very robust with regard to health data.
- The Paris Principles are indicative of a more hands-off approach to aid, placing greater responsibility in the hands of local partners and focusing on enhancing the environment in which aid is used rather than achieving tangible objectives with aid inputs. It is therefore contradictory to try and attribute results to aid inputs as the nature of interventions through government systems, harmonised with other donors, etc. dilutes the possibility of attribution of impact to the original aid input. Such limitations are recognised in the literature evaluating aid effectiveness, and the results of the ongoing phase 2 evaluation of the Paris Declaration should further our understanding of these limitations and possible ways to overcome them.
- We would recommend using aid modalities or management systems rather than the Paris Principles in evaluating aid interventions. The Principles themselves are too nebulous and are too open to different interpretations.
- We would recommend that future studies of general budget support, and particularly sector budget support, need to go further than they currently

do. More studies on these modalities are required that provide data through the whole causal chain from input to outputs to outcomes. While it is extremely important to recognise the difficulties in making claims about particular aid interventions and outcomes, especially budget support, a larger pool of such studies might provide us with greater confidence in interpreting results.

- This review provides some evidence of impact of aid interventions on maternal health. The analysis could be extended by eliciting more information from the studies reviewed here about how interventions are deemed to have had an impact, or about their outputs or immediate outcomes.

On interventions in maternal and reproductive health:

- Before claims about cause and effect can be made, we need robust baseline data to couple with later data. Many of the studies had an inadequate statistical base, often without good time series data, too short a time-frame to estimate changes when any impact is likely to have a longer lead time, and a lack of attention to context. Additionally, several of the studies were based on data around institutions, and changes at that level cannot be judged unless there are data on what is going on outwith those institutions. An evaluation well beyond the project/programme conclusion should be factored into intervention design if outcomes are to be properly assessed.
- We are concerned that there is too great an emphasis on healthcare interventions. A focus on gender politics might have a greater impact. For example, we need to ask questions about ownership and control of resources, about women's work and how it is rewarded and valued. These will impact on things such as women's nutritional status generally (including pelvic dimensions, anaemia) which can have knock-on effects on their health and thus health during pregnancy/childbirth. There are also issues of gendered use of space and transport systems, and gendered patterns of mobility (and location of facilities) which will affect women's ability to avail themselves of facilities. This also points to evidence of long working days which can affect the time women have to access health care, as well as issues of having cash in hand to pay for services if necessary.
- We also need to see maternal and child health (MCH) in terms of class as well as gender. Good statistics would enable us to ascertain class biases in MCH. Even where women may not control resources, if their husbands are poor they may not be able to access health care, even if they wished to do so. Class also affects relationships with health care providers and whether they are providing user-friendly services for poor people.

1. Background

1.1 Aims and rationale for review

In 2000, United Nations member states signed up to the Millennium Development Goals (MDGs), a set of eight international development targets intended to catalyse development and reduce global poverty. To date progress towards these goals has been uneven. Of particular concern is MDG 5, which aims to improve maternal and reproductive health outcomes by: a) reducing the maternal mortality ratio by 75%; and b) by achieving universal access to reproductive healthcare by 2015. Current estimates suggest that only 23 (out of a surveyed 181) countries are on track to reduce maternal mortality by 75% (Hogan *et al.* 2010). This poor progress is despite the increasing volumes of official development assistance being directed at MDG 5 (Greco *et al.* 2008). There is concern, therefore, that not all the aid targeting MDG 5 is reaching the countries in the greatest need or being delivered in a manner that is proving effective (Greco *et al.* 2008; Powell-Jackson *et al.* 2006). For example, while aid for MDG 5 has increased overall, the funding available for family planning has actually decreased and it has been suggested that current aid levels remain insufficient to meet MDG 5 (WHO and UNICEF 2010).

The adoption of the MDGs came at the end of a decade in which the purpose and usefulness of development aid had come under increased scrutiny. The changing geopolitical climate of the 1990s, coupled with the poor results of decades of work and billions of dollars aimed at improving social and economic conditions in poor countries, led to a questioning of the usefulness and effectiveness of aid. In the 2000s, a series of high-level fora was held to debate the provision of aid and its management, which resulted in the:

- The Monterrey Consensus of the International Conference on Financing for Development (UN 2002)
- Joint Marrakech Memorandum (Second International Round Table Marrakech 2004)
- The Rome Declaration on Harmonisation (Rome High-Level Forum 2003)
- The Paris Declaration on Aid Effectiveness (Paris High-Level Forum 2005)
- The Accra Agenda for Action (Accra High-Level Forum 2008)

Central to this is the Paris Declaration which set out five principles for more effective aid (hereafter, Paris Principles), including targets to be achieved by 2010 (see Box 1). The theory underpinning these principles is that the provision, management and use of aid in this manner will lead to better results in terms of achieving the development objectives set out in national development plans. Accra represented a mid-way point, and the next High Level Forum takes place in Busan in 2011, when the achievements of the Paris Declaration and the future direction will be discussed.

Box 1: The Paris Principles

Ownership - Developing countries set their own development strategies

Alignment - Donor countries and organisations bring their support in line with these strategies and use local systems to deliver that support

Harmonisation - Donor countries and organisations coordinate their actions, simplify procedures and share information to avoid duplication

Managing for Results - Developing countries and donors focus on producing and measuring results

Mutual Accountability - Donors and developing countries are accountable for development results

On the back of this sea change in global aid coordination, there is a growing body of evidence to demonstrate changes in aid practice and management in line with the Paris Principles. A first major evaluation took place in 2008 to feed into the Accra High Level Forum (Stern et al. 2008, Woods et al. 2008); a second major evaluation was conducted in 2010-11 in preparation for the High Level Forum in 2011. This second evaluation aims to ascertain whether and how the Paris Principles are contributing to reducing poverty and enhancing social and economic development.¹

This review contributes to this process of evaluating the impact of the Paris Declaration by assessing available evidence of how aid delivered under the Paris Principles is impacting on development outcomes, focusing specifically on maternal and reproductive health (MDG 5). The review question is:

What is the evidence of the impact on MDG 5 outcomes of delivering aid in line with Paris and Accra aid effectiveness principles? How does this compare to the evidence of the impact of aid in general on MDG 5 outcomes?

Maternal and reproductive health is a key sector for many donors and is an area where very different types of aid are provided, some with a more direct and some with a more indirect impact on maternal and reproductive health. For example, some donors provide aid to strengthen the broad institutional, policy and financial framework, known as sector-wide or systems strengthening. This is widely recognised as fundamental to improving maternal health outcomes (Freedman et al. 2005, WHO and UNICEF 2010). Many donors, however, continue to prioritise project-style aid which focuses on more narrowly defined and managed activities. The Global Health Initiatives (GHIs) such as the Global Fund for AIDS, TB and Malaria (GFATM) and the President's Emergency Fund for AIDS Relief - have tended to target single health issues, e.g. malaria rather than broad primary healthcare. It has been argued, however, that such Initiatives have resulted in positive knock-on effects for MDG 5, by virtue of their targeting some of the 'indirect' causes of maternal mortality, such as communicable disease (Walensky and Kuritzkes 2010, GFATM 2010). Furthermore, some GHIs now support programmes that may contribute directly or indirectly to broader strengthening of health systems. MDG 5 therefore is a good basis from which to compare the impact of different aid modalities in improving outcomes.

Recent studies exist which evaluate shifts in the practice and management of aid, and which challenge and question the process of the aid effectiveness agenda; but

¹ Full information and documentation on the second phase evaluation is available from the OECD-DAC: http://www.oecd.org/document/60/0,3343,en_21571361_34047972_38242748_1_1_1_1,00.html

much of this research has stopped short of assessing outcomes. This review aims to take the existing research base a step forward by focusing on identifying and reporting studies which present robust empirical evidence of the impact of interventions delivered in the context of Paris Style aid in bringing about changes (be they positive, negative or negligible) in maternal and reproductive health.

The review also takes a comparative approach. The Paris Declaration calls for a more hands-off approach under which recipient authorities take greater responsibility for development interventions. This review therefore asks whether there are differences in the impact of aid when it is delivered under the Paris Principles.

1.2 Objectives

A systematic review sums up the best available research on a specific question. It does not involve primary research, such as triangulating evidence on health interventions with primary data on aid types and flows. Rather it evaluates existing studies and research whether these are published or unpublished. A systematic review adopts a very structured methodology in order for it to be objective and replicable. This involves preparing a Protocol or outline of the review which then guides the full review to its completion. The review entails a structured search of available literature, followed by a structured synthesis of data extracted from the studies which are found to meet strict inclusion criteria.²

The objectives of this review are:

- To review systematically all available evidence about the impact of different types of aid upon MDG 5 indicators;
- To compare the effects on MDG 5 outcomes of aid delivered under the Paris Principles and aid delivered outside this framework;
- To produce a synthesis of the evidence;
- To appraise the quality of this evidence;
- To identify gaps in the current evidence-base and
- To comment on the implications and scope for future research in this area.

1.3 Definitional and conceptual issues

1.3.1 Conceptual (PICO) Framework

This Review concerns aid delivered according to the Paris Principles (Interventions) to developing countries (Participants) and the impacts this aid has on maternal and reproductive health (Outcomes). It also explored aid which was not delivered according to the Paris Principles as a means of comparing the impact of different aid types (Comparison).³

Participants	Intervention	Comparison	Outcomes
Developing	Aid delivered under	Aid in general	Changes in targets and indicators for

² See The Campbell Collaboration for further information on systematic review definitions: www.campbellcollaboration.org/what_is_a_systematic_review [accessed 23 March 2010]. The Protocol for this review is available from:

<http://www.dfid.gov.uk/r4d/SearchResearchDatabase.asp?projectID=60782>

³ Drawing on definitions given by the OECD-DAC, we understand: 'impact' as the intended or

Countries	the Paris Principles		maternal & reproductive health covered by MDG 5
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The elements within the PICO are defined as follows:

1) Participants - Developing countries

Developing countries are those countries categorised as ‘Medium Human Development’ and ‘Low Human Development’ in the Human Development Index of 2009 (UNDP 2009, p213). The review therefore covered countries where there are serious problems in maternal health, and which receive support from DFID and other donors, but which are not considered as Least Developed, e.g. India.

2) Intervention - Aid delivered in accordance with the Paris Principles

This review aimed to compare the impact of two types of aid: aid delivered in accordance with the Paris Principles; and aid delivered not in accordance with these principles.

Aid delivered in line with the Paris and Accra aid effectiveness principles (henceforth Paris-style aid) is aid delivered according to some or all of the five principles set out in the Paris Declaration on Aid Effectiveness of 2005, recognising that these were reiterated in the Accra Agenda for Action of 2008 (see Box 1 above). They are: 1. Ownership; 2. Harmonisation; 3. Alignment; 4. Managing for results; and, 5. Mutual accountability.

As the Paris Principles are relatively new, many studies are not explicit about whether the aid in question conforms with these principles. In order not to lose valuable studies from our pool, we established a mechanism for categorising whether the aid in question was Paris-style or not.

Box 2: Paris Declaration Indicators

Ownership

1. Countries put in place national development strategies with clear strategic priorities.

Alignment

2. Countries develop reliable national fiduciary systems or reform programmes to achieve them.
3. Donors align their aid with national priorities and provide the information needed for it to be included in national budgets.
4. Co-ordinated programmes aligned with national development strategies provide support for capacity development.
- 5a. As their first option, donors use fiduciary systems that already exist in recipient countries.
- 5b. As their first option, donors use procurement systems that already exist in recipient countries.
6. Country structures are used to implement aid programmes rather than parallel structures created by donors.
7. Aid is released according to agreed schedules.
8. Bilateral aid is not tied to services supplied by the donor.

Harmonisation

9. Aid is provided through harmonised programmes co-ordinated among donors.
- 10a. Donors conduct their field missions together with recipient countries.
- 10b. Donors conduct their country analytical work together with recipient countries

Managing For Results

11. Countries have transparent, measurable assessment frameworks to measure progress and assess results.

Mutual Accountability

12. Regular reviews assess progress in implementing aid commitments.

national development priorities of recipient governments, we required a more rigorous means of capturing Paris-style aid. We therefore also used aid modalities (i.e. the mechanisms through which donors give aid to a developing country) as a way of categorising aid types and these formed an integral part of our review methods. These include:

- General budget support: a sub-category of direct budget support. In the case of general budget support, the dialogue between donors and partner governments focuses on overall policy and budget priorities. Direct budget support is defined as a method of financing a partner country's budget through a transfer of resources from a donor to the partner government's national treasury. The funds thus transferred are managed in accordance with the recipient's budgetary procedures.⁴
- Sector budget support: a sub-category of direct budget support. Sector budget support means that dialogue between donors and partner governments focuses on sector-specific concerns rather than on overall policy and budget priorities.⁵
- Basket funds: the joint funding by a number of donors of a set of activities through a common account, which keeps the basket resources separate from all other resources intended for the same purpose. The planning and other procedures and rules governing the basket fund are therefore common to all participating donors, but they may be more or less in conformity with the public expenditure management procedures of the recipient government. A basket may be earmarked to a narrow or a wider set of activities, for example a sector or a sub-sector. The term "pool(ed) funding" is sometimes used instead of basket funding.⁶
- Project aid: directed towards an individual development intervention designed to achieve specific objectives within specified resources and implementation schedules (which may or may not be implemented within the framework of a broader programme).⁷

These four categories can be conceived as a hierarchy. General budget support could be considered the aid modality which most closely conforms to the Paris Principles as it is given directly to the central government of a recipient, with no directing of how it should be spent. It requires that the recipient has in place a robust national development strategy which is well managed and transparent. Sector budget support and basket funds also adhere to the Paris Principles, but in a more constrained way. Some types of project aid can also be considered to adhere to the Paris Principles, if they are sufficiently *harmonised* with that of other donors and if they are *aligned* with government plans, ideally with aid reported within the government budget (otherwise known as on-budget).⁸ We might anticipate seeing this type of project aid within a sector-wide approach, where donors support a

⁴ Definition sourced from the OECD DAC Glossary, available at:

http://www.oecd.org/document/19/0,3343,en_21571361_39494699_39503763_1_1_1_1,00.html

⁵ Definition sourced from the OECD DAC Glossary, available at:

http://www.oecd.org/document/19/0,3343,en_21571361_39494699_39503763_1_1_1_1,00.html

⁶ Definition sourced from the Aid Management Guidelines Glossary developed by the Danish Ministry of Foreign Affairs. Available at: <http://amg.um.dk/en/servicemenu/Glossary/Glossary.htm>

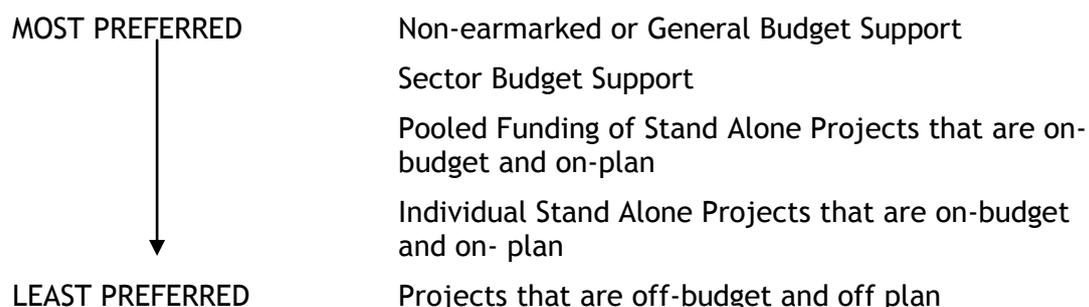
⁷ Ibid.

⁸ A project can be said to be "on plan" when its objectives align with those of the developing country. This is most likely to be the case when a donor has consulted/ planned its project in conjunction with the aid recipient government. A project can be said to be "on budget" provided the donor has informed the government of its intentions. Often a government will factor such information into its own medium-term expenditure framework, enabling it to free up resources for other priorities.

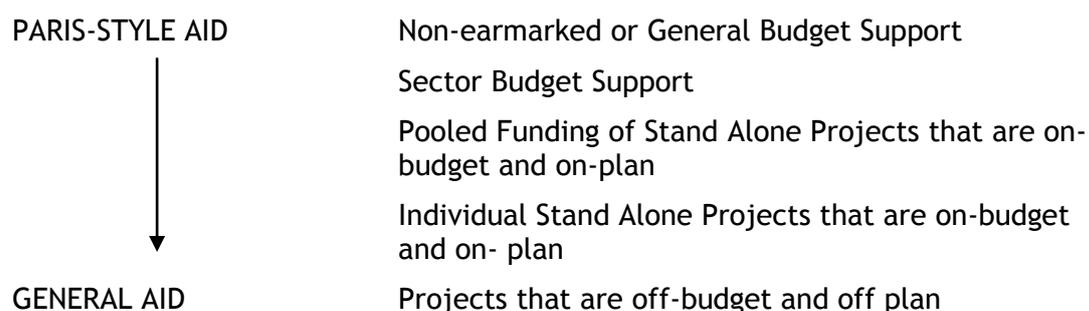
comprehensive sector policy led by the government. The aid provided by donors to a sector-wide approach can take any form.

Other types of project aid cannot be said to adhere to the Paris Principles, namely when projects are managed and delivered outside country frameworks and financial systems. These we consider to be a proxy for non-Paris-style aid (or aid in general).

Aid recipient countries themselves have conceptualised an aid hierarchy when stating their preferences to donors. For example, Rwanda’s Aid Policy (Government of Rwanda 2006) ranks aid modalities in the following order of preference:



Building on this, our categorisation was defined thus:



What constitutes Paris-style aid is complicated, and categorising aid interventions formed an integral part of our Review methods.

3) COMPARISON - Aid in general

In line with the above definition of aid delivered under the Paris Principles, ‘aid in general’ is aid that does not adhere to the Paris Principles, that is, aid interventions that are managed and delivered outside country frameworks and financial systems and therefore affording no or very limited ‘ownership’ to the recipient authorities. Our definition of aid in general, therefore, focuses on delivery mechanisms rather than discrete aid inputs. The difficulty here is that some interventions may appear or lay claim to being aligned or harmonised. The key element which distinguishes between Paris-style aid and general aid by our definition is whether or not aid is reported within the budget of the recipient government, in other words ‘on-budget’.

By making this comparison, we aimed to analyse the impact of different approaches to the provision of aid on MDG 5 outcomes.

4) OUTCOMES - Changes in MDG 5 targets and indicators

Outcomes are changes in the MDG 5 targets and indicators which occur as a result of or are associated with the short-term and medium-term effects of an aid intervention. These targets and indicators are:⁹

- Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio, assessed by:
 - i. Maternal mortality ratio
Maternal mortality per 100,000 live births
 - ii. Proportion of births attended by skilled health personnel
Births attended by skilled birth personnel, percentage

- Achieve, by 2015, universal access to reproductive health, assessed by:
 - i. Contraceptive prevalence rate among married women, aged 15-49 years
Current contraceptive use: any method, percentage
Current contraceptive use: modern methods, percentage
Current contraceptive use: condom, percentage
 - ii. Adolescence birth rate
Adolescent birth rate per 1000 women
 - iii. Ante-natal care coverage
Ante-natal care coverage, at least one visit, percentage
Ante-natal care coverage, at least four visits, percentage
 - iv. Unmet need for family planning
Unmet need for family planning, total, percentage
Unmet need for family planning, spacing, percentage
Unmet need for family planning, limiting, percentage

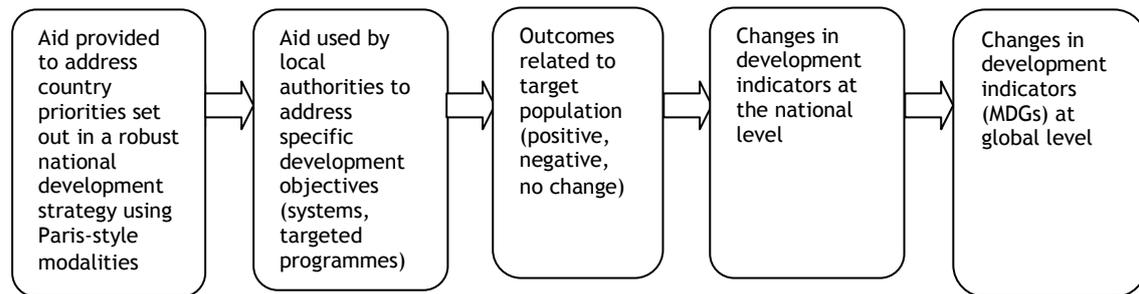
1.3.2 Theoretical Background

The Paris and Accra Declarations represent an approach for achieving effective aid, based on reflections and research into why aid in the past has not worked as well as expected. The Principles are therefore based on a policy-oriented theory of how aid should deliver results. The literature on aid is generally in agreement that establishing a causal relationship between aid interventions and development outcomes is problematic due to multiple externalities and contextual factors which influence development policy and ensuing changes (see Stern 2008 for an overview of this literature). Nevertheless, the aid effectiveness debate proceeds from a theoretical assumption about how aid should deliver results. Figure 1 outlines the pathway through which aid delivered under the Paris Principles might be expected to impact upon MDG 5 outcomes, and it provides a reference point for situating the evidence emerging from the studies analysed in this review.

Note that these are simple models which deal with final outcomes, our key concern within this review. Much of the evaluation literature on aid focuses around inputs, outputs (intermediate results) and outcomes, with outcomes defined in different ways, for example as short-term, medium-term or long-term results and impacts.

⁹ <http://unstats.un.org/unsd/mdg/Data.aspx> [Accessed 29/11/10]

Figure 1: The impact pathway of aid delivered under the Paris-Principles

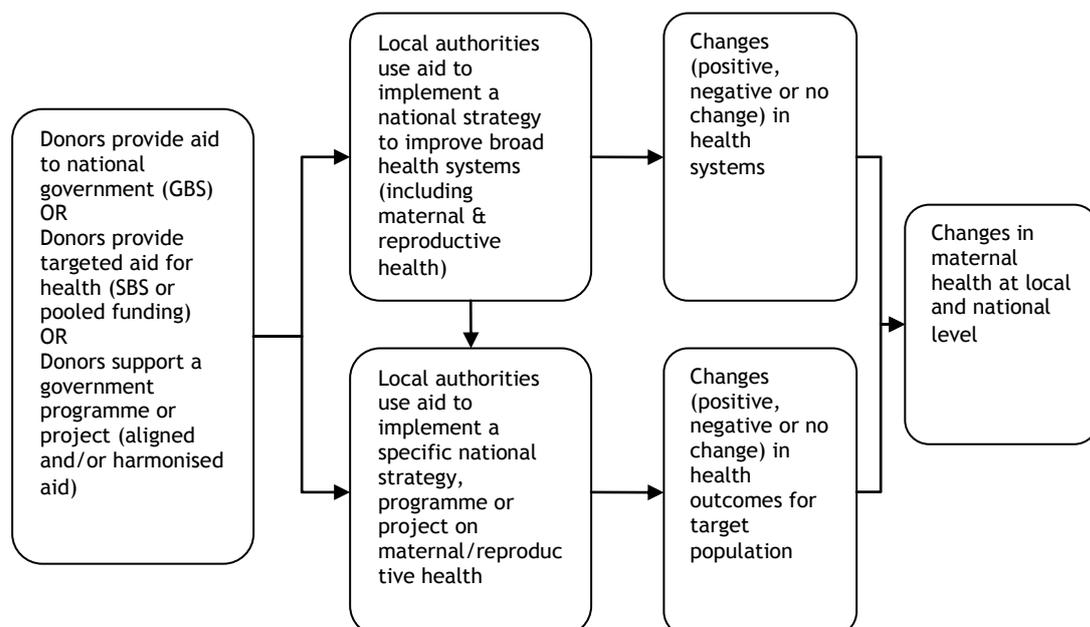


By this theory, Paris-style aid is ‘owned’ by the recipient country, so the recipient takes responsibility for its use. Because the aid intervention is harmonised and aligned, it is provided in tune with country needs and systems. It is therefore well-managed and coordinated. Donors may still be involved in the aid chain, e.g. deciding which areas sector-budget support should go to, managing a pooled fund rather than giving funding directly to the government, providing policy advice or technical assistance. There are several key assumptions with this model:

- a) that donors/governments are adhering to the Paris Principles;
- b) that governments are committed to national development strategies;
- c) that the government uses the aid to those particular ends.

Figure 2 applies this model to maternal and reproductive health

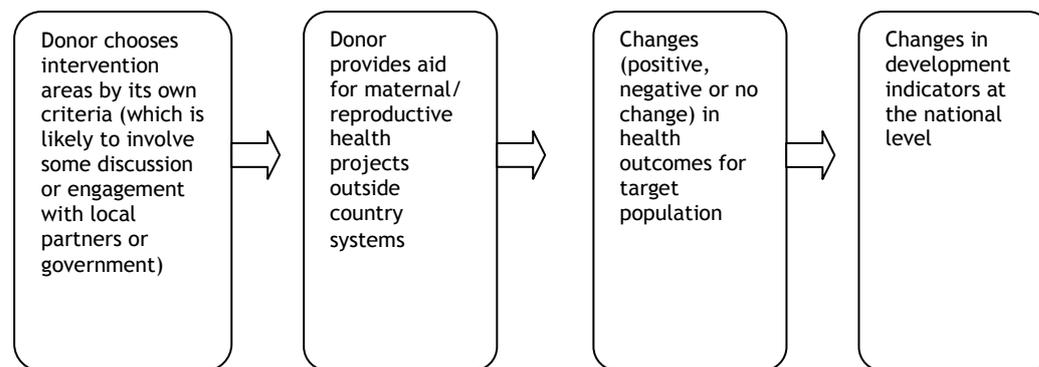
Figure 2: The impact pathway of Paris-style aid on maternal and reproductive health



There are different potential pathways by which an aid intervention might impact upon maternal and reproductive health outcomes. Figure 3 provides a model of how aid *not* delivered under the Paris Principles might be expected to impact upon MDG 5 outcomes. Here the aid intervention occurs outside government control and

systems; the intervention is not owned by the government, it is not aligned with needs or priorities set by the local authorities, it is not aligned with local systems, and it is not well harmonised or coordinated with the activities of other donors in the sector. In reality this is more nuanced, but again this model provides a reference point for situating the evidence emerging from what we term ‘general aid’ in this review.

Figure 3: The impact pathway of aid *not* delivered in accordance with the Paris Principles on maternal and reproductive health



1.4 Research and policy background

A preliminary search of the literature established that no previous systematic reviews exist on this topic. More generalised literature regarding maternal health and aid is available, however, which generally falls into the following cluster types:

Donor reporting studies

Reporting on aid is well developed within the donor community, among the Global Health Initiatives and among (aid-funded) civil society organisations. These take the form of evaluation reports, summary reports and briefing notes (e.g. USAID 2009, GFATM 2010).

Progress tracking studies

Studies tracking progress for MDG 5 include the annual *Millennium Development Goals Report* produced by the UN, and the *Countdown 2015* series (e.g. Bryce et al. 2008, WHO and UNICEF 2010). More critical analyses of progress toward MDG 5 include contributions from a range of interested stakeholders: UN agencies, multilateral and bilateral donors, the academic community and civil society. Such documents often make suggestions as to how to accelerate progress toward MDG 5 (Freedman et al. 2005; Bernstein & Hansen 2006). The quality and focus of such critical analyses vary wildly, as do the methodologies.

Country case studies

In the face of methodological challenges in producing robust comparative studies across vastly different contexts, country case studies form the backbone of the research base to chart changes in maternal and reproductive health to inform policy (e.g. Koblinsky 2003, Campbell et al. 2005, Padmanathan et al. 2003, Baird et al. 2010).

Studies tracking aid flows

Another subset of the literature monitors aid flows to maternal health, and the MDGs more broadly. This includes reports which demonstrate that since the adoption of the MDGs and the Paris Declaration there has been greater targeting of

aid. This literature also alludes to why progress toward MDG 5 is falling short. Such studies suggest there is poor targeting of maternal health aid, the continued dominance of project aid, and the inadequate supply of aid for maternal health specifically (e.g. Greco et al. 2008; Powell-Jackson et al. 2006).

Aid effectiveness studies

There is a growing body of literature analysing and tracking aid effectiveness. This includes both independent and commissioned research. A large body of work focuses directly on the Paris Declaration (covering evaluations of the implementation of the Paris Declaration), commissioned by the OECD to provide input to the High Level Forums (Wood et al. 2008, Stern 2008); work on Health as a Tracer Sector to assess the impact of the implementation of the Paris Declaration (OECD 2009); studies on the impact of budget support and sector budget support in relation to the MDGs or specific development sectors (e.g. Beynon and Dusu 2010, Oxfam 2008, Williamson and Dom 2010, Tidemand 2009); and studies on the broader aid effectiveness principles in the health sector (Lewis et al. 2010, ODI/Mokoro 2009, Getnet 2009).

For the Accra High Level Forum on Aid Effectiveness in 2008, a preliminary evaluation of the effects of the Paris Declaration was prepared. This evaluation and the broader work mentioned above assess the implementation of the Paris Principles. They examine particularly how the Paris Declaration has affected aid management and intermediate outputs, primarily at the policy and governance level, and present methodological concepts for tackling impact evaluation under this system. While some of these make direct or indirect reference to the health sector and maternal health, none of them present robust data for MDG 5 indicators. They have approached the topic from the aid input side, rather than the development outcome side. The difficulty recognised in much of this literature is that it is extremely difficult methodologically to assess the impact of Paris-style aid on development outcomes, and, partly because of this, that the evidence base is weak to date. While this body of literature is extremely useful for understanding the impact of the Paris Declaration on aid management and on policy processes in developing countries, this literature is slim when it comes to providing robust evidence of impact on specific development outcomes, such as MDG5.

This problem of evidence of impact is being tackled during a second phase of the evaluation which is underway in advance of the next forum in late 2011. The emphasis here is on outcomes, impacts and results. Health is being used as an illustrative sector for evaluating outcomes (see OECD 2009).

This review aims to contribute to filling the gap in the evidence about the impact of aid on health outcomes by exploring and synthesising what literature exists.

2. Methods used in the review

2.1 User involvement

There are two core groups of end-users for this research: governments and health services in developing countries; and donor agencies and multilateral institutions. Findings of the research will be disseminated in the form of a policy brief, a summary report, and the full report to the full range of interested partners, including agencies, organisations and academics whose studies have been reviewed. Findings will also be posted on Research for Development (R4D), Eldis and other development research dissemination sites.

During the review, the team sought advice and input from DFID aid effectiveness and health teams as well as the OECD-Development Assistance Committee (OECD-DAC) working group on Health as a Tracer Sector to identify additional sources of literature, discuss preliminary findings and reflect on evidence emerging from the review. We also engaged with consultants from IOD Parc working on the evaluation of the Paris Declaration indicators to identify studies and discuss the methodology of impact evaluation in the field of aid effectiveness.

On systematic review methodology we consulted the EPPI-Centre and the International Initiative for Impact Evaluation (3ie).

We also sent our list of included studies to experts working on maternal health to identify additional published and unpublished studies which might be ongoing or which might have not been captured in our search. Through this we identified additional studies and were also able to gain new insights into the conclusions and limitations of the review. The report will be sent to these experts.

We will disseminate our findings directly to governments of developing countries where we have existing contacts or whose countries feature in the studies explored (aid coordination units, ministries of finance and health). We will publish the findings of the systematic review in a peer-reviewed journal.

2.2 Identifying and describing studies

2.2.1 *Defining relevant studies: inclusion and exclusion criteria*

Studies meeting the following criteria were included in the review:

Participants

Studies had to refer to developing countries (in general), individual developing countries or developing regions of the world.

Interventions

External financing had to be reported whether that be:

- Aid delivered under the Paris Principles (e.g. programme aid, general budget support, sector budget support, or projects that are on-budget)
- Aid in general (e.g. off-budget project support)
- Studies making a direct comparison between types of aid

Outcomes

Studies had to concern MDG 5, the MDG 5 indicators (i.e. maternal mortality ratios, births attended by skilled birth personnel, contraception prevalence, adolescent

birth rate, ante-natal care coverage and unmet need for family planning) or MDG 5 outcomes (trends in maternal and reproductive health). The mention of MDG 5 indicators was sufficient for inclusion; it was not necessary for studies to refer directly to ‘Millennium Development Goal 5’.

We adopted a generous approach to interpreting the indicators when devising the search and screening strategies, primarily because the indicators for MDG 5 have been amended and added to since their adoption in 2000. Originally MDG 5 was accompanied by just two indicators: 5.1 and 5.2. MDG indicators 5.3, 5.4, 5.5 and 5.6 were added some time after 2005. For example, even the wording of indicator 5.2 has changed since the Goal was adopted. Originally entitled ‘Proportion of births attended by skilled health personnel’, the indicator was immediately deemed problematic:

Standardization of the definition of *skilled* health personnel is sometimes difficult because of differences in training of health personnel in different countries. Although efforts have been made to standardize the definitions of doctors, nurses and midwives and auxiliary midwives used in most household surveys, it is probable that many “skilled attendants” would not meet the criteria for a “skilled attendant” as defined by the World Health Organization. Moreover, it is clear that skilled attendants’ ability to provide appropriate care in an emergency depends on the environment in which they work. (UNDG 2003, p39).

In 2010, the indicator was worded as: ‘births attended by skilled birth personnel, percentage’. The minor change has done little to clarify which categories of workers should be considered ‘skilled birth personnel’. In our inclusion strategy therefore, we opted to interpret this indicator rather broadly, including for instance institutional births (on the assumption that births conducted at a medical institution would likely be attended by a staff member) and births simply recorded as ‘assisted’ or ‘attended’, which did not specify whether the person/s assisting the birth was a formally trained health worker or an informal Traditional Birth Attendant.

We also included the use of proxy indicators, and accepted studies concerning contraceptive prevalence to use samples that fall outside the specified parameters (females aged 15-49 years).

Such an approach is entirely in keeping with the ethos of a scoping review. Moreover, it was deemed essential given that we had opted to include studies which pre-dated the adoption of the MDGs in 2000, and because few studies looking at the effects of aid on MDG 5-style indicators engage with MDG 5 terminology directly (even those conducted after 2000).

Timeframe

Studies published from 1990 to 2010. This date range reflects the beginning of a concerted agenda to reform aid both in terms of outcomes (poverty focus leading to the adoption of the MDGs in 2000) and in terms of effectiveness. The period 1990 to 2010 therefore provided a broad time-span to capture aid interventions corresponding with the evolution of the aid effectiveness and poverty reduction agenda.

Types of studies

Studies had to present empirical research (qualitative or quantitative), i.e. contain primary data.

Evidence of impact

Studies had to present evidence of the impact of interventions funded by international aid on MDG 5 outcomes, i.e. to provide statistical evidence of a change in the MDG5 indicators. Studies based on experimental, quasi-experimental and non-experimental designs were eligible.

Language

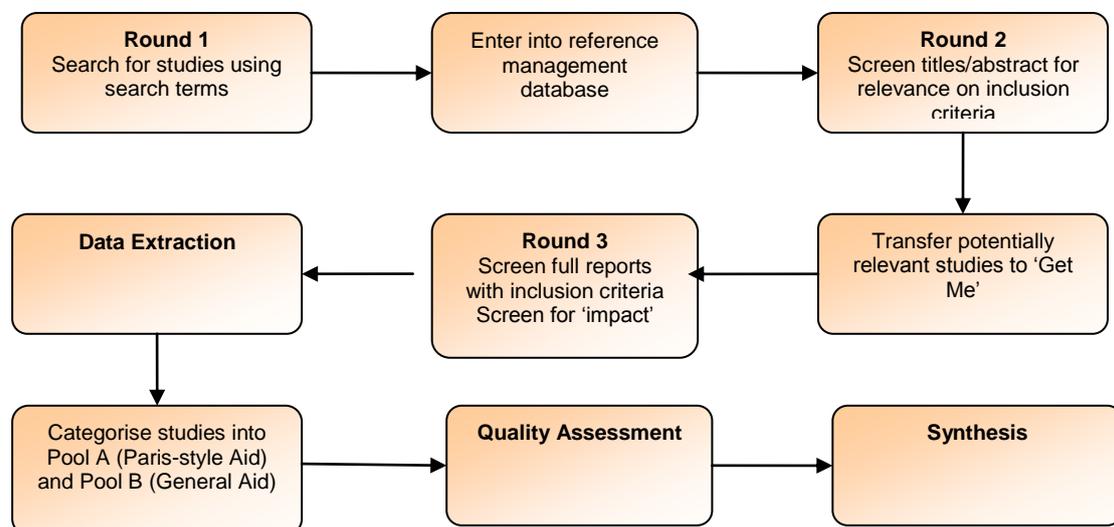
Searches were only conducted in English. Studies in other languages were included where an abstract was provided in English. The abstract was then used to evaluate the relevance of the study, and we drew on the language skills of the team to further verify the relevance of the studies where appropriate.

Exclusion criteria

Studies were excluded if they

- were published before 1990
- made only passing reference to aid or donors
- did not contain primary data on an external intervention, or
- did not report impact

Figure 4: Overview of the review process



2.2.2 Identification of studies: Search strategy

In the preliminary round of searching (Round 1 - see Figure 4), electronic databases, organisational websites and topic gateways were searched by MD, EMT and SH using the search terms outlined in Appendix 2.1. Reports were identified from the following sources:

- Electronic searches on bibliographic databases that index academic journals and the reference lists of primary studies. A specialist university librarian led the database searches:
 - Web of Science; Dissertations and Theses; Index to Theses; MEDLINE; EMBASE; Cinahl; Popline; Global Health Library (incorporating LILACS, AFRO, EMRO, PAHO, WHOLIS, WPRO); Econlit; IBSS; JOLIS; and IDEAS
- Key organisation websites were trawled or, where feasible, searched using keyword searches (i.e. Google advanced searches):
 - DFID, GFATM, OECD, PATH, USAID, UNIFEM, White Ribbon Alliance, World Bank, World Health Organisation
- Topic gateways were trawled or, where feasible, searched using keyword searches (i.e. Google advanced searches): ELDIS, BLDS, Aid Effectiveness Portal, DFID Research 4 Development
- Keyword searches were conducted using Internet search engines Google and Google Scholar
- Reference lists were inspected from relevant existing evidence syntheses, systematic and literature reviews
- Direct contact was made with authors and experts working in the fields of maternal health and aid which yielded specialist recommendations

Due to limited resources, no hand-searching of journals was undertaken.

All search histories were recorded (see Appendix 2.1). The database function of EPPI-Reviewer was used to keep track of studies identified.

2.2.3 Screening studies: applying inclusion and exclusion criteria

Titles and abstracts (where available) of studies from the initial search were either automatically imported or entered manually into the database. In Round 2, the titles and abstracts were screened against the inclusion criteria listed in 2.2.1. A simple coding tool was employed to exclude irrelevant studies. This initial tool was called: “inclusion/exclusion criteria” and consisted of 6 sub-categories, applied in the following hierarchy:

1. Exclude studies which do not focus on aid/external financing (general or Paris-style aid).
2. Exclude studies which do not refer to MDG 5 or one of its related indicators (i.e. maternal mortality ratios, births attended by skilled birth personnel, contraception prevalence, adolescent birth rate, ante-natal care coverage and unmet need for family planning).
3. Exclude studies with data which pre-date the 1990 cut-off point established for the rapid review.
4. Exclude studies which do not refer to a developing country/region as defined by the country/region’s placement in the Human Development Index.
5. Exclude studies which do not use causal, correlation, or process designs (see 2.2.4 below)
6. Include based on title and abstract (all studies that meet this criterion were put through to screening Round 3).

Full reports were obtained for all studies which met the inclusion criteria, as well as for those which provided insufficient information in the abstract to make a sound judgement. In Round 3, the full reports were screened further against the inclusion criterion of ‘evidence of impact’. Studies that failed to meet this final criterion were excluded from the review at this point. Here 7th and 8th sub-categories were added to the bottom of the existing hierarchy:

- Exclude on impact
- Include at full text

Each study was checked against these two sub-categories, to clarify that a study, accepted at Round 2, was being excluded based on its full text and/or for its failure to establish a relationship between aid and the MDG 5 indicators; or to reflect that a study was deemed eligible for inclusion having reviewed its full text *and* because it had made an attempt to assess the impact of aid on the MDG 5 indicators (here it was necessary to check the sub-categories: “include based on title and abstract” and “include at full text”).

All inclusions and exclusions were recorded in the EPPI-Reviewer reference management database.

2.2.4 Characterising included studies

Studies eligible for inclusion in the review were categorised according to design:

- ‘causal’ studies: randomised controlled trials, quasi-experimental studies which we defined as non randomised designs used to test a causal hypothesis.
- ‘correlation’ studies: these were defined by us as observational studies which test an association between the intervention and the outcome recorded.
- ‘process’ studies: qualitative or descriptive studies which presented possible associations between aid and outcomes.

Two data extraction tables were created in Microsoft Excel, one for causal and one for correlation studies. Data from each study were extracted using the coding tool in appendix 2.2.

Using the ‘aid information’ section of the data extraction tables (codes 3.01-3.11 in appendix 2.2), and referring back to the hierarchy on conformity with the Paris Principles set out in section 1.2, we then sub-divided the studies into Paris-style aid (Pool A) and general aid (Pool B). Pool A contains studies on interventions which demonstrate clear adherence to the Paris Principles, and Pool B contains studies classified as general aid either because there was no indication of adherence to the Paris Principles or because the information was too limited to make a sound assessment.

2.2.5 Identifying and describing studies: quality assurance process

While the screening process was initially conducted by a single reviewer, several quality assurance checks were applied at different stages of the review process:

- 1) Prior to initiating the full screen (round 1), three team members (EMT, MD, SH) were involved in pre-testing the search strategy. This was in order to:
 - 1) refine the search terms/query strings for the electronic database searches, and 2) to assess the best way to approach the individual website and topic gateway searches.

- 2) Following pre-testing, three team members (EMT, RH, SH) reviewed a handful of search finds to ensure that the application of eligibility criteria was sufficiently standardised (i.e. to ensure that we were not relying on specialist knowledge or assumptions to understand the inclusion criteria). During this session consensus was unanimous regarding screening decisions.
- 3) Two reviewers (EMT and SH) and a specialist university librarian (MD) were involved in the Round 1 searches.
- 4) Due to resource limitations a single reviewer (EMT) conducted the screening rounds. Twenty percent of all the studies screened in screening Round 2 were re-screened by a second independent reviewer (RH) to test the level of reviewer agreement. Following this quality assessment, the inclusion criterion was revised to exclude studies which referred passively to aid (note: the revised inclusion criterion on aid is the one presented in this report). Round 2 was subsequently repeated using the revised definition.
- 5) At the end of Round 3, two reviewers (EMT and FC) determined whether included studies fell into the causal, correlation or process pools, conducting their analysis at first independently and then together.
- 6) Following data extraction, two reviewers (EMT and RH) independently assessed the nature of the aid intervention presented to categorise the studies by aid type, then came together to corroborate their findings and resolve disagreements by discussion. Where a classification could not easily be made about the nature of the aid type described, the study was by default placed into Pool B.
- 7) Three reviewers (EMT, RH and FC) carried out quality assessment of the included studies.

2.3 Methods for synthesis

2.3.1 Assessing quality of studies

No single approach to the assessment of quality and the identification of bias in studies evaluating the effect of international aid exists. We created a quality assessment checklist with quality assessment criteria from previous reviews (Rees et al. 2009; Thomas et al. 2003; Public Health Resource Unit 2006; Waddington et al. 2009). We convened a meeting of our whole team to consider these items and to add any additional factors we believed to be potential sources of bias. Two members of our team then piloted the checklist on a sample of studies and modifications were made. The resultant composite quality assessment checklist focused on 5 categories (see appendix 2.3 for full checklist):

1. Independence of the study
2. Quality of reporting on the aid intervention
3. Robustness of the study design and methods
4. Robustness of the data analysis
5. Quality of reporting of confounding factors

Answers were categorised as Yes/No/Unclear. We did not exclude studies on the basis of quality. Rather we used the quality assessment: a) to highlight potential bias or untrustworthiness in the study findings; and b) to assist with categorising aid into Pools.

The quality assessment results are summarised in section 4.3 with details presented in appendix 4.4.

2.3.2 Overall approach to and process of synthesis

It was not possible to aggregate or pool data from the studies in this review because the studies were different in design and the data they present. For example the unit of analysis was a source of variation between studies with analyses presented from data collected at the different levels of country, region, district, province, upazilla, town and Health Care facility (appendix 4.1). We therefore configured a narrative synthesis based on the data from each study (4.2.1). We present tabulated results of the characteristics of the included studies (appendix 4.1), then the outcome data for each Pool (appendix 4.2). The quality of the studies was considered during the synthesis and interpretation of the review findings (section 4.3).

2.3.3 Selection of studies for synthesis

Thirty six studies (in 37 reports) were taken forward for full data extraction. Two duplicate studies and three process studies were excluded from the synthesis. One study was not taken forward for synthesis as we were unable to access the full original report and the donor briefing we located contained insufficient data (Huntingdon et al. 2008). 30 studies (in 31 reports) were therefore selected for synthesis.

2.3.4 Selection of outcome data for synthesis

Many of the included studies contained information beyond the focus of our review. The review question focuses on the impact of aid on MDG 5 outcomes. Therefore, the outcome data selected for synthesis were the six MDG indicators (and sub-categories or proxies related directly to these), namely:

MDG 5.1	Maternal mortality ratio
MDG 5.2	Proportion of births attended by skilled birth personnel
MDG 5.3	Contraceptive prevalence rate
MDG 5.4	Adolescence birth rate
MDG 5.5	Ante-natal care coverage
MDG 5.6	Unmet need for family planning

2.3.5 Process used to combine / synthesise data

Our synthesis brings together the findings from the synthesis of outcome data, the analysis of aid interventions in relation to outcomes, and the quality assessment findings to present:

- Findings on the impact of Paris-style aid on MDG 5 outcomes;
- Findings on the impact of general aid on MDG 5 outcomes.

2.4 Deriving conclusions and implications

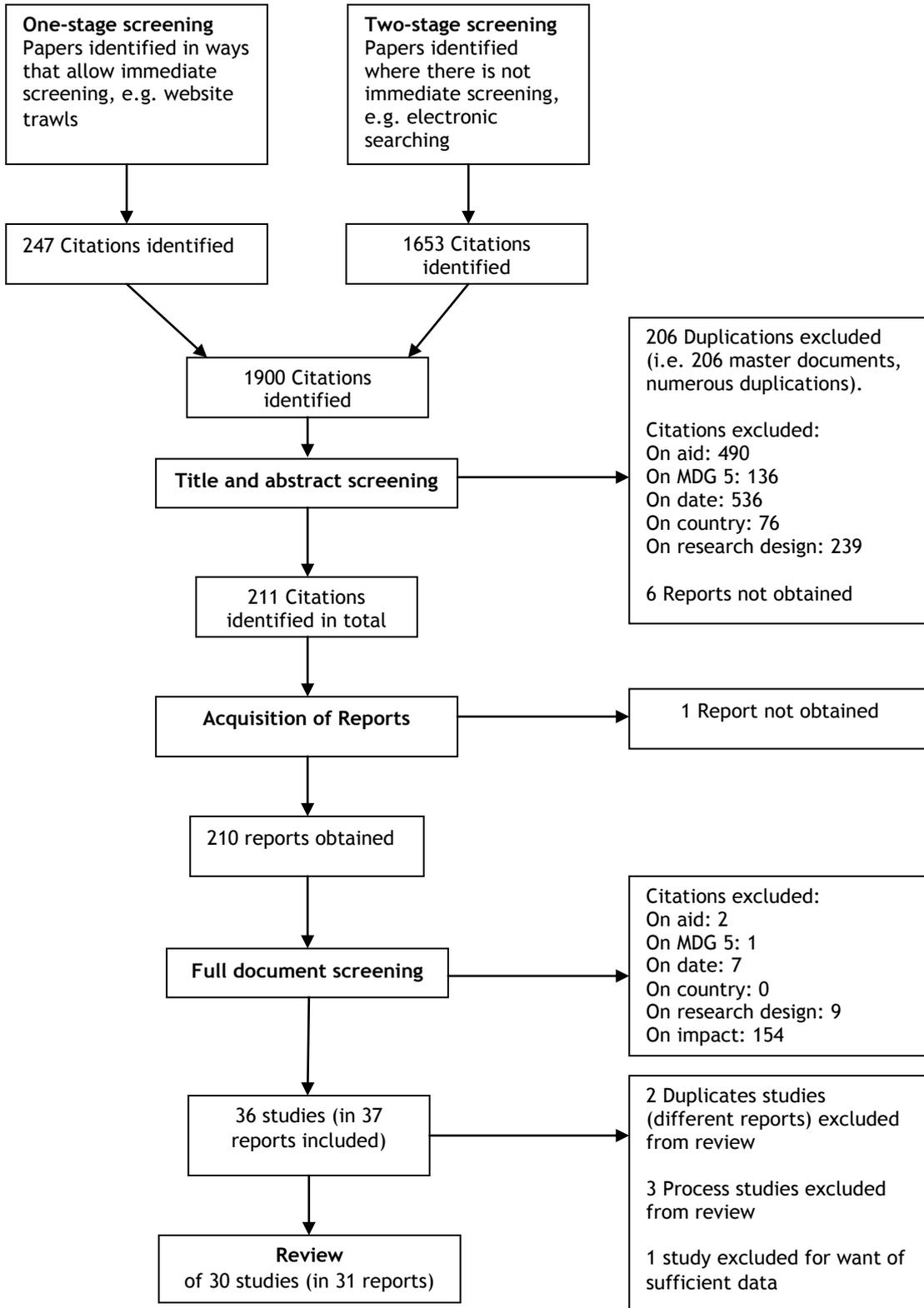
The initial findings from the synthesis were commented on by the whole review team and preliminary conclusions were drawn. The first draft of the report was then sent to DFID, 3ie and the EPPI-Centre and ensuing comments were incorporated. The findings and conclusions were again reviewed by the content experts on the team before completing the final draft.

3. Search results

3.1 Studies included from searching and screening

Figure 5 shows the results of screening for relevance studies identified by the systematic search strategy.

Figure 5: Filtering of papers from searching to map to synthesis



3.2 Details of included studies

A total of 30 studies were included in the final review, ten in Pool A and 20 in Pool B (Appendix 3.1). This section gives an overview of the studies. Due to resource constraints only causal and correlation studies have been included in the review. A list of citations for the process studies identified by our search is presented in the bibliography.

3.2.1 Geographic coverage of the studies

Of the 30 studies included for the review, 29 of the studies are based on data from individual countries or regions/districts within a country. These provide data from a total of 22 countries classified in the Human Development Index (UN HDR 2009)¹⁰ as follows:

- Medium Human Development: China (3), Honduras (2), Indonesia (3), Uzbekistan (1), Egypt (3), Nicaragua (1), Botswana (1), South Africa (1), People's Democratic Republic of Lao (1), Tanzania (2), Cameroon (1), Bangladesh (2), Nepal (2), Ghana (2), Uganda (1), Madagascar (1), India (1), Pakistan (1)
- Low Human Development: Guinea (1), Burkina Faso (1), Timor Leste (1), Rwanda (1)

We also have one report from Zimbabwe (1) which was not ranked in the Human Development Index of 2009 due to low quality data. In the 2010 report it is ranked bottom of the Low Human Development countries.

3.2.2 Donor agencies

The studies include interventions from a range of donors:

- interventions funded by bilateral donor agencies as primary actors: USAID (8 studies); Canadian International Development Agency (1 study); DFID (4 studies)
- interventions funded by the following multilateral agencies as primary actors: World Bank (8 studies)
- studies on interventions involving a comparative analysis across a large number of donors (5 studies)
- interventions funded by non-governmental organisations: CARE (1 study); Bill and Melinda Gates Foundation (2 studies); Save the Children Australia (1 study); PEPFAR (1 study); MotherCare (1 study)

Many of the studies involve implementing partners, organisations sub-contracted by the principal funding agency to carry out development interventions. Some studies also mention other donors active in the same sector, which often include UN bodies such as UNICEF and UNFPA. USAID is the bilateral agency that features most frequently as a primary partner, funder or actor in the studies.

¹⁰ We refer to the HDI rankings from the 2009 Human Development Report to ensure consistency throughout this review. In the 2010 HDI (UNDP 2010) there have been some changes in classification, with many more countries classified as Low Human Development. Countries covered in our review which in 2009 were classified as Medium Human Development but which have now been re-classified as Low Human Development are: Tanzania, Cameroon, Bangladesh, Nepal, Ghana, Uganda and Madagascar. Timor Leste has moved from Low to Medium Human Development.

3.2.3 MDG indicators

The studies concern a range of healthcare issues, often beyond MDG 5. The indicators covered in the included studies are as follows:

- Maternal mortality ratio or rate (MDG 5.1): 12 studies
- Births attended by skilled birth personnel (MDG 5.2): 17 studies
- Contraceptive prevalence (MDG 5.3): 15 studies
- Adolescent birth rate (MDG 5.4): 1 study
- Ante-natal care coverage (MDG 5.5): 14 studies
- Unmet need for family planning (MDG 5.6): 2 studies

3.2.4 Years of intervention

An important consideration for this review is the time period which interventions cover, as the lag between intervention, research/evaluation and publication can be long:

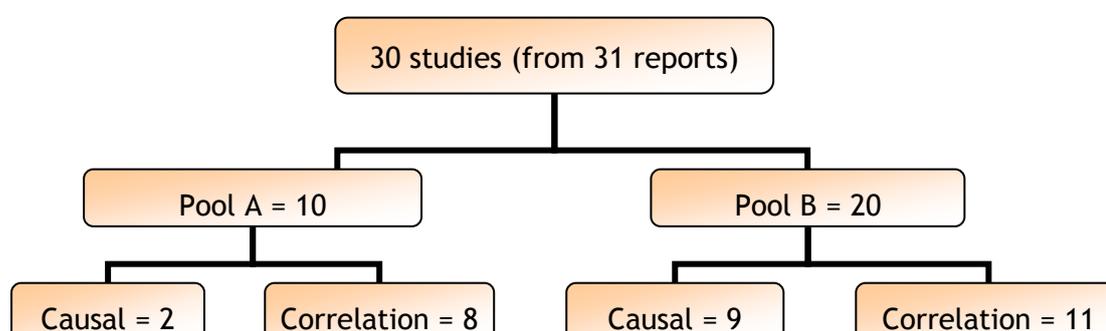
- eight studies concern interventions that concluded by 2001
- six studies concern interventions that concluded by 2003
- six studies concern interventions that concluded by 2006
- six studies concern interventions that concluded after 2006 or are ongoing to date

In four studies the intervention period is not specified or is unclear.

3.2.5 Aid Pools and Study types

Detail on aid modalities, flows and management was limited in many of the studies. As the Paris Principles are relatively new, few of our studies made explicit reference to these principles (as anticipated in section 1.2), and many concerned interventions pre-dating the Paris Declaration. As outlined above, we drew on aid information extracted from the studies to categorise them into Pool A and Pool B. Appendix 3.2 provides a summary for each study. As the studies were also divided by method, we arrive at the breakdown given in Figure 6.

Figure 6: Types of aid and study design



Pool A Studies

There are 10 studies in Pool A (Barnett et al. 2007, COWI et al. 2007, Edwards et al. 2006, Magnani et al. 1998, Mansour et al. 2010, Perks et al. 2006, Shiffman et al. 2004, World Bank 2003, 2006, 2007), and they fall into the following sub-categories:

- No studies report just on general budget support.
- Two studies (COWI et al. 2007, Shiffman et al. 2004) cover a mixture of aid modalities, including budget support, sector budget support, pooled funding and projects.
- Four studies pertain more specifically to a sector-based approach, including the use of sector budget support (COWI et al. 2007, World Bank 2007), pooled funding (World Bank 2006), and multi-donor trust funds and silent partnerships (Barnett et al. 2007).
- Two studies concern project aid with clear alignment and ownership (Edwards et al. 2006, World Bank 2003). The World Bank study on China (World Bank 2003) reports aid in the form of a soft loan with government co-financing. There is evidence of local ownership of the intervention, and this would appear to be a discrete project with on-budget aid which is on-plan.

It is much harder to judge the extent to which the interventions adhere to the Paris indicators of ownership, alignment, harmonisation, managing for results and mutual accountability. However, within our included studies:

- COWI et al. (2007) engages most with the Paris Principles. The study assesses the effectiveness of harmonised support for the health sector in Tanzania under a sector-wide approach. The sector-wide approach (SWAp) involves more than 20 development partners and captures aid provided through different modalities (general budget support, health basket fund, health block grants, bilateral projects and programmes, funding from Global Health Initiatives). There is an indication of government ownership, alignment with national systems and strategies, and harmonisation of donor support.
- Barnett et al. (2007) provides another example of a harmonised approach, with the donor - DFID - working closely with and through other donors in support of the health sector in Indonesia. There is also close alignment with the government's strategy.
- Two World Bank studies (2006, 2007) describe the establishment of sector-wide approaches. The study on Bangladesh (World Bank 2006) implies there is strong country ownership and a harmonised approach by donors, with the World Bank and 8 additional donors pooling funds into a special account which the Ministry of Health could access. The study on Ghana (World Bank 2007) outlines the shift over time from a project approach to pooled donor funding in support of a sector-wide approach in the health sector. There is limited information on aid management, but this programme conforms to many of the Paris Principles, including a harmonised approach and alignment with a nationally-owned strategy.
- Four studies (Magnani et al. 1998, Mansour et al. 2010, Perks et al. 2006, Shiffman et al. 2004) demonstrate strong country ownership in terms of the initiation, management or sustainability of the intervention, although the information on the funding modalities is limited. Mansour et al. (2010)

provides an example where a discrete donor-funded project, requested by the Egyptian authorities but which was not on-budget, led to a nationally-owned, scaled up and successful programme.

The World Bank (2003, 2006, 2007) interventions could be considered a sub-group as the funding is based on credits (soft loans) rather than grants, with projects requiring co-financing from local authorities and therefore by their nature have government involvement and hence a degree of alignment and ownership.

Pool B Studies

There are 20 studies in Pool B (Agha 2002, Baird et al. 2010, Barbey et al. 2001, Buckley 2006, Campbell et al. 2005, Debay 2007, Hounton et al. 2008, Mathur et al. 2004, Meuwissen et al. 2006, Mize et al. 2008, Mulay et al. 1992, Options Consultancy Services Ltd 2010, Powell-Jackson et al. 2006, Price et al. 2009, Ronsmans et al. 2001, Senlet et al. 2008, Snyder et al. 2003, Williams et al. 2007, World Bank 1998, 2008), and they fall into the following sub-categories:

- Six studies (Buckley 2006, Hounton et al. 2008, Meuwissen et al. 2006, Options Consultancy Services Ltd 2010, World Bank 1998, World Bank 2008).relating to project or programme interventions but where the information on aid is very limited or unclear, giving us insufficient means to ascertain whether the intervention(s) could be determined to be Paris-style
- Nine studies (Baird et al. 2010, Barbey et al. 2001, Campbell et al. 2005, Debay 2007, Mize et al. 2008, Price et al. 2009, Ronsmans et al. 2001, Senlet et al. 2008, Williams et al. 2007) relating to discrete projects which demonstrate some very limited adherence to the Paris Principles, e.g. they mention partnerships with national authorities indicating a degree of alignment with national strategies or a degree of ownership, but there is insufficient information to suggest a more robust adherence to the Paris Principles.
- Three studies (Agha 2002, Mathur et al. 2004, Mulay et al. 1992) with no evidence of adherence to any of the Paris Principles

Pool B also included:

- One study (Baird et al. 2010) that mentioned the intervention under consideration in relation to a broader programme, but the study itself focuses on discrete projects..
- Three studies (Buckley 2006, Powell-Jackson et al. 2006, Snyder et al. 2003) where the objectives are not conducive to analysing adherence to the Paris Principles, notably comparative studies relating to a large range of donors or projects

4. Synthesis results

4.1 Further details of studies included in the synthesis

Appendix 4.1 provides details of the data presented in the studies according to type of aid (Pool A or B) and study method. The appendix includes information on the intervention group, data collected, outcomes measured, sampling criteria, control groups (where appropriate), findings and claims on behalf of aid.

4.2 Synthesis of evidence

4.2.1 Summary of the results of the synthesis

Appendix 4.2 provides details of the outcome data for each of the six MDG 5 indicators according to type of aid (Pool A or B) and study type. A detailed narrative synthesis of the results is presented in appendix 4.3.

Evidence of the impact of aid delivered under the Paris aid effectiveness principles (Pool A) on MDG 5 outcomes:

- The interventions reported in ten studies were categorised as conforming to the Paris Principles. Four of these reported interventions adhered to a wide range of the Principles, using new aid modalities and working in close partnership with the recipient government (Barnett et al. 2007, COWI et al. 2007, World Bank 2006, 2007). The others demonstrated a lesser degree of conformity with the Principles, such as government ownership and alignment with national strategies. Two studies presented data based on causal design and eight based on correlation design.
- Reporting on the aid intervention, study design/methods, data analysis and reporting on confounding factors was generally good in relation to our quality assessment criteria although many of the studies did not demonstrate independence from donor agencies, i.e. the studies were either commissioned by donor agencies or conducted by researchers linked to donor agencies.
- MDG 5.1: Seven of the ten studies reported maternal mortality ratios. Data from six of these (one causal study and five correlation studies) report a lower maternal mortality ratio (MMR) with interventions funded by Paris style aid such as training birth attendants, transport for haemorrhaging women, and other improvements in maternal or reproductive health services. One correlation study reports higher MMR despite strongly conforming to the Paris Principles (COWI et al. 2007).
- MDG 5.2: The review found seven correlation studies which reported aid delivering a higher proportion of births attended by skilled personnel. The increases were very varied. The greatest increase in the proportions of attended births is 30% but some longitudinal estimates show both increases and reductions over time.
- MDG 5.3: The one causal study on contraceptive prevalence was funded by Paris style aid; it did not find statistically significant differences between those receiving support and those who were not. Some data from correlation studies of interventions funded by Paris style aid (three studies) reported higher rates of contraceptive use and family planning.
- MDG 5.4: We found no studies that reported on Paris-style aid in relation to the adolescence birth rate.

- MDG 5.5: Interventions delivered with Paris style aid were associated with higher uptake for ante-natal care in six correlation studies included in the review but confounding factors, a lack of robust statistical analysis and divergent data mean uncertainty exists.
- MDG 5.6: Our review identified one correlation study which reported lower unmet need for family planning.

Evidence of the impact of general aid (Pool B) on MDG 5 outcomes:

- The interventions reported in 20 studies were categorised as general aid, of which nine had a causal design and eleven a correlation design.
- MDG 5.1: The MMR data in the five studies (two causal studies and three correlation studies) which concerned general aid were varied. Four studies suggested lower MMR, while the data from one of the correlation studies were unclear. Reporting on study design/methods, data analysis and confounding factors was mixed: two studies did not meet many of our quality assessment criteria.
- MDG 5.2: Reports on attended births from three causal and six correlation studies contain data which consistently reported higher proportions of attended births. Results from a 7th correlation study were unclear. Reporting on study design/methods, data analysis and confounding factors was generally good. The studies scored less well on reporting details of the aid intervention and study independence.
- MDG 5.3: four causal studies demonstrated mixed results from aid-funded interventions aimed at increasing contraceptive use. The seven correlation studies generally show greater contraceptive use, although there are weaknesses in the data reporting for several studies. Reporting on study design/methods, data analysis and confounding factors was generally good, with causal studies meeting more of our criteria than correlation studies.
- MDG 5.4: We found one correlation study which reported indirectly on the adolescence birth rate; it found a higher percentage of teenage pregnancies. This study met most of our quality assessment criteria, except on the aid intervention.
- MDG 5.5: Two causal and three correlation studies which concerned general aid report higher ante-natal care coverage. One causal study showed no change and in two correlation studies the results were unclear. The quality of the studies was mixed: reporting on study design/methods and data analysis was generally good, but five of the eight studies did not report well on confounding factors.
- MDG 5.6: One correlation study reported greater met need for family planning. Reporting on robustness of the data analysis was good and reporting on study design/methods and confounding factors was reasonable.
- Generally the studies did not meet many of our criteria on reporting on the aid intervention and study independence.

As the available data do not permit a meaningful comparison between aid delivered under the Paris Principles and aid delivered outside this system we advise

a cautious interpretation of the findings. The studies reporting on Paris-style aid interventions appear to show more consistent positive outcomes and demonstrate lower risk of bias. The general aid studies report less consistent outcomes and greater variability in the risk of bias, however within this larger group there are more studies which used a causal design and consequently the data are more robust.

4.2.2 Relationship between interventions and outcomes

In section 1.3.2 we set out pathways through which aid delivered might be expected to impact on MDG 5 outcomes. Many of the studies reviewed did not provide sufficient information on how the aid was delivered or managed, i.e. the intermediate stages in the pathway, to enable a robust systematic analysis. We provide a few examples below (details in appendices 3.1 and 4.1).

Pool A Studies (Paris-style aid)

- Barnett et al. (2007) reported how aid from one donor was channelled through other donors (harmonised) in Indonesia; and this aid was used by other donors for targeted interventions in the health sector aligned with the national strategy. It is therefore Paris-style aid but does not flow through government systems. The study reported an increase in the percentage of attended births between 2000 and 2004. However, the authors stated that success could not be attributed to the aid intervention with certainty.
- COWI et al. (2007) reported on a sector-wide approach (SWAp) for health in Tanzania, involving more than 20 development partners providing aid through different modalities (general budget support, health basket fund, health block grants, bilateral projects and programmes). This aid supported a nationally-owned health sector strategy, implemented by government agencies and donor partners. There were mixed results for maternal health. The study claims that the sector-wide approach had resulted in greater sector coherence and consistency, and contributed to improvements in health outcomes and in the quality of health services. However, the study also notes that it is difficult to establish causal relationships between any one aid modality and the health outcomes because of the range of modalities used.
- The World Bank (2006) reported on pooled funding by several donors into a special account for use by the Ministry of Health in Bangladesh. It was harmonised and aligned aid, but did not flow through government systems. The outcomes reported were positive for several MDG 5 indicators, but the authors noted that it is less plausible to claim a clear link between the sector-wide approach and the outcomes than it was with previous projects. They also note that other factors such as economic growth and expansion of female education might account for the outcomes rather than the Health and Population Sector Programme alone.
- Mansour et al. (2010) reported on a discrete aid-funded project requested by the Egyptian government, a national initiative which was subsequently scaled up with local funding. The study claims an association between the intervention and positive outcomes for MDG 5.1 and MDG 5.5, but primarily due to the efforts of local partners after the aid funding was completed.
- The World Bank (2003) reported on aid in the form of a soft loan to government which supports a discrete project, co-financed and implemented with national authorities. The study makes an association

between the intervention and positive outcomes for MDG 5, although the findings note methodological problems in measuring the magnitude of impact.

Pool B Studies

- Agha (2002) is a clear example of general aid, reporting on discrete project interventions implemented by organisations funded by USAID in the area of contraceptive usage. There was no information to indicate an adherence to the Paris Principles. Outcomes were mixed (some positive) amongst the target population.
- Barbey et al. (2001) evaluated the Dinajpur Safe Motherhood Initiative in Bangladesh. The intervention by the NGO Cooperative for Assistance and Relief Anywhere (CARE) took a project approach with aid delivered outside government systems, but claims to be implemented in conjunction with the Government of Bangladesh and UNICEF. The intervention supported discrete activities in the health sector and, while no claims are made on behalf of the intervention, the data show positive results in the intervention area.
- Campbell et al. (2005), Mize et al. (2008) and Ronsmans et al. (2001) provide examples where there is a suggestion of engagement with local authorities, but the aid was in the form of discrete projects managed by external actors. These studies all suggest that the discrete project interventions supported national programmes which have been successful.

4.3 Synthesis: Quality Assessment Results

Appendix 4.4 provides details of the quality assessment.

4.3.1 Assessment of study quality

The majority of studies reported their methodological approach to data collection and made conclusions which were supported by data. Eight studies clearly reported the design and analysis:

- Causal studies: Baird et al. (2007), Barbey et al. (2010), Meuwissen et al. (2006), Williams et al. (2007)
- Correlation studies: Perks et al. (2006), Powell-Jackson et al. (2006), Ronsmans et al. (2001), Shiffman et al. (2004)

Many studies were weaker regarding reporting on study limitations. The studies which provided the least information on this were: Edwards et al. (2006) and Options Consultancy Services Ltd (2010).

4.3.2 Reporting on confounding factors and alternative explanations

Only one study was explicit about confounding factors, possible alternative explanations for the results and external factors which might have affected the conclusions (Baird et al. 2007). Twelve studies failed to report any of these issues and 22 studies did not report on possible alternative explanations (ref). Given the extremely wide range of factors which can affect development interventions in developing countries, e.g. political context, economic environment, gender inequalities, this is a concern.

4.3.3 Reporting on the aid intervention

The majority of the studies gave a clear description of the aid intervention in general. However, their focus tended to be the activities funded by aid not the amounts of aid, the mechanisms through which it was donated, or the management of the funding. Only three studies (World Bank 2003, World Bank 2006, World Bank 2007) returned 'yes' responses to all our criteria on aid. These were also the only studies to provide an explanation of how the aid flowed from donor to recipient. In only 17 studies was the aid modality or aid instrument clearly defined and in only 12 was there information about the amount of aid donated. We consider all this information crucial to the evaluation of an association between the MDG 5 indicators and the principles governing how aid is provided. Baird et al. (2010), for example, which scored well on study quality and reporting on confounding factors, gave very little information on the aid intervention, making it impossible to assess whether the outcomes reported could be associated with the way in which aid was donated.

Many Pool B studies failed to report details of the aid. This is perhaps not surprising given that many were categorised as Pool B because there was insufficient information about the aid mechanisms to enable us to assess whether there was adherence to the Paris Principles.

4.3.4 Study independence

Only five studies appeared to have a high level of independence, i.e. there was nothing to suggest that the authors were in any way linked to or funded by a donor agency or an actor involved in the aid intervention or programme. Although some of the studies funded by donor agencies were quite critical of the aid intervention, for example the World Bank evaluation reports, we should be aware that, where the authors are connected in some way with aid agencies, the studies might report overly optimistic outcomes.

In general, our quality assessment suggests that caution is needed in attributing results based on outcome data to the provision of aid donated in particular ways. The study which met the most of our quality assessment criteria was Perks et al. (2006). However, this is not a study which takes us far in an analysis of the impact of Paris-style aid. Although there appears to be strong national ownership and alignment with national goals, the intervention concerns the provision of a long-term technical assistant funded by an NGO to the Lao DPR Ministry of Health. Studies which were more closely associated with Paris-style aid (e.g. Barnett et al. 2007 and COWI et al. 2007) were much weaker in terms of study design, robustness of the analysis and reporting on confounding factors.

5. Strengths and limitations

This report presents the first attempt to review systematically the publicly available literature on the impact of aid delivered under the Paris aid effectiveness principles on MDG 5 outcomes. This section explores some of the principal issues arising from the review.

5.1 Methodology

A systematic review aims to evaluate the existing research on a specific question. Maintaining a focus on the well-defined question, and ensuring that the review is replicable is central to the methodology. Boundaries were therefore set by the review question and systematic review methods. Our key focus was on evaluating the impact of aid delivery methods on *outcomes*. The question is not concerned with immediate or intermediate outputs from aid interventions which many of the studies did report, e.g. number of people trained, number of people visiting a particular facility, or uptake of services. Much of the literature to date on this topic looks at this level, where it is arguably easier to establish relationships between aid inputs (interventions) and outputs. Synthesising information on outputs rather than outcomes would have presented entirely different results.

The methods for undertaking evidence syntheses of health systems are not well developed (Alliance for Health Policy and Systems Research 2010), and our review included the added dimension of international aid as the core intervention. Our methodological approaches were informed by the EPPI-Centre, 3ie, the Cochrane Collaboration and the Centre for Reviews and Dissemination at the University of York (CRD); however, we had to adapt these to the particular needs of the review. This included, for example, taking a generous approach to the inclusion criteria on 'impact'.

Although some studies reported using randomisation to elicit their samples, we identified no randomised controlled trials, nor interrupted time series (with 3 or more data points before a clearly timed intervention with a further 3 or more data points afterwards). The most common study designs we identified used correlation methods, and therefore only indicate an association between the aid intervention and the outcomes. Our review included studies which contained few confidence intervals or p values from significance tests and almost no absolute numbers which would permit the recalculation of summary statistics. The follow-up periods were often short. We are aware that randomized control trials have been conducted on maternal and reproductive health in developing countries (see, for example, Manandhar et al. 2004). Likewise, studies exist which appear to show global reductions in MMR (see Hogan et al. 2010). However, such studies would not meet our inclusion criteria because the focus of this review is on the impact of particular types of aid intervention. Studies on particular government-run programmes, which were initiated with donor funding but which made no references to any of the terms in our 'aid' query string, would also not be returned in our search.

One area of innovation was our quality assessment checklist. It was a composite of items informed by the work of others and based on the opinion of the experts in our review group. Further work is merited to develop and test (validate) QA tools for systematic reviews on international aid.

Our systematic review has been conducted under considerable time pressure which prevented us from making contact with the authors of the included studies and we remain uncertain whether unpublished data on aid in support of MDG 5 outcomes exist.

5.2 Data on maternal and reproductive health

We adopted a broad approach to defining the MDG 5 indicators, for example by including studies which used proxy measures for some of the indicators,. The majority of studies failed to engage with the MDG 5 terminology altogether. In several studies the outcome indicators for which data were collected changed over the course of the reporting period or project lifespan. Even with a generous application of the MDG definitions the synthesis reveals gaps in the evidence base on maternal and reproductive health, particularly on adolescence birth rate and unmet need for family planning. Overall the evidence implies an association between aid and improvements in maternal and reproductive health, but there are serious limitations which are considered below:

MDG 5.1: Maternal mortality ratio (MMR)

The core of MDG 5 is the reduction in MMR. Compared to the incidence of neonatal, perinatal or infant mortality, maternal mortality is a relatively rare event even in countries where the MMR is high. For instance, where the MMR is 500 maternal deaths per 100,000 live births (equivalent to 5 maternal deaths per 1000 live births), it will require studies with a very large sample size to capture the kind of numbers of maternal deaths that could be tested statistically. Consequently, individual studies are unlikely to be in a position to make strong claims about changes in MMR. Moreover, many countries do not have national vital registration schemes capable of providing robust data on MMR and how it is changing. This is particularly so in places where the vast majority of births take place outside institutions and where there are large rural and/or remote populations. Moreover, we cannot assume that all institutions, such as private clinics, would necessarily report adequately on maternal deaths. In addition, different sources of data, such as Family Health Surveys and large scale sample surveys, can provide different base-line statistics, often with wide confidence intervals.

We also have concerns about the use of Emergency Obstetric Care (EmOC) as a proxy measure for MMR, on the assumption that more EmOC will lead to a lower MMR, as used by Barbey et al.(2001). In countries where home births are the norm, late and reluctant referrals are likely to be women with complications seeking and receiving EmOC very late and they are thus probably more prone to serious post-partum complications or death. Without adequate and reliable baseline statistics on the numbers of births and numbers of maternal deaths within institutions providing EmOC *and* in the wider society, it is not possible to make strong claims about the efficacy of EmOC in reducing the MMR.

MDG 5.2: Attended or assisted births

Our data on MDG 5.2 pertain both to institutional deliveries and to attended deliveries. It is important to distinguish between these two outcomes. Not all Staff in institutions are “skilled” and, equally, some home births may be attended by skilled attendants. Depending on the skills of the staff involved, institutional deliveries may not necessarily be safer than home births. The term institution covers a wide range of facilities, from those capable of providing full EmOC, with operating facilities, staff trained to perform C-sections, blood banks and other

facilities, to small rural clinics that lack all or some of these requirements. In other words, it is important to understand the term “institutional delivery”: without doing this, it should not be assumed that an increase in institutional deliveries necessarily results in a positive outcome for MMR.

MDG 5.3 Contraceptive prevalence rate:

The CPR is important for MDG 5 targets because high parity births (4+) tend to be much more risky than births 2-3-4. In other words, simply increasing the proportions of women who are not having high order risky births should bring down the MMR, even if there are no improvements in obstetric and other reproductive health services. It is important to stress, however, that caution is necessary in interpreting studies reporting an increase in contraceptive use at particular facilities and outlets (as measured in condom sales or numbers of women being sterilised, for instance). For example, without adequate baseline data on the CPR in the wider population both before and after interventions, it is not possible to know if increasing “contraceptive use” reflects an increase in the contraceptive prevalence *rate* or merely reflects increasing numbers of women/couples in the reproductive age groups (which could occur with no increase or even a decrease in the CPR). Studies that report increasing numbers of contraceptive users without informing us about changes in size of the total population could be illegitimately claiming success in increasing the CPR (and thereby implicitly reducing MMR).

MDG 5.4: Adolescent birth rate

This is generally defined as the annual pregnancy rate per 1000 females aged 15-19. The connection with MMR is that first pregnancies among adolescents are more risky than subsequent pregnancies, because of problems of physical immaturity, especially in conditions of chronic malnutrition. Moreover, early and then repeated pregnancies and lactation can result in “maternal depletion syndrome”, including chronic anaemia that renders women more vulnerable to postpartum haemorrhage, widely said to be the single most common cause of MMR. In some contexts, adolescent pregnancies are the result of extra-marital sexual relationships which carry stigma leading to concealment and poor care. Publicity campaigns directed at adolescents might conceivably have some impact on the adolescent pregnancy rate, but this cannot be assumed since information, education and communication approaches do nothing to alter the gender politics and socio-economic settings in which young women engage in sexual relationships i.e. they do not alter the conditions of poverty and interpersonal coercion, etc. that propel young women into early sexual activity. In contexts where marriages continue to be mainly parentally arranged (for instance, much of South Asia, which accounts for a huge proportion of the world’s maternal deaths), adolescent pregnancy is both commonplace and socially legitimate. Unless there are significant rises in marriage ages for young women, adolescent pregnancy rates will remain high. These are practices affected by social and economic factors and responsive to secular change over time (for example availability of jobs, and number of years in formal education), and they cannot readily be changed through intervention programmes, including those with a primarily health-care or medical focus.

MDG 5.5: Ante-natal care (ANC)

Different countries have different normal ANC programmes, so there is an inherent problem of comparability between different studies and generalisability across countries. In addition, as with the other issues discussed here, the statistics on ANC coverage may not be sufficiently accurate to permit us to judge how coverage has changed over time. Further, it is important to emphasise that even completed ANC regimes cannot be guaranteed to pick out all the women who are likely to

experience life-threatening obstetric crises and few studies are sufficiently detailed to enable an evaluation of the relative benefits of (say) weighing pregnant women, performing external examinations or providing them with iron-folic acid supplements. Crucially for MDG 5, by the late 1990s, it was in any case widely agreed that ANC was not a sufficiently effective means of identifying cases that were likely to result in a maternal death. Breech presentations and twin pregnancies are not necessarily identified in advance, particularly if ultrasonography is unavailable. Moreover, it is not always possible to predict post-partum haemorrhage. This led to the renewed enthusiasm for safe delivery, skilled attendants, institutional delivery, oxytocin for combating post-partum haemorrhage, etc. which are all part of the 2000s drive to reduce MMR. Thus, it is also crucial to acknowledge the limitation of ANC as a means of claiming or predicting reductions in MMR.

MDG 5.6: Unmet need for family planning

Unmet need is generally phrased in terms of percentages of pregnancies that are reported to be unwanted/unplanned, based on large-scale surveys.¹¹ Without knowing the details of how the surveys are conducted, which women were interviewed, who else was present at the interview, and what questions were asked, it is not possible to be confident that these percentages represent something close to unmet needs. Another aspect of this relates to gender politics and decision-making at the household level, when spouses may not be in agreement. The relevance of unmet need for contraception to MMR is first, that high fertility has detrimental effects on women's health (cf. the discussion of CPR above). Second, birth spacing benefits women (and babies) because small gaps between pregnancies (especially where breast-feeding is the norm) can involve a considerable drain on a woman's bodily wellbeing and, when combined with high fertility, can result in maternal depletion syndrome that puts women at greater risk of death in childbirth. It is also important to distinguish between the unmet need for permanent methods (such as sterilisation) and spacing contraception (such as IUCD, hormonal pills) for couples who ultimately want more children, or for whom sterilisation poses ethical or religious issues. Some countries at particular times have emphasised sterilisation, and there is likely to be a much higher level of unmet need for spacing methods there than for terminal methods in these situations. For instance, a trend that demographers in India have noted is that young women married in their late teens have (say) two children in rapid succession and are then sterilised all before their mid-twenties. This links to the logistical issues around one-off interventions compared to maintaining complex supply chains for condoms, and hormonal pills, etc.

More generally, and seriously, we are concerned that the focus on health care inputs/interventions to tackle apparently "medical" problems (with hence a focus on medical outcomes) inevitably marginalises the political, social and economic factors, including gender politics, which influence maternal health outcomes. Another way of phrasing this is that the problem within the reproductive and child health field is the assumption that this is all to do with "nature"/women's bodies, universalising / homogenising issues and that findings from one place can be used to inform what is done in some other quite different places. This lies behind global policies, e.g. to train traditional birth attendants (see Jeffery and Jeffery 1993, Jeffery et al. 1987). Rather, reconceptualising reproductive and child health as a complex socio-political field (with a biological component) would reframe it and

¹¹ See for example the discussion on defining unmet need in contraception: <http://www.guttmacher.org/pubs/gpr/09/1/gpr090110.html>

demedicalise it, and make interventions more responsive to socio-political context and less medically driven.

5.3 Aid interventions and health outcomes

Our search identified 12 studies that reported on interventions which concluded or began after the adoption of the Paris Declaration in 2005. Within these studies, the data often predated the concern with aid effectiveness which increased after the Monterrey Consensus of 2002. As anticipated, with the Paris Principles being so recent, many of the studies did not engage fully with the ideas of the Paris Declaration. Barnett et al. (2007) and COWI et al. (2007) were exceptions. It was appropriate therefore to take a broad approach to defining Paris-style aid as any intervention which showed clear adherence to all or some of the Paris Principles.

We found no studies which explicitly addressed the last two of the Paris Principles: - 'managing for results' and 'mutual accountability' - and reporting on aid management was often unclear. We only observed aspects of 'alignment' and 'harmonisation'. For example, we were unable to ascertain if donors used country systems or reported aid in the national budget. We can deduce degrees of harmonisation from the way studies reported on work with other donors in the field, but it was unclear if this went as far as conducting analytical work together. This highlights the constraints in analysing the impact of the Paris Principles when research does not engage directly with the Principles or give information on aid management systems. It was therefore much harder to discern whether an intervention could be considered to be adhering to the Paris Principles than anticipated.

This may be a consequence of the systematic review methodology, where studies had to meet robust inclusion criteria. Because studies had to present evidence of impact on MDG 5 outcomes to be included, their primary focus tended to be on health interventions, immediate outputs stemming from the intervention or results, not the aid input or policy dimension. Further, because our focus was on outcomes, we did not extract data on intermediate outputs or outcomes, such as impact on policy processes, how interventions worked, relationships between actors and which aid-funded activities worked best. Whereas the frameworks for evaluating the Paris Declaration discussed in section 1.4 come from the angle of studies on aid effectiveness, this systematic review comes from the angle of studies on maternal health. As a result, very few of the included studies had as a key objective a robust analysis of the aid modalities or management. Many studies which provided more detail on the aid dimension were screened out of the review during the process (see 7.3 for the full list) because they did not present evidence of impact on outcomes. For example, Greco et al. (2008) provide information on aid flows and how they have affected expenditure, but they provide no data on the impact of that aid on outcomes.

Much of the current work on aid effectiveness was excluded from our review because it does not address maternal health or because evidence of impact is not presented. For example, Beynon and Dusu (2010) look at the impact of budget support on the MDGs but do not use MDG 5 as an example. The studies produced by ODI/Mokoro as part of their study on sector-budget support did not present sufficient evidence of impact on health outcomes. Our early rounds of screening revealed several studies on Ghana, one of several countries which receive

considerable amounts of general and sector budget support, but none of them met all our criteria. Much of the work to date on aid effectiveness has stopped short of assessing final outcomes, but has focused rather on the impact of different aid modalities on shifts in donor approach, on policy processes or on institutional capacity. The second phase of the evaluation of the Paris Declaration which is ongoing might produce this sort of material, as multiple country studies are underway which should provide more evidence of impact. Once this material is available, it might be appropriate to update this systematic review.

A substantial number of the studies, however, did demonstrate adherence to at least some of the Paris Principles. For example, we see in most studies attempts to work in partnership with national authorities or to support national programmes on maternal health. Several interventions had strong elements of local 'ownership', with local authorities either initiating an activity, scaling up an activity initially funded by a donor, or controlling the use of resources. Very few gave no indication of such partnership and that may be more to do with the study design and reporting than the design of the intervention itself. Time and resource constraints meant that we were not able to engage with study authors to obtain further information on the aid dimension.

The studies which conformed most to the Paris Principles were those which reported on sector-based (or sector-wide) approaches in health. Reflecting back on the use of aid modalities as proxies for the Paris Principles as set out in section 1.3.1, the sector-wide approach might make the best proxy for Paris-style aid when looking at outcomes such as maternal health. At the same time, these studies did not seek to disaggregate the effects of different aid modalities, e.g. between budget support, sector budget support, pooled funds (administered through a trust fund or through a government-administered basket), or aligned projects making it impossible to isolate the impact of different types of aid. Within this type of package there is also aid which does not conform to all of the Paris Principles.

The studies on sector-wide approaches were also cautious about making claims on behalf of aid. Several state that the results recorded cannot necessarily be attributed to the intervention because of external factors, including political context, the impact of the activities of other donors, and the environment in which the intervention is taking place (capacities of staff, infrastructure, etc.). It is also difficult to control for interventions happening outside the Paris framework, highlighting that the Paris Declaration is far from being implemented across the board by all actors in developing countries. These studies which capture well the Paris Principles therefore also capture well the complexity of attributing results and outcomes to interventions and particular ways of working. It remains an open question as to whether any study design could sufficiently control for external environment given the size and socio-political complexity of the aid arena, and the reality that many aid actors do not adhere to the Paris principles in all their activities. For example, different agencies make different health related interventions in the same locality at the same time (multiple bi-lateral, philanthropo-capitalist [e.g. Gates], multi-lateral and INGO). Disentangling their individual impacts is impossible.

6. Conclusions and recommendations

This systematic review involved a broad search of the available literature on aid interventions and maternal health outcomes. An initial yield of 209 reports was screened using clearly defined inclusion and exclusion criteria to produce a total of 30 studies for synthesis and analysis. By using broad criteria on the MDG 5 indicators and broad definitions of aid we made the review as inclusive as possible.

We found no existing systematic review on this topic. We also found no studies which answered the review question in its entirety, i.e. the review identified no studies which compared the impact on the MDG 5 indicators of aid delivered using the principles set out in the Paris Declaration on Aid Effectiveness with aid delivered outside this framework. The study types and objectives were wide-ranging. Over half were donor reporting studies, e.g. evaluation reports and progress reports conducted by donors or commissioned by donor agencies. The vast majority were based on case studies of individual projects or countries. Most of the studies were not designed originally to evaluate the impact of different ways of delivering aid. In our definitions and background guiding the review, we focused on aid modalities as proxies for Paris-style and non-Paris-style aid. However, the studies themselves did not disaggregate in this way. No studies were included which looked only at general budget support or sector budget support. The studies which captured most clearly the Paris Principles were those evaluating sector-wide approaches in health, which covered a range of aid modalities. Although limited in number, studies do exist which assess the impact of sector-wide approaches, harmonisation and alignment on maternal and reproductive health outcomes.

The review identified discernible gaps in the evidence base on MDG 5 which are of concern if these targets are to be met by 2015, notably MDG 5.4 (adolescence birth rate) and 5.6 (unmet need for family planning). The studies synthesised concerned a rather narrow number of developing countries and aid donors.

Overall, the studies suggest that aid interventions (both Paris-style and general) might be associated with some positive changes in the target areas of intervention as demonstrated by changes in the outcome data. This conclusion should be treated with caution, however, as the claims are of association rather than causality, data are not comparable across the studies which cover different countries and time periods, and reporting on confounding factors and alternative explanations is generally weak. Therefore we cannot be confident that changes are happening because of the manner in which aid is delivered.

The data do not allow for a meaningful comparison between aid delivered according to the Paris Principles and aid delivered outside this framework. This points to a need for more targeted primary research to answer questions such as that posed in this review. It also highlights the time-lag between the adoption of a policy and a) the production of research based on solid data, and b) the translation of the policy into significant changes at the level of outcomes, especially when aid is but a very small part of the overall picture of social transformation.

The approach we took to quality assessment provides a basis for examining the chain between aid input and development outcomes. Firstly we need to be confident that there is no bias arising from study methodology, design and analysis which might affect the outcomes reported. However, before we can assess whether changes are anything to do with aid, be it Paris-style or not, we need to address the lack of reliable vital registration data and statistics on the issues that MDG5

addresses (such as teenage pregnancy), and the general lack of time series data which would be vital in order to assess what changes have taken place. Secondly, if we are confident that the designs are robust, we then need to be confident that the study considers confounding factors and alternative explanations for the outcomes. This is crucial given the importance of context to the impact of aid interventions. Thirdly, we need to relate the findings to the reporting on the *aid* itself. For example, we might find a study that is robust regarding the outcome variables, but tells us very little about the way in which aid was provided. This would not enable us to say with any degree of certainty whether the outcomes could be attributed to the way in which aid was delivered.

Recommendations

On systematic reviews and research methodology:

- The complexity of the review question raised concerns that a scoping review might have been more appropriate than a systematic review in a first phase. The included studies had widely differing objectives and designs, and the narrow focus on data on outcomes failed to capture broader socio-political, economic and gender issues which affect how aid works in this field. Some systematic review methods, such as meta-analysis, do not appear conducive to this type of question, and we would advocate more innovative approaches to evaluating impact within systematic reviews, including the use of qualitative research.
- Impact evaluation literature asserts that studies based on experimental design present the most plausible evidence of impact. Mounting primary studies of this type in the field of aid would pose great challenges, especially in controlling for all the contextual factors which affect how aid functions. Theory-based evaluations and outcome-mapping would be more appropriate.
- Evaluations of international aid in health systems could usefully exploit the methods developed by researchers of complex health interventions to overcome some of the challenges inherent in tracking aid flows within recipient nations and their effect on MDG 5.

On evaluating on aid effectiveness:

- This review highlights gaps that should be filled with primary studies bringing together aid effectiveness and health outcomes research. A more balanced approach for evaluating development outcomes is required that captures the whole chain. We observe that the aid effectiveness literature focuses too much on the aid and policy side; and much of the literature on health focuses too much on providing and analysing information on health alone.
- To do this, studies on health outcomes (or outcomes in other sectors) need to provide full information about the aid intervention as well as outcome data, e.g. how much funding, how it flows, how it is managed, clear information on the relationship between external and local actors, and information on other donors or aid-funded activities in the sector. This information was sparse in many of the studies explored in this review, making it impossible to ascertain depth of adherence to the Principles. The studies being prepared in advance of the next High Level Forum might begin to plug this gap, but they would also need to be very robust with regard to health data.

- The Paris Principles are indicative of a more hands-off approach to aid, placing greater responsibility in the hands of local partners and focusing on enhancing the environment in which aid is used rather than achieving tangible objectives with aid inputs. It is therefore contradictory to try and attribute results to aid inputs as the nature of interventions through government systems, harmonised with other donors, etc. dilutes the possibility of attribution of impact to the original aid input. Such limitations are recognised in the literature evaluating aid effectiveness, and the results of the ongoing phase 2 evaluation of the Paris Declaration should further our understanding of these limitations and possible ways to overcome them.
- We would recommend using aid modalities or management systems rather than the Paris Principles in evaluating aid interventions. The Principles themselves are too nebulous and are too open to different interpretations.
- We would recommend that future studies of general budget support, and particularly sector budget support, need to go further than they currently do. More studies on these modalities are required that provide data through the whole causal chain from input to outputs to outcomes. While it is extremely important to recognise the difficulties in making claims about particular aid interventions and outcomes, especially budget support, a larger pool of such studies might provide us with greater confidence in interpreting results.
- This review provides some evidence of impact of aid interventions on maternal health. The analysis could be extended by eliciting more information from the studies reviewed here about how interventions are deemed to have had an impact, or about their outputs or immediate outcomes.

On interventions in maternal and reproductive health:

- Before claims about cause and effect can be made, we need robust baseline data to couple with later data. Many of the studies had an inadequate statistical base, often without good time series data, too short a time-frame to estimate changes when any impact is likely to have a longer lead time, and a lack of attention to context. Additionally, several of the studies were based on data around institutions, and changes at that level cannot be judged unless there are data on what is going on outwith those institutions. An evaluation well beyond the project/programme conclusion should be factored into intervention design if outcomes are to be properly assessed.
- We are concerned that there is too great an emphasis on healthcare interventions. A focus on gender politics might have a greater impact. For example, we need to ask questions about ownership and control of resources, about women's work and how it is rewarded and valued. These will impact on things such as women's nutritional status generally (including pelvic dimensions, anaemia) which can have knock-on effects on their health and thus health during pregnancy/childbirth. There are also issues of gendered use of space and transport systems, and gendered patterns of mobility (and location of facilities) which will affect women's ability to avail themselves of facilities. This also points to evidence of long working days which can affect the time women have to access health care, as well as issues of having cash in hand to pay for services if necessary.
- We also need to see maternal and child health (MCH) in terms of class as well as gender. Good statistics would enable us to ascertain class biases in

MCH. Even where women may not control resources, if their husbands are poor they may not be able to access health care, even if they wished to do so. Class also affects relationships with health care providers and whether they are providing user-friendly services for poor people.

7. References

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Appendices

Appendix 1.1: Authorship of this report

RH, JS, EMT and FC conceived the idea for the study and all authors contributed to its design. The search strategy was designed by MD and conducted by MD, EMT and SH. Study selection, data extraction, quality assessment and data synthesis were conducted by RH, EMT and FC. RH drafted the report and all authors contributed to revisions and all approved the final version.

Details of Review Group membership:

Fay Crawford (FC), The University of Edinburgh
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Details of Advisory Group membership:

There was no external advisory group beyond the review team which included content experts on aid (RH, JS and EMT), maternal and reproductive health (PJ and IH), and systematic review methodology (FC).

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We are grateful to support teams at the EPPI-Centre and 3ie for technical and methodological advice throughout the systematic review.

Conflicts of interest:

There were no conflicts of interest

Appendix 2.1: Search strategy and results

Detailed Search Results

1. Databases (total uploaded from databases = 1653)

Database	Results Uploaded	Dates
CINAHL Plus	53	08/08/10
Dissertations and Theses	34	08/08/10
Econlit	10	19/08/10
Embase	131	27/07/10
Global Health Library	7	09/08/10
IBSS	11	20/08/10
IDEAS	0	23/08/10
Index to Theses*	4	08/08/10
JOLIS	13	23/08/10
Medline	131	26/07/10
Popline	883	08/08/10
Web of Science	376	27/07/10

* Note: 19 citations were picked up in the original Index to Theses search but because hits from this database could not be automatically imported into EPPI-Reviewer, the haul was pre-screened in Word. Subsequently, only 4 citations made it through the round 2 screening process.

2. Organisation websites (total uploaded from websites = 147)

Organisation	URL	Searched/Results Uploaded	Dates
DFID	http://projects.dfid.gov.uk http://www.dfid.gov.uk	- Search 'completed projects' in Population Policies/Programmes and Reproductive Health; no relevant studies. - Search 'publications'; 9 studies identified.	12/08/10
GFATM	http://www.theglobalfund.org	Google advanced search; 6 studies identified.	11/08/10
OECD	http://www.oecd.org	- Search 'OECD Working Paper Series' and site's 'key health publications'; no relevant studies. - Search 'OECD publications'; 10 studies identified.	13/08/10
PATH	http://www.path.org	Google advanced search; 5 studies identified.	16/08/10
USAID	http://www.usaid.gov	Search 'Our Work/Health/Maternal and Child Health' and	12/08/10

		publication archive 'Development Experience Clearance'; 12 studies identified in total.	
UNIFEM	http://www.unifem.org.int	Google advanced search; 2 studies identified.	19/08/10
White Ribbon Alliance	http://www.whiteribbonalliance.org	Google advanced search; no relevant studies.	19/08/10
World Bank	http://www.worldbank.org	- Search 'Research and Evaluation'; no relevant studies. - Use site's internal search function to search 'Documents and Reports' and 'Data Research'; 40 studies identified in total.	17/08/10
WHO	http://www.who.int	Google advanced search; 63 studies identified.	16/08/10

3. Topic gateways (total uploaded from topic gateways = 80)

Topic Gateway	URL	Searched/Results Uploaded	Date
Aid Effectiveness Portal	http://www.aideffectiveness.org	- Google advanced search; no relevant studies. - Use site's internal search function to search keyword 'maternal'; no relevant studies. - Search keyword 'MDG'; 2 studies identified.	11/08/10
BLDS	http://blds.ids.ac.uk	Search 'Health/Maternal Health', 'Aid Effectiveness/Health Aid' and 'MDGs'; 29 studies identified in total.	31/07/10
DFID Research 4 Development	http://www.research4development.info	Use site's internal search function to search maternal health in 'R4D outputs'; 5 studies identified.	08/09/10
ELDIS	http://www.eldis.org	Search 'Aid/MDGs/ Sector Specific Aid/Health' and 'Health/Maternal and Newborn Health'; 44 studies identified in total.	10/08/10

4. Bibliographic Snowballing/Expert Recommendations

An additional 20 additional references were manually uploaded into EPPI-Reviewer following bibliographic snowballing and expert recommendations.

Search Strategy for Electronic Databases

We generally used two query strings when searching electronic databases. The query strings concern 'aid in general' and 'MDG 5'. Examples of search criteria and strategies used are detailed below. We tailored our search strategies according to the complexity of the databases but also in a manner designed to reap the most results. Hence, we did not use all of the search criteria outlined below in all instances.

Having carried out some pre-testing, we decided against adding any further query strings in Round 1 concerning the other inclusion criteria (i.e. 'aid delivered in line with the Paris Principles', 'studies after 1990', 'developing countries', and 'impact'). This was in order to pick up as many potential studies as possible.

QUERY STRING 1. AID IN GENERAL. EXAMPLE SEARCH CRITERIA:

- Official Development Assistance (ODA)
- Aid flows/disbursement/commitment/international/project/programme etc
- Donor
- Development partner
- Bilateral
- Multilateral
- Loans
- Grants
- Development assistance
- Official Development Assistance
- Development/International Cooperation
- Global funds / global programmes / global health initiatives / global initiatives

QUERY STRING 2. MILLENNIUM DEVELOPMENT GOAL 5. EXAMPLE SEARCH CRITERIA:

- MDG 5/MDG5
- Millennium Development Goal 5/five
- Maternal mortality/morbidity
- Maternal mortality ratio
- Reproductive health/medicine
- Contraceptive prevalence rate
- Unmet contraception need
- Family planning
- Attended births
- Ante-natal care coverage
- Adolescence/adolescent birth rate
- Reproductive and Child Health (RCH)
- Safe motherhood

Database search histories

CINAHL Plus (EBSCOhost searched 2010-08-08)

(TX aid N3 program* or TX aid N3 project* or TX aid N3 development or TX aid N3 international or TX aid N3 flow* or TX aid N3 commitment* or TX aid N3 disbursement* or TX global health initiative* or TX "official development assistance" or TX ODA or TX "donor assistance") AND (TX birth* N3 attended or TX maternal N3 health or TX adolescen* N3 "birth rate*" or TX contracepti* N3 rate* or TX "Millennium Development Goal*" N3 "5" or TX MDG5 or TX "MDG 5" or MH "Pregnancy in Adolescence+" or MH "Contraception+" or MH "Family Planning+" or MH "Reproductive Health" or MH "Maternal Health Services+" or MH "Maternal Welfare" or MH "Maternal Mortality")

Dissertations and Theses (ProQuest searched 2010-08-08)

Search: ((aid OR donor) W/3 (disbursement* OR commitment* OR flow* OR international OR development OR project OR program)) OR (global fund* OR global health initiative* OR "official development") AND ((maternal W/2 (mortality OR health OR welfare)) OR reproductive health OR (attended W/3 births) OR family planning OR contraceptive behavio* OR (pregnancy w/3 adolescen*) OR (Millennium Development Goal W/3 "5") OR MDG5)

Embase (OvidSP 1980 to 2010 Week 29) searched 2010-07-27

1. (official development assistance or ODA).mp.
2. global health initiative*.mp.
3. (aid adj3 (disbursement* or commitment* or flow* or international or development or project* or program*)).mp.
4. (Millennium Development Goal* adj3 "5").mp.
5. (MDG5 or MDG 5).mp.
6. or/1-5
7. maternal mortality ratio.mp.
8. maternal mortality/
9. reproductive health/
10. (birth* adj3 attended).mp.
11. family planning/
12. exp prenatal care/
13. adolescent pregnancy/
14. sexual behavior/
15. contracept* behavio?r.mp.
16. maternal welfare/
17. (maternal adj3 health).mp.
18. or/7-17
19. 6 and 18

Global Health Library (www.globalhealthlibrary.net searched 2010-08-09)

(MDG5 OR "MDG 5" OR (millennium development goal* AND 5) OR (birth* AND attend*) OR (pregnancy AND adolescen*) OR (maternal health OR maternal welfare OR reproductive health OR family planning OR contraceptive use OR contraceptive behavio*)) AND ((global health initiative*) OR (official development) OR ((aid OR donor) AND (disbursement* OR commitment* OR flow* OR international OR development OR project OR program)))

Index to Theses (www.theses.com searched 2010-08-08)

("official development" OR (aid AND (disbursement OR commitment OR flow OR international OR development OR project OR program))) AND ("maternal mortality"

OR "maternal health" OR "maternal welfare" OR "reproductive health" OR "attended births" OR "family planning" OR "contraceptive use" OR "contraceptive behaviour" OR prenatal OR ante-natal OR "adolescent pregnancy" OR "pregnancy in adolescence" OR "Millennium Development Goal" OR MDG5 OR "MDG 5")

Medline (OvidSP 1950 to July Week 2 2010) searched 2010-07-26

1. (official development assistance or ODA).mp.
2. global health initiative*.mp.
3. (aid adj3 (disbursement* or commitment* or flow* or international or development or project* or program*)).mp.
4. (Millennium Development Goal* adj3 "5").mp.
5. (MDG5or MDG 5).mp.
6. Maternal Mortality/ or maternal mortality ratio.mp.
7. reproductive health.mp. or Reproductive Medicine/
8. (birth* adj3 attended).mp.
9. Family Planning Services/
10. Prenatal Care/ or ante-natal care.mp.
11. Pregnancy in Adolescence/
12. Contraception Behavior/
13. Maternal Health Services/
14. (maternal adj3 health).mp.
15. 1 or 2 or 3
16. or/4-12
17. or/4-14
18. 15 and 16
19. 15 and 17

Popline (www.popline.org searched 2010-08-08)

(official development assistance / global health initiative* / global fund* / ((aid / donor) & (disbursement* / commitment* / flow* / international / development / project* / program*))) & (maternal health / maternal health services / reproductive health / maternal mortality / family planning / contraceptive usage / adolescent pregnancy / (birth* & attend* & skill*) / (Millennium Development Goal* & 5) / MDG5 / MDG 5)

Web of Science (incorporating Science Citation Index and Social Sciences Citation Index) searched 2010-07-27

Topic=(((official development assistance OR ODA OR (aid SAME (disbursement* OR commitment* OR flow* OR international OR development OR project* OR program*)) OR donor OR global health initiative*) AND (MDG 5 OR MDG5 OR ((Millennium Development Goal* OR MDG*) SAME (5 OR maternal)) OR maternal mortality OR maternal health OR reproductive health OR (birth* SAME attended) OR family planning OR ante-natal care OR (adolescen* SAME birth rate*) OR (contracepti* SAME rate))))

EconLit (FirstSearch) 2010-08-19 all content 1969-present

(ab: aid n3 disbursement* or ab: aid n3 commitment* or ab: aid n3 flow* or ab: aid n3 international or ab: aid n3 development or ab: aid n3 project or ab: aid n3 program or ab: donor n3 disbursement* or ab: donor n3 commitment* or ab: donor n3 flow* or ab: donor n3 international or ab: donor n3 development or ab: donor n3 project or ab: donor n3 program or ab: global w health w initiative* or ab: official w development w assistance or ab: ODA or ab: donor w assistance) and (ab: maternal or ab: reproductive w health or ab: birth* n3 attend* or ab: prenatal w care or ab: ante-natal w care or ab: adolescen* n3 birth or ab: adolescen* n3

pregnancy or ab: contracepti* n3 rate* or ab: contracepti* n3 behavio* or (ab: family and ab: planning) or ab: millennium w development w goal n3 5 or ab: MDG5)

IBSS (EBSCOhost) searched 2010-08-20 all content 1951-present
(TX aid N3 program* or TX aid N3 project* or TX aid N3 development or TX aid N3 international or TX aid N3 flow* or TX aid N3 commitment* or TX aid N3 disbursement* or TX global health initiative* or TX "official development assistance" or TX ODA or TX "donor assistance") AND (TX birth* N3 attended or TX maternal or TX adolescen* N3 "birth rate*" or TX contracepti* N3 rate* or TX "Millennium Development Goal*" N3 "5" or TX MDG5 or TX "MDG 5" or TX Pregnancy N3 Adolescen* or TX Contracepti* N3 rate* or TX Contracepti* N3 behavio* or TX "Family Planning" or TX "Reproductive Health")

IDEAS searched 2010-08-23 all content
"MDG 5" OR maternal OR "millennium development goal 5"

JOLIS searched 2010-08-23 (specify document type: article)
maternal OR "MDG 5" OR "millennium development goal 5"

Appendix 2.2: Coding tool

	Num	Question	Description	Coding
GENERAL DETAILS	1.01	Reviewer ID	Reviewer carrying out data extraction on report	Reviewer initials
	1.02	EPPI ID number	Unique EPPI Reference number assigned to report	##
	1.03	Author/s	Author/s of report under review	Surname, Initial
	1.04	Year of publication	Year of report publication	####
	1.05	Publication type	Type of publication (e.g. peer reviewed journal)	Open answer
	1.06	Study funder	Who is funding the report?	Open answer
	1.07	Project/Programme name	Name of aid-funded project/s or programme/s being discussed in report	Open answer
	1.08	Country/countries	Geographical focus of study	Open answer
STUDY DETAILS	2.01	Study Objectives	Study objectives as described, or implied, in report	Open answer
	2.02	Study design	Study design as described, or implied, in report	Open answer
	2.03	Study methods	Study methods as described, or implied, in report	Open answer
	2.04	Primary outcome measures	Primary outcome measures	Open answer
	2.05	Secondary outcome measures	Secondary outcome measures	Open answer
	2.06	Covariate variables	Covariates	Open answer
	2.07	Primary data source	Data sources drawn on in report	Open answer
	2.08	Data collection period	When the empirical data cited in the report was collected?	Insert date range
	2.09	Control group	Define control group*	Open answer
	2.10	N Control	Number of participants in control group*	##
	2.11	Selection/Sampling criteria	Sampling criteria for control group*	Open answer
	2.12	Intervention Group	Define intervention group	Open answer
	2.13	N Intervention	Number of participants in control group	##
	2.14	Selection/Sampling Criteria	Sampling criteria for intervention group	Open answer
			<i>* Note: question only relevant to causal studies</i>	
AID	3.01	Project/programme donor	Aid donor/s described in report	Open answer

	Num	Question	Description	Coding
INFORMATION	3.02	Project/programme name	Aid project/programmes described in report	Open answer
	3.03	Other donors/projects operating in the same field	Other donors reported to be working in same field in focus country/countries (i.e. maternal health)	Open answer
	3.04	Project start	Date of project commencement	Insert date
	3.05	Project end	Date of project end	Insert date
	3.06	Project Funding	Aid total (and breakdowns if given) for project	Insert figure/s
	3.07	Project description/aims	Project description/aims as recorded in report	Open answer
	3.08	Description of aid modality	Describe aid modality (e.g. project, sector-wide approach)	Open answer
	3.09	Description of aid intervention	Describe aid intervention (i.e. discrete, ongoing)	Open answer
	3.10	Sufficient detail to suggest Paris-style aid management	Is sufficient detail, provides in the report to suggest Paris-style aid management?	Yes/no
	3.11	If yes, describe aid management conditions	If yes to last question, describe the aid management conditions	Open answer
CONTEXTUAL INFORMATION	4.01	National MMR	National Maternal Mortality Rate	##/100,000 live births
	4.02	HDI Ranking	Human Development Index Ranking of focus country/countries	##
	4.03	Other	Other salient contextual information contained in report	Open answer
MDG FOCUS	5.01	MDG Focus	List the MDG 5 indicators alluded to (either directly or indirectly) in the report, e.g. Maternal Mortality Ratio/MDG indicator 5.1	Open answer
DATA SECTION	6.01	Quantitative data	Insert salient quantitative data contained in the report (e.g. tables presenting interrupted time series data, the results of multivariate regressions etc.)	Open answer (largely numerical)

	Num	Question	Description	Coding
STUDY FINDINGS AND ADDITIONAL COMMENTS	7.01	Salient qualitative and quantitative findings	Insert any salient study findings, as recounted in the discussion/text-based sections of the report.	Open answer (largely textual)
	7.02	Additional comments	Insert additional comments, whether these refer to sections of the report for which data were not extracted (i.e. because they were not deemed directly relevant to the review question) or whether you consider them a useful addition to help others make sense of the study findings/data.	Open answer
	7.03	Study Conclusions	Insert broad report conclusions	Open answer
STUDY CLAIMS	8.01	Study claims about impact of aid on MDG 5 goal/indicators	Has the study made any claims about the impact of aid on the MDG 5 goal/indicators?	Open answer
	8.02	Causation or correlation	If yes to last question, does claim allude to causation or correlation?	Open answer
	8.03	Theories of change or causal pathways	Are any theories of change or causal pathways offered?	Open answer
QUALITY ASSESSMENT PART ONE (AID)	9.01	Independence of study author	Is study author a donor or recipient or linked to project?	Yes/no/unclear
	9.02	Study funding	Was study funded by an aid donor or recipient?	Yes/no/unclear
	9.03	Description of aid intervention	Is there a clear description of the aid intervention?	Yes/no/unclear
	9.04	Aid modality	Is the aid modality defined?	Yes/no/unclear
	9.05	Aid amount	Is the aid amount specified?	Yes/no/unclear
	9.06	Explanation of aid flow	Is there a clear explanation of aid flow from funder to recipient?	Yes/no/unclear
	9.07	Evidence of local ownership	Is there evidence of local ownership of aid funded intervention?	Yes/no/unclear
QUALITY ASSESSMENT PART TWO (METHODS)	10.01	Study aims and methods	Are study aims and methods clearly described?	Yes/no/unclear
	10.02	Sampling method	Was the method of sampling reported?	Yes/no/unclear
	10.03	Rigour of data	Were steps to increase the rigour of data collection reported?	Yes/no/unclear

	Num	Question	Description	Coding
	10.04	collection Control group	Is the control group reported?*	Yes/no/unclear
	10.05	Study limitations	Are the study limitations discussed?	Yes/no/unclear
	10.06	Data and study conclusions	Does the data support the study conclusions?	Yes/no/unclear
	10.07	Confounding factors	Does the study report confounding factors?	Yes/no/unclear
	10.08	Alternative explanations	Is study clear about alternative possible explanations behind the results?	Yes/no/unclear
	10.09	External events or factors	Does study report external events or factors which have affected conclusions?	Yes/no/unclear
			<i>* Note: question only relevant to causal studies</i>	

Appendix 2.3: Quality Assessment Checklist

1. Independence of the Study	Response
<p>Is study author a donor or recipient or linked to project? <i>Does the study specify whether all or any of the author(s) are employed by or affiliated to the donor behind the intervention or the recipient receiving the support?</i> <i>Does the study specify whether the author(s) are in any way linked to the project in question?</i> <i>(NB: commissioned reports/studies by external consultants would be a no)</i></p>	<p>Yes No Unclear</p>
<p>Was the study funded by a donor or recipient? <i>Is it clear who funded the study?</i> <i>Was that funder a donor agency, implementing agency or recipient government associated with the intervention?</i> <i>(NB: we have studies which were funded by donor agencies, e.g. Bill & Melinda Gates Foundation - unless it is a Foundation project the answer would be no)</i></p>	<p>Yes No Unclear</p>
2. Reporting on the aid intervention	
<p>Is there a clear description of the aid intervention? <i>Are details provided of the aid project/programme?</i></p>	<p>Yes No Unclear</p>
<p>Is the aid modality defined? <i>Is there a clear description of the aid modality (budget aid, sector budget support, project, etc.)</i></p>	<p>Yes No Unclear</p>
<p>Is the amount of aid specified? <i>Are total amounts given; is there a breakdown of aid inputs?</i></p>	<p>Yes No Unclear</p>
<p>Is there a clear explanation of aid flow from funder to recipient? <i>Does the study trace the flow of funding from the initial input to the intended beneficiary (whether that is the recipient government, implementing partner, etc.)?</i></p>	<p>Yes No Unclear</p>
<p>Is there evidence of local ownership of aid funded intervention? <i>Is information provided on how the aid is managed?</i> <i>Is there evidence that the intervention was initiated by the recipient side (e.g. government requested a particular intervention?)?</i> <i>Is there evidence that the intervention is aligned with local government priorities or strategies?</i> <i>Is there evidence that the local recipient (government, local authorities, national civil society, etc.) have responsibility for the aid intervention?</i></p>	<p>Yes No Unclear</p>
3. Reporting on the study design and methods	
<p>[This section is concerned with what is reported in the study. It is not about making value judgments about the nature of the study design or methods]</p>	
<p>Are study aims and methods clearly described?</p>	<p>Yes No Unclear</p>
<p>Was the method of sampling reported?</p>	<p>Yes No Unclear</p>
<p>Were steps to increase the rigour of data collection reported? <i>Here the use of data triangulation is looked upon as a sign of rigour.</i></p>	<p>Yes No Unclear</p>
<p>Is the control group reported?</p>	<p>Yes No Unclear</p>

[This question is only applicable to causal studies]	
Are the study limitations discussed?	Yes No Unclear
4. Robustness of the data analysis [This section looks for convergence between a study's qualitative conclusions and the quantitative data presented in the study]	
Do the data support the study conclusions?	Yes No Unclear
5. Reporting on confounding factors [This section is concerned with what is reported in the study]	
Does study report confounding factors? <i>E.g. intervening variables which might affect the findings, such as literacy rates, other health factors, poverty levels?</i>	Yes No Unclear
Is study clear about possible alternative explanations behind results? <i>E.g. outcomes may be explained by factors such as employment, education</i>	Yes No Unclear
Does study report external events or factors which have affected conclusions? <i>E.g. factors beyond the control of the intervention, such as natural disasters, the impact of new government policy (donor or recipient side)?</i> <i>E. g. Was there an international conference/agreement which might have catalysed a particular activity?</i>	Yes No Unclear

Appendix 3.1: Details of studies included in the review

	Study (general details)	Intervention details	Aid Details
1	<p>Agha 2002</p> <p>Study design: quasi-experimental; pre-test post-test; using the Health Belief model which is based on a cognitive approach that uses a cost-benefit perspective to understand preventative health behaviour</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: using a cost-benefit perspective, to understand preventative health behaviour. Study supported by USAID and PSI</p> <p>MDG 5 Indicators: contraceptive use (MDG 5.3)</p>	<p>Programme Name: Social Marketing Adolescent Health Project</p> <p>Objectives: to raise risk awareness, reduce barriers to safer sex and increase perceived benefits of prevention through social marketing activities.</p> <p>Country of operation: Cameroon (13 months); Botswana (8 months); South Africa (11 months); Guinea (6 month in Kankan, 8-9 months in Conakry)</p> <p>Year of intervention: 1994-1998</p> <p>Intervention description: peer education (training of peer educators to promote behaviour change and motivate use of contraception), youth clubs, mass media advertising (except in Guinea), distribution of informational and educational materials, distribution of free condoms and sales of subsidized condoms at new outlets or existing outlets which were encouraged to be adolescent-friendly.</p>	<p>Donor: USAID (Africa Bureau)</p> <p>Other donors operating in the same field: not reported</p> <p>Aid modality: not explicit; information suggests project modality with discrete interventions.</p> <p>Funding amount: not reported</p> <p>Aid management: no information provided</p>
2	<p>Baird et al. 2010</p> <p>Study design: quasi-experimental; pre-test post-test design</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: To examine the impact of the World Bank's Safe Motherhood Programme on health outcomes amongst Indonesia's poor by comparing outcome data in intervention and control provinces.</p> <p>MDG 5 Indicators: attended births (MDG 5.2); adolescent birth-rate (MDG 5.4)</p>	<p>Programme Name: Safe Motherhood Project</p> <p>Objectives: increase demand for and utilization of quality maternal and child health care through education and awareness; increase supply of health services at village level; improve quality of MCH care via training; improve health services aimed at adolescent reproductive health.</p> <p>Country of operation: Indonesia (East and Central Java)</p> <p>Year of intervention: 1998-2003</p> <p>Intervention description: The Safe Motherhood Project was an intervention designed specifically for Indonesia's Central and East Java provinces. The SMP provided training and funding for specific programs, such as health counsellors. It targeted province residents with educational campaigns to increase awareness of what services were available to them. Indonesia's Ministry of Health had previously attempted several programs to improve MCH, such as increasing the number of midwives and other trained personnel, but had failed to create demand for such services. The</p>	<p>Donors: World Bank</p> <p>Other donors operating in the same field: UNICEF (MCS project); World Bank Health Project 5; WHO; USAID; AUSAID; Asian Development Bank</p> <p>Aid modality: Information suggests a programme-based approach with multiple discrete inputs into health and education sector.</p> <p>Funding amount: \$42.5m</p> <p>Aid management: Not clear but there is a suggestion that the Indonesian Ministry of Health coordinates projects in the health sector</p>

	Study (general details)	Intervention details	Aid Details
		SMP was intended as the first phase of a large-scale program aimed at addressing this problem.	
3	<p>Barbey et al. 2001</p> <p>Study design: quasi-experimental; post-test design</p> <p>Study type: evaluation report</p> <p>Study objectives: to examine and validate the achievements; explain attribution of specific project interventions; make recommendations for future programming initiatives</p> <p>MDG 5 Indicators: MMR (MDG 5.1); assisted deliveries (MDG 5.2) and ante-natal care (MDG 5.5)</p>	<p>Programme Name: Dinajpur SafeMother Initiative</p> <p>Objectives: Community mobilization to increase utilization of obstetric care services in the facilities within the intervention sub-district from 16% to 50%; and to increase access of women to quality care, particularly those with obstetric complications, who are subjected to violence.</p> <p>Country of operation: Bangladesh (Dinajpur district)</p> <p>Year of intervention: 1999-2001</p> <p>Intervention description: promotion of Birth Planning; development of community support systems (CmSS); improvement in Quality of Care through the creation of Stakeholder Committees and through the enhancement of GOB health service provider capacity; advocacy for access for all women subjected to violence, particularly those with obstetric complications, to quality services</p>	<p>Donors: CARE (Cooperative for Assistance and Relief Anywhere)</p> <p>Other donors operating in the same field: intervention is carried out in conjunction with UNICEF. No other donors mentioned.</p> <p>Aid modality: not explicit; 3-year discrete initiative suggests project modality</p> <p>Funding amount: not reported</p> <p>Aid management: report mentioned that the intervention was implemented in conjunction with the Government of Bangladesh and UNICEF</p>
4	<p>Barnett et al. 2007</p> <p>Study design: Review of reports and correspondence and programme records plus interviews with staff and officials in government</p> <p>Study type: country programme evaluation</p> <p>Study objectives: to summarise the evaluation of DFID's country programme in Indonesia</p> <p>MDG 5 Indicators: attended births (MDG 5.2) - indicator tracked</p>	<p>Programme Name: three consecutive strategy papers to support poverty reduction (Country Strategy Paper - CSP - 2000-2005; Country Approach Paper - CAP - 2004-2008; Vision Paper 2004-2011)</p> <p>Objectives: programme billed as having innovatively sought to implement the Paris Declaration, especially on donor harmonisation, achieve 'more with less' through low intensity partnerships (LIPs) and shift towards a 'mature aid relationship'.</p> <p>Country of operation: Indonesia</p> <p>Year of intervention: <2000-2010/11</p> <p>Intervention description: under CSP to work with other major development partners to strengthen international support for Indonesia's efforts to reduce poverty in areas of: pro-poor policies and budgetary management; governance; forestry. broad range of activities, including health, governance, forestry, civil society, capacity building. Under CAP areas are: health; governance & poverty; forestry and civil society. Under VP twin-track approach to improve development effectiveness through harmonisation focusing on decentralisation and the Local Services Platform; health; livelihoods/forestry; conflict prevention.</p>	<p>Donors: DFID</p> <p>Other donors operating in the same field: donors DFID is working with in Indonesia named in the report: World Bank, GTZ, UNICEF</p> <p>Aid modality: range of modalities, including multi-donor trust funds, partnership funds (channelled through other multilateral and bilateral donors), Multi-stakeholder Forestry Programme provides small grants.</p> <p>Funding amount: average of USD 24.49m since 2000</p> <p>Aid management: harmonised donor funds. Through low-intensity partnerships, DFID provides support to competent agencies working to implement Gol strategies, with a view to scaling up interventions and catalysing increased donor harmonisation. DFID did not seek to build its own advisory support, and avoided areas where other donors were strong</p>

	Study (general details)	Intervention details	Aid Details
5	<p>Buckley 2006</p> <p>Study design: Interviews with NGO workers, medical personnel, and secondary analysis of health survey data and routinely collected data</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to examine the direction and results of efforts of NGOs in the area of reproductive and sexual health in Uzbekistan. It focuses specifically on the institutional, structural, epidemiological and cultural forces responsible for the exclusion of sexual health issues from reproductive health campaigns.</p> <p>MDG 5 Indicators: contraceptive use (MDG 5.3)</p>	<p>Programme Name: this study is not about one particular donor or campaign. It covers a range of donor-funded activities.</p> <p>Objectives: The various interventions had a range of objectives linked to reproductive and sexual health.</p> <p>Country of operation: Uzbekistan</p> <p>Year of intervention: programmes range from 1993-2000</p> <p>Intervention description: Interventions described are varied, covering training health care providers, mass media education campaigns, providing material assistance in the form of IUDs and condoms, and raising awareness about contraceptive methods other than IUDs.</p>	<p>Donors: various bilateral (incl. USAID) and multilateral agencies (incl. UNFPA, UNESCO, UNAIDS) and NGOs</p> <p>Other donors operating in the same field: not relevant</p> <p>Aid modality: discrete projects</p> <p>Funding amount: not reported</p> <p>Aid management: study deals with a range of donor interventions so few details are provided. There is no recording of government involvement in the interventions, although there is an indication that some activities are in line with government preferences</p>
6	<p>Campbell et al. 2005</p> <p>Study design: Quasi experiment, pre-test/post-test design</p> <p>Study type: WHO Bulletin</p> <p>Study objectives: reviews the shifts in causes and avoidable factors related to maternal deaths and analyses the impact of Safe Motherhood programmes in Egypt on MMR</p> <p>MDG 5 Indicators: maternal mortality ratio (MDG5.1); assisted births (MDG 5.2); contraceptive prevalence (MDG 5.3); ante-natal visits (MDG 5.5)</p>	<p>Programme Name: Safe Motherhood Programme</p> <p>Objectives: overall aim of the national programme, to which USAID projects contributed, was to reduce the 1989 MMR</p> <p>Country of operation: Egypt</p> <p>Year of intervention: series of projects running from 1985-2005: Child Survival Project (1985-1996); MotherCare Egypt Project (1996-1998); Healthy Mother/Health Child Project (1998-2005)</p> <p>Intervention description: USAID-supported interventions undertaken by the Egyptian Ministry of Health and Population included: establishment of a Daya training programme; introduction of a revised curriculum and pre-service training in nursing and medical schools; in-service training to upgrade skills of health providers in MCH service delivery; introduction of service standards for improved clinical management; providing equipment to strengthen health and lab facilities; training lab technicians in the proper use of upgraded MCH labs; initiation of the development of an improved, computerised health information system; implementation of systems for improved and decentralised planning, management and supervision; organisation of mass media campaigns; development of standards of care; strengthening of institutional capacity to improve maternal health; increasing community awareness and participation; and enhancement of national policy environment for maternal health.</p>	<p>Donors: USAID</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: project aid</p> <p>Funding amount: not reported</p> <p>Aid management: USAID projects contributing to a national programme</p>

	Study (general details)	Intervention details	Aid Details
7	<p>COWI et al. 2007</p> <p>Study design: Document reviews, key informant interviews, case studies, secondary data analysis</p> <p>Study type: report (joint evaluation), funded by 6 donors (Belgium, Canada, Denmark, Germany, the Netherlands and Switzerland)</p> <p>Study objectives: to provide evidence about the relevance and effectiveness of the joint development work in the health sector, including the performance of the health sector against the Millennium Development Goals (MDGs) and the objectives of the PRSP/ MKUKUTA , and cooperation modalities, harmonisation, alignment and dialogue between the Government, the development partners and other stakeholders.</p> <p>MDG 5 Indicators: MMR (MDG 5.1); attended births (5.2)</p>	<p>Programme Name: Tanzania, Sector-Wide Approach in the Health Sector</p> <p>Objectives: support to the Government of Tanzania's strategies in the health sector</p> <p>Country of operation: Tanzania</p> <p>Year of intervention: 1999-ongoing</p> <p>Intervention description: wide-ranging and diverse support for health goals outlined in the National Strategy for Growth and Poverty Reduction (MKUKUTA), sector strategic plans, improving access, service quality and health outcomes</p>	<p>Donors: multiple donors. Eight government agencies, more than 20 development partners, many non-government organisations, faith-based organisations, civil society organisations as well as the private sector were engaged in this joint evaluation exercise.</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: mixture of modalities, including general budget support, health basket fund, health block grants, bilateral projects and programmes, funding from global health initiatives.</p> <p>Funding amount: Total foreign disbursements to Tanzanian health sector averaged more than USD 316 million in FY 2005 up from USD134 million in FY 2002</p> <p>Aid management: strong engagement with Paris Principles. Range of aid modalities used under the sector-wide approach. The report also mentions activities of other donors outside this framework. There was an increase in on-budget aid over the evaluation period, and the development of a joint monitoring and evaluation system.</p>
8	<p>Debay 2007</p> <p>Study design: interrupted time series using Health Facility Assessment surveys and focus groups.</p> <p>Study type: final project evaluation</p> <p>Study objectives: not explicit; assume to evaluate the performance of the project against the objectives outlined in the Detailed Implementation Plan</p> <p>MDG 5 Indicators: contraceptive use (MDG 5.3)</p>	<p>Programme Name: The Toliara Province Child Survival Project</p> <p>Objectives: To reduce morbidity and mortality among children under 5 and to improve the health status of women of reproductive age in the Betioky and Toliara II Districts</p> <p>Country of operation: Madagascar</p> <p>Year of intervention: 2003-2006</p> <p>Intervention description: The Toliara Province Child Survival Project (TPCSP, 2003-2006) is a cost-extension of the Betioky Child Survival Project (BSCSP, 1998-2002), which itself built on a Planning Grant project (1996-1998). Three main strategies to (1) strengthen capacity at community level, (2) strengthen case management, BCC, and management/supervision at the facility and district levels; and (3) facilitate synergies with other donor partners. Technical interventions: Control of Diarrheal Diseases, Immunization, Breastfeeding, Child spacing, HIV prevention, Pneumonia Case Management and Malaria Control.</p>	<p>Donors: USAID, implementing partner is Medical Care Development International (MCDI)</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: project funding</p> <p>Funding amount: USD 1,229,843</p> <p>Aid management: Primary partners named are the Ministry of Health and Family Planning (MOHFP) at the Region, District and Commune levels, the Ministry of Communication and Youth, and three local NGOS (VEMIMA, Mampifofo and Miainga). Discrete project funding managed by the implementing partner.</p>

	Study (general details)	Intervention details	Aid Details
9	<p>Edwards et al. 2006</p> <p>Study design: quasi-experimental</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to assess the elements of project design that contributed to its long-term sustainability beyond the project life-span</p> <p>MDG 5 Indicators: Maternal mortality rate (MDG5.1)</p>	<p>Programme Name: The Canada-China Yunnan Maternal and Child Health Project</p> <p>Objectives of the intervention: improve quality, accessibility and availability of essential services for priority maternal and child health problems; support maternal and child health staff and village doctors in instituting and maintaining dynamic relationships and action with rural women, village midwives, and other groups for improvements in maternal and child health; increase the relevancy and responsiveness of continuing education programming for maternal and child health trainers and trainees regarding the needs and priorities of rural women and children.</p> <p>Country of operation: China (Yunnan)</p> <p>Year of intervention: 1997-2003</p> <p>Intervention description: training grassroots maternal and child health workers in participatory and community-based approaches and clinical skills; designing a model comprehensive referral system including provision of basic equipment; and introducing participatory monitoring and evaluation methods. The project incorporated strategies to infuse new approaches through the system and increase uptake beyond project counties (training-the-trainers). Local counterparts were identified for all Canadian technical personnel. Through a process of mentoring and mutual learning, counterparts became critical project champions. Iterative results-based management provided budgetary and implementation flexibility, so that the project team could effectively address externally-driven events that threatened sustainability. Participatory management allowed the project team to make adjustments during key transition points, such as the mid-project handover of the training component to Chinese partners.</p>	<p>Donors: Canadian International Development Agency (CIDA)</p> <p>Other donors operating in the same field: World Bank (Health VI project)</p> <p>Aid modality: bilateral project; discrete intervention</p> <p>Funding amount: not reported</p> <p>Aid management: co-designed and managed with Chinese partners. Canadian executing agency reporting to CIDA; Chinese executing agency reporting to Chinese Ministry of Trade and Commerce (MOFCOM); Joint Project Steering Committee directed by CIDA and MOFCOM, providing oversight and approval of annual budgets, work plans, and overall project direction.</p>
10	<p>Hounton et al. 2008</p> <p>Study design: quasi-experimental.</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to investigate the extent to which the Skilled Care Initiative (SCI) was effective in reducing pregnancy- related and perinatal mortality, and to assess how costs borne by the health system and households for maternal care were affected by the SCI.</p>	<p>Programme Name: The Skilled Care Initiative</p> <p>Objectives: contribute towards pregnancy-related mortality reduction by ensuring skilled care for every woman before, during and after childbirth; increase rates of skilled attendance by at least 10% in the project districts.</p> <p>Country of operation: Burkina Faso</p> <p>Year of intervention: 2001-2005</p> <p>Intervention description: Project activities focused on two main areas: improving the availability and quality of maternity care, and promoting</p>	<p>Donors: Bill and Melinda Gates Foundation; Family Care International (implementing partner)</p> <p>Other donors operating in the same field: UNFPA, World Neighbours. Notes that the other six health centres in the district received support from other donors</p> <p>Aid modality: unspecified but the information suggests project approach</p> <p>Funding amount: not reported</p>

	Study (general details)	Intervention details	Aid Details
	<p>Indicators: reducing maternal mortality rate (MDG 5.1) by increasing the number of assisted births (5.2) and ante-natal care (MDG 5.5). Mentions MDG 5 specifically.</p>	<p>increased utilisation of maternity services. It also aimed to strengthen obstetric care at the first referral level – the district hospital. FCI worked in the district hospital and, on a phased basis, in 13 of the then 19 health centres. District-level interventions were complemented by national-level activities aimed at strengthening government policies and strategies related to maternal health, including the development of clear standards and protocols for obstetric care. There was also an intensive behaviour change and community mobilisation effort to encourage health-seeking behaviour and build critical community support for skilled care.</p>	<p>Aid management: no information provided about how aid was managed or engagement with local authorities.</p>
11	<p>Magnani et al. 1998</p> <p>Study design: quasi-experimental; post-test design</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to explore whether the monetization of non-emergency food aid adversely influenced national family planning program efforts. Study funded by USAID.</p> <p>MDG 5 Indicators: contraceptive prevalence (MDG 5.3)</p>	<p>Programme Name: National Family Assistance Program</p> <p>Objectives: provide nutritional assistance via cash transfers to nutritionally vulnerable sub groups; encourage school matriculation and utilisation of primary health care services by linking receipt of program benefits to continued matriculation and/or adherence to prescribed maternal-child health service schedules</p> <p>Country of operation: Honduras</p> <p>Year of intervention: From 1990 (end date unspecified)</p> <p>Intervention description: Under the programme, cash coupons or 'bonos' were provided in selected municipios to 1. primary school age children of female heads of households under the Bono Mujer Jefe de Familia (BMJF) programme component and 2. malnourished children under five and pregnant or lactating women under the Bono Materno Infantil (BMI) component. Bonos are convertible into cash through the banking system, or may be used in lieu of cash in areas covered by the programme.</p>	<p>Donors: World Bank; USAID; other donors</p> <p>Other donors operating in the same field: CARE international (implementing partner for one of the study control programmes, Programe de Alimentacion Materno Infantil (PAMI))</p> <p>Aid modality: not clearly specified but the information provided suggests a series of donor-funded projects</p> <p>Funding amount: not reported</p> <p>Aid management: Government programme, mobilising financial support from the World Bank, USAID/Honduras and other donors</p>
12	<p>Mansour et al. 2010</p> <p>Study design: Quasi experimental pre-test post test design</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to analyse a programme aimed to improve health services in three districts by increasing managers' ability to create high performing teams and lead them to achieve results.</p>	<p>Programme Name: Leadership Development Programme (LDP) and TASHEEN</p> <p>Objectives: leadership training through teams of health workers working together on service delivery challenges in their workplaces, with support and feedback from local managers. Aim was to empower local managers and health workers to improve the quality and accessibility of health services</p> <p>Country of operation: Egypt</p> <p>Year of intervention: 2002-2003 (LDP); unclear (TASHEEN)</p>	<p>Donors: USAID (plus implementing partners: Management Sciences for Health and Catalyst Consortium)</p> <p>Aid modality: project</p> <p>Funding amount: not reported</p> <p>Aid management: project requested by Egyptian officials; donor-funded pilot which was then scaled-up and funded by the government</p>

	Study (general details)	Intervention details	Aid Details
	<p>MDG 5 Indicators: maternal mortality ratio (MDG5.1); ante-natal care (MDG 5.5)</p>	<p>Intervention description: training, capacity building, performance improvement projects. Pilot project involved 10 teams of doctors, nurses and midwives from five primary health units, three district and one rural hospital, plus one team of governorate managers. Each team assembled baseline data and established a measurable performance goal. The teams designed projects to increase access to family planning services and prenatal and postpartum visits and carried out the projects in their clinics or districts.</p> <p>Facilitators then transferred LDP approaches to other governorates in Egypt. Through TAHSEEN, a USAID-funded project implemented in Egypt by the Catalyst Consortium, the Upper Egypt governorates of Minya, Bani Swaif and Fayoum were trained in LDP approaches and tools.</p>	
13	<p>Mathur et al. 2004</p> <p>Study design: quasi-experimental; pre-test post-test design</p> <p>Study type: evaluation report</p> <p>Study objectives: to document results of a project that scientifically tested the effectiveness of the participatory approach in defining and addressing the reproductive concerns of adolescents</p> <p>MDG 5 Indicators: contraceptive use (MDG 5.3); ante-natal care (MDG 5.5)</p>	<p>Programme Name: not reported</p> <p>Objectives: to address sexual and reproductive health needs of young people and the broader social context that defines needs and concerns</p> <p>Country of operation: Nepal</p> <p>Year of intervention: 1998-2003</p> <p>Intervention description: At study sites there were 8 integrated interventions: adolescent-friendly services; peer education and counselling; information and education campaign; adult peer education; youth clubs; street theatre on social norms; efforts to improve livelihood opportunities; teacher education.</p> <p>At comparison sites, three interventions were implemented: adolescent-friendly services, peer education and counselling, teacher training.</p>	<p>Donors: unspecified source of aid. EngenderHealth (implementing agency); International Centre for Research on Women (research body)</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: project (discrete interventions)</p> <p>Funding amount: not reported</p> <p>Aid management: Aid delivered through implementing partners. Included participation of international and Nepali non-governmental partners: BP Memorial Health Foundation, New ERA, SAMANTA, Sarwanam Manch, the Nepal Red Cross, the Family Planning Association of Nepal, the Group for Technical Assistance, and World Education</p>
14	<p>Meuwissen et al. 2006</p> <p>Study design: quasi-experimental; post-test design</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to assess whether the voucher program, through increased access to sexual and reproductive health-care (SRHC), would increase knowledge about STIs and contraceptive methods as well as increase contraceptive use. Self-administered</p>	<p>Programme Name: not reported</p> <p>Objectives: To strengthen demand of adolescents for SRHC through a competitive voucher scheme for counselling, family planning, pregnancy testing, ante-natal care, STI treatment, or a combination of these services</p> <p>Country of operation: Nicaragua</p> <p>Year of intervention: dates unspecified but vouchers distributed between Sept 2000 and July 2001</p> <p>Intervention description: 28,771 vouchers were distributed to male and female adolescents in disadvantaged areas of Managua. Vouchers were</p>	<p>Donors: UK Department for International Development (DFID); Central American Health Institute (implementing partner), plus 4 NGOs (implementing partners)</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: project</p> <p>Funding amount: not reported</p> <p>Aid management: unclear how the funding was managed beyond funding from DFID to implementing partners</p>

	Study (general details)	Intervention details	Aid Details
	<p>questionnaires</p> <p>MDG 5 Indicators: contraceptive use (MDG 5.3).</p>	<p>distributed through Central American Health Institute (ICAS) and nongovernmental organizations (NGOs) in 4 markets, outside 19 public schools, in clinics, and on streets and house to house in 221 poor neighbourhoods. During distribution, registers were kept recording age, gender, level of school attainment, and the socioeconomic status of each distribution site. Four public clinics, 5 private clinics, and 11 NGO clinics participated. Clinic staff received a short introduction to the program followed by training sessions on counselling, adolescence and sexuality, and sexual abuse. Doctors filled in a standard medical form during each consultation. Based on the numbers of completed forms with the voucher attached, the clinics received reimbursement according to agreed fees.</p>	
15	<p>Mize et al. 2008</p> <p>Study design: pre-test/post-test design</p> <p>Study type: implementing partner final evaluation report</p> <p>Study objectives: to evaluate the performance of the project against its specified objectives</p> <p>MDG 5 Indicators: attended births (MDG 5.2); ante-natal care coverage (MDG 5.5)</p>	<p>Programme Name: Child Survival Grant</p> <p>Objectives: integrated project combining efforts to improve overall maternal health (including child spacing) and newborn care: 1. improve the health policy environment and ensure national policies reflect the most up-to-date research in antenatal care, delivery care and postpartum care, 2. support cross-cutting areas such as information collection and supervision tools, 3. expand the capacity of the district and health facility to deliver MCH services, 4. improve selected behaviours among the community.</p> <p>Country of operation: Timor Leste</p> <p>Year of intervention: 2004-2008 (ongoing to 2010 under the Flexible Fund for child spacing project)</p> <p>Intervention description: The intervention mix combines community level health promotion activities and health system strengthening. The strategies have focused on training, behaviour change, materials development, and community outreach. These strategies have been implemented under the overarching strategy of embedding all activities within the national framework and on the national implementation schedule. The project has also invested in human resource development and systems strengthening, with an emphasis on supervision and use of data for program decisions.</p>	<p>Donors: USAID. Implementing partner: Health Alliance International</p> <p>Other donors operating in the same field: UNFPA</p> <p>Aid modality: project funding</p> <p>Funding amount: not reported</p> <p>Aid management: implementing in partnership with Ministry of Health, and it notes that the objectives of the project evolved in response to requests from the Ministry. Indication of alignment in the intervention description with a national framework and implementation schedule.</p>
16	<p>Mulay et al. 1992</p> <p>Study design: Pre-test/post-test design</p> <p>Study type: journal article</p> <p>Study objectives: presents the findings of an</p>	<p>Programme Name: 3 projects - National Integrated Medical Association (NIMA); Centre for Matru Mandir (CMM); Yusuf Meherally Centre (YMC)</p> <p>Objectives: the projects focused on family planning and health</p> <p>Country of operation: India (Maharashtra State). NIMA: Malegaon in Nashik district. CMM: Oni in Ratnagiri district. YMC: Tara in Raigad district</p>	<p>Donors: All three projects have received funding from the Family Planning Association of India (FPAI), itself a voluntary organisation. The FPAI is issued a rolling grant from the Ministry of Health and Family Welfare for providing financial assistance to small NGO relating to health and family planning. Mantre Mandir and YMC also received funding from international NGOs.</p>

	Study (general details)	Intervention details	Aid Details
	<p>evaluation of three projects on family planning and health undertaken by three non-governmental organisations (NGOs); study was undertaken by the Population Research Centre of the Gokhale Institute of Politics and Economics during 1991. The objective was to identify factors that could explain differences in their performances.</p> <p>MDG 5 Indicators: contraceptive prevalence rate (MDG 5.3)</p>	<p>Year of intervention: since 1986</p> <p>Intervention description: NIMA: Limited field activity relating to health and family welfare. CMM: Pursues multiple interests, although most relate to health and family welfare. YMC: Pursues multiple interests, of which family planning is just one.</p>	<p>Other donors operating in the same field: unspecified</p> <p>Aid modality: would appear to be discrete project funding</p> <p>Funding amount: not reported</p> <p>Aid management: not reported</p>
17	<p>Options Consultancy Services Ltd, 2010</p> <p>Study design: unclear, but uses primary data sources including endline and baseline data.</p> <p>Study type: interim report (bi-annual)</p> <p>Study objectives: Reports on main achievements of SSMP over a 6-month period (1 July- 31 Dec 2009)</p> <p>MDG 5 Indicators: maternal mortality ratio (MDG5.1); attended births (MDG 5.2); ante-natal care coverage (MDG 5.5)</p>	<p>Programme Name: Support to Safe Motherhood Program</p> <p>Objectives: to support the Government of Nepal's Safe Motherhood Programme. Wide range of interventions, including support for decentralisation, infrastructure, capacity building, training. One relevant intervention is the Equity and Access Programme (EAP) which takes a rights based approach to raise demand for maternal and newborn health services, and in pursuit of greater equity and social inclusion, targets the poor and socially excluded.</p> <p>Country of operation: Nepal</p> <p>Year of intervention: 2004-2010</p> <p>Intervention description: Equity and Access Programme was launched in 2006. EAP is a community mobilisation programme aimed at improving maternal and newborn health (MNH) among the poor and excluded. Operational in full in 8 districts spread across the country. Strong focus on building local capacity and fostering local change agents. Another activity was the Appreciative Inquiry (AI) which was used as a management tool to augment traditional service development inputs at facility level.</p>	<p>Donors: DFID (main donor); five implementing partners (John Hopkins University, Actionaid, Ipas, UN Mission to Nepal, UNICEF)</p> <p>Other donors operating in the same field: not reported</p> <p>Aid modality: unspecified but the use of implementing partners suggests a project approach</p> <p>Funding amount: limited information on overall budget, but Rs. 820m in financial aid for 2009/10 for Options Technical Assistance</p> <p>Aid management: support for a national programme, with co-funding of at least one SSMP programme with government. Mentions partnership with district level NGOs, and close coordination with the Department of Health Services (DoHS), and district authorities.</p>
18	<p>Perks et al. 2006</p> <p>Study design: Review of documents and reports, health data summaries, evaluation workshops and secondary analyses of data from population surveys.</p> <p>Study type: Bulletin of the WHO</p>	<p>Programme Name: The Sayaboury Programme</p> <p>Objectives: strengthening primary health services through maternal and child health services</p> <p>Country of operation: Lao People's Democratic Republic</p> <p>Year of intervention: 1991-2003 (programme implemented in four 3-year stages)</p>	<p>Donors: Save the Children Australia (with AusAID support)</p> <p>Other donors operating in the same field: The International Fund for Agricultural Development</p> <p>Aid modality: long-term project support (technical assistance)</p> <p>Funding amount: USD 4m over 12 years</p>

	Study (general details)	Intervention details	Aid Details
	<p>Study objectives: to evaluate the primary healthcare programme in Sayaboury</p> <p>MDG 5 Indicators: maternal mortality ratio (MDG5.1); attended births (MDG 5.2); contraceptive use (MDG 5.3); ante-natal care coverage (MDG 5.5)</p>	<p>Intervention description: Phase 1 focused on strengthening management and training skills of the provincial management team, which conducted in-service training for district teams and dispensary staff, trained health volunteers and traditional birth attendants. Fixed and mobile maternal and child health clinics were developed; dispensaries were constructed or upgraded; and essential equipment was supplied. In subsequent phases the geographical coverage was expanded.</p>	<p>Aid management: programme has been implemented by government staff with support from one expat health advisor, and it has been integrated completely into the work routine of the health system. The programme was coordinated by a provincial management team consisting of representatives from each participating district and the provincial health office</p>
19	<p>Powell-Jackson et al. 2006</p> <p>Study design: retrospective analysis using quantitative methods</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to track and analyse global aid flows to maternal, newborn and child health. The study was funded by USAID.</p> <p>MDG 5 Indicators: maternal mortality ratio (MDG5.1)</p>	<p>Programme Name: the study covers multiple countries rather than a specific project or programme</p> <p>Objectives: the interventions analysed support maternal, newborn and child health</p> <p>Country of operation: Recipient countries include all those classified by the Development Assistance Committee as developing, which amount to over 150 countries.</p> <p>Year of intervention: not relevant</p> <p>Intervention description: not relevant</p>	<p>Donors: The study covers all 22 high-income donor countries and the European Union, represented in the OECD-DAC, plus the World Bank, UNICEF, and the UN Population Fund (UNFPA), and the Global Alliance for Vaccines and Immunisation (GAVI) and the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM).</p> <p>Other donors operating in the same field: not relevant</p> <p>Aid modality: various modalities of aid are used in the different interventions, including budget support and project aid</p> <p>Funding amount: the study reports amounts detailed in the OECD-DAC databases for the majority of donors. It notes that the world's major donors gave an estimated \$1990 million of aid to developing countries for maternal, newborn, and child health activities in 2004, of which \$815 million was disbursed through projects exclusively targeting such activities.</p> <p>Aid management: insufficient detail on individual interventions to assess aid management or adherence to the Paris Principles. while the study gives breakdowns of global aid flows to budget support, project aid etc, those figures have no bearing on the claim it makes on behalf of aid.</p>
20	<p>Price et al. 2009</p> <p>Study design: retrospective observational design. Study was supported by USAID</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: to test the hypothesis that non-HIV care does not decrease after the</p>	<p>Programme Name: not specified, but samples are drawn from health centres receiving PEPFAR-funded technical assistance from Family Health International (FHI) to introduce HIV care.</p> <p>Objectives: to provide support for infrastructure and primary health centres, focused around HIV</p> <p>Country of operation: Rwanda</p>	<p>Donors: PEPFAR and implementing partner Family Healthcare International.</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: unspecified but information suggests a project approach</p>

	Study (general details)	Intervention details	Aid Details
	<p>introduction of basic HIV care</p> <p>MDG 5 Indicators: attended births (MDG 5.2); contraceptive prevalence (MDG 5.3); ante-natal care coverage (MDG 5.5)</p>	<p>Year of intervention: unspecified</p> <p>Intervention description: For basic HIV care, FHI supports infrastructural upgrades, equipment and medical supplies. FHI also supports on average two additional nursing-level staff. While the PHCs directly manage these inputs and the new HIV services offered, in collaboration with district health teams, FHI provides formal and on-site training in all technical areas, ongoing supportive supervision and mentoring, and assistance with a variety of site-specific issues related to HIV and beyond.</p>	<p>Funding amount: \$63,000 for basic HIV care from FHI in year one going down to \$32,000 a year after that</p> <p>Aid management: aid managed by FHI in collaboration with target districts</p>
21	<p>Ronsmans et al. 2001</p> <p>Study design: pre-test/post-test, using mixed methods</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: To evaluate the interventions supported by the MotherCare programme in three Indonesian districts</p> <p>MDG 5 Indicators: attended births (5.2)</p>	<p>Programme Name: Safe Motherhood Programme</p> <p>Objectives: the ultimate goal of the national Safe Motherhood programme is to reduce maternal and perinatal mortality; the MotherCare programme provided short-term inputs to contribute to that longer-term goal.</p> <p>Country of operation: Indonesia</p> <p>Year of intervention: intervention began in 1994. The end-date is not specified</p> <p>Intervention description: In 1994, MotherCare began working with the Ministry of Health to enhance the ongoing safe motherhood initiative in three districts (Banjar, Barito Kuala and Hulu Sungai Selatan) in the province of South Kalimantan. A package of interventions was developed, including in-service training to improve the knowledge, skills and confidence of midwives at facilities and in villages, a supervisory system with peer-review and continuing education, a maternal and perinatal audit system and an information, education and communication (IEC) strategy aimed at the community.</p>	<p>Donors: MotherCare (USAID-funded initiative)</p> <p>Other donors operating in the same field: unspecified</p> <p>Aid modality: project funding</p> <p>Funding amount: not reported</p> <p>Aid management: intervention supporting National Safe Motherhood Programme in Indonesia; working with Ministry of Health to build capacity.</p>
22	<p>Senlet et al. 2008</p> <p>Study design: Review of documents, secondary analysis of programme and financial data and survey results, interviews with key participants and field trips.</p> <p>Study type: project mid-term evaluation report</p> <p>Study objectives: to provide USAID Mission to Pakistan with an independent mid-term evaluation of its maternal, newborn, and child health (MNCH) programs</p>	<p>Programme Name: PAIMAN Project</p> <p>Objectives: to improve maternal and neonatal health in 10 districts in Pakistan</p> <p>Country of operation: Pakistan</p> <p>Year of intervention: 2005-2009</p> <p>Intervention description: to promote access to skilled birth attendants (SBAs) as a long-term goal to reduce mortality and assists in positioning community midwives (CMW) as the focal point for obstetric care.</p>	<p>Donors: USAID. Lead implementing partner: John Snow Inc (JSI); seven other partners</p> <p>Other donors operating in the same field: UNICEF, UNFPA, DFID, WHO, JICA, GTZ, Norway, CIDA</p> <p>Aid modality: project funding</p> <p>Funding amount: USD 49,943,857 through 2009</p> <p>Aid management: it is reported that Government decided on the intervention sites. PAIMAN forms one component of a much larger US support grant to the Government of Pakistan,</p>

	Study (general details)	Intervention details	Aid Details
	MDG 5 Indicators: assisted births (MDG 5.2); ante-natal visits (MDG 5.5)		including a national health programme.
23	<p>Shiffman et al, 2004</p> <p>Study design: process-tracing methodology</p> <p>Study type: peer-reviewed journal article</p> <p>Study objectives: investigates interactions between international health policy networks and ministries and the impact of these interactions on health priority setting through a study of safe motherhood in Honduras in the 1990s. It explores why successful policy transfer and implementation occurred and highlights the case's significance for understanding network–ministry interactions and health priority formation in developing countries.</p> <p>Indicators: MMR (MDG 5.1); attended births (MDG 5.2); ante-natal care coverage (MDG 5.5)</p>	<p>Programme Name: Safe Motherhood</p> <p>Objectives: the study explores the impact of a range of financial support and technical assistance projects for maternal health over three decades</p> <p>Country of operation: Honduras</p> <p>Year of intervention: 1970s, 80s, 90s</p> <p>Intervention description: limited information on specific interventions. The study is primarily concerned with policy transfer, implementation and impact as a result of the interaction between donors and Honduran health bureaucrats.</p>	<p>Donors: various donors (including USAID, Inter-American Development Bank, UNFPA, World Bank, other bilateral donors)</p> <p>Other donors operating in the same field: Other donors that provided financial or technical assistance for safe motherhood included the Germans, the Canadians, the Spanish, the European Union, UNICEF and the Latin American Center for Perinatology in Uruguay.</p> <p>Aid modality: various</p> <p>Funding amount: USAID provided grants of US\$54 million for health sector development and rural water and sanitation projects between 1981 and 1988; provided a further US\$57.3 million to the health sector between 1988 and 2000. The Inter-American Development Bank approved a US\$27 million loan for the construction and equipping of hospitals across the country in 1987. UNFPA financed programmes for maternal and child health from 1978 through 1991; new funding for 1991 to 1995, including a sub programme on reproductive health and the health of mothers, providing nearly half a million dollars for reproductive health projects in two regions of the country. During 1990s the Honduran office of PAHO offered technical expertise, receiving financial backing from the Netherlands and other donors.</p> <p>Aid management: paper suggests that donors supported ownership, harmonisation and alignment</p>
24	<p>Snyder et al. 2003</p> <p>Study design: meta-analysis</p> <p>Study type: conference paper</p> <p>Study objectives: research synthesis of the effectiveness of US-funded family planning campaigns in developing countries. The main objective is to examine the average impact of a</p>	<p>Programme Name: a list of campaign names is provided</p> <p>Objectives: the interventions focused on communication programmes in family planning</p> <p>Country of operation: covers multiple countries</p> <p>Year of intervention: activities between 1986 and 2001</p> <p>Intervention description: the study examined 39 campaigns that received</p>	<p>Donors: USAID (funder); John Hopkins University (implementing partner)</p> <p>Other donors operating in the same field: not reported</p> <p>Aid modality: projects</p> <p>Funding amount: not reported</p> <p>Aid management: no details provided</p>

	Study (general details)	Intervention details	Aid Details
	<p>set of family planning campaigns aimed at behaviour change.</p> <p>MDG 5 Indicators: contraceptive prevalence rate (MDG 5.3)</p>	<p>U.S. federal funding between 1986 and 2001 for technical assistance by the Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs. Study examined gains in knowledge, approval of family planning, interpersonal communication, behavioral intentions, and actual behavior that could be attributed to a family planning campaign.</p>	
25	<p>Williams et al. 2007</p> <p>Study design: quasi-experimental; post-test only evaluation</p> <p>Study type: summary report</p> <p>Study objectives: to determine whether exposure to AYA's comprehensive, integrated program resulted in improved ASRH knowledge, attitudes, and sexual behaviours among male and female youth age 17–22 in areas where AYA worked.</p> <p>MDG 5 Indicators: contraceptive use (MDG 5.3)</p>	<p>Programme Name: Africa Youth Alliance Programme</p> <p>Objectives: to improve adolescent sexual and reproductive health (ASRH) and to prevent transmission of the human immunodeficiency virus (HIV), primarily through behaviour change.</p> <p>Country of operation: Ghana, Tanzania, Uganda</p> <p>Year of intervention: Ghana: 2001-2005, Tanzania: 2002-2005, Uganda: 2001-2005. Programme concluded in 2006</p> <p>Intervention description: focused on implementing and scaling up a comprehensive set of integrated ASRH interventions using existing local institutions. Six key components: Policy and advocacy coordination; Institutional capacity building; Coordination and dissemination; Behaviour Change Communication including life-planning skills and enter-education activities; Youth-Friendly Services; Integration of Adolescent Sexual and Reproductive health with livelihood planning.</p>	<p>Donors: Bill and Melinda Gates Foundation (funder); United Nations Population Fund (implementing partner); Pathfinder International (implementing partner); Program for Appropriate Technology in Health (implementing partner)</p> <p>Other donors operating in the same field: not reported</p> <p>Aid modality: not reported, but information suggests project approach</p> <p>Funding amount: not reported</p> <p>Aid management: aid provided through implementing agencies; mentions partnership with government</p>
26	<p>World Bank 1998</p> <p>Study design: Quasi-experimental</p> <p>Study type: Country Sector Impact Study</p> <p>Study objectives: Study assesses the relevance and impact of World Bank policy advice and project support to health, nutrition, and population in Zimbabwe over the past 15 years, including the influence of macroeconomic dialogue and policies on the health sector.</p> <p>MDG 5 Indicators: attended births (MDG 5.2)</p>	<p>Programme Name: Family Health Projects I & II, Sexually Transmitted Infections Project</p> <p>Objectives: FHP I&II aimed at improving health status, particularly of mothers and children, increasing availability of MCH services and family planning, strengthening government capacity in this sector. The goal of the Sexually Transmitted Infections (STI) Project was to help reduce the incidence and impact of sexually transmitted infections in a cost-effective manner.</p> <p>Country of operation: Zimbabwe</p> <p>Year of intervention: FHPI – 1986-1993; FHP II – 1991-1998; then separate project on Sexually Transmitted Infections launched in 1993</p> <p>Intervention description: FHPI: components included upgrading of district hospitals and more than 80 clinics in eight target districts; training for nurses in family planning, MCH, and midwifery; information, education, and</p>	<p>Donors: World Bank</p> <p>Other donors operating in the same field: USAID</p> <p>Aid modality: loans, but provided for discrete projects. Notes that government provided the majority of financing for FHPI and FHP II. STI project is financed by a no-interest loan with a 40-year repayment period</p> <p>Funding amount: not reported</p> <p>Aid management: government co-financing, but WB played key role in project design</p>

	Study (general details)	Intervention details	Aid Details
		communication (IEC) activities to increase demand for health and family planning services; management strengthening at national, provincial, and district levels; and urban family planning. FHP1 added a nutrition component. Of the 57 districts in Zimbabwe, Family Health I focused on eight target districts (one in each of Zimbabwe's eight provinces) while FHP2 focused on an additional 16 districts (two in each province). The training and capacity building components of both projects were nationwide. STI financed drugs for treating STIs and opportunistic infections associated with AIDS (such as tuberculosis), laboratory equipment, and protective supplies for health care workers.	
27	<p>World Bank 2003</p> <p>Study design: pre-test/post-test</p> <p>Study type: project completion report</p> <p>Study objectives: to rate the performance of the Health IV project in China</p> <p>MDG 5 Indicators: MMR (MDG 5.1); attended births (MDG 5.2); ante-natal care coverage (MDG 5.5)</p>	<p>Programme Name: Comprehensive Maternal and Child Health Project (Health IV)</p> <p>Objectives: The goal of the project was to reduce maternal and child mortality and morbidity in the poorest areas of China.</p> <p>Country of operation: China</p> <p>Year of intervention: 1995-2002</p> <p>Intervention description: Four major components: Basic Health Care Delivery - included essential maternal and newborn care; referral and emergency obstetric care; prevention of neonatal tetanus; child care from birth to five years (including immunization, nutrition, management of acute respiratory infections and diarrheal diseases); and related health education activities. Health Workers' Training – short and long training courses, management training, skills improvement. Management Improvement – including improving supervision and the functioning and use of the existing management information systems. National Level Program – project management and research.</p>	<p>Donors: World Bank</p> <p>Other donors operating in the same field: UNICEF</p> <p>Aid modality: credit (soft loan), so programme aid</p> <p>Funding amount: \$90m credit for total project cost of \$139m. The World Bank credit would finance about 65 percent of the total project cost.</p> <p>Aid management: Foreign Loan Office of the Ministry of Health is charged with managing the project, with provision for national partners to co-fund elements. The project involves government ministries, provincial authorities and county authorities. Study notes that the goal and strategy of the project are reflected in the Government's "National Plan of Action for Child Development in China" and the "National Plan of Action (NPA) for Women's Development in China" in 1992</p>
28	<p>World Bank 2006</p> <p>Study design: retrospective study</p> <p>Study type: project performance assessment report</p> <p>Study objectives: to assess two projects and their contribution to the establishment of a sector-wide approach in health</p>	<p>Programme Name: Fourth Population and Health Project (FPHP); Health and Population Project (HPPP)(renamed Health and Population Sector Program)</p> <p>Objectives: FPHP followed earlier projects in support of family planning, widening into broader health sector support. HPPP became the Health and Population Sector Program, a SWAp aimed at improving health, nutrition and family welfare of the population of Bangladesh</p> <p>Country of operation: Bangladesh</p>	<p>Donors: World Bank (with additional donors as co-financers) FPHP partners: IDA, Canada, EU, Germany, Australia, Netherlands, Norway, Sweden, UK HPPP: IDA, the Netherlands, Sweden and DFID</p> <p>Other donors operating in the same field: UNFPA, UNICEF</p> <p>Aid modality: FPHP is a pooled or basket fund. HPPP pooled funds, including WB grant contribution</p> <p>Funding amount: FPHP WB provided contribution of \$180m;</p>

	Study (general details)	Intervention details	Aid Details
	<p>MDG 5 Indicators: maternal mortality ratio (MDG5.1); assisted births (MDG 5.2); contraceptive prevalence rate (MDG 5.3); ante-natal visits (MDG 5.5); unmet need for family planning (5.6)</p>	<p>Year of intervention: FPHP: 1992-1998. HPPP: 1998-2005</p> <p>Intervention description: FPHP: strengthening of family planning and MCH services (training, contraceptive supplies, renovation and construction of facilities); strengthening of health service delivery (training, support for several health programs, construction and rehabilitation of health facilities); support for institutional activities for service delivery; support women's nutrition programs. HPPP: provision of an integrated Essential Services Package (ESP); re-organization of Ministry of Health; implementing a sector-based approach toward aid management.</p>	<p>contribution to HPPP is unclear.</p> <p>Aid management: interventions evolved from back-to-back projects to a sector-wide approach with strong government ownership. Aid did not go to government budget but was pooled into a special account which the MOHFW could access.</p>
29	<p>World Bank 2007</p> <p>Study design: pre-test/post-test</p> <p>Study type: project performance assessment report</p> <p>Study objectives: to assess the development effectiveness of the World Bank's direct lending for Ghana's health sector during the period 1990-2005</p> <p>MDG 5 Indicators: assisted births (MDG 5.2); contraceptive prevalence (MDG 5.3); ante-natal care coverage (MDG 5.5)</p>	<p>Programme Name: Ghana Second Health and Population Project (HPP 11); Ghana Health Sector Support Project (HSSP); Second Health Sector Program Support Project (HSPSP)</p> <p>Objectives: HPP11 aimed at improving health services and family planning; HSSP and HSPSP supported broad health sector Plan of Work</p> <p>Country of operation: Ghana</p> <p>Year of intervention: HPP 11: 1991-1997; HSSP – 1997-2002; HSPSP – 2003-2007</p> <p>Intervention description: HPP 11 supported a range of defined activities in basic health service: rehabilitation of facilities in underserved three northernmost regions of Ghana; Drug and Vaccine Supplies and Drug Infrastructure Rehabilitation; Ministry of Health Institution Building; District and Regional Hospital Equipment; Support to Primary Health Care and District Health Management Teams; Population Family Planning in partnership with NGOs; Prizes Fund to provide incentives for improved performance of human resources. HSSP and HSPSP did not specify project components. Rather it was designed to contribute annual tranches of financing to a common fund, that would be used and managed by GoG to support the implementation of the seven strategies (or components) of the Plan of Work. The primary focus of the POW was on the delivery of a package of priority health intervention.</p>	<p>Donors: World Bank</p> <p>Other donors operating in the same field: USAID, UNFPA</p> <p>Aid modality: credit (loan) with government co-financing; HSPSP loan and grant. HSSP and HSPSP funding went to a pooled donor fund in support of a SWAp. So shift from project approach to sector-based funding</p> <p>Funding amount: HPP 11 \$18.9m disbursed; HSSP \$25.1m; HSPSP \$57.6m loan and \$32.4m grant</p> <p>Aid management: HPP 11 project funding, with NGOs as implementing agencies. Coordinated by Ministry of Health. HSSP - WB contributed financing to a common fund, pooled with other donors, to be used and managed by the Government of Ghana.</p>
30	<p>World Bank 2008</p> <p>Study design: pre-test/post-test design</p>	<p>Programme Name: Egypt Population Project</p> <p>Objectives: to help Egypt: (a) better manage population growth and prevent avoidable population growth by building institutional capacity; and</p>	<p>Donors: World Bank</p> <p>Other donors operating in the same field: UNFPA, USAID, EU</p>

Study (general details)	Intervention details	Aid Details
<p>Study type: project performance assessment report</p> <p>Study objectives: to assess the effectiveness of the World Bank's support to health, nutrition and population in Egypt as part of the wider self-evaluation process by the Bank.</p> <p>MDG 5 Indicators: contraceptive prevalence (MDG 5.3); unmet need for family planning (MDG 5.6).</p>	<p>(b) improve the conditions and status of women and children in areas where fertility remains high by stimulating additional demand for smaller family size and for family planning services.</p> <p>Country of operation: Egypt</p> <p>Year of intervention: 1998-2005</p> <p>Intervention description: Component 1: capacity building with support for training, technical assistance, policy studies, vehicles, office equipment, furniture and material. Component 2: population activities program to finance grants to NGOs, local community organizations and public sector agencies to support activities to: increase awareness, strengthen motivation for couples to plan smaller families and facilitate access to and use of reproductive health services.</p>	<p>Aid modality: credit (soft loan), i.e. programme aid</p> <p>Funding amount: Loan of \$17.2m, with planned government and community contributions of US\$1.6 million and US\$1.9 million, respectively.</p> <p>Aid management: unclear. Small amount for Ministry of Health for capacity building; bulk of support is for NGOs.</p>

Appendix 3.2 Aid Pools

Study	Pool A	Pool B	Analysis of aid modality and management
Agha 2002		X	Study describes discrete project inputs with no indication of adherence to Paris Principles. Note that the intervention period was 1994-1998, so preceding the aid effectiveness agreements.
Baird et al. 2010		X	The intervention is described as a first phase in a large-scale programme, suggesting partnership with the Indonesian Ministry of Health. However, there is insufficient detail to adequately assess depth of ownership or alignment, and the study describes discrete project interventions. Other donors are mentioned but there is no information provided to judge harmonisation.
Barbey et al. 2001		X	The intervention takes a project approach but it is implemented in conjunction with the Government of Bangladesh and UNICEF; hence there is a suggestion of harmonisation and alignment. However, there is no indication of funding being on-budget.
Barnett et al. 2007	X		Intervention takes a harmonised approach with other donors (low intensity partnership with German agencies and UNICEF), so adherence to Paris Principles regarding harmonisation, and uses a mixture of aid modalities. There is limited information on other aspects of the Paris Principles, such as government ownership or use of national systems.
Buckley 2006		X	Study concerns multiple discrete projects and donors, with only a passing reference to some alignment with government preferences. The design is not conducive to determining any adherence to the Paris Principles
Campbell et al. 2005		X	Project approach with a suggestion of alignment with a national strategy as the project provides support to the national Safe Motherhood programme. Insufficient to classify as Paris-style aid.
COWI et al. 2007	X		Mixture of aid modalities, including general budget support, health basket fund, health block grants, bilateral projects and programmes, and funding from global health initiatives, funding a sector-wide approach, with strong engagement with the Paris Principles.
Debay 2007		X	Project approach using implementing partners; government ministries as partners, but no indication of adherence to Paris Principles.
Edwards et al, 2006	X		Project approach with aid from CIDA channelled through a Canadian implementing partner. However, the intervention involves co-planning and co-management with a Chinese counterpart (Chinese executing agency reporting to the Ministry of Trade and Commerce), so there is alignment with national strategies and ownership in the sense of local responsibility and planning. This constitutes adherence to some of the Paris Principles.
Hounton et al. 2008		X	Project approach. No information provided on aid management, beyond some indication of coordination with other donors operating in the same area (different donors supporting different health centres). Insufficient information to assess adherence to the Paris Principles.
Magnani et al. 1998	X		Government-initiated programme, so there would appear to be ownership in the sense of this being a national strategy. There is very little information provided on the aid, but the programme has mobilised funding from several donors. There is no information to judge degrees of alignment or harmonisation
Mathur et al. 2004		X	Discrete project interventions, involving community participation, but no indication of adherence to the Paris Principles

Study	Pool A	Pool B	Analysis of aid modality and management
Mansour et al. 2010	X		Pilot project, funded by USAID, but requested by the country and then scaled up with strong local ownership (ownership)
Meuwissen et al. 2006		X	Project with no indication of adherence to the Paris Principles
Mize et al. 2008		X	Project approach using implementing partners, with the Ministry of Health as a partner. Indication of alignment with a national framework but no information on use of government systems or reporting of aid in the budget.
Mulay et al. 1992		X	NGO-led projects, with no information about aid flows and management. Interventions concern the late 1980s/early 1990s, preceding debates on aid effectiveness principles.
Options Consultancy Services Ltd 2010		X	Suggestion of alignment (with national strategy) as the project provides support to the national Safe Motherhood programme with some co-funding from government; but insufficient information on the funding mechanisms and management to classify intervention as 'Paris-style'. Use of implementing partners suggests a project approach.
Perks et al. 2006	X		Long-term technical assistance from an NGO, embedded within national administration. Indication of strong ownership and alignment, with express aim of building up national capacity and ownership.
Powell-Jackson et al. 2006		X	Data on different aid modalities (including budget support) but the study does not seek to make claims on behalf of different types of aid, nor does it provide detail to enable a classification as Paris-style aid
Price et al. 2009		X	Suggestion of ownership as direct grants are provided to local Primary Health Centres; but insufficient information to assess adherence to Paris Principles
Ronsmans et al. 2001		X	Suggestion of alignment (with national strategy) as the project provides support to the national Safe Motherhood programme in partnership with the Ministry of Health; but insufficient information on the funding mechanisms and management to classify the intervention as 'Paris-style'.
Senlet et al. 2008		X	Discrete project supporting wider national effort, with some government involvement (e.g. government selected intervention sites).
Shiffman et al. 2004	X		Intervention includes various aid modalities, with evidence of close partnership between government and donors leading to Safe Motherhood becoming a political priority (ownership). Information on the effects of different aid modalities is not provided.
Snyder et al. 2003		X	Study analyses multiple targeted projects; limited information about the aid flows and management to enable classification as Paris-style aid.
Williams et al. 2007		X	Project approach with suggestion of partnership with government, but limited information to assess adherence to the Paris Principles
World Bank 1998		X	Insufficient information to suggest anything other than discrete projects; co-funding by government implies close engagement with government ministries, although the report states that the World Bank played a key role in project design.
World Bank 2003	X		Soft loan, requiring co-financing and with strong engagement with local authorities at different levels. Indicates local ownership of the intervention and alignment.
World Bank 2006	X		Study describes the evolution of support from back-to-back projects to a pooled, basket fund and the establishment of a sector-wide approach. Conforms to many of the Paris Principles.
World Bank 2007	X		Programme aid (credit/loan), evolving into a sector-wide approach, so conforms to many of the Paris Principles.

Study	Pool A	Pool B	Analysis of aid modality and management
World Bank 2008		X	Programme aid (credit/loan), but most of the information is about support for NGOs with insufficient information to assess adherence to the Paris Principles

Appendix 4.1: Details of studies included in the synthesis

Table A4.1.1. Pool A studies: summary of interventions and data characteristics (Causal designs)

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
CAUSAL			
Edwards et al. 2006	<p>Study objectives: to assess the elements of project design that contributed to its long-term sustainability beyond the project life-span</p> <p>Study design: quasi-experimental</p> <p>Study methods: Focus of the report is the sustainability dimension. Data reported are the numbers of people trained, and the outcomes in relation to maternal, infant and under-five mortality rates. The data on outcomes are drawn from figures provided by the Provincial Public Health Bureau. There is no information on how these statistics were arrived at.</p> <p>Data collection period: not reported</p> <p>MDG: maternal mortality rate (MDG 5.1)</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: Ten impoverished counties in Yunnan province with high proportions of ethnic minority populations. Population total of 2.2million Train-the-trainer cascade structure unfolding from provincial level to county, township, and village levels. Trainees included: 19 provincial-level staff, primarily physicians who were prepared as “key trainers” in a 3-month training program; 172 county-level health staff who were prepared as “county trainers” in a 3-month training program led by key trainers; 22 county-level trainers who received an additional 3 weeks training to prepare them as “back-up key trainers”; 256 township hospital doctors who received 6 months of in-service training in a county hospital; 2,276 village doctors who had been working in their communities, often for extensive time periods, who received a 90-day training program from county-level trainers; 1,327 new female village doctors and midwives who received 80-110 days of training from county-level trainers</p> <p>Control group: Other Yunnan counties</p> <p>Primary outcome: not reported</p> <p>Secondary outcome: not reported</p> <p>Covariates: not reported</p> <p>Primary data source: Data were obtained from routinely collected data by the Yunnan Provincial Public Health Bureau</p>	<p>Findings: Large-scale change was successfully introduced in project counties within a short funding cycle. Over 4,000 maternal and child health workers at village, township, and county levels were trained in community and clinical skills. Project results included reductions of more than 30% in maternal, infant and under-five mortality rates across the 10 project counties. Uptake of participatory methods gained momentum through the project lifespan, with uptake by the Provincial Health Bureau and national Ministry of Health. Improvements in health status indicators in project areas exceeded those in other Yunnan counties during the same time period, as well as those achieved by the World Bank.</p> <p>Claims on behalf of aid: Not explicitly, but the effect of the intervention on MMR is considered</p> <p>Confounding factors reported: the study reports on threats to sustainability and the need to understand the implementation setting. These included uneven support for training innovation; variations in learning needs, literacy levels, clinical competencies; changing political landscape with reforms to health services; the impact of other international projects with different methods and demands.</p> <p>Theories of change reported: implicit in the study is that aid for training that is well-designed (i.e. where there is a good fit between core project elements and existing health systems, good supporting structures, and a transition plan) and takes into account the implementation setting including deep engagement with local partners, can lead to sustainability of the intervention and have an impact on outcomes.</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
Magnani et al. 1998	<p>Study objectives: to explore whether the monetization of non-emergency food aid adversely influenced national family planning program efforts. The study was motivated by concern that the shift from commodity-based (i.e. on-site feeding or take-home rations) to monetized food aid might be having an adverse effect on national family planning program efforts.</p> <p>Study design: quasi-experimental; post-test design</p> <p>Study methods: Post-test only, non-equivalent group design. Three comparison groups were used - a treatment group (Bono Materno Infantil - BMI - program beneficiaries) and two control groups (beneficiaries of CARE's Programe de Alimentacion Materno Infantil - PAMI; women residing in municipios of comparable socio-economic status not covered by the BMI or PAMI programs)</p> <p>Unit of analysis: municipality</p> <p>Data collection period: not reported</p> <p>MDG: contraceptive prevalence (MDG 5.3)</p>	<p>Selection Criteria: Sample of BMI program beneficiaries. Eligibility for the non-food aid group was limited to municipalities classified as being nutritionally at risk located in the eight departments in which one or more food aid program was operating in 1994; further restricted to women who had visited a Ministry of Public Health facility for maternal or preventive child care services during the 6 months preceding the survey.</p> <p>Sample size: A total of 1,037 household interviews were obtained. After deleting cases with excessive missing data, 1,019 households divided approximately equally among the three comparison groups remained for analysis. As the variability in overall probabilities of selection across sample elements was small, the data were treated as if they were self-weighted.</p> <p>Intervention group: Under the programme, cash coupons or 'bonos' were provided in selected municipios to 1. primary school age children of female heads of households under the Bono Mujer Jefe de Familia (BMJF) programme component and 2. malnourished children under five and pregnant or lactating women under the Bono Materno Infantil (BMI) component. Bonos are convertible into cash through the banking system, or may be used in lieu of cash in areas covered by the programme</p> <p>Control group: Control 1: Beneficiaries of CARE's PAMI program. Control 2: women residing in municipios of comparable socioeconomic status not covered by the BMI or PAMI programs</p> <p>Primary outcome: recent fertility; fertility preferences; contraceptive use; family planning service quality.</p> <p>Secondary outcome: not reported</p> <p>Covariates: not reported</p>	<p>Findings: Taking all sources into account, oral contraceptives and condoms appear to have been more or less universally available in sample communities. IUD's are estimated to have been accessible in 74% of study communities, female sterilization in 66%, vaginal methods in 55%, male sterilization in 47%, and injectables in 41%. The range of available methods tended to be the widest for residents of BMI and the narrowest for non-food aid communities. Method availability for the PAMI group approximated that in BMI communities for pills, IUD's, condoms, and female sterilization, and was intermediate between that for BMI and non-food aid communities for the remaining methods. The overall pattern emerging from these data is that while family planning services were reasonably accessible to all sample communities, communities participating in the two food aid programs appear to have been somewhat advantaged.</p> <p>The evidence regarding contraceptive knowledge, current behaviour, and intended future use is consistent with earlier observations regarding recent fertility and fertility preferences in that women in the BMI group do not appear to be destined to higher fertility levels than women in the non-food aid group. Other than with regard to ideal family size, no significant differences between women in the BMI and non-food aid groups were observed.</p> <p>The regression results provide no support for an adverse effect of monetized food aid. When other factors are controlled, BMI recipients were equally likely as PAMI or non-food aid women to either have been pregnant during the 12 months prior to the survey or to have been pregnant or breastfeeding at the time of the survey. BMI program beneficiaries desiring additional children, either soon or later, were not statistically different from those of women in the PAMI or non-food aid groups. No significant comparison group differences in the likelihood of use of modern contraceptive methods were observed. Women in the PAMI group were, however, significantly less likely to be using a traditional method of contraception than women in the BMI group.</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
		<p>Primary data source: Data collection was carried out by the Honduran firm Agro Industria. It consisted of:</p> <p>(1) a Health Center Questionnaire: gathered information on the infrastructure, equipment, and supplies available at each sample facility; number and types of personnel; and services provided. Service statistics were also gathered from sample facilities in order to assess trends in family planning service volume. However, these data were judged to be of insufficient quality to be used in the study. Observations of service transactions and exit interviews with clients were undertaken at sample facilities in order to assess the quality of services being provided.</p> <p>(2) a Community Questionnaire conducted in each village in which a sample household was located: provided information on two sets of key determinants of reproductive behaviour: (1) community-level socioeconomic conditions and infrastructure and (2) the supply environment for health and family planning services. The supply environment items consisted of numbers of different types of health and family planning service and supply points located within 30 km of sample communities, distances and travel times to the nearest of each type of facility, and services available at these facilities. The facilities considered included hospitals, Health Centers (Centro de Salud con Medico – CESAMOs), Health Posts (Centro de Salud Rural – CESARs), private physicians and clinics, Asociacion Hondurena de Planificacion Familiar (ASHONPLAFA) clinics, ASHONPLAFA community-based distribution (CBD) points, pharmacies, and shops selling medicines and contraceptives.</p> <p>(3) a Household Questionnaire: provided a wide variety of information pertaining to individual study subjects and their households, including socioeconomic background; household composition; reproductive history; fertility intentions; past, current, and intended contraceptive use; household economic activity, expenditures, and consumption; and receipt of food aid and other social welfare program benefits</p>	<p>Claims on behalf of aid: the study looks at the broader effects of the national program and does not make explicit claims on behalf of specific aid inputs.</p> <p>Confounding factors reported: not reported</p> <p>Theories of change reported: An hypothesis to explain the need for the study is posited, i.e. that food aid could raise the demand for children by subsidising child-rearing and/or that overburdening service delivery staff with extra administrative duties could detract from quality of services</p>

Table A4.1.2. Pool A studies: summary of interventions and data characteristics (Correlational designs)

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
CORRELATION			
Barnett et al. 2007	<p>Study Objectives: to summarise the evaluation of DFID's country programme in Indonesia</p> <p>Study design: Review of reports and correspondence and programme records plus interviews with staff and officials in government.</p> <p>Study methods: An evaluation matrix was designed to guide the evaluation process with a checklist of questions.</p> <p>Unit of analysis: country</p> <p>Data collection period: evaluation conducted Jan-March 2007; the main evaluation covers the period 2000-2006</p> <p>MDG: attended births (MDG 5.2) – indicator tracked</p>	<p>Selection Criteria: no selection criteria presented. Only data is baseline data from 2000 and follow-up data for 2004 and 2006. No primary data collection was undertaken.</p> <p>Intervention group: not reported.</p> <p>Control group: no control group reported</p> <p>Primary outcome: proportion of births assisted by skilled birth attendants</p> <p>Secondary outcome: data also provided on other MDG indicators</p> <p>Covariates: not reported</p> <p>Primary data source: source of the figures is the United Nations Statistics Division. Evidence for the evaluation report was collected from three main sources: (i) A documentary review of file correspondence and programme records, including Project Memorandums, logical frameworks, major reviews/studies, Output-to-Purpose Reviews (OPRs) and Project Completion Reports (PCRs); (ii) Interviews with past and present DFID staff; and, (iii) Interviews with officials in government, with partners in other development agencies, and with representatives of NGOs and civil society organisations.</p>	<p>Findings: Findings on assisted births. Target was an increase of 15 percentage points in the proportion of births assisted by skilled birth attendants. Baseline 41%(2000). 2004: Births attended by skilled health personnel, 71.5% 2006: 66.3 % (Although MoH measured this in a slightly different way). Report states that the data are unreliable.</p> <p>Appreciation of flexibility in DFID's funding, targeting and low transaction costs. Specific to maternal health, decision to harmonise work over MDG 5 has meant that DFID has no data to report on progress but is reliant on reporting of other parties (e.g. GTZ, UNICEF), and attribution of results is problematic. Difficult to measure outcomes for 'deliverables' in areas such as harmonisation and policy impact. Notes there has been good progress against process indicators in all four areas of achievement, planning/M&E, referral, clinical services and empowering communities.</p> <p>Claims on behalf of aid: programme specifically sought to implement the Paris declaration, especially on donor harmonisation through low intensity partnerships. DFID's strategy is well-aligned with government and harmonisation is improving. Notes that the attribution of DFID's contribution to increasing the proportion of births assisted by skilled birth attendants is highly problematic. However, through Low Intensity Partnerships (LIPs) with UNICEF and GTZ, DFID is helping to improve services in 33 districts.</p> <p>Confounding factors reported: aid contributions are small relative to government revenue, so national policies and programmes can overshadow changes. Effectiveness of aid can only be judged through adoption and scaling-up of innovative, pro-poor approaches,</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
			<p>programmes and policies. Some information on the economic and political context provided to frame the study. The report also notes problems with the harmonisation approach, particularly in the attribution of results.</p> <p>Limitations to the study reported: limited number of performance reviews and evaluation reports available means that this study is not a meta-evaluation. No projects or programmes were visited in the field and no primary data collection or commissioned studies were undertaken. The limited extent to which the team has been able independently to verify the evidence needs to be borne in mind when reading the report.</p> <p>Theories of change reported: not reported</p> <p>National MMR: Indonesia's progress toward MDG 5 is rated as Significantly off-track. The rate of decrease between 1991 and 1995 has slowed, as has the rate (MMR) of increase in skilled attendance at birth. On current trends Indonesia's MMR will be 226 per 100,000 live births compared to its target of just over 100 per 100,000 live births. Indonesia is also far behind several regional neighbours in progress towards MDG 5, e.g. Malaysia (<50/100,000 live births) and Vietnam (<100/100,000 live births)</p>
COWI	<p>Study Objectives: to provide solid evidence about the relevance and effectiveness of the joint development work in the health sector; evaluate the performance of the health sector 1999-2006 against MDGs and objectives of the PRSP/MKUKUTA and HSSP1 and HSSP2; evaluate partnership in terms of cooperation modalities, harmonisation, alignment and dialogue with government, development partners and stakeholders.</p> <p>Study design: joint evaluation report, involving document reviews, key informant interviews, case studies, secondary data analysis</p>	<p>Selection Criteria: no selection criteria presented. Only data is baseline data from 1996 (MMR) and 1999 (for attended births) and follow-up statistics for 2004/5.</p> <p>Intervention group: not reported</p> <p>Control group: not reported</p> <p>Primary outcome: MMR; percentage of births attended</p> <p>Secondary outcome: other health indicators reported on in the study: infant mortality, under-5 mortality, malnutrition, vaccinations, HIV prevalence, access to ARVs</p> <p>Covariates: not reported</p>	<p>Findings: The programmes, projects and activities implemented under the SWAp have contributed to improvements in health outcomes and to some improvements in the quality of health services at community level. These improvements can, in turn, be plausibly linked to progress toward MDG and PRSP/MKUKUTA goals, especially relating to infant and child mortality. There has been no progress in the reduction of maternal mortality or in improving maternal health, although the number of births attended by trained personnel increased considerably during the evaluation period.</p> <p>Claims on behalf of aid: SWAp has resulted in greater sector coherence and consistency, securing higher</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
	<p>Study methods: joint evaluation of the health sector, including 8 government agencies, more than 20 development partners, many NGOs, faith-based organisations and civil society organisations. Included focus groups with over 300 community members.</p> <p>Unit of analysis: National/Regional and District/Council</p> <p>Data collection period: Dec 2006-Sept 2007</p> <p>MDG: MMR (MDG 5.1); attended births (5.2)</p>	<p>Primary data source: Review of Health Outcomes Data: the evaluation relied on existing primary and secondary data sources to assess changes in health outcomes during the evaluation period, especially as they relate to the achievement of goals and targets in health as set out in MKUKUTA and the MDGs.</p>	<p>levels of domestic and external financial resources for health. Health Basket Fund and Block Grants considered particularly effective.</p> <p>Confounding factors reported: the following factors contribute to or limit positive changes in health outcomes. Potential Contributing Factors: Strengthened micronutrient services; Increased numbers of skilled birth attendance; Improved diagnosis and treatment of malaria, especially among children; Improved availability of drugs, especially for treatment of malaria and HIV/AIDS; Increased use of ITNs; and, some reported improvement in the use of modern contraceptive methods. Potential Constraints and Limiting Factors: Continuing severe shortages of trained health workers; Deficiencies in infection control and poor infrastructure, especially the lack of running water as reported in the Tanzania Service Provision Assessment Survey and directly observed during all six district case studies; Continuing intermittent shortages of essential drugs at HF level; Shortages of other medical supplies (syringes, gloves, x-ray film, reagents) at facilities level; Poor and/or expensive transport infrastructure, especially as it relates to emergency transport and the use of ambulances.</p> <p>Theories of change reported: The evaluation was not able to locate a model or study able to mathematically link changes in health outcomes to specific changes or interventions in the health sector. As a mix of aid modalities has been used throughout the evaluation period, it is difficult to establish causal relationships between any one aid modality and the broad health outcomes achieved.</p>
Mansour et al.	<p>Study Objectives: to analyse a programme aimed to improve health services in three districts by increasing managers' ability to create high performing teams and lead them to achieve results.</p> <p>Study design: Quasi experimental</p>	<p>Selection Criteria: Not selection criteria reported, but Aswan is described as "typical of the governorates in Upper Egypt, with a rural and mostly impoverished population."</p> <p>Intervention group: 3 districts in Aswan Governorate: Aswan, Daraw and Kom Ombo</p> <p>Control group: not reported</p>	<p>Findings: At the end of the first year following the intervention, eight of the 10 health teams had achieved 95% or more of their desired results. Three districts—Aswan, Daraw and Kom Ombo— increased the number of new family planning visits by 36%, 68% and 20%, respectively, compared to the same period the year before. Three teams achieved notable increases in the average number of prenatal care visits per client. Gaafra</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
	<p>Study methods: used a pre-test/ post-test design</p> <p>Unit of analysis: district</p> <p>Data collection period: not reported</p> <p>MDG: maternal mortality ratio (MDG5.1); ante-natal care (MDG 5.5)</p>	<p>Primary outcome: MMR; pre-natal visits</p> <p>Secondary outcome: family planning visits to healthcare facilities</p> <p>Covariates: not reported</p> <p>Primary data source: data is drawn from secondary sources (MMR) and from project evaluation reports.</p>	<p>Health Centre achieved an average of 3.6 postpartum visits per client as of the end of June 2003, up from 0.2 visits in June 2002.</p> <p>In the second year, teams from Aswan District raised the number of prenatal visits per woman from 1.3 to 3.7, and child care visits increased from 1.1 to 3.5.</p> <p>In the third year, the LDP scaled up to 100 health facilities and by 2005 it had reached all 184 primary health facilities—including more than 1000 health workers— in the governorate.</p> <p>From 2006 to 2007, the Aswan Governorate reduced the MMR further, from 50.0 per 100,000 live births to 35.5. This figure continues to drop at a rate faster than in comparable governorates in Egypt.</p> <p>Claims on behalf of aid: the success of the pilot project has catalysed adoption of the Leadership Development Programme in other parts of Egypt; but it is the efforts of local partners in the aftermath of aid funding that the claims relate to.</p> <p>Confounding factors reported: not reported</p> <p>Theories of change reported: The LDP has scaled up with local resources because it uses a simple process of working with teams over time to focus on real health results, developing leaders at all levels of the health system and enabling local health managers to own the development process. It provides a pathway for teams of health managers and providers at all levels to lead and manage to improve performance.</p> <p>National MMR: from 174 per 100,000 live births in 1992/3 to 84 in 2000</p>
Perks et al. 2006	<p>Study Objectives: to evaluate the primary healthcare programme in Sayaboury.</p> <p>Study design: Review of documents and reports, health data summaries, evaluation workshops and secondary analyses of data from population surveys.</p>	<p>Selection Criteria: Each survey used a standard two-stage random 30-cluster sampling technique with an administrative village as the primary sampling unit and a sample size of 600 households. No further information is provided.</p> <p>Intervention group: Sayaboury province. In 2003, it had a population of 321,000 of whom 22% belonged to 33 ethnic minorities</p>	<p>Findings: A comprehensive district-managed primary health care programme has achieved significant gains when compared with the national indicators. 573 traditional birth attendants, all chosen by village health committees, have been trained in 495 villages. Improvements in access to health services have been accompanied by high utilization. MMR declined from 218 per 100,000 live births in 1998</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
	<p>Study methods: Due to weaknesses in the routine health information system the accuracy of data was checked by conducting 3 cross-sectional studies in the 4 northern districts, which represent the least developed part of the province.</p> <p>Unit of analysis: district</p> <p>Data collection period: evaluation conducted in 2004</p> <p>MDG: maternal mortality ratio (MDG5.1); assisted births (MDG 5.2); contraceptive prevalence (MDG 5.3); ante-natal visits (MDG 5.5)</p>	<p>Control group: not reported</p> <p>Primary outcome: Maternal Mortality Ratio (per 100,000 births); Proportion of women of reproductive age using a modern contraceptive method (%);Proportion of pregnant women attending 3 antenatal clinic visits (%);Proportion of attended deliveries in northern districts (%);Proportion of attended deliveries in southern districts</p> <p>Secondary outcome: study also mentions service access, service utilization, infant mortality, communicable disease, nutrition and immunisation.</p> <p>Covariates: not reported</p> <p>Primary data source: Reports and documents were reviewed including Health Data Summaries (1997-2003) and Six-Monthly Primary Health Care Activity Reports. Participatory Evaluation workshops were held were four domains of change were examined: district capacity, provincial management capacity, health service quality (including community perceptions) and impact on the population's health. Impact data collected in annual reports of the health information system were reviewed for 1997-2003 as were the findings from the 1999, 2001 and 2004 population survey.</p>	<p>to 110 per 100,000 in 2003, a lot less than the 530 per 100,000 national average. Widespread adoption of contraception for the purpose of child spacing. Current use of a modern method increased from 12% of women in 1997 to 67% in 2003. This is more than double the national average of 32%, and is reflected in a crude birth rate of 23 per 1000 population compared with 34 per 1000 nationally. The proportion of pregnant women attending 3 ante-natal clinic visits increased from 24% in 1997 (in 6 districts) to 58% in 2003 (in 10 districts) compared with 20% nationwide. Training and supervision of traditional birth attendants led to an increase in attended deliveries in the northern districts, from 17% of births in 1999 to 47% in 2004, compared with 17% nationally in 2000. The proportion of attended deliveries is higher in the 6 southern districts (67%). Moreover, all district hospitals are able to provide basic emergency obstetric care.</p> <p>Claims on behalf of aid: NR</p> <p>Confounding factors reported: notes contextual factors affecting health: low-income country, fragile state, low life expectancy, malnutrition</p> <p>Theories of change reported: not reported</p> <p>National MMR: 530 per 100,000</p>
Shiffman et al. 2004	<p>Study Objectives investigates interactions between international health policy networks and ministries and the impact of these interactions on health priority setting through a study of safe motherhood in Honduras in the 1990s. Explores why successful policy transfer and implementation occurred and highlights the case's significance for understanding network–ministry interactions and health priority formation in developing countries.</p> <p>Study design: process-tracing methodology</p> <p>Study methods: Mixed. Largely qualitative</p>	<p>Selection Criteria: Purposive case study. Interviews: 30 individuals involved in Honduran safe motherhood. Interviewed each of the five individuals who led the maternal and child health division of the Ministry of Public Health between the years 1986 and 2002; a number of senior officials in the Ministry; NGO and private sector consultants; and members of the donor community including the Pan American Health Organization (PAHO – the Americas branch of the WHO), USAID, UNFPA, UNICEF and the World Bank.</p> <p>Intervention group: Nation-state of Honduras</p> <p>Control group: not reported</p>	<p>Findings: Between 1990 and 1997 domestic health officials and international donors cooperated to institutionalize safe motherhood as a policy priority in Honduras, resulting in successful policy transfer, implementation and impact on maternal mortality levels. Honduran government and donor efforts resulted in substantial expansion of the country's health and safe motherhood infrastructure. Access and utilization by Honduran women of safe motherhood services increased markedly over this period. Ante-natal care increased and became increasingly professionalized with smaller proportions of women relying only on traditional birth attendants for care during pregnancy. In 1997, a second national RAMOS study was conducted on the</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
	<p>with supporting quantitative data. Used a process-tracing methodology in constructing the case history, seeking to employ multiple sources of information in order to minimize bias and establish common patterns of causality. Our aim was to investigate how safe motherhood appeared on the Honduran health agenda, the degree to which the cause had been institutionalized in the country, and the factors behind the prioritization of the issue.</p> <p>Unit of analysis: country</p> <p>Data collection period: NR</p> <p>MDG: MMR (MDG 5.1); assisted births (MDG 5.2); ante-natal visits (MDG 5.5)</p>	<p>Primary outcome: MMR</p> <p>Secondary outcome: Process indicators, e.g. percentage of women having an ante-natal visit, percentage of institutional births and caesarean section rate</p> <p>Covariates: not reported</p> <p>Primary data source: interviews with officials involved in Honduran safe motherhood policy; government reports and documents; donor agency reports; and published research on Honduran safe motherhood.</p> <p>The government reports consulted included national health plans, national health surveys, safe motherhood strategy papers and official documents on safe motherhood norms. Of particular importance were the 1990 and 1997 RAMOS that provided evidence of a maternal mortality decline in the country and information on its possible causes. Donor documents included regional and national safe motherhood plans of action from PAHO, USAID-Government of Honduras health agreements and evaluations, and UNFPA project plans and reports for Honduras</p>	<p>country's maternal mortality levels (supported by donor funding). The investigation revealed a maternal mortality ratio of 108, indicating a significant decline from the 1997 ratio of 182. The report provided strong evidence that increased access to maternal health care played a role in this decline.</p> <p>Claims on behalf of aid: indirectly implied that donor interventions helped produce the results.</p> <p>Confounding factors reported: political and health infrastructural developments were taking place globally and in Honduras well before 1990, so it is unlikely the decline was solely a function of activities taken in the time period between the two studies. Also, there are no reliable data prior to 1990 on the country's maternal mortality levels, so cannot discern trends in periods prior to that year.</p> <p>Notes limitations from study design, notably lack of comparison</p> <p>Theories of change reported: not reported</p> <p>National MMR: Between 1990 and 1997 the Honduran maternal mortality ratio declined from 182 to 108 maternal deaths per 100 000 live births</p>
World Bank 2003	<p>Study Objectives: to rate the performance of the Health IV project in China</p> <p>Study design: design is pre-test/post-test, but what is undertaken is a ex-post evaluation.</p> <p>Study methods: Analysis of baseline studies and annual reports. However, study notes in its limitations that a precise measurement of the magnitude of project impact was hindered by two factors: a) as the original project design did not allow for a repeat of the of the baseline study at the end, the more limited ex-post external evaluation (EPEE) based on secondary data could not document the impact</p>	<p>Selection Criteria: Selection criteria for the participating counties were based on maternal and infant mortality ratios/rates, income, and the designation of a county as either a national or provincial poverty county. Counties already covered under the UNICEF sponsored 300-County project were excluded.</p> <p>Intervention group: Of the 879 counties in the eight provinces and one autonomous municipality, the project covered 282 (32%) of those that were the most economically disadvantaged in Chongqing, Gansu, Guangxi, Jiangxi, Inner Mongolia, Qinghai, Shaanxi, Sichuan and Yunnan. The project was estimated to benefit 100 million people among whom there were nearly 20 million women of reproductive age.</p> <p>Control group: not reported</p>	<p>Findings: Achievement of both the project objectives and outputs are rated as Satisfactory. assessment of the achievement of the objectives was facilitated by the clarity of the priorities; the well-defined performance and outcome indicators; and the strong central technical and management leadership, supervision, and spirit of supportive collaboration between the central team and the Bank.</p> <p>Based on the Provincial Annual Reports (PAR), most provinces met the outcome targets of maternal mortality, infant mortality, under-five mortality and neonatal mortality reduction. Elements such as HE, which experienced slow initial execution, greatly accelerated its implementation later on in the project, despite resource and transport limitations.</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
	<p>in a comparable pre- and post-intervention manner; and b) the continuing weakness of the management information systems (MIS).</p> <p>Unit of analysis: province</p> <p>Data collection period: not reported</p> <p>MDG: MMR (MDG 5.1); attended births (MDG 5.2); ante-natal care (MDG 5.5)</p>	<p>Primary outcome: maternal mortality ratio, infant mortality, neonatal mortality, under-5 mortality, neonatal tetanus mortality rate</p> <p>Secondary outcome (output indicators): attended births; ante-natal care coverage, post-natal care, hospital delivery rate, child immunisation rate.</p> <p>Covariates: not reported</p> <p>Primary data source:</p> <ul style="list-style-type: none"> - Baseline studies (1992) based on statistically designed household cluster sample - Provincial Annual Reports (1995 and 2001) 	<p>A precise measurement of the magnitude of that impact is hindered by two factors: a) as the original project design did not allow for a repeat of the of the baseline study at the end, the more limited ex-post external evaluation (EPEE) based on secondary data could not document the impact in a comparable pre- and post-intervention manner; and b) the continuing weakness of the management information systems (MIS).</p> <p>Claims on behalf of aid: not reported</p> <p>Confounding factors reported: Reports major factors affecting implementation and outcome: rapid economic development and increase in the average per capita income in many counties probably had a positive impact on the project; on other hand, geographic and cultural remoteness of many groups, coupled with the difficulties associated with transport for Health Education work and supervision in some areas may have negatively impacted project reach; strong leadership and support from central authorities; project management factors (positive and negative).</p> <p>Theories of change reported: not reported</p>
World Bank 2006	<p>Study Objectives: to assess two projects and their contribution to establishment of a sector-wide approach</p> <p>Study design: retrospective study</p> <p>Study methods: study draws on a range of reports and studies.</p> <p>Unit of analysis: country</p> <p>Data collection period: March 2006</p> <p>MDG: maternal mortality ratio (MDG5.1); attended births (MDG 5.2); contraceptive prevalence rate (MDG 5.3); ante-natal care coverage (MDG 5.5); unmet need for family planning (MDG 5.6)</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: not reported</p> <p>Control group: not reported</p> <p>Primary outcome: MMR; fertility rate; Percentage of married women currently using any method of family planning; Percentage of women with an unmet need for family planning; Percentage of live births receiving ante-natal care from a trained health professional; Percentage of live births delivered at a health facility; Percentage of live births receiving assistance at delivery from a trained health professional; Percentage of births delivered by c-section</p> <p>Secondary outcome: see above</p> <p>Covariates: not reported</p>	<p>Findings: the objectives of FPHP were rather over-extended, including the reduction of maternal mortality and nutrition objectives which were not realistic as there were few activities related to achieving these objectives. Second, HPPP aimed to both improve service delivery whilst at the same time undertaking a substantial reorganization, which proved extremely disruptive. Performance on Specific Objectives specific to FPHP and salient to maternal health: (1) Reduce fertility by increasing the CPR to 45-50 percent: Achieved. The proportion of married women currently using contraception was 40 percent in 1991 and 50 percent in 1996/97. (2) Improve maternal care and ensure safer deliveries thereby reducing maternal mortality from the current 6-8 to 4-5 per 1,000 live births: Partially achieved. There has been a decline in maternal mortality, though not to the extent hoped for. HPPP/HPSP Specific Results: Whilst health outcomes</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
		<p>Primary data source: Implementation Completion Reports (ICR), project documents, and interviews with government officials and Bank staff with experience of the projects. The report also draws on the OED impact study 'Maintaining Momentum? An impact evaluation of interventions to improve Maternal and Child Health and Nutrition Outcomes in Bangladesh'.</p>	<p>continued to improve under HPPP, progress was not uniform. Some activities supported by the program did contribute to the continued improvement in outcomes, but those activities where the bulk of the money was spent did not. Performance by specific objectives (salient to maternal health): (1) Technical support and funding to improve coverage and quality of essential health and family planning services for vulnerable groups, particularly poor women and children: At best partially achieved. The community clinics failed and utilization of some public facilities declined in the unification period (though has since recovered). These shortcomings were not because government did not provide the agreed finance, which it did, but because of the problems in implementation.</p> <p>Claims on behalf of aid: report notes that to the extent that there were improvements under the HPPP/HSPS, it is less plausible to claim such a clear link with the project as was the case with previous intervention. Notes that the continued improvements in health outcomes and fertility reduction in Bangladesh may well have been in spite of HPSP not because of it. Politicisation of HSPS: highly owned but also implementation problems due to political events.</p> <p>Confounding factors reported: recognises that it can plausibly be claimed that, as has been done in the HPSP indicator reviews, that other factors, such as continued economic growth, the rapid expansion of female education and earlier investments, account for these successes rather than then HPSP since service use actually fell during the course of the project.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>

Study ID	Study Methods	Data Presented	Findings, Claims, Limits and Pathways
<p>World Bank 2007</p>	<p>Study Objectives: to assess the development effectiveness of the World Bank's direct lending for Ghana's health sector during the period 1990-2005</p> <p>Study design: pre-test/post-test design</p> <p>Study methods: Evaluation process involves assessment of key sources of evidence which include: (a) World Bank project files; (b) project-related reporting and evaluation; and (c) epidemiological data, studies, surveys and research on health, much of it generated in Ghana.</p> <p>Unit of analysis: country</p> <p>Data collection period: June 2006</p> <p>MDG: assisted births (MDG 5.2); contraceptive prevalence rate (MDG 5.3); ante-natal visits (MDG 5.5)</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: not reported</p> <p>Control group: not reported</p> <p>Primary outcome: Percent of deliveries supervised by skilled workers; Percent of deliveries supervised by skilled workers; Percent of deliveries supervised by skilled workers; Percent of maternal deaths audited; Contraceptive prevalence; Couple-years of protection; Women receiving ante-natal care; Births at a facility</p> <p>Secondary outcome: a wide range of indicators are reported on in the report in other areas of health</p> <p>Covariates: not reported</p> <p>Primary data source: Key sources of evidence consulted include: (a) World Bank project files; (b) project-related reporting and evaluation; and (c) epidemiological data, studies, surveys and research on health, much of it generated in Ghana. Independent Evaluation Group (IEG) mission to Ghana was carried out in June 2006. Met with authorities and staff of the Ministry of Health, the Ghana Health Service and the Ghana ALDS Commission; other public sector agencies implementing health activities; selected NGOs and civil society groups; and development partners. Also visited the Regions (Districts/Municipalities) of: Greater Accra (Tema), Upper West (Wa, Nadowli), Upper East (Bolgatanga, Kassena Nankana and Nawongo), Northern (Tamale, Tolon) and Ashanti (Kumasi), where it met with health authorities, services providers and stakeholders and assessed health inputs and activities supported by the Bank. Once SWAp was initiated, national survey data like the Ghana Demographic Health Survey becomes an important resource for monitoring sector-wide outcomes.</p>	<p>Findings: Health indicators improved during 1993-1998 under the traditionally designed HPP 11, then plateaued during 1998-2003 under the first SWAp for PoW I. New GDHS data for 2008 will provide important insight on the trends in health under the second SWAP for Po W II, but preliminary data for fertility and mortality show no improvement and are cause for concern. Available data on health services performance that span the timeframes of the first and second SWAp also indicate an inadequate focus of Ghana's SWAP support on results, relative to its focus on capacity building. Key service performance data reveal a stagnation in service trends and a failure to achieve 2005 objectives for a number of indicators, including: utilization rates, family planning acceptors, pre-natal and post-natal care coverage, supervised deliveries by medically trained personnel. On the other hand, both immunization coverage and tuberculosis cure rates have improved.</p> <p>Claims on behalf of aid: no explicit claims made</p> <p>Confounding factors reported: study does control for confounding factors, looking at indicators such as economic status, gender, rural/urban residence, etc.). Contextual factors noted: general trends in HNP status mask wide variations within Ghana. Rural populations, residents of the poorer (especially northern) regions and those in lower wealth quintiles all have higher infant and child mortality, fertility and malnutrition rates than their counterparts living in urban areas and in the better-off regions and belonging to the higher wealth quintiles.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>

Table A4.1.3 Pool B studies: summary of interventions and data characteristics (Causal designs)

Study ID	Intervention Details	Study Methods	Findings, Claims, Limits and Pathways
CAUSAL			
Agha 2002	<p>Study Objectives: to assess the impact of the Social Marketing Adolescent Health Project.</p> <p>Study design: quasi-experimental</p> <p>Study methods: Pre-test, post-test. Multivariate Logistic Regression was used. In a non-equivalent comparison group design, respondents in the intervention and comparison locations can differ by age and educational level. All regression analyses controlled for these factors. In addition, all analyses were stratified by gender. The sample sites were chosen for logistical reasons so not random.</p> <p>Unit of Analysis: towns</p> <p>Data collection period: baseline and follow-up surveys were conducted at different times in the different studies countries between 1994 and 1998.</p> <p>MDG: contraceptive use (MDG 5.3)</p>	<p>Selection Criteria:</p> <p>In Cameroon: Control and Intervention towns said to have shared characteristics: ethnically mixed, roughly even division of Christians, Muslims etc, both towns have access to AIDS services. Having picked towns a multistage probability sample was used; 30 clusters were drawn with probability proportional to cluster size in each location. Households were randomly selected within each cluster, and of household members aged 12–22, the one whose birthday was most recent was chosen to participate.</p> <p>In South Africa: Control and Intervention towns said to have shared characteristics: both urban and near major urban centres. Major differences too however: Umlazi much smaller population and a higher HIV prevalence rate. Adolescents were randomly selected for the surveys through multistage probability sampling. At the first stage, township maps for each city were used to randomly select 450 residential plots with equal probability of selection. Young people aged 16–20 were enumerated in each selected plot, and a random sample of youth was drawn. Because data quality checks revealed that most interviewers used for the male follow-up sample were not reliable, the analysis is restricted to females. In addition, because very few 16-year-old females were selected for the follow-up sample, the analysis for the intervention site is restricted to those aged 17–20.</p> <p>In Botswana: Control and Intervention towns said to have shared characteristics: similar ethnic composition, urbanization and access to government services (inclu AIDS prevention services); similar levels of HIV/AIDS infection among women attending ante-natal clinics - 40% at time of intervention. Survey respondents were 13–18-year-old men and women who were randomly selected through multistage sampling. With the use of numbered maps, 30 starting households were randomly selected in both the intervention and the comparison locations. Each household had an equal probability of selection. Other households in that cluster were randomly selected through a systematic pattern of walking</p> <p>In Guinea: the control and intervention sample groups drawn from selected neighbourhoods of the country's two largest cities: Conakry and Kankan. The Association Stat-View collected data, using a multistage sampling process. The sample was drawn from</p>	<p>Findings:</p> <p>Cameroon intervention: associated with a reduction in risky sexual behaviour among young men and an increase in contraceptive use among young men and women.</p> <p>Botswana intervention: Women's perception of the level of risk involved in sexual activity and of the benefits of preventive measures increased in the intervention site, as did their contraceptive use. Among men, there was evidence of a reduction in casual partnerships.</p> <p>South Africa Intervention: the intervention had very few net positive effects among young women. The poor quality of data for men precluded the evaluation of the full impact of this intervention.</p> <p>Guinea: The intervention in Guinea had the least impact on Health Belief indicators.</p> <p>Overall, more positive change occurred among young women than among young men. This may reflect a better ability of these adolescent sexual health interventions to address the concerns of women than of men, or a greater receptivity to such interventions among young women than among young men.</p> <p>Claims on behalf of aid: No explicit claims were made but it is suggested that the interventions improved contraceptive usage among female and male participants (although not uniformly across the sexes or the countries).</p> <p>Confounding factors reported: The multivariate analyses adjusted for differences in respondents' characteristics by controlling for age and education, and the analyses were stratified by gender. Only this limited set of control variables was used in order to keep the statistical models the same in all four countries; it is therefore possible that individual level differences between intervention and comparison</p>

		<p>a list of enumeration areas and households obtained from the Planning Department for Demographic Surveys. All enumeration areas in the intervention and comparison locations were included in the sample frame. Two households were randomly selected per enumeration area, and one adolescent was randomly selected in each household.</p> <p>Intervention group: <u>In Cameroon:</u> intervention group sample drawn from town Edea (population 86,000). 805 out of 1,606 randomly selected respondents in baseline survey; 811 out of 1,633 respondents in follow-up survey. <u>In South Africa:</u> intervention group sample drawn from town Soweto (population more than 1 million). 118 in baseline survey and 101 in follow-up survey. <u>In Botswana:</u> intervention sample group drawn from town Lobatse (population 30,000). Numbers for control and intervention groups not disaggregated: 1,002 in baseline survey; 2,396 in follow up survey <u>In Guinea:</u> control and intervention sample groups drawn from selected neighbourhoods of the country's two largest cities: Conakry and Kankan. Numbers for control and intervention groups not disaggregated: 2,016 in baseline survey; 2,005 in follow up survey.</p> <p>Control group: <u>In Cameroon:</u> control group sample drawn from town Bafia (population 73,000). 801 out of 1,606 randomly selected respondents in baseline survey; 822 out of 1,633 respondents in follow-up survey. <u>In South Africa:</u> control group sample drawn from town Umlazi (population less than 50,000). 103 in baseline survey; 103 in follow-up survey. <u>In Botswana:</u> control group sample group drawn from town Francistown (population 50,000). Numbers for control and intervention groups not disaggregated: 1,002 in baseline survey; 2,396 in follow up survey. <u>In Guinea:</u> the control and intervention sample groups drawn from selected neighbourhoods of the country's two largest cities: Conakry and Kankan. Numbers for control and intervention groups not disaggregated: 2,016 in baseline survey; 2,005 in follow up survey.</p> <p>Primary outcome: contraceptive use</p>	<p>sites were not adequately controlled for, for instance, the social and epidemiological contexts of HIV differed in the four countries.</p> <p>Theories of change reported: Study uses the Health Belief model: based on a cognitive approach that uses a cost-benefit perspective to understand preventative health behaviour. It assumes that individual behaviour change depends upon perceived severity of risk, perceived susceptibility to risk, perceived benefits of preventive action, perceived barriers to preventive action and perceived ability to take preventive action (self-efficacy)</p> <p>National MMR: not reported</p>
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		<p>Secondary outcome: reach of interventions, effect on perceptions and beliefs, effects on behaviour</p> <p>Covariates: not reported</p> <p>Primary data source: baseline and follow-up surveys for each country.</p>	
<p>Baird et al. 2010</p>	<p>Study Objectives: Article examines the impact of the World Bank's Safe Motherhood Programme (SMP) on health outcomes amongst Indonesia's poor by comparing outcome data in intervention and control provinces looking at multiple primary and secondary outcomes.</p> <p>Study design: quasi-experimental</p> <p>Study methods: pre-test, post-test design using quantitative methods. Provincial data was from 1990-2005 was analysed combining a difference-in-difference approach in multivariate regression analysis with matching of intervention (SMP) and control group provinces and adjusting for possible confounders. Purposive as opposed to random sampling.</p> <p>Unit of Analysis: provinces</p> <p>Data collection period: Study draws on data spanning 1990-2005.</p> <p>MDG: Attended births (MDG 5.2), adolescent birth rate (MDG 5.4)</p>	<p>Selection Criteria: Sampling criteria used to determine the intervention provinces included: population size, the number of rural villages, the administrative structure, more advanced administrative capabilities and the ability to serve as 'best practice' examples.</p> <p>The intervention provinces East and Central Java are both provinces of Java Island. Thus in this study, authors chose control provinces from the rest of Java Island and the surrounding area to control for geographic and cultural factors. The intervention and control sites also said to enjoy similar total populations. Other factors such as sex ratio and population density were comparable between intervention and control groups.</p> <p>Intervention group: The following provinces have a combined population of approximately 75 million: Central province East Java province</p> <p>Control groups: The following provinces have a combined population of approximately 70 million: West Java Daerah Khusus Ibukota Yogyakarta DKI Jakarta Banten Lesser Sunda Islands West and East Tenggara Bali</p> <p>Primary outcome: Percentage of births overseen by trained personnel Percentage of teen pregnancy Total fertility</p>	<p>Findings: Overall, with the exception of the under-five mortality rate, the authors found that changes in outcomes in the Safe Motherhood Programme provinces were not statistically significantly different from those in non-SMP provinces. However, in both SMP and non-SMP provinces, clinically relevant changes occurred. For example, the percentage of deliveries overseen by trained personnel increased, infant mortality decreased, and under-five mortality decreased in both study groups. The authors found statistically significant associations between unemployment and the pupil-teacher ratio, and increases in the numbers of assisted births.</p> <p>Claims on behalf of aid: No explicit claims were made on behalf of aid-funded activities.</p> <p>Confounding factors reported: In their multivariate analyses, the authors found that the major changes outcomes witnessed were associated primarily with education, employment status, and membership in Mother and Child Health Care Services. In all provinces, the main education variable, the pupil-teacher ratio, decreased over time, indicating an improvement in education quality. This decrease in the pupil-teacher ratio was associated with increased utilization of reproductive health services and decreases in the infant and under-five mortality rates. Female education levels, which increased in all provinces, contributed to decreases in under-five mortality.</p> <p>In their analysis the authors also controlled for a UNICEF project. However, it is possible that the cumulative effect of these coordinated efforts</p>

		<p>Secondary outcome: Infant Mortality Under-5 mortality</p> <p>Covariates: Indicator of project participation (to control for participation in two other MCH projects)</p> <p>Funding received Population density Sex ratio Education level of males Education level of females Pupil-teacher ratios General unemployment rate Male and female life expectancies</p> <p>Primary data source: Indonesian Demographic and health Surveys. For intermediate years study utilized additional data compiled by the United Nations Children’s Fund for the Maternal and Child Survival Development and Protection project on behalf of the Indonesian government.</p>	<p>crossed over into both intervention and control group so that the authors were unable to identify a “pure” effect of SMP.</p> <p>Limitations were also highlighted: the post-project analysis was limited to two years: 2004 and 2005. The authors were unable to account for behavioural factors due to data restrictions on indicators such as addictive behaviours and nutritional status. The data set did not contain views on various cultural issues. The study methodology did not involve randomization so it is impossible to fully isolate any given variable for analysis. Thus the conclusions should be interpreted as assessments of association as opposed to causality. Finally, they note that it is difficult to isolate the independent impact of any given project, such as SMP, given the overall climate of development assistance.</p> <p>They also note the potential impact of external factors, e.g. a 1987 Nairobi conference on safe motherhood and a 1995 international conference on women in Beijing, which may have been significant in prioritizing safe motherhood activities in Indonesia across both intervention and control groups.</p> <p>Finally, they note the significance of domestic-led policies, programs and projects which cannot be overstated. Marked changes in maternal health policy across the country could have been influential in both intervention and control groups in our study.</p> <p>Theories of change reported: not reported</p> <p>National MMR: 230/100,000 live births</p>
<p>Barbey et al. 2001</p>	<p>Study Objectives: The scope of the Dinajpur Safe Motherhood Initiative (DSI) evaluation is to examine and validate the achievements, and explain the attribution of the specific project interventions, and make recommendations for future programming initiatives through a comprehensive review of the project approaches and its relevant documents.</p> <p>Study design: quasi-experimental.</p>	<p>Selection Criteria:</p> <p>i. All three Upazilas have a population of approximately 170,000.</p> <p>ii. The intervention site and comparison area A have Government of Bangladesh (GoB)-UNICEF supported EmOC services. Comparison area B has no GoB-UNICEF supported EmOC services.</p> <p>Intervention group: Birampur (Upazila of Dinajpur district) – population – 164,000.</p>	<p>Findings: The percent of women with obstetric complications using EmOC facilities increased dramatically from 16 percent to 39.8 percent in the intervention area during the DSI versus from 12.5 percent to 25.5 percent in the upgraded comparison area A and versus from 11.1 percent to 12.1 percent in comparison area B, the control area. The increase in utilization of EmOC service in the intervention area is just 10 percent below the ambitious 50 percent goal targeted by the project. Moreover, the percent of total births taking place in facilities increased over the</p>

	<p>Study methods: A post-test design using mixed methods. A community and facility-based longitudinal study with an intervention area and two comparison sites. Used purposive sampling.</p> <p>Unit of analysis: sub-district (<i>upazila</i>)</p> <p>Data collection period: 2-17 May 2001</p> <p>MDG: MMR (MDG 5.1), Institutional births (MDG 5.2), ante-natal care (MDG 5.5)</p>	<p>Control group: Bochaganj (Upazila of Dinajpur district) - also known as comparison area A – population 166,000. Debiganj (Upazila of Panhagarh district) - also known as comparison area B – population 183,000.</p> <p>Primary outcome: note that Emergency Obstetric Care (EmOC) was used as a proxy for the reduction of maternal health in the DSI. The study assumes that EmOC, if received in an upgraded facility, would not result in maternal health.</p> <p>Secondary outcome: Study collects data on various process (e.g. percent of women receiving ante-natal care) and effect indicators (percent of total births taking place at the facility).</p> <p>Covariates: not reported</p> <p>Primary data source: Key DSI documents were consulted by the Final Evaluation Team. Most important to the review were the Project Proposal of DSI, the Monitoring Strategy of DSI, DSI Baseline Survey, the DSI Final Evaluation Survey, Report of the DSI Qualitative Baseline Study, DSI Interventions to Increase the Use of Emergency Obstetric Care Service, Partnership in DSI, DSI Case Studies, DSI Verbal Autopsies of Maternal Deaths, Long Range Strategic Plan of CARE Bangladesh 2002-2006 etc. Throughout the evaluation report, data from the DSI documents were triangulated with the evaluation team's own observations, interviews, focus groups, research findings, etc.</p>	<p>life of the DSI: in the intervention area: 2.4 percent to 10.5 percent; in the upgraded comparison area A: 7.2 percent to 12.1 percent; and in the control area: 4.5 percent to 5 percent according to the Final Quantitative Survey by ACPR. In order to increase the percent of women with obstetric complications using EmOC facilities, the percentage of births occurring in these facilities was expected to increase and did.</p> <p>Claims on behalf of aid: No explicit claims were made.</p> <p>Confounding factors reported: the study notes that fatality rates were not calculated due to poor data. It also notes that due to time constraints in carrying out the study, an evaluation of external factors which may have influenced the results of this project was not possible.</p> <p>Theories of change reported: not reported</p> <p>National MMR: 560/100,000 live births in 1990</p>
<p>Hounton et al. 2008</p>	<p>Study Objectives: The aim of the evaluation is to assess to what extent a Skilled Care Initiative (SCI) was associated with pregnancy-related mortality in Ouargaye district, Burkina Faso.</p> <p>Study design: quasi-experimental</p> <p>Study methods: Mixed-methods study. The aim was to conduct a real-life assessment of an existing strategy. Used a quasi-experimental design, and a mixed-methods study covering the project implementation period to assess changes in selected outcomes and process measures within the intervention and</p>	<p>Selection Criteria: Ouargaye and Diapaga districts are remote, rural districts located in south-eastern Burkina Faso. Both districts for the most part lack electricity, running water, paved roads and an effective transport system. Diapaga district covers an area of 14 780 km², 2.6 times bigger than Ouargaye. In 2001, before the implementation of the SCI, there were 213 690 inhabitants in Ouargaye and 268 366 in Diapaga. Populations were covered by 19 health centres (increased to 21 in 2002) in Ouargaye and 18 (increased to 21 in 2002) in Diapaga.</p> <p>Some considerations used to select the comparison district were: (i) being in the same region but sharing no borders with the intervention district, (ii) having a similar proportion of skilled attendance at delivery and (iii) having similar levels of poverty. Finally, it was noted that Diapaga was mainly assisted by UNICEF</p>	<p>Findings: The pregnancy-related mortality risk decreased with increasing proportions of women attending ante-natal care (P = 0.032) or giving birth in an institution (P = 0.065) within the health facility catchment area. Subsequently, an important contribution of the Skilled Care Initiative was to increase the number of women receiving ANC and delivering in an institution. She study did not find any significant impact of the SCI on pregnancy-related mortality within the reference period of the study. So although the SCI intervention made an impact on utilisation of skilled care at delivery, we have not yet seen a significant impact on pregnancy-related deaths reduction.</p>

	<p>comparison districts. Although a prospective, randomised trial approach might have improved control of confounding and reduced sources of bias, the study notes that this would not have been appropriate or possible in this real-world setting and would not necessarily have increased external validity. A robust trial-based design would have been impossible because of variations between multiple stake-holders, inherent dissimilarities between the Districts and the complexity of the SCI implementation.</p> <p>Unit of analysis: health district</p> <p>Data collection period: 2006</p> <p>MDG: MMR (MDG 5.1), attended/skilled births (MDG 5.2), ANC (MDG 5.5)</p>	<p>to set up a cost-sharing mechanism aimed at decreasing financial and geographical barriers to emergency obstetric care in 2001.</p> <p>Intervention group: Ouargaye Health district</p> <p>Control group: Diapaga Health district</p> <p>Primary outcome: Impact Indicators: pregnancy-related mortality. Indicator examples: maternal mortality ratio, maternal mortality rate, perinatal mortality rate. Note the Hounton et al. study uses the risk of pregnancy-related mortality as a short-term proxy for MMR. Process measures: severe morbidity, access to CEMoC, Performance, Utilisation of maternal health services. Indicator examples: near-miss rate, quality of care, long-term disability rate, proportion of unmet obstetric needs, performance of maternal unit, skilled attendance rate.</p> <p>Secondary outcome: N/A</p> <p>Covariates: N/A</p> <p>Primary data source: The study administered 3 survey types: Community, Facility and Qualitative Surveys. Under these heading were the following. 1. Community surveys: census and socio-economic survey, Adult deaths survey, Perinatal survey, Short-term outcomes after pregnancy, household costs for maternal care, verbal autopsy. 2. Facility surveys: unmet obstetric need, near miss, maternal death records, facility costs, time allocation, performance, incentive survey, knowledge, attitudes and practice. Qualitative surveys: verbal autopsy, near-miss, perceived quality of care.</p>	<p>Claims on behalf of aid: No explicit claims are made but the suggestion is that increasing utilisation of maternal healthcare services could feasibly reduce MMR in the long-term.</p> <p>Confounding factors reported: the study notes that there were real challenges to find methods for disentangling SCI effects from other competing safe motherhood interventions and to attribute results. There were also concerns about significant differences in baseline data for the two districts. Information was gathered in questionnaires on indicators of women's own socio-economic status, capacity to undertake activities of daily life, psychological status, social and familial relation status, discomfort as a result of pregnancy and childbirth, capacity to pay health-care costs.</p> <p>Theories of change reported: not reported</p> <p>National MMR: 484 per 100,000</p>
<p>Mathur et al. 2004</p>	<p>Study Objectives: Study documents the results of a project that scientifically tested the effectiveness of the participatory approach in defining and addressing the reproductive concerns of adolescents. It is intended to fill a gap in evidence base as to date there is little documentation of the extent to which participatory methodologies yield improved results in developing countries, or about their potential to affect reproductive health behaviour</p>	<p>Selection Criteria: The two rural sites are located in the "Terai" area, in the districts of Nawalparasi and Kawasoti near the Nepali-Indian border. With approximately 200 households each, the two communities lie about 80 kilometres apart and were selected on the basis of having a secondary school, a range of health service providers, access to a main road and electricity, and the presence of at least one working NGO. As such, they represent the relatively more developed Nepali village. The two urban communities, consisting of approximately 300 households each, were drawn from middle class suburbs on the outskirts of</p>	<p>Findings: Study confirmed that young people lacked adequate knowledge and information regarding reproductive health. Services are not easily accessible to young people, in a large part because providers demonstrate judgemental attitudes toward young people seeking services. With regard to basic reproductive health outcomes, the participatory approach was found to be generally more effective than the traditional approach, although not consistently so. For example, results on only some of</p>

	<p>in young people.</p> <p>Study design: quasi-experimental; pre-test post-test design</p> <p>Study methods: pre-test, post-test design using mixed methods. Utilised the participatory approach for research, intervention, monitoring and evaluation at two study sites, together with more traditional reproductive health research and interventions at two control sites. An extensive needs assessment was conducted at the study sites using triangulated methodologies, followed by action planning with the community to design the program. At the control sites a more limited needs assessment was conducted.</p> <p>Unit of analysis: districts</p> <p>Data collection period: seems to have taken place throughout the project from 1998-2003</p> <p>MDG: contraceptive prevalence (MDG 5.3); ANC (MDG 5.5)</p>	<p>Kathmandu. Located about 20 kilometres apart from each other, the two suburbs selected met the basic criteria described above, along with having a more developed infrastructure and a wider range of options for such aspects as transportation, schooling, employment, health services, and leisure activities.</p> <p>Intervention group: 1 rural intervention site 1 urban intervention site</p> <p>Control group: 1 rural control site 1 urban control site</p> <p>Primary outcome: self-reported health behaviours: knowledge of sexual health; sexual behaviour, contraceptive use, marriage and childbearing, care during pregnancy</p> <p>Secondary outcome: gender inequality, schooling</p> <p>Covariates: demographic characteristics</p> <p>Primary data source: The study collected baseline and endline data for evaluation purposes, as well as process data on interventions and community perceptions for monitoring purposes. The baseline data also served as formative research and provided the basis for an initial needs assessment. The evaluation design relied on a triangulation of research methodologies. Quantitative, qualitative, and participatory methods were employed to gather detailed information on the reproductive health knowledge and practices of young people from a range of perspectives, as well as rich data on the broader social and cultural context that shapes and defines the sexual and reproductive experiences of Nepali youth.</p>	<p>the measures of knowledge of STDs or HIV/AIDS were more positive at the study sites. In fact, for some measures (such as contraceptive use), the results were mixed at both sets of sites. However, results on the communication of reproductive health concerns and understanding of sexuality were consistently more positive at the study sites.</p> <p>Claims on behalf of aid: No explicit claims made.</p> <p>Confounding factors reported: study also looks at gender in relation to schooling and participation in social activities, and found that gender inequality is a huge problem. The socio-economic context is outlined, including the challenges facing youth in Nepal</p> <p>Theories of change reported: not reported</p> <p>National MMR: 539/100,000 live births</p>
<p>Meuwissen et al. 2006</p>	<p>Study Objectives: to assess whether a voucher program, through increased access to Sexual and Reproductive Healthcare (SRHC), would increase knowledge about STIs and contraceptive methods as well as increase contraceptive use.</p> <p>Study design: quasi-experimental; post-test</p>	<p>Selection Criteria: Evaluation of the impact of the intervention was limited to adolescent girls (only 6% of the male receivers used their voucher). Self-administered questionnaires were distributed randomly among female adolescents 3 to 15 months after the vouchers had been distributed in their area. The sampling frame consisted of a selection of 21 of the 244 sites where a large number of vouchers had been distributed. At each site, convenience samples of adolescent girls were asked to complete a questionnaire. The only criterion for selection was age.</p>	<p>Findings: After adjustment for differences between groups, voucher receipt was associated with a significantly greater increase in the following: use of SRHC, knowledge of contraceptives, and knowledge of STIs and prevention through condom use. The impact of voucher receipt varied between subgroups. For respondents at markets only the use of SRHC increased. The use of contraceptives increased significantly among respondents at schools, and the</p>

	<p>design</p> <p>Study methods: 3,130 questionnaires were completed, of which 3,009 (96%) contained sufficient data for analysis. Data were entered twice in Epi-info by 2 different data processors. STATA 7.0 (Intercooled) software was used for further analysis. The main characteristics describing study participants according to voucher receipt were calculated and tabulated (Tables 1 and 2 on p56.e4-e5). The crude odds ratio between voucher receipt and outcomes was assessed. The adjusted Mantel- Haenszel odds ratios for the different levels of possible confounders were calculated. Only statistically significant results ($p < .05$) are reported. Multiple logistic regression analyses were used to adjust the association between voucher receipt and the outcome for group differences. The likelihood ratio test (LRT) was used to determine whether other variables individually had a significant effect on the outcome ($p < .10$). For each variable, it was assessed whether there was interaction with voucher receipt using the LRT. All categoric variables were tested for departure from the linear trend. Finally, the significance of each variable was tested with the LRT, by excluding them one by one from the model with all significant variables ($p < .05$). Because the survey site (markets, neighbourhoods, and schools) had considerable influence on the outcomes, multivariate analyses were performed for each site separately (see table in data section). Only records with complete data for all significant variables were used in the multivariate analysis. Missing data were few and associated neither with the probability of voucher reception nor with any outcome.</p> <p>Unit of analysis: Group level (voucher receiver or non-receiver)</p> <p>Data collection period: 2000-2001</p>	<p>At markets and in neighbourhoods, girls were approached individually both during voucher distribution and the survey. During voucher distribution at schools, relatively large groups of adolescents were approached while leaving their school to prevent compromising schools with the SRHC intervention. During the survey, girls were approached on a more individual basis while still in or near the school compound. The survey was presented to girls as a study seeking adolescents' opinion on health services and was not linked to the program. The objective was to obtain a random sample of girls who had had the same chance of receiving a voucher. Within this sample, the voucher receivers were considered the intervention group to be compared at a group level with the control group, the non-receivers, because it was by chance whether or not a respondent had received a voucher.</p> <p>Intervention group: Voucher receivers ($n = 904$)</p> <p>Control group: Voucher non-receivers ($n = 2,105$)</p> <p>Primary outcome: The selection of the variables was based on literature and previous studies in Nicaragua. The main outcome variables: (1) using SRHC within 15 months before the survey; (2) mentioning at least 2 modern contraceptives; (3) mentioning a health care facility as a place to obtain contraceptives; (4) mentioning 2 STIs; (5) mentioning condoms as a method to prevent transmission of STIs; (6) reported use of modern contraceptives; and (7) reported condom use during last sexual contact.</p> <p>Secondary outcome: N/A</p> <p>Covariates: The variables of age, level of schooling, school attendance, socioeconomic (SE) indicators, childbearing experience, and survey site were considered potential confounders that might have been associated with receiving a voucher and independently influence outcome, or effect modifiers that might influence the effect of vouchers on outcome.</p> <p>Primary data source: self-administered questionnaires completed by female adolescents in places where vouchers had been distributed, focusing on the use of SRHC and knowledge and use of contraceptives and condoms. Of completed questionnaires, 18% had been filled in by survey staff on behalf of</p>	<p>increase in the use of condoms during last sexual encounter was strongest in neighbourhoods. Study claims that accessible health care of good quality can make an important contribution to helping a considerable proportion of girls use SRHC and to diminish the risks of sexual relations, even without their social context being changed. It claims that this is very encouraging because other factors influencing sexual behaviour, such as economic deprivation, cultural norms, low educational attainment, and sex inequality are complex issues that will take time to change at a societal level.</p> <p>Claims on behalf of aid: Study implies that this type of direct intervention can produce results.</p> <p>Confounding factors reported: Socio-economic indicators were considered possible confounders. It also notes that a main limitation was the different characteristics of voucher receivers and non-receivers among respondents at school. Notes that it remains to be seen whether the impact will be sustained beyond the voucher program as financial obstacles for confidential care reappear and the financial incentives and guidance given to providers disappear.</p> <p>Theories of change reported: Study considers that young people reached by the voucher program might become the agents for changes.</p> <p>National MMR: not reported</p>
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	MDG: contraceptive use (MDG 5.3)	girls who had difficulty reading or writing. Open-ended questions were used to assess girls' knowledge.	
Williams et al. 2007	<p>Study Objectives: The main objective of the evaluation was to determine whether exposure to African Youth Alliance's (AYA) comprehensive, integrated program resulted in improved Adolescent Sexual and Reproductive Health (ASRH) knowledge, attitudes, and sexual behaviours among male and female youth age 17–22 in areas where AYA worked. This evaluation focuses on the relationship between AYA interventions, antecedents, and behaviours in AYA program areas and among youths who have been exposed to AYA programs. It tests the hypothesis that unmarried and recently married youths who are age 17–22 and who were previously exposed to AYA interventions are more likely than unexposed youths to report the desired ASRH outcomes targeted by the program.</p> <p>Study design: quasi-experimental</p> <p>Study methods: Using a post-test-only evaluation design, the evaluation compared knowledge, attitudes, and behavioural outcomes between (a) intervention sites and control sites and (b) youths who were exposed to AYA pro-grams and those who were not exposed to AYA. The design used two analytical techniques to determine impact: propensity score matching and instrumental variable regression. Both techniques use observational data from a single point in time, and data were triangulated to increase confidence in the results.</p> <p>Unit of analysis: country</p> <p>Data collection period: March-June 2006</p> <p>MDG: contraceptive use (MDG 5.3)</p>	<p>Selection Criteria: AYA program implementers defined intervention areas as districts or wards, depending on the country context, where AYA had implemented its full range of services for at least one year. Control areas were purposefully selected areas that were considered comparable with intervention areas in terms of urban–rural setting, ethnicity, local economic, and infrastructure development but saw no AYA activities other than mass media campaigns and other regional or nationwide activities. Study focuses on older youths, aged 17-22.</p> <p>Intervention group: Ghana female intervention (n=1,036) Ghana male intervention (n=952) Tanzania female intervention (n=843) Tanzania male intervention (n=492) Uganda female intervention (n=933) Uganda male intervention (n=995)</p> <p>Control group: Ghana female control (n=800) Ghana male control (n=628) Tanzania female control (n=336) Tanzania male control (n=229) Uganda female control (n=615) Uganda male control (n=633)</p> <p>Primary outcome: The evaluation measures three types of key variables: exposure, outcomes, or dependent variables (i.e. antecedents and ASRH behaviours), and it measures confounders or controls. Exposure variables measure respondent exposure to AYA interventions. Antecedent outcome variables measure factors such as knowledge, attitudes, and self-efficacy that act as precursors to sexual behaviour change. Behavioural outcome variables measure changes in sexual and reproductive health behaviours.</p> <p>Secondary outcome: see above</p> <p>Covariates: The control variables measure factors other than exposure to AYA (i.e., exposure to other ASRH programs, age, socio economic characteristics, etc.) that may influence the outcomes and potentially bias impact estimates.</p>	<p>Findings: A consistent impact was detected on condom and contraceptive use among females. In terms of program impact, this area was clearly the crowning achievement of AYA in all three countries. It is, indeed, impressive and noteworthy that a significant positive impact was observed so consistently across all countries and across most analysis methods for this important group of variables. Given the magnitude of the impact in most of these “method use” variables, one can say with confidence that AYA programs were able to improve behaviours among a sizable proportion of youths in areas where the programs were in operation. Putting this result in the context of the conceptual framework for this study, behaviours that were improved by the AYA interventions would be expected ultimately to contribute to improved ASRH in program areas, including reduced incidence of HIV/AIDS and other sexually transmitted infections (STIs); fewer unwanted pregnancies; and, ultimately, saved lives and a healthier youth population. Much less impact was observed among young males.</p> <p>Claims on behalf of aid: no explicit claims made</p> <p>Confounding factors reported: The control variables measure factors other than exposure to AYA (i.e., exposure to other ASRH programs, age, socio economic characteristics, etc.) that may influence the outcomes and potentially bias impact estimates.</p> <p>Theories of change reported: the study proposes a conceptual framework to explain the anticipated relationship between project interventions and outcomes. The framework is based on the theory that adolescent development takes place under the influence of overlapping contexts, or ecological systems, within which adolescents live. Those contextual factors include the nuclear family, extended family, peer group, neighbourhood, community, and institutions such as school or the</p>

		<p>Primary data source: The evaluation used three questionnaires to conduct individual, household, and community informant interviews. The individual questionnaire captured information on location and identification, background characteristics, YFS, BCC/LPS, knowledge, attitudes, perceived risk of and motivation to avoid unsafe sex and unwanted pregnancy, sexual and other health behaviours, and gender attitudes. The household questionnaire included a roster of occupants, an inventory of household assets, and a series of questions to measure adults' perceptions of local ASRH issues. The community questionnaire was administered to local implementing partners and local government informants in each of the evaluation localities to capture local awareness of the ASRH activities (particularly those supported by AYA), the informants' involvement in such activities, their ASRH knowledge and attitudes, and their perception of the AYA program.</p>	<p>workplace. The contextual factors are expected to influence adolescent sexual and reproductive health (ASRH) behaviours and their antecedents (factors such as knowledge, attitudes, and self-efficacy that are presumed to act as precursors to behaviour change). The framework holds that African Youth Alliance (AYA) interventions affected ASRH antecedents directly by interacting with young people or indirectly by influencing the context within which youth reside, as well as by enhancing established ASRH programs. The causal pathway then assumes that antecedents (i.e., knowledge and attitudes) influence behavioural outcomes such as abstinence, partner reduction, and condom and contraceptive use. Finally, the improved ASRH behaviours should logically contribute to improved health conditions among youth. This framework is consistent with the health belief model, social cognition model, and other health behavioural models.</p> <p>National MMR: not reported</p>
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Table A4.1.4 Pool B studies: summary of interventions and data characteristics (Correlational designs)

Study ID	Intervention Details	Study Methods	Findings, Claims, Limits and Pathways
CORRELATION			
Buckley 2006	<p>Study Objectives: Study examines the direction and results of efforts of non-governmental organisations (NGOs) in the area of reproductive and sexual health in Uzbekistan. It focuses specifically on the institutional, structural, epidemiological and cultural forces responsible for the exclusion of sexual health issues from reproductive health campaigns.</p> <p>Study design: Interviews with NGO workers, medical personnel, and secondary analysis of health survey data and routinely collected data.</p> <p>Study methods: mixed methods including semi-structured interviews, participant observation and the review of existing quantitative data.</p> <p>Unit of analysis: country</p> <p>Data collection period: 2002 and 2003</p> <p>MDG: contraceptive prevalence (MDG 5.3)</p>	<p>Selection Criteria: not reported. Relevant data extracted are drawn from secondary data sources. No primary data collected.</p> <p>Intervention group: not reported</p> <p>Primary outcome: Prevalence of contraceptive use, Fertility rate, General abortion rate etc.</p> <p>Secondary outcome: not reported</p> <p>Covariates: not reported</p> <p>Primary data source: <u>Qualitative:</u> Author conducted semi-structured interviews with 15 NGO workers, 10 medical personnel, 15 men and women of reproductive age, and 6 researchers working on population issues within and outside Ministry of Health. Snowball sampling was used to identify respondents. Author participated in sessions focusing on contraceptive training, attended a conference concerning maternal health and conducted observations in gynecology clinics and birthing hospitals. <u>Quantitative sources:</u> Author conducted a quantitative examination of data from state health stats and reports, two demographic and health surveys, and UNICEF's Multiple Indicator Cluster Survey 2000 (2001).</p>	<p>Findings: Prevalence of modern method use among married women has increased from a reported 28 percent at the end of the Soviet period (1989) to 51 percent in 1996, and to 60 percent in 2002, according to the 2002 UHES survey. The results of a UNICEF multi-indicator cluster survey indicate that when the term "modern contraception" is expanded to include lactational amenorrhea, the female condom, and emergency contraception, 67 percent of married women were found to practice modern contraception (UNICEF 2001). Based on self-reported abortion histories taken for the UHES, the estimated general abortion rate fell from 39.1 per 1,000 women in 1991-93 to 28.0 in 2000-02, a 28 percent decline (Sullivan and Kamilov 2004), so that the two primary goals of donors and recipients of the family planning programs initiated in the early 1990s clearly were accomplished during that decade. Uzbek women's contraceptive use occurs primarily between ages 25 and 44.4 Contraceptive-use rates for the youngest age groups are low, indicating that contraceptives are unlikely to be used to delay first births or to prevent premarital conception. According to DHS data, less than 40 percent of women in this age group (15-25) have visited a reproductive health clinic in the past year. Recent program efforts target education and behavioural change among young adults, but the initial successes of family planning programs appears to have excluded the young.</p> <p>Claims on behalf of aid: Internationally supported programs made rapid, substantial, and important strides in promoting contraceptive use for married Uzbek women in the 1990s, while indicators of sexual health across the population remained low, or declined.</p> <p>Confounding factors reported: Uzbekistan's economic circumstances following the collapse of Soviet Union are cited as one reason the</p>

			<p>Government started to attempt to curb fertility. Study also reports that structural, cultural and attitudinal issues have prevented donors and states from expanding family planning programs into broad-based interventions focusing upon education, empowerment, and sexual health. Strong recipient-state influence, lags in the development of new intervention approaches, and evaluation techniques emphasizing narrow measures of family planning can marginalize issues relating to sexual health, leading to its decoupling from family planning efforts.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>
<p>Campbell et al. 2005</p>	<p>Study Objectives: Paper reviews the shifts in causes and avoidable factors related to maternal deaths and analyses the impact of Safe Motherhood programmes in Egypt on MMR through their effect on intermediate indicators.</p> <p>Study design: Quasi-experimental. Pre-test, post-test design.</p> <p>Study methods: The study methods reported in this paper relate to how two National Maternal Mortality Surveys were conducted. To sum up, the methods for conducting the 2 surveys were essentially identical and the results comparable. Data for the 1992-93 survey were obtained from a selection of 122 health bureaus in 21 governorates. In 2000, five more governorates were added, and Luxor city had become a governorate, bringing the total to 27 governorates, covering the whole of Egypt. Advantage was taken of Egypt's virtually complete registration of adult deaths. Accuracy in the 2000 NMMS is rated as plus or minus 10% for the maternal mortality rate.</p> <p>Unit of analysis: country, region and governorate.</p> <p>Data collection period: Survey One: 1st 1992 and 28 February 1993; Survey Two: and 1 January to 31 Dec 2000</p> <p>MDG: MMR (MDG 5.1); assisted births (MDG 5.2);</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: not reported</p> <p>Primary outcome: Maternal mortality ratio</p> <p>Secondary outcome: Intermediate outcome indicators were addressed: contraceptive prevalence, fertility rate, percentage of women receiving ante-natal care, presence of skilled birth attendants and number of institutional deliveries etc.</p> <p>Covariates: not reported</p> <p>Primary data source: Two national maternal mortality surveys (NMMSs) conducted in 1992-3 and 2000. The Ministry of Health and Population conducted the surveys between March 1st 1992 and 28 February 1993, and 1 January to 31 Dec 2000, with the assistance of the Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS) and USAID Egypt funding. Note: the NMMSs appear to have been part of the broader Egyptian Economic and Demographic Health Surveys.</p>	<p>Findings: A documented, reduction in MMR over a relatively short time demonstrates the collective effort of an integrated national Safe Motherhood programme aimed at making improvements at the community, healthcare delivery site and healthcare professional levels. The intensive training received by the medical personnel in 1990s apparently had a positive impact on MMR. It is more difficult to quantify what direct impact infrastructural improvements, increased utilization of ANC and the presence of skilled birth attendants have had. The majority of the intermediate indicators related to maternal deaths improved between 1992-3 and 2000.</p> <p>Claims on behalf of aid: No explicit claims made on behalf of aid. Rather it is the national programme that success is attributed to.</p> <p>Confounding factors reported: The study mentions an underreporting of deaths and deaths occurring due to sub-standard care. It also mentions the potential importance of socio-economic status of women.</p> <p>Theories of change reported: not reported</p> <p>National MMR: Between the 1992-3 and 2000 National Maternal Mortality Surveys the MMR decreased by 52%, from 174/100,000 live births to</p>

	contraceptive prevalence (MDG 5.3); ante-natal care coverage (MDG 5.5)		84/100,000 live births.
Debay 2007	<p>Study Objectives: to evaluate the performance of the Toliara Province Child Survival Project against the objectives outlined in the Detailed Implementation Plan.</p> <p>Study design: interrupted time series using Health Facility Assessment surveys and focus groups.</p> <p>Study methods: Mixed methods including collecting survey data and fieldwork. The paper includes a detailed explanation of the methodology used to conduct the 2006 Knowledge, Practice, Coverage (KPC) survey.</p> <p>Unit of analysis: districts</p> <p>Data collection period: The fieldwork of Project Final Evaluation took place between February 11 and 26, 2007. TPCSP staff had conducted a Knowledge, Practice and Coverage (KPC) between October and December 2006. The baseline KPC and HFA surveys and the workshop were completed in December 2002 and in March 2003, respectively, and the midterm KPC and HFA surveys and evaluation were conducted in February and June 2005, respectively.</p> <p>MDG: contraceptive use (MDG 5.3)</p>	<p>Selection Criteria: sampling of households, plus sampling of specific groups: a) mothers of children between 0 and 23 months; b) mothers of children under 6 months, to analyze breastfeeding in children under 4 and 6 months; c) mothers of children between 6 and 9 months, to assess the introduction of complementary feedings; d) children between 12 and 23 months, to assess immunization and the continuation of breastfeeding/alimentation over 12 months, combined with an "Over Sampling" to be applied for the groups of 12 to 23 months of age who have received DPT1 to analyze the loss rate between DPT1 and DPT3; e) women of 15-45 years of age, to assess modern contraceptive use and HIV.</p> <p>Intervention group: The project was implemented in the two districts of Toliara II and Betioky – total beneficiary population: 63,791 under fives and 81,510 women of reproductive age. 2006 Knowledge, Practice and Coverage (KPC) survey of 300 mothers of children under two in each project district and a Health Facility Assessment of 23 and 17 Basic Health Centers in Toliara and Betioky, respectively.</p> <p>Primary outcome: project impact is measured against specified project indicators. Relevant indicator: an objective of the project's child spacing and reproductive health component is to: increase from 9% to 25% the percentage of mothers who are not pregnant, do not want another child in the next two years or are not sure, and are using a modern method of contraception.</p> <p>Secondary outcome: broad range of project-specific indicators</p> <p>Covariates: not reported</p> <p>Primary data source: Report on the Knowledge, Practice and Coverage (KPC) Baseline and Mid-Term Surveys; Field Agent Supervision (Baseline and</p>	<p>Findings: Results for Toliara II district: Child spacing and reproductive health (which aimed to increase access to quality family planning and improve the use of child spacing services): Only two of the four project objectives for child spacing and reproductive health were met, including: an increase in contraceptive prevalence from 9% at baseline to 24% at the end of the project, thereby meeting the 25% objective. Results for Betioky district: the objective on increasing contraceptive prevalence was met.</p> <p>Overall, the project achieved the objectives set for two thirds of the project indicators in Toliara and three quarters in Betioky.</p> <p>Claims on behalf of aid: No explicit claims made.</p> <p>Confounding factors reported: not reported</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>

<p>Mize et al. 2008</p>	<p>Study Objectives: To evaluate the performance of a project against its own specified objectives (evaluation report).</p> <p>Study design: pre-test/post-test design</p> <p>Study methods: A) Quantitative Survey: The questionnaire was developed using the KPC 2000+ Rapid Catch Survey as an outline and adding questions taken from the DHS questionnaire and other standardized surveys. Additional questions on media and on practices surrounding birth were developed by project staff. B) Qualitative Assessment based on questionnaire. These were used as loose guide but in the one to one interviews, informants were free to raise issues they considered important. Field activities consisted of interviews with over 30 key informants, observation of training sessions and focus groups, field visits to different areas (Aileu, Suco Fahisoi, Aifu, and Hataudu) and community health centers.</p> <p>Unit of analysis: districts, <i>suco</i> or village</p> <p>Data collection period: June to August 2008</p> <p>MDG: attended births (MDG 5.2); ANC (MDG 5.5)</p>	<p>Midterm) Reports; and Health Facility Assessments.</p> <p>Selection Criteria: Quantitative survey used 30-cluster sampling, with samples drawn at three levels: district (the primary sampling unit), suco or village level, and enumeration areas that have been previously defined based on a recent census. Women were included in the survey if they were between the ages of 15-49 and had a child who was under 24 months old. If two women fit that description within one household, we interviewed the mother of the youngest child. Qualitative survey: 30 key informants, observation and focus groups</p> <p>Intervention group: 7 out of the 13 districts in the Democratic Republic of Timor-Leste: Aileu, Ermera, Manatuto, Liquica, Manufahi, Ainaro and Dili. While full activities were rolled out in the first 6 districts Dili district enjoyed few direct inputs. The four startup initial start-up districts were: Aileu, Manatuto, Ermera and Liquica.</p> <p>The study reports that because of Health Alliance International's (HAI) collaboration with the Ministry of Health and significant input into national strategies, they have had a greater national impact than originally envisioned. The beneficiary population is approximately 100,000 women and children in the districts. An ancillary beneficiary population of approximately 25 people can be found among the small core of MOH health staff at the national and district level, and the national staff of HAI, all of whom have gained in technical competence and expertise because of this project and will continue on as national resources long after this project has ended.</p> <p>Primary outcome: Multiple indicators were used, but the ones of primary interest to this review concern the percentage of women with children age 0-23 months who received one or more ante-natal visits during their last pregnancy in program districts, and the percentage of women with children age 0-23 months whose last delivery was assisted by a skilled birth attendant in program districts.</p> <p>Secondary outcome: staff and institutional capacity,</p>	<p>Findings: The project is said to have met or exceeded many of its primary objectives and in doing so has earned a widespread reputation for collaboration, flexibility and integrity. It is viewed as a trusted partner of the Ministry of Health and has entwined its technical assistance with the national program, thus ensuring that many of its models will be sustainable. Key improvements over 2003 DHS statistics for the initial four program districts include: 1. Women receiving at least one ante-natal care visit rose from 50% to 82%; 2. Women receiving at least two tetanus toxoid injections during their last pregnancy rose from 48% to 69%; 3. Skilled birth attendance increased from 16% to 37%; 4. Vitamin A intake post-partum rose from 28% to 49%; 5. Exclusive breastfeeding for children 0-5 months of age rose from 29% to 68%. Most of these final survey findings exceed the original targets outlined in the Detailed Implementation Program, indicative of how well overall the program met its objectives while responding to an ever changing set of challenges in Timor Leste. Moreover, HAI's technical assistance in the arena of Maternal and Newborn health is so widespread that they have contributed to every major initiative that has become a government program.</p> <p>Claims on behalf of aid: the project is deemed to have contributed to tangible improvements in set indicators.</p> <p>Confounding factors reported: The doubling of the program budget when HAI won the family planning grant is depicted as a confounding factor (taxing human resources and management systems within the project team). Contextual factors such as political events in country are also suggested to have influenced project results.</p> <p>Theories of change reported: not reported</p> <p>National MMR: 660/100,000 live births</p>
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		<p>infant health.</p> <p>Covariates: not reported</p> <p>Primary data source:</p> <p><u>i. Quantitative Survey:</u> The questionnaire was developed using the KPC 2000+ Rapid Catch Survey as an outline and adding questions taken from the DHS questionnaire and other standardized surveys. Additional questions on media and on practices surrounding birth were developed by project staff. The survey covers ante-natal care (including birth plans and tetanus toxoid immunization), birthing practices (including skilled birth attendance and immediate breastfeeding), postnatal care, family planning and contraceptive use, childhood immunization and illnesses, and exposure to media messages about a family planning, and contained approximately 80 questions.</p> <p><u>ii. Qualitative assessment:</u> interviews with over 30 key informants, observation of training sessions and focus groups, field visits to different areas and community health centres.</p> <p><u>iii. District Health Services Statistics</u></p>	
Mulay et al. 1992	<p>Study Objectives: The study presents the findings of an evaluation of three projects on family planning and health undertaken by three non-governmental organisations (NGOs) in Maharashtra State, India. The study identifies various factors which determine the performance of a particular NGO and highlights how voluntary organisations can play a useful role in promotion of family welfare and maternal and child programmes in India. The authors stipulate that it has never been a study objective to conduct a comparative analysis of the project performance of the three NGOs; the objective was to identify factors that could explain differences in their performances.</p> <p>Study design: Pre-test, post-test design</p> <p>Study methods: Mixed methods. The authors originally state that the evaluation would be carried out in 2 phases. In phase one quantitative information provided</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: not reported</p> <p>Primary outcome: in the revised quantitative phase, figures on population, eligible couples (for sterilisations), the couple protection rate (i.e. numbers of couples sterilised), pregnant women, and child under 6 etc are collated (where possible) in project areas.</p> <p>Note: the authors underline that the study only using data concerning sterilisations in the analysis since the figures in other methods may not give exact information on actual numbers of real users.</p> <p>Secondary outcome: not reported</p> <p>Covariates: not reported</p>	<p>Findings: In phase one, the quantitative assessment results, the authors find no trends in the information, education and communication (IEC) indicators, so can not comment on project performance of any of the three NGOs. Having thus failed to derive anything from the original quantitative assessment, the authors attempt to provide some quantitative analysis by comparing performance in the project area with performance before the inception of the project – looking at family planning and immunisation coverage. Regarding the former, It is observed that for the area under NIMA, the couple protection rate (CPR) rose from 34.2% to 37.8% during project period. Matru Mandir area saw an increase from 15% to 23.8%, and YMC from 39.3% to 42% over same time period. Matru Mandir was therefore said to have met its goal to accelerate family planning performance, while YMC failed in its objective to increase CPR by 15%. NIMA was found to be ahead</p>

	<p>by the NGOs in question regarding their work, budget etc would be scrutinised. In phase two, the qualitative aspects would be discussed, based on discussions with project staff, interviews with fieldworkers and visits to project villages. However, a dearth of useable data in phase one led to a revised approach. Instead the authors opted to compare performance in the project area with performance before the inception of the project using some select indicators. However, only one of the NGOs under study (YMC) set quantifiable targets against which to measure its performance.</p> <p>Unit of analysis: district</p> <p>Data collection period: The paper presents the findings of the study undertaken by the Population Research Centre of the Gokhale Institute of Politics and Economics during 1991.</p> <p>MDG: contraceptive use (MDG 5.3)</p>	<p>Primary data source:</p> <ol style="list-style-type: none"> i. For phase one, the quantitative assessment, the authors note that they only had quarterly progress reports of the projects and the figures regarding budget and personnel, so the performance assessment is based on limited secondary data. ii. For phase two, the qualitative assessment, the authors collected views on the projects from project staff and beneficiaries during field visits, using three questionnaires. One concerned information on the target villages (with population questions, performance etc) to be directed to fieldworkers, one was an interview schedule for the fieldworker, and the third was a questionnaire for resident villages. 	<p>in providing other contraceptive inputs (e.g. oral pills and condoms); however, the authors state that such figures should be interpreted continuously.</p> <p>Claims on behalf of aid: No explicit claims made.</p> <p>Confounding factors reported: mentions improvements in government facilities in the operating area of Matru Mandir. Notes lack of infrastructure in operating area of NIMA as adversely affecting results. Insufficient funding for all three NGOs affects performance.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>
<p>Options Consultancy Services Ltd 2010</p>	<p>Study Objectives: Study reports on the main achievements of the Support to the Safe Motherhood Programme in Nepal (SSMP) over a 6-month reporting period.</p> <p>Study design: evaluation report (bi-annual) using primary data sources</p> <p>Study methods: main source of data comes from the Equity and Access Programme (EAP) Knowledge, Attitudes and Practices (KAP) Study (which reports endline and baseline data).</p> <p>Unit of analysis: district</p> <p>Data collection period: The reporting period is specified as 1st July-31st December 2009</p> <p>MDG: MMR (MDG 5.1); assisted births (MDG 5.2); ANC (MDG 5.5)</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: not reported</p> <p>Primary outcome: MMR, assisted births, facility deliveries, met need for Emergency Obstetric Care (EmoC), met need for caesarean.</p> <p>Secondary outcome: wide range of intervention areas addressed in the report, including service availability.</p> <p>Covariates: not reported</p> <p>Primary data source:</p> <ol style="list-style-type: none"> i. Two SSMP/ Options supported studies: (1) the Maternal Mortality and Morbidity (MMM) Study funded by USAID and DFID and (2) the Equity and Access Programme (EAP) Knowledge, Attitudes and Practices (KAP) Study (which reports endline and baseline data). ii. Appreciative Inquiry Evaluation iii. National studies, including the 2006 Nepal Demographic and Health Survey iv. national Health Management Information System 	<p>Findings:</p> <p>(1) Progress against goal to reduce MMR: The results of the MMM Study were very powerful, with indications of good progress in some areas, such as reduction in deaths from postpartum haemorrhage, but also highlighting areas that require more attention. The Maternal Mortality Ratio (MMR) found for the eight study districts was 229 maternal deaths per 100,000 live births, a figure that supports the national estimate from the 2006 Nepal Demographic and Health Survey (NDHS) of 281 deaths per 100,000 live births, which represents significant progress towards the Millennium Development Goal target of 134 by 2015.</p> <p>(2) Indicator for Attended births: a modest increase of 0.9 percentage points is seen, from 23.9% of births to 24.8%. Although this does not meet the target of 4% increase per year, it can be argued that the rate of increase will rise as more Skilled Birth Attendants are trained and more people know about them.</p> <p>(3) Indicator for facility deliveries: Facility deliveries increased, by 2.3 percentage points, from 20.2% of</p>

		(HMIS).	<p>births to 22.5%. This is just over the target of 2% increase per year, and represents a considerable improvement on progress in 2007/08.</p> <p>Claims on behalf of aid: No explicit claims are made although the implicit suggestion is that a donor-funded programme has contributed positively to the national effort.</p> <p>Confounding factors reported: not reported</p> <p>Theories of change reported: not reported</p> <p>National MMR: 281/100,000 live births</p>
<p>Powell-Jackson et al. 2006</p>	<p>Study Objectives: the study tracks and analyses global aid flows to maternal, newborn and child health.</p> <p>Study design: retrospective analysis using quantitative methods</p> <p>Study methods: Quantitative. Regarding data analysis, the study reports extensively on the methods it used. For the purpose of this review however, it is the authors' decision to use Kendall's tau-b - a non-parametric test that relies on ranks, to measure the association between mortality rates and ODA per head – that is salient. Values range between –1 and 1, with a value of 1 indicating the ranks of the two variables differ in the same direction and are therefore concordant. A value of –1 indicates the two variables are perfectly discordant.</p> <p>Unit of analysis: country</p> <p>Data collection period: study draws on 2003 and 2004 datasets.</p> <p>MDG: MMR (MDG 5.1)</p>	<p>Selection Criteria: The estimates of ODA to maternal, newborn, and child health capture the resource flows from bilateral donor agencies, multilateral development organisations, and global health initiatives. Authors include all 22 high-income donor countries and the European Union, represented in the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD), a forum for the major bilateral donors of ODA. Additionally, we include the World Bank, UNICEF, and the UN Population Fund (UNFPA) as multilateral development organisations; and the Global Alliance for Vaccines and Immunisation (GAVI) and the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM) as global health initiatives. Recipient countries include all those classified by the Development Assistance Committee as developing, which amount to over 150 countries.</p> <p>Intervention group: over 150 developing countries.</p> <p>Primary outcome: MMR</p> <p>Secondary outcome: study explores a range of maternal and child health indicators</p> <p>Covariates: The study tracked 'ODA' as defined by the OECD. The definition of 'expenditure' adopted for the study was</p>	<p>Findings: Study finds a positive correlation between ODA per head and maternal mortality rates, as indicated by a Kendall's tau value of 0.284 ($p=0.0015$). It also notes substantial variation in the amount ODA per head received by developing countries, suggesting other factors are important in aid allocation decisions.</p> <p>Claims on behalf of aid: No explicit claims made.</p> <p>Confounding factors reported: not reported, but study limitations are discussed. These include: uncertainty around the allocation factors and assumptions used to apportion funds which are not specific to maternal, newborn, and child health; acknowledgement that the exact share of general budget support is unmeasurable; within the CRS, data are most incomplete in the description data field, sometimes making verification of the specific purpose of a project and how it relates to maternal, newborn, and child health impossible. The study also acknowledges gaps in the data on donors and resources flows, and limitations by only looking at ODA rather than other forms of aid.</p> <p>Theories of change reported: not reported</p>

		<p>based on a functional classification of maternal, newborn, and child health activities, and therefore determined by the activities on which the money is spent.</p> <p>Primary data source:</p> <ol style="list-style-type: none"> i. For all but two of the donors, the analysis used data from the Creditor Reporting System database (CRS), maintained and administered by the OECD. The Global Alliance for Vaccines and Immunisation provided data on request, and the Global Fund to Fight AIDS, Tuberculosis and Malaria disbursements were obtained online. ii. Uses an existing data set on maternal mortality rates, specifically: WHO. Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA. Geneva: WHO, 2004. 	
<p>Price et al. 2009</p>	<p>Study Objectives: With the intensive scale-up of care and treatment for HIV/AIDS in developing countries, some fear that intensified attention to HIV programs may overwhelm health care systems and lead to declines in delivery of other primary health care. The study tests the hypothesis that non-HIV care does not decrease after the introduction of basic HIV care.</p> <p>Study design: Study uses a retrospective observational design, which compares aggregate service data before and after the introduction of "basic HIV care" on selected measures of primary healthcare.</p> <p>Study methods: quantitative methods were used to compare the volume of non-HIV services delivered at 30 primary health centres (PHCs) before and after the introduction of basic HIV care. The study tests the hypothesis that the introduction of basic HIV care into the PHC service portfolio does not result in declines in the delivery of non-HIV care. For the data analysis, the authors calculated the mean quantities of services delivered per PHC per month for Time-1 and Time-2, and tested for significant increases or decreases in Time-2 using the Paired-Samples T-Test or the Wilcoxon Signed-Ranks Test depending on tenability of the normality assumption.</p>	<p>Selection Criteria: Data was collected from a convenience sample of Primary Health Centres (PHC) who were receiving PEPFAR-funded technical assistance from Family Health International (FHI) to introduce HIV care. The sample included all FHI-assisted PHCs that had at least six months' experience offering basic HIV care as defined above.</p> <p>Intervention group: Thirty PHCs met the sampling criteria. Because the study was concerned with the delivery of primary healthcare, it excluded hospitals. The 30 PHCs in the sample represent four provinces and 14 districts throughout Rwanda. In addition to basic HIV care, nine of these centres also offered physician-supervised highly active antiretroviral therapy (HAART) for a period of 2-6 months during Time-2.</p> <p>Primary outcome: Ante-natal care coverage, family planning uptake, births at facilities.</p> <p>Secondary outcome: The data points included monthly service totals on laboratory tests, out-patient consultations, hospitalisations, reproductive health, services for children, nutrition, and health education.</p> <p>Covariates: not reported</p>	<p>Findings: Study findings suggest that HIV-focused health care is not associated with declines in the delivery of other primary health care and may be associated with increases in key preventive services, particularly in reproductive health. On 13 reproductive health service delivery indicators, no decreases were observed in Time-2, and 10 out of the 13 increases were found to be statistically significant (p<0.05). PHC experience offering HIV services was positively associated with increases observed in seven of these reproductive health indicators, while experience in Performance-Based Funding and the mutuelle de sante' programmes were positively associated with increases in three of the indicators.</p> <p>Claims on behalf of aid: No explicit claims were made on behalf of aid. The suggestion instead is that positive synergies may exist between HIV care and the delivery of other primary health care services.</p> <p>Confounding factors reported: During data analysis, the authors considered two important nationally coordinated health care financing programs and their potential influence on the observed results: Rwanda's primary health insurance system, mutuelle de sante', and the Ministry of</p>

	<p>Unit of analysis: health-care facilities</p> <p>Data collection period: June 2006</p> <p>MDG: attended births (facility births) (MDG 5.2); contraceptive use (uptake) (MDG 5.3); ante-natal care coverage (MDG 5.5)</p>	<p>Primary data source: Extant service data – the monthly activity reports that PHCs are required to submit to the Rwandan Government (December 2005 - May 2006)</p>	<p>Health's has performance based financing (PBF) programme. The study did not however control for all confounding factors, such as seasonal fluctuations in malarial incidence (which might account for increased use of health care facilities), one-off donor gifts, intermittent food aid, and/or personnel changes.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>
Ronsmans et al. 2001	<p>Study Objectives: To evaluate the interventions supported by the MotherCare programme in three Indonesian districts.</p> <p>Study design: pre-test/post-test design, using mixed methods</p> <p>Study methods: Mixed methods were used. Although the ultimate programme goal was to reduce maternal and perinatal mortality, directly measuring these outcomes was not feasible and evaluation focused on measuring the direct results of the interventions. The interventions were evaluated in three groups, those aiming to (1) increase availability and access to services, (2) improve quality of services and (3) improve knowledge and decision-making in the community. The data collection tools were designed to measure service availability and use, service quality and knowledge and decision-making in the community. Data collection was timed before and after the interventions were put into place</p> <p>Unit of analysis: districts</p> <p>Data collection period: 1996-1999</p> <p>MDG: Skilled birth attendance (MDG 5.2)</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: Three districts in South Kalimantan, Indonesia: Banjar, Barito Kuala (BK) and Hulu Sungai Seletan (HSS)</p> <p>Primary outcome: assisted births</p> <p>Secondary outcome: range of process indicators developed to evaluated increased use of maternal services</p> <p>Covariates: not reported</p> <p>Primary data source: Population-based assessments included:</p> <ul style="list-style-type: none"> - Community random surveys conducted in 1996 and 1999 - Censuses of village midwives in the three districts in 1997 and 1999 - Routine data collected from specially adapted delivery ward registers in the seven hospitals covering the three districts, between 1997 and 1999 <p>Targeted evaluation efforts included:</p> <ul style="list-style-type: none"> - Knowledge tests and skills assessments of midwives - Observation of interactions between midwives and clients - Observation of MPA meetings - Monitoring of IEC materials 	<p>Findings: The combined MotherCare-Government strategies clearly resulted in an increase in skilled birth attendance. From 1993 to 1996, the recall period in the 1996 survey, 90% of births took place at home, and only 37% of all births (home and facility) were reportedly attended by a skilled attendant (doctor or midwife). By the time of the 1999 survey (with 510 midwives posted in the three districts) skilled attendance at delivery had increased to 59% (P < 0.01). The strongest increase was in home deliveries with a village midwife present, and a large part of this increase was in deliveries where a village midwife and a TBA were both reported. The proportion delivering at home remained stable at 88% of births (P = 0.3). At that time, in the village midwife census, an average attendance of two deliveries per month was reported.</p> <p>Claims on behalf of aid: No explicit claims made, the donor-funded MotherCare programme is simply said to have contributed positively to the national goal of bringing skilled obstetric services closer to women in the three project districts.</p> <p>Confounding factors reported: authors were not able to speculate on the effects of the major economic crisis that struck Indonesia during the project years. Limitations reported: attribution for the aid-funded programme cannot be separated from the achievements of the national programme as a whole. It also highlights the problems of conducting a</p> <p>Theories of change reported: A theory of change is forwarded in the conceptual framework used to</p>

			<p>evaluate the project (Ronsman et al. 2001: 802). However, the framework only provides a causal pathway from the project interventions to the overall project goals (not from the aid).</p> <p>National MMR: not reported</p>
<p>Senlet et al. 2008</p>	<p>Study Objectives: The purpose of this evaluation is to provide the United States Agency for International Development's Mission to Pakistan (USAID/Pakistan) with an independent mid-term evaluation of its maternal, newborn, and child health (MNCH) programs. PAIMAN - a maternal and newborn project – is one of two projects through which this program is implemented, and is the sole focus of the evaluation.</p> <p>Study design: Review of documents, secondary analysis of programme and financial data and survey results, interviews with key participants and field trips.</p> <p>Study methods: Mixed. The evaluation methodology consisted of 1. Review of background documents; 2. Analysis of program and financial data and survey results; 3. In-depth discussions with USAID/Pakistan and PAIMAN staff; 4. Structured interviews with contacts in the central, provincial, and district offices of the Ministry of Health (MOH) and Ministry of Population Welfare (MOPW), donor organizations, implementing partners, and other stakeholders; and 5. Field trips to Rawalpindi, Lahore, Khanewal, Peshawar, Sukkur, Lasbella, and FATA.</p> <p>Unit of analysis: district</p> <p>Data collection period: June-July 2008</p> <p>MDG: attended births (MDG 5.2); ante-natal care coverage (MDG 5.5)</p>	<p>Selection Criteria: The districts were selected by the government of Pakistan.</p> <p>Intervention group: 10 districts in Pakistan in four provinces.</p> <p>Primary outcome: PAIMAN uses three types of indicators to track progress and evaluate interventions: outcome, output and activity indicators. The outcome indicators include: (1) Percentage of births attended by Skilled Birth Attendants (SBAs); (2) Percentage of women aged 15–44 who received three or more ante-natal (ANC) visits during the last pregnancy; (3) Percentage of pregnant women who report receiving at least two doses of TT during the last live birth; (4) Percentage of women who report having a postpartum visit within 24 hours of giving birth; (5) Number of district referral facilities upgraded and meeting safe birth and newborn care quality standards; and (6) Increase in district health budgets of 50 percent or more over the life of project (from all sources other than USAID).</p> <p>Secondary outcome: see above</p> <p>Covariates: not reported</p> <p>Primary data source:</p> <ul style="list-style-type: none"> - Data sets and formative research maintained by the project - FALAH project baseline survey - Qualitative data collected during fieldwork. 	<p>Findings: As of June 2008 the project had achieved five of the six indicator targets set for 2007. Between 2005 and 2008, in 10 project districts: 1. Births assisted by traditional birth attendants (TBAs) increased from 36 percent to 38 percent. 2. Women who received three or more ante-natal visits during pregnancy increased from 27 percent to 35 percent. 3. Pregnant women who received at least two doses of tetanus toxoid (TT) during the most recent pregnancy increased from 40 percent to 43 percent. 4. Women who had a postpartum visit within 24 hours of giving birth increased from 34 percent to 39 percent. 5. Facilities upgraded and meeting safe birth and newborn care quality standards increased from 0 to 26. 6. On average, district health budgets increased by 52 percent. However, there are vast differences in performance between districts, requiring district-level analysis for future directions. Project targets set for 2009 are significantly higher than the 2007 targets. At the current implementation rate, it is unlikely that the project will achieve its final targets for most of the indicators.</p> <p>Claims on behalf of aid: No explicit claims made.</p> <p>Confounding factors reported: not reported. although weaknesses in the project are mentioned, including complexities arising from the large number of project partners.</p> <p>Theories of change reported: not reported</p> <p>National MMR: The maternal mortality rate averages 276/100,000 live births, with great variation throughout the country.</p>
<p>Snyder et al. 2003</p>	<p>Study Objectives: The study is a research synthesis of the effectiveness of family planning campaigns in developing countries. The main objective is to examine</p>	<p>Selection Criteria: The study population was family planning campaigns that had received technical assistance from the Johns Hopkins Bloomberg School</p>	<p>Findings: The greatest effect of the campaigns was on knowledge of family planning methods ($r = .15$). There were also positive effects on partner</p>

	<p>the average impact of a set of family planning campaigns. It examines gains in knowledge, approval of family planning, interpersonal communication, behavioural intentions, and actual behaviour that could be attributed to a family planning campaign.</p> <p>Study design: Meta-analysis.</p> <p>Study methods: Study draws on the traditional “KAB” (knowledge, attitudes, and behaviour) model with one important addition: behavioural intentions, which are assessed as a precursor to behaviour change. It also draws on the “ideational” model, which views communication as essential to changing individual thoughts and community norms about family planning.</p> <p>For data analysis, effect sizes were computed in SPSS using a difference statistic.</p> <p>Unit of analysis: unclear</p> <p>Data collection period: Study focus on campaigns conducted between 1986 and 2001.</p> <p>MDG: contraceptive use (MDG 5.3)</p>	<p>of Public Health/Center for Communication Programs (CCP) since 1986. CCP has received large amounts of funding from the U.S. Agency for International Development (USAID) to consult on family planning campaigns throughout the world. The criteria for inclusion in the meta-analysis was (1) the presence of outcome data for the intervention group, and (2) a design that enabled the effect of the intervention on the outcomes to be assessed.</p> <p>Intervention group: The study examined 39 campaigns that received U.S. federal funding between 1986 and 2001 for technical assistance by the Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs.</p> <p>Primary outcome: The outcomes examined were: exposure to the campaign, recall of campaign messages, knowledge of modern contraceptives, knowledge of any contraceptives, communication about family planning with partner/spouse, health professionals, and friends, approval of family planning methods, behavioural intentions to use modern family planning methods, use of modern or any family planning methods, and use of modern family planning methods by those exposed to the campaign. The latter compared use levels among people who were exposed to the campaign to those who were not exposed to the campaign.</p> <p>Secondary outcome: see above</p> <p>Covariates: not reported</p> <p>Primary data source: USAID database of project evaluations</p>	<p>communication ($r = .10$), approval of family planning ($r = .09$), behavioural intentions ($r = .07$), and use ($r = .07$). Exposure to the campaigns was high, and the average effect of recall on use was $r = .12$. Other measures were reported, but they had a very small number of studies contributing to the average effect sizes, making the results more tentative.</p> <p>Claims on behalf of aid: makes a case that aid-funded communication campaigns can increase the use of family planning methods.</p> <p>Confounding factors reported: limitation reported: the small sample size means any conclusions are tentative. Contextual factors: many of the campaigns included in the meta-analysis were conducted before 1994 when the International Conference on Population and Development (ICPD) shifted the focus from family planning to reproductive health</p> <p>Theories of change reported: The KAB and Ideational models provide theories of change, which might feasibly serve as a causal pathway between the intervention and the outcome (but neither have anything to say about the impact of aid per say).</p>
<p>World Bank 1998</p>	<p>Study Objectives: Sector Impact Study assesses the relevance and impact of World Bank policy advice and project support to health, nutrition, and population in Zimbabwe over the past 15 years, including the influence of macroeconomic dialogue and policies on the health sector.</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: For the Family Health Project 1 (FHP 1), there were 8 target districts, although training and capacity elements of the project were applicable nationwide.</p>	<p>Findings: (1) The maternity wards in the FHP I hospitals were mostly open by 1990, although other hospital and clinic construction continued through 1992. From 1989 to 1995, the rate of maternity admissions in FHP1 districts increased by almost 50 percent. The admission rates in non-FHP districts were over 60</p>

	<p>Study design: Secondary data analysis of existing (including quasi-experimental) data. Quasi-experimental.</p> <p>Study methods: Mixed. The study is based upon review of World Bank project documents, interviews with World Bank staff, government officials, and health workers, focus group discussions with health workers and health system clients, and analysis of facility and household data.</p> <p>To assess quantitatively the impact of the Family Health Projects on access to health services and health status, the study compared changes over time in project and non-project districts using health service data. Since only FHP1 was completed at the time of the study, the analyses sought to assess whether indicators had improved in FHP1 districts relative to other districts. Using the Ministry of Health's National Health Information System, consultants working in collaboration with the Department of Epidemiology compiled district-level time-series data from 1988 to 1996 for a number of key health service and outcome indicators.</p> <p>Unit of analysis: country</p> <p>Data collection period: not reported</p> <p>MDG: attended births (MDG 5.2)</p>	<p>For the Family Health Project 2 (FHP 2), there were 24 target districts (two in each province), although again training and capacity elements of the project were applicable nationwide.</p> <p>Control groups were non-FHP districts.</p> <p>Primary outcome: hospital deliveries</p> <p>Secondary outcome: contraceptive prevalence; rate of maternity admissions</p> <p>Covariates: not reported</p> <p>Primary data source: Data sources include the Ministry of Health's National Health Information System, Demographic and Health Surveys, the 1995 Zimbabwe Poverty Assessment Survey, and the Situation Analysis survey conducted by the Zimbabwe National Family Planning Council. The study commissioned several background papers, and the author visited Zimbabwe four times over the course of a year, once to discuss study design, twice to conduct interviews and supervise research, and a final visit to discuss preliminary findings with government and civil society.</p> <p>Using the Ministry of Health's National Health Information System, consultants working in collaboration with the Department of Epidemiology compiled district-level time-series data from 1988 to 1996 for a number of key health service and outcome indicators.</p>	<p>percent higher in 1989 than in both FHP1 and FHP2 districts, but did not change significantly subsequently. Admission rates in FHP2 districts did increase modestly over this time, which could be the result of improved transport, although the data do not allow firm conclusions.</p> <p>(2) Hospital deliveries increased several-fold in the most underserved FHP I districts, but in others admissions increased only slightly or remained static despite the new facilities</p> <p>(3) The integration of family planning into health services contributed to increased contraceptive prevalence. Before the project, most family planning services were delivered through the Zimbabwe National Family Planning Council urban clinics and community based providers in rural areas. The training of health professionals in family planning sponsored by the project was successful, such that by 1994, 55 percent of contraceptives were obtained in government health facilities. Increased contraceptive prevalence from 1988 to 1994, therefore, can at least in part be attributed to the project.</p> <p>Claims on behalf of aid: No explicit claims are made. Instead – and in light of confounding factors - the study states its intention to assess where the Bank contributed to changes in the sector, without attributing all of the changes to the Bank's inputs.</p> <p>Confounding factors reported: The study is open that assessing the World Bank's impact on health system performance and outcomes is challenging for several reasons. Health systems and health outcomes are influenced by a variety of factors. Bank-supported projects are not controlled experiments, and factors inside and outside the project can contribute to changes in health status and system performance. Second, the World Bank is one of many actors in the health sector. All Bank-supported projects are implemented by government, many with co-financing from other donors. The Bank can influence government policies, but policy decisions and implementation ultimately rest with</p>
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			<p>government. Borrower performance is typically the most important influence on both project outcomes and sector performance.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>
<p>World Bank 2008</p>	<p>Study Objectives: to assess the effectiveness of the World Bank's support to health, nutrition and population in Egypt as part of the wider self-evaluation process by the Bank.</p> <p>Study design: pre-test/post-test</p> <p>Study methods: intends a pre-test, post-test design but weak and incompatible data renders this difficult. ON relevant indicators, the study uses baseline data from 2000 (year projects started) and outcome data from 2005 (year project closed)</p> <p>Unit of analysis: district</p> <p>Data collection period: The findings of this assessment are based on an Independent Evaluation Group (IEG) mission to the Arab Republic of Egypt carried out in November 2007.</p> <p>MDG: contraceptive use (MDG 5.3), unmet need for family planning (MDG 5.6)</p>	<p>Selection Criteria: not reported</p> <p>Intervention group: not reported</p> <p>Primary outcome: The key performance indicators for the project were:</p> <ul style="list-style-type: none"> i. Changes in attitudes: desired number of children; approval of family planning; and intention to use contraception. ii. Changes in behaviour: rate of contraceptive use. iii. Changes in fertility <p>Secondary outcome: not reported</p> <p>Covariates: not reported</p> <p>Primary data source: Key sources of evidence consulted include: (a) World Bank project files; (b) project-related reporting and evaluation; (c) health facility data; and (d) epidemiological data, studies, surveys and research on health, much of it generated in Egypt.</p>	<p>Findings:</p> <p>(1) Trends in behaviour have revealed an increase in the use of contraceptives in Rural Upper Egypt. Contraceptive prevalence rate in Rural Upper Egypt rose from 40 (CI: 37-43) to 45 (CI: 44-47) percent between 2000 and 2005. While this increase is greater than the national increase (from 56 [CI: 55-57] to 59 [CI: 58-60] percent), it is not as dramatic as the 16 percent increase (from 24 [CI: 22-26] to 40 [CI: 37-43] percent), which occurred during the previous five years. Contraceptive prevalence increased in all 8 of the governorates in Upper Egypt.</p> <p>(2) District-level data compiled from health facility data reveal mixed trends in contraceptive prevalence rates in districts where the project intervened. The three districts supported under Phase I (2000-2003) together had an average contraceptive prevalence rate of 30 percent in 1999, the year prior to the launching of subprojects. In the ensuing years the rate climbed, reaching 38 percent in 2001 and then gradually declined to the pre-project level in 2003 and 2004. Under Phase II (2001-2004) nine districts had a combined CPR of 17 percent in 2000, the year prior to implementation. During implementation the CPR hovered between 28 and 29 percent, rising to 33 percent in 2004. During Phase III implementation (2002-2004), the CPR in 23 districts increased only slightly during implementation over the baseline of 39 percent, rising to 42 percent by the end of that phase. Project support to these districts was limited in all phases, covering only one to two villages per district. These data thus do not provide sufficient evidence of project impact.</p> <p>(3) The share of total demand for family planning which is satisfied increased slightly in Rural Upper</p>

			<p>Egypt from 69 percent in 2000 to 73 percent in 2005, while it remained virtually unchanged for Egypt as a whole (84 percent in 2000 and 85 percent in 2005). Across Egypt's Regions, only Upper Egypt and the Frontier Governorates had documented improvements in the satisfaction of existing demand, rising from 74 to 78 percent and from 75 to 85 percent, respectively. Lower Egypt registered no change at all (at a constant 88 percent) and the Urban Governorates experienced a slight decrease from 90 to 88 percent. The demand of women with no education was the least satisfied (at 81 percent), while those with some, primary and/or secondary education all fared better at 87, 86 and 88 percent, respectively).</p> <p>Claims on behalf of aid: No explicit claims were made, and authors recognise that poor quality of the data makes attribution difficult.</p> <p>Confounding factors reported: Other partners were providing similar demand-side stimulation and supply-side interventions for advancing the population agenda in Rural Upper Egypt during time periods overlapping with the project: Similarly, other social development support that would have had an impact on attitudes and behaviours (poverty alleviation, employment, micro credit, literacy training, among other development activities) were also ongoing. Provides information on the context, institutional changes and policy priorities which affected maternal health.</p> <p>Theories of change reported: not reported</p> <p>National MMR: not reported</p>
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Appendix 4.2: Synthesis tables

Table A4.2.1 Data for MDG 5 Indicators extracted from Causal and Correlation Studies adhering to Paris Principles (Pool A)

Study ID and unit of analysis	Maternal Mortality Ratio Per/100,1000 live births	Attended Births	Contraceptive prevalence	Adolescent Birth Rate	Ante-natal care	Unmet need for FP
Causal studies						
Edwards et al. 2006 County	Data depicting a decline in maternal mortality rate not transcribed from graph	-	-	-	-	-
Magnani et al. 1998 Municipality	-	-	Not using a method BMI (intervention) Reference category PAMI (control 1) -0.208 0.728 Non food aid (control 2) -0.164 0.559 Traditional method BMI (intervention) Reference category PAMI (control 1) -1.389 3.105 Non food aid (control 2) -0.096 0.263	-	-	-
Correlation studies						
Barnett et al. 2007 Country	-	Proportion of births assisted by skilled birth attendants 41% (2000)	-	-	-	-

		71.5% (2004) 66.3%* (2006) <i>*Although MoH measured this in a slightly different way. The next comparable figures will be the 2007/08 DHS</i>				
COWI et al. 2007 National and district	Maternal Mortality Rate 529* (1996) 578 (2004/5) <i>* A number of key informants point out that this estimate for maternal mortality is contested with some analysts and agencies suggesting it may have been much higher in 1996.</i>	36% (1999) 46% (2004/5)	-	-	-	-
Mansour et al. 2010 District	Change in Aswan Governorate: 85/100,000 (2005) 50/100,000 (2006) 35.5/100,000 (2007)	-	-	-	Change in 2nd year: In the second year, teams from Aswan District raised the number of prenatal visits per woman from 1.3 to 3.7	-
Perks et al. 2006 Country	218/100,00 (1998) 110/100,00 (2003)	Northern districts: 17% (1999) 47% (2004) Southern districts No data (1999) 67% (2004)	Proportion of women of reproductive age using a modern contraceptive method (%) 12% (1997) 67% (2003)	-	Proportion of women attending 3 ante-natal care visits 1997: 24% (in 6 districts) 2003: 58% (in 10 districts)	-
Shiffman et al. 2004 Country	MMR 182/100,000 (1990) 108/100,000 (1997)	Percentage with an institutional delivery / Change in process indicator: 45% (1989/90) 61% (1998)	-	-	Percentage of births in last 5 years to women 15-44 years with at least one antenatal care visit with medically trained personnel / Change in process Indicator: 72% (1989/90)	-

World Bank 2003 District	MMR Last PRS: 203.8/100,000 (149.4) Actual/latest estimate: 69.6/100,000 <i>Time points:</i> Last PRS = 1992-3 Actual/latest = 2001 Figures in brackets = 1995	Hospital delivery rate Last PRS: 18.6 (34.0) Actual/latest estimate: 59.6 <i>Time points:</i> Last PRS = 1992-3 Actual/latest = 2001 Figures in brackets = 1995	-	-	85% (1998) Antenatal care rate (3x) Last PRS: 22.0 (47.4) Actual/latest estimate: 84.2 <i>Time points:</i> Last PRS = 1992-3 Actual/latest = 2001 Figures in brackets = 1995	-
World Bank 2006 District	Maternal mortality rate FPHP Early 90s: 485 Late 90s: 499 HPPP Early 2000s: 400	Percentage of live births receiving assistance at delivery from a trained health professional DHS 93/94: NR DHS 96/97: 5.2% DHS 99/00: 7.1% DHS 04: 7.5% Percentage of live births delivered at a health facility DHS 93/94: NR DHS 96/97: 4.1% DHS 99/00: 7.6% DHS 04: 9.3%	Percentage of married women using any method of FP DHS 93/94: 44.9% DHS 96/97: 49.8% DHS 99/00: 54.3% DHS 04: 58.5%	-	Percentage of live births receiving ante-natal care from a trained health professional DHS 93/94: NR DHS 96/97: 19.6% DHS 99/00: 23.8% DHS 04: 31.2%	Percentage of women with an unmet need for family planning DHS 93/94: 18.1% DHS 96/97: 15.8% DHS 99/00: 15.3% DHS 04: 11.2%
World Bank 2007 Country	-	Percent of deliveries supervised by skilled workers: 1988 40.2% 1993 43.8% 1998 44.3% 2003 47.1% 2006 49.7%	Contraceptive prevalence - modern method (as defined in '88): 1988 5.2% 1993 10% 1998 12.6% 2003 17.4% 2006 11.5%	-	Women receiving ante-natal care: 1988: 82.4% 1993: 85.7% 1998: 87.5% 2003: 91.9% <i>Note: the exact wording of the question to solicit this data was changed over the</i>	-

		<p><i>Note: definition of what constitutes a skilled worker changes over time period</i></p> <p>Births at a facility:</p> <p>1993 42.2% 1998 43% 2003 45.7% 2006 48.7%</p> <p><i>Note: the exact wording of the question used to solicit this data was changed over the time period.</i></p>	<p>Contraceptive prevalence - any modern method:</p> <p>1988 5.2% 1993 10% 1998 13.3% 2003 18.7% 2006 13.6%</p>		<p><i>time period.</i></p>	
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Table A4.2.2 Data for MDG 5 Indicators extracted from Causal and Correlation Studies not adhering to Paris Principles (Pool B)

Study ID and unit of analysis	Maternal Mortality Ratio Per/100,1000 live births	Attended Births	Contraceptive prevalence	Adolescent Birth Rate	Ante-natal care	Unmet need for FP
Causal						
Agha 2002 Town	-	-	<p>Female Participants Ever used condom</p> <p>Cameroon Intervention 2.27 Comparison 0.87</p> <p>Botswana Intervention 1.64 Comparison 1.55</p> <p>South Africa Intervention 1.85 Comparison 2.20</p> <p>Guinea Intervention 0.42 Comparison 0.43</p> <p>Female Participants Uses modern method for FP</p> <p>Cameroon Intervention 3.32 Comparison 5.90</p> <p>Botswana Intervention unavailable Comparison unavailable</p> <p>South Africa Intervention 1.73</p>	-	-	-

			<p>Comparison 1.91</p> <p>Guinea Intervention unavailable Comparison unavailable</p> <p>Males participants Ever used condom</p> <p>Cameroon Intervention 1.19 Comparison 0.81</p> <p>Botswana Intervention 0.70 Comparison 2.00</p> <p>Guinea Intervention 1.77 Comparison 0.91</p> <p>Male participants Using modern methods for FP</p> <p>Cameroon Intervention 11.05 Comparison 1.93</p> <p>Botswana Intervention unavailable Comparison unavailable</p> <p>Guinea Intervention unavailable Comparison unavailable</p>			
Baird et al. 2010	-	Intervention group; Before SMP (SD)34.88 (7.75)	-	Teenage pregnancy (%)	-	-

Provinces		<p>After SMP (SD)58.68 (16.78) Change(%) 23.81 (68.26) P=0.004</p> <p>Comparison group Before SMP (SD) 45.63 (27.95) After SMP (SD) 69.31 (20.97) Change(%) 23.68 (51.90) P=0.009</p>		<p>Intervention group Before SMP (SD)9.19 (3.51) After SMP (SD) 10.00 (1.27) Change(%) 0.81 (8.81) P=0.24</p> <p>Comparison group Before SMP (SD)8.93 (5.21) After SMP (SD)13.20 (3.27) Change(%) 4.27 (47.82) P=0.91</p>		
Barbey et al. 2001 Sub-district	<p>% of women with obstetric complications using Emergency Obstetric Care facilities from January 1999- December 2000/7 (i.e. proxy indicator for MMR)</p> <p>Intervention site (Birampur) 16% (n=59)-39.8% (n=144)</p> <p>Comparison area A (Bochaganj)</p>	<p>% of total births taking place at a facility</p> <p>Intervention site (Birampur) 2.4%-10.5%</p> <p>Comparison area A (Bochaganj) 7.2% - 12.1%</p> <p>Comparison area B (Debiganji) 4.5% - 5.0%</p>	-	-	<p>% of women receiving ante-natal care</p> <p>Intervention site (Birampur) 78.9% (n=412)</p> <p>Comparison area A (Bochaganj) 71.8% (n=400)</p> <p>Comparison area B (Debiganji) 73.8% (n=400)</p>	-

	12.5% (n=45)-25.5% (n=92) Comparison area B (Debiganj) 11.1% (n=44)-12.1% (n=48)					
Hounton et al. 2008 Health district	<p>Trends in maternal mortality risk in women age 15-49 in non-intervention sites in Burkina Faso (change 2002-2006)</p> <p>Diapaga district (non intervention) Univariate p value 0.488 Adjusted for demographic 0.382 Characteristics p value</p> <p>Ouargaye (non intervention) Univariate p value 0.933 Adjusted for demographic 0.913 Characteristics p value</p> <p>Ouargaye (intervention) Univariate p value 0.074 Adjusted for demographic 0.131 Characteristics p value</p> <p>Diapaga versus Ouargaye Univariate p value 0.274 Adjusted for demographic 0.439 Characteristics p value</p>	Effects of institutional births on reducing the risk of pregnancy-related mortality P=0.065	-	-	Effects of increased ante-natal care on reducing the risk of pregnancy-related mortality P=0.032	-

	Ouargaye - non intervention vs intervention Univariate p value 0.274 Adjusted for demographic characteristics p value 0.278					
Mathur et al. 2004 Districts	-		<p>Contraceptive use Urban married females ever visited an organisation for family planning advice? Baseline 0.449 (95% CI 0.159 to 1.272) Endline, ages 18-25 0.606 (95% CI 0.247 to 1.489)</p> <p>Rural married females: ever visited an organisation for family planning advice? Baseline 1.018 (95% CI 0.297 to 3.491) Endline, ages 18-25 2.365 (95% CI 0.943 to 5.927)</p> <p>Unmarried urban males contraceptive use at first premarital sex? Baseline 0.271 (95% CI 0.31 to 2.346) Endline, ages 14-21 0.000 (95% CI 0.000 to 8.4E44) (sic)</p> <p>Unmarried rural males contraceptive use at first premarital sex?</p>	-	<p>Rural females: accessed formal prenatal care during first pregnancy? Baseline 0.879 (95% CI 0.286 to 2.705) Endline, ages 14-21 0.392 (95% CI 0.118 to 1.302)</p>	-

			<p>Baseline 0.810 (95% CI 0.164 to 4.002) Endline, ages 14-21 0.1 (95% CI 0.005 to 1.914)</p> <p>Urban youth married less than 2 years: current contraceptive use? Baseline 2.305 (95% CI 0.558 to 9.525) Endline, ages 18-25 2.648 (95% CI 0.558 to 12.568)</p> <p>Rural youth married less than two years: current contraceptive use Baseline 2.217 (95% CI 0.530 to 9.628) Endline, ages 18-25 2.243 (95% CI 0.455 to 11.058)</p> <p>2.217 (95% CI 0.530 to 9.628) 2.243 (95% CI 0.455 to 11.058)</p>			
Meuwissen et al. 2006	-	-	Use of modern FP methods 1.33 (95% CI 0.77 to 2.29)	-	-	-
Group			Use of condoms in last sexual contact 1.84 (95% CI 1.11 to 3.03)			
Williams et al. 2007	-	-	Condom at first sex Unexposed females (%) Ghana 37 Tanzania 33 Uganda 45 Exposed females (%) Ghana 48* Tanzania 54* Uganda 58*	-	-	-
Country						

			<p>Unexposed Males (%)</p> <p>Ghana 41</p> <p>Tanzania 24</p> <p>Uganda 55</p> <p>Exposed Males (%)</p> <p>Ghana 41</p> <p>Tanzania 44*</p> <p>Uganda 55*</p> <p>Condom at last sex</p> <p>Unexposed females (%)</p> <p>Ghana 34</p> <p>Tanzania 30</p> <p>Uganda 37</p> <p>Exposed females (%)</p> <p>Ghana 41*</p> <p>Tanzania 54*</p> <p>Uganda 54*</p> <p>Unexposed Males (%)</p> <p>Ghana 55</p> <p>Tanzania 66</p> <p>Uganda 55</p> <p>Exposed Males (%)</p> <p>Ghana 56</p> <p>Tanzania 65</p> <p>Uganda 54</p> <p>Ever used condom with current partner</p> <p>Unexposed females (%)</p> <p>Ghana 61</p> <p>Tanzania 59</p> <p>Uganda 57</p> <p>Exposed females (%)</p> <p>Ghana 76*</p> <p>Tanzania 75*</p> <p>Uganda 77*</p> <p>Unexposed Males (%)</p> <p>Ghana 69</p>		
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			<p>Tanzania 78 Uganda 74 Exposed Males (%) Ghana 71 Tanzania 81 Uganda 78</p> <p>Always use condom with current partner Unexposed females (%) Ghana 12 Tanzania 15 Uganda 20 Exposed females (%) Ghana 17* Tanzania 25* Uganda 35* Unexposed Males (%) Ghana 34 Tanzania 14 Uganda 37 Exposed Males (%) Ghana 33 Tanzania 28* Uganda 39</p> <p><i>* Statistically significant difference between exposed and unexposed</i></p>			
Correlation						
Buckley 2006	-	-	Prevalence amongst married women in Uzbekistan 1989 28% 1996 51% 2002 60%	-	-	-
Country						
Campbell et al. 2005	MMR 1992-3: 174/100,000 2000: 84/100,000	Presence at delivery of skilled attendant (%) 1992-3: 40.7% 2000: 60.9%	Contraceptive prevalence (%) 1992-3: 47.1% 2000: 56.1% % Change: 19% increase	-	Women receiving any ante-natal care (%) 1992-3: 52.9% 2000: 52.9 %	-
Country						

		<p>% Change: 50% increase</p> <p>No. of institutional deliveries 1992-3: 27 2000: 49 % Change: 82% increase</p>			<p>% Change: 35% increase</p> <p>Number of ANC visits:</p> <p>1 visit 1992-3: 12.3% 2000: 3.2% % Change: NR</p> <p>2-3 visits 1992-3: 17.4 2000: 9.1 % Change: NR</p> <p>4 or more visits 1992-3: 22.5% 2000: 36.7% % Change: NR</p> <p>Number of ANC visits don't know/missing 1992-3: 0.7% 2000: 3.9% % Change: NR</p>	
Debay 2007 Districts	-	-	<p>Increase from 9% to 25% the percentage of mothers who are not pregnant, do not want another child in the next two years or are not sure, and are using a modern method of contraception</p> <p>Project-wide data Baseline 9% Midterm 22% Final 24% (95% CI 19% to 29%)</p> <p>Betioky-specific result Baseline 17% (95% CI 12% to 23%)</p>	-	-	-

			Final 28% (95% CI 23%-33%)			
			Toliara specific result Final evaluation 24% (95% CI 19% - 29%)			
Mize et al. 2008	-	Percentage of children age 0-23 months whose last delivery was assisted by a skilled birth attendant in program districts - Baseline estimate: 16% - Final estimate (first 4 districts): 37% - Final estimate (all 6 districts): 32%	-	-	Percentage of mothers of children age 20-23 months who received one or more ante-natal care visits during their last pregnancy in program districts - Baseline estimate: 50% - Final estimate (first 4 districts): 82% - Final estimate (all 6 districts): 84%	-
District Suco or village		Mean monthly deliveries with skilled birth attendance Maubara sub district 2006 Facility 1.7 2006 home 21.8 2007 Facility 6.6 2007 Home 11.7 2008 Facility 10 2008 Home 12.3 Mean monthly deliveries with skilled birth deliveries attendance Remexio sub district. 2006 Facility 0.3 2006 home 9.8 2007 Facility 3.2 2007 Home 2.6 2008 Facility 2.6 2008 Home 13.1				

<p>Mulay et al. 2008</p> <p>Districts</p>	-	-	<p>Assessment of the family planning performance of three NGOs:</p> <p>Matru Nadir Couple protection rate 1986: 15% Couple protection rate 1991: 23.8% Percentage increase in CPR 1986-1991: 58.7%</p> <p>YMC Couple protection rate 1986: 39.3% Couple protection rate 1991: 42% Percentage increase in CPR 1986-1991: 6.9%</p> <p>NIMA Couple protection rate 1986: 34.2% Couple protection rate 1991: 37.8% Percentage increase in CPR 1986-1991: 10.5%</p>	-	-	-
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Options Consultancy Ltd 2010 District	MMR data unclear	<p>Attended births: Modest increase of 0.9 percentage points is seen, from 23.9% of births to 24.8%</p> <p>Facility deliveries: Increased by 2.3 percentage points, from 20.2% of births to 22.5%.</p>	-	-	Equity and Access Programme Results: Take-up of 4 or more ANC visits has increased from 45% to 60% at endline. Service records from EAP areas show similar levels of increase as the baseline and endline surveys, with 4+ ANC rising 36% over the first 2 years of the programme.	-
Powell-Jackson et al. 2006 Country	Association between maternal mortality rates and ODA to maternal and neonatal health per livebirth, as indicated by a Kendall's tau value of 0.284 (p=0.0015)	-	-	-	-	-
Price et al. 2009 Health Care facility	-	<p>Births at health centre Time 1: 17 Time 2: 23</p> <p>Mean and (median) differences (Time-2 Minus Time-1) in service provision at Highly Active Antiretroviral Therapy and non-HAART sites</p> <p>Births at health centre HAART not offered: 5(4) HAART offered: 10 (11)</p>	<p>New family planning acceptors Time 1: 9 Time 2: 13</p> <p>Returning family planning acceptors Time 1: 91 Time 2: 141</p> <p>Total family planning acceptors Time 1: 100 Time 2: 155</p> <p>Mean and (median) differences (Time-2 Minus Time-1) in service provision at Highly Active Antiretroviral Therapy and non-HAART sites</p> <p>New family planning acceptors</p>	-	<p>Total new ante-natal clients Time 1: 74 Times 2: 84</p> <p>Coverage rate new ANC clients Time 1: 68% Time 2: 81%</p> <p>First trimester ANC visit Time 1: 5 Time 2: 10</p> <p>Second trimester ANC visit Time 1: 36 Time 2: 52</p> <p>7-8 month ANC visit Time 1: 51 Time 2: 54</p>	-

			<p>HAART not offered: 4 (0) HAART offered: 7 (1)</p> <p>Returning family planning acceptors HAART not offered: 21 (0) HAART offered: 117 (32)</p> <p>Total family planning acceptors HAART not offered: 24 (4) HAART offered: 126 (35)</p>		<p>9 month ANC visit Time 1: 15 Time 2: 17</p> <p>All four ANC visits completed Time 1: 3.2 Time 2: 5.2</p> <p>Coverage rate all four ANC visits Time 1: 3% Time 2: 4.7%</p> <p>Mean and (median) differences (Time-2 Minus Time-1) in service provision at Highly Active Antiretroviral Therapy and non- HAART sites</p> <p>Total new Ante-natal (ANC) clients HAART not offered: 7 (5) HAART offered: 19 (15)</p> <p>Coverage rate new ANC clients HAART not offered: 1.8% HAART offered: 1.0%</p> <p>First trimester ANC visit HAART not offered: 2 (2) HAART offered: 12 (14)</p> <p>Second trimester ANC visit HAART not offered: 13 (10) HAART offered: 21 (18)</p> <p>7-8 month ANC visit HAART not offered: 18 (10) HAART offered: 17 (13)</p>	
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					<p>9 month ANC visit HAART not offered: 2 (-0.67) HAART offered: 2 (-.0.33)</p> <p>All four ANC visits completed HAART not offered: 2 (5) HAART offered: 3 (2)</p> <p>Coverage rate all four ANC visits HAART not offered: 2% (0.5) HAART offered: 1% (2%)</p>	
Ronsmans et al. 2001 District	-	<p>Births (home and facility) reportedly attended by a skilled attendant (doctor or midwife)</p> <p>1993-6 (i.e. 1996 survey recall period): 37% 1999: 59%</p>	-	-	-	-
Senlet et al. 2008 District	-	<p>PAIMAN Baseline 2005 % of births assisted by skilled birth attendants = 36%</p> <p>PAIMAN Target 2007 % of births assisted by skilled birth attendants = 38%</p> <p>FALAH Findings 2008 % of births assisted by skilled birth attendants = 38%</p> <p>FALAH Target 2009 % of births assisted by skilled birth attendants = 45%</p>	-	-	<p>PAIMAN Baseline 2005 % women who received 3 or more ANC visits during the last pregnancy = 27%</p> <p>PAIMAN Target 2007 % women who received 3 or more ANC visits during the last pregnancy = 35%</p> <p>FALAH Findings 2008 % women who received 3 or more ANC visits during the last pregnancy = 35%</p> <p>FALAH Target 2009 % women who received 3 or more ANC visits during the last pregnancy = 50%</p>	-

Snyder et al. 2003 Unclear	-	-	Mean Effect Sizes for Campaigns Aimed at both Women and Men by Outcome: Use of modern methods of FP: % pre-test: 30.6% % post-test: 36.4% Use of any FP method: % pre-test: 46% % post-test: 50.5%	-	-	-
World Bank 1998 Country	-	No absolute numbers available. Graphic presentation of data suggests little change between 1986 and 1993 for maternity hospital admissions.	-	-	-	-
World Bank 2008 Country	-	-	Contraceptive Prevalence Rate (all methods) % Baseline 2000: 40.2% Outcome 2005: 45.2%	-	-	Met Demand for FP in Rural Upper Egypt 2000: 69% 2005: 73% Female ed None 81% Primary Ed 87% Prim & Sec Es 86% Sec Ed 88%

Appendix 4.3: Synthesis of Evidence

Maternal mortality ratio (MDG 5.1)

Pool A (Paris-style aid)

Causal studies

Only a graphic presentation of data was reported in 1 study using a causal design and this showed a decline in the maternal mortality rate over a five year period (1997-2002) in China (Edwards et al. 2006).

Correlation studies

Data for MMR from 5 correlation studies found evidence that a reduction in MMR had occurred over time while data from 1 study demonstrated that MMR had increased.

The 5 studies which reported a reduction in MMR collected outcomes from women in several developing countries:

- In a study conducted in Egypt, the study intervention concerned the transportation of haemorrhaging post-partum women from home to hospital in which hospital physicians diagnose and treat in a team of three to prevent unnecessary haste and foster good decision-making under pressure (Mansour et al. 2010).
- The Sayaboury Programme trained birth attendants in 495 villages in Lao People's Democratic Republic. Over a 5 year period the MMR was reported to have almost halved (Perks 2006).
- Reported outcomes from the Safe Motherhood Programme in Honduras found MMR reduced from 182/100,000 in 1990 to 108/100,000 in 1997 (Shiffman et al. 2004).
- The Comprehensive Maternal and Child Health Project (Health IV) in China provided training for village birth attendants and improvements in basic mother and child health care. A reduction in MMR from 203/100,000 in 1992/3 to 69.6/100,000 per live births in 2001 was reported (World Bank 2003).
- The Fourth Population and Health Project (FPHP) in Bangladesh provided support to family planning activities and produced divergent data over three time periods: between the early and late 1990s the maternal mortality rate showed an increase from 485 to 499 but this reduced to 400 by the early 2000s (World Bank 2006).

A single study which reported an increase in the maternal mortality rate was conducted in Tanzania where a multi-donor funded sector-wide approach in the Health Sector demonstrated an increase from 529 in 1996 to 578 in 2004/5 (COWI et al. 2007).

Pool B (general aid)

Causal studies

Two causal studies used proxy indicators for MMR. The first, which examined the effects of the Skilled Care Initiative in Burkina Faso, used the risk of pregnancy-related mortality as a proxy for MMR. It observed that the project's efforts to increase the rates of skilled attendance at births in project districts did not demonstrate a statistically significant difference in the risk of pregnancy-related mortality in women aged 15-49 who participated in the project, compared with those who did not (Hounton et al. 2008). The authors did observe, however, that attending ante-natal care was associated with a statistically significant reduction in the risk of pregnancy-related mortality.

A second causal study used Emergency Obstetric Care (EmOC) as a proxy for MMR (assuming that EmOC, if received in an upgraded facility, would not result in maternal death). Accordingly, it found a higher percentage of women with complications used EmOC in the intervention arm of the study than in the control groups (16% to 39.8% versus 12.5% to 25.5% and 11.1% to 12.1%) over a seven year period (Barbey et al. 2001).

Correlation studies

One study using a correlation design reported reductions in MMR between 1992/3 and 2000 (Campbell et al. 2005) and evaluated outcomes from 3 USAID-funded projects which are thought to have supported the Safe Motherhood Project in Egypt between 1985 and 2005. Between 1992-3 and 2000 the MMR dropped from 174/100,000 to 84/100,000.

The data from one study on MMR was unclear (Options Consultancy Ltd 2010). Data from another study was depicted graphically but was intended to demonstrate a positive association between maternal mortality rates and official development assistance per head (Powell-Jackson et al. 2006).

Proportion of births attended by skilled birth personnel (MDG 5.2)

Pool A (Paris-style aid)

Causal studies

No causal studies evaluating the impact of aid on the number of women receiving skilled care at the time of delivery were identified by our search.

Correlation studies

Data from seven correlation studies which complied with the Paris and Accra principles showed an increase in the percentage of attended births:

- In a DfID funded programme, Barnett et al. (2010) reported a 30.5% increase in the percentage of attended births in Indonesia between 2000 (41%) and 2004 (71.5%), although the final percentage estimate was 66.3% in 2006. Few details of the nature of the intervention were reported (Barnett et al. 2010).
- An aid-funded programme in Tanzania reported an increase in attended births from 36% in 1999 to 46% in 2004/5 (COWI 2007).
- One study showed an increase in the proportion of attended births in the northern districts of the Lao People's Democratic Republic between 1999 and 2003 (Perks et al. 2006).
- One study documented an increase in the percentage of institutional deliveries from 45% in 1989/90 to 61% in 1998 (Shiffman et al. 2004).
- A report by the World Bank (2003) published data showing a hospital delivery rate in China which increased from 18.6 in 1992-3 to 59.6 in 2001.
- Data collected at three time points after the implementation of a strategy to train Female HAS Assistants in the fourth Population and Health Project (FHP) in Bangladesh demonstrated modest increases in the percentage of attended births from 5.2% in 1996/97, 7.1% in 1999/2000 and 7.5% in 2004 (World Bank 2006).
- The Ghana Second Health and Population Project (HPP 11) produced longitudinal data for percentages of attended births between 1988 (40.2%) and 2006 (49.7%); however it should be noted that the definition of what constituted a 'skilled worker' changed over that time frame (World Bank 2007).

Pool B (general aid)

Causal studies

Three studies using a causal design reported data for attended births:

- An evaluation of the Safe Motherhood Project in Indonesia found statistically significant increases in the percentage of attended deliveries between baseline and follow-up periods within intervention (education, training, provision of health counsellors) and control groups, but no statistical difference between the groups was observed (Baird et al. 2010).
- In Bangladesh, the percent of total births taking place in facilities increased over the life of the Dinajpur Safe Motherhood Initiative: in the intervention area from 2.4% to 10.5%; in the upgraded comparison area A: from 7.2% to 12.1%; and in the control area: from 4.5 % to 5% (Barbey et al. 2010).

- Hounton et al. (2008) reported the pregnancy-related mortality risk decreased with increasing proportions of women attending ante-natal care (P = 0.032) or giving birth in an institution (P = 0.065) in Burkina Faso.

Correlation studies

Six correlation studies demonstrated an increase in the proportion of attended births:

- Mize et al. (2008) reported an increase in the percentage of children (aged 0-23 months) whose last delivery was assisted by a skilled birth attendant in programme districts. However, district level data for 2006, 2007 and 2008 show the mean level of monthly home deliveries in the Remexio district increased, while the same data for the Maubara district showed a decline in attended deliveries.
- An evaluation of the safe motherhood project reported that facility deliveries increased by 2% per year but the exact time period to which this refers is unclear (Options Consultancy Ltd 2010).
- Price et al. (2009) reported an increase in the number of births at a health care facility in a project designed to improve health care for people with HIV from 17 to 23. The time periods for these data are unclear.
- One report showed an increase in the number of attended births from 37% to 59% over the period (1993/6-1999) in Indonesia (Ronsmans et al. 2001).
- The PAIMAN project in Pakistan funded training, communication, outreach and facility renovations. An early evaluation detected a small increase in the number of attended births between 2005 (35%) and 2007 (38%) (Senlet et al. 2008).

The data from a seventh correlation were presented graphically with no absolute numbers available. The graph suggests little change between 1986 and 1993 in Zimbabwe for maternity admissions (World Bank 1998).

Contraceptive prevalence rate (MDG 5.3)

Pool A (Paris-style aid)

Causal studies

In an evaluation of cash coupons in Honduras, Magnani et al. (1998) reported changes in contraceptive use as co-efficients from a logistic regression analysis but no statistically significant differences were observed between those who received the coupons and those who did not.

Correlation studies

Three correlation studies reported changes in contraceptive use:

- The Sayaboury Programme in Lao People's Democratic Republic reported an increase in contraceptive use from 12% in 1997 to 67% in 2003 (Perks et al. 2006).
- A 2006 report by the World Bank observed that the percentage of women using family planning services in Bangladesh increased between 1993/4 (44.9%) and 2004 (58.5%) (World Bank 2006).
- A report by the World Bank in 2007 presented data from Ghana which showed an increase in the use of modern methods of contraception used by married women from 5.2% in 1988 to 13.6% in 2006. The proportions of married women using any method of contraception over the same time period were even greater, increasing from 5.2% in 1988 to 18.7% in 2006 (World Bank 2007).

Pool B (general aid)

Causal studies

Four causal studies reported changes in contraceptive use:

- A USAID-funded social marketing project targeting adolescents in 4 countries used peer education, peer educators, youth clubs, and mass media advertising to promote safe sexual health practices. Data from Cameroon, Botswana, South Africa and Guinea revealed that only in Cameroon did the numbers of women who had ever used a condom differ to a statistically significant level from the comparator

group. Similarly the numbers of people who used a modern method of contraception for pregnancy prevention only differed to a statistically significant level in Cameroon (Agha 2002).

- A study based in Nepal evaluated the effect of three interventions designed to improve reproductive health: adolescent services, peer education and counselling and teacher training. No statistically significant differences were observed between baseline and the end of the study (Mathur et al. 2004).
- A study investigating the effect of vouchers for reproductive health clinics in Nicaragua found the use of family planning methods were statistically significantly different between those who received the vouchers and those who did not, as was the prevalence of condoms used in the last sexual contact (Meuwissen et al. 2006).
- One study found a statistically significant impact on condom usage amongst females involved in the African Youth Alliance Programme in Ghana, Tanzania and Uganda, when compared with females outside the intervention, on four condom-related indicators. A less favourable impact was demonstrated amongst study males, and just two (of the four) impact indicators were deemed statistically significant for the project males of Tanzania (Williams et al. 2007).

Correlation studies

Seven correlation studies reported positive changes in contraceptive prevalence:

- The prevalence of the use of modern methods in Uzbekistan was shown to increase from 28% in 1989 to 60% in 2002. No data from significance tests were presented in the report and it is unclear if these data are statistically significantly different between time periods (Buckley 2006).
- In an evaluation of the Safe Motherhood Programme in Egypt the contraceptive prevalence was also shown to increase between 1992/3 (47.1%) and 2000 (56.1%). No significance tests results were presented in the report and it is unclear if these data are statistically significantly different between time periods (Campbell et al. 2005).
- The Toliara Province Child Survival Project in Madagascar to improve mother and child health comprises five interventions which were not well defined. The percentage of mothers who were not pregnant and did not want another child in the next two years and were using a modern method of contraception was observed to increase across the project sites from 9% to 24% (95% CI 19%-29%). The outcome data specific to Betioky district demonstrated an increase from 17% to 28% (95% CI 23-33%). No baseline data were presented for Toliara II district but the final follow-up estimate is similar to that observed in Betioky, odds ratio; 24 (95% CI 19 to 29) (Debay 2007).
- An assessment of the family planning performance of 3 NGOs in India found the couple protection rate increased between 1986 and 1991, the range was from 6.9% to 58.7% (Mulay et al. 2008).
- The number of new family planning acceptors increased over 2 time periods in a study based in Rwanda; total baseline estimate was 100 (mean) which increased to 155 (mean). The interventions involved infrastructure improvements, equipment and medical supplies plus additional nursing staff. An even greater increase was observed in the uptake of family planning services amongst those at highly active antiretroviral therapy sites 24 -126 mean (Price et al. 2009)
- A meta-analysis of USAID data from electronic data sets by Snyder et al. (2003) found the pre-intervention use of contraception was lower than the post-intervention use of modern family planning methods. When data for modern methods were included in the analysis the increase was more marked. The nature of the interventions and the exact locations from which the data were collected are not well described, however (Snyder et al. 2003).
- In a report by the World Bank (2008) on the Egypt Population Project an increase in the use of contraceptives from 40.2% to 45.2% was observed between 2000 and 2005.

Adolescence birth rate (MDG 5.4)

Pool A (Paris-style aid)

No causal or correlation studies complying with the Paris and Accra principles reported teenage pregnancy data.

Pool B (general aid)

One correlation study reported indirectly on this indicator. In the Safe Motherhood Project in Indonesia, the percentage of teenage pregnancies increased between the baseline and follow-up period in both the intervention and control groups but in neither case was the increase shown to be statistically significant (Baird et al. 2010).

Ante-natal care coverage (MDG 5.5)

Pool A (Paris-style aid)

Causal studies

No causal studies evaluating the impact of Paris-style aid on the number of those receiving ante-natal care (ANC) were identified by our search.

Correlation studies

Six correlation studies pointed to an increase in ANC coverage:

- In the year after an aid-funded intervention ended in Egypt, the number of prenatal visits per woman was reported to have increased from 1.3 to 3.7 in Aswan district (Mansour et al. 2010).
- An aid-funded programme in Lao People's Democratic Republic was thought to have contributed to the proportion of pregnant women making 3 ante-natal clinic visits, which increased from 24% in 1997 (in 6 districts) to 58% in 2003 (in 10 districts) compared with 20% nationwide (Perks et al. 2006).
- During the Safe Motherhood Programme in Honduras there was an increase in the number of women aged 15-44 years who had at least one ante-natal care visit with medically trained personnel, from 72% in 1989/90 to 85% in 1998 (Shiffman et al. 2004).
- A report by the World Bank in 2003 published baseline estimates collected in China (1992/3 = 22, 1995 = 47.4) and a follow-up estimate of 84.2 in 2001. It is unclear as to what these data pertain (percentages, means or absolute numbers) (World Bank 2003).
- A second World Bank report (2006) published data to show increases in the percentages of ante-natal visits after targeted interventions in Bangladesh. Between 1996/97 and 2004 the percentage increased from 19.6% to 31.2% (World Bank 2006).
- A third report by the World Bank (2007) published data to showed that over the course of two World Bank projects implemented back-to-back in Ghana, the number of ANC visits remained consistently high. While the time series data would suggest an increase in overall coverage (from 82.4% in 1988, to 87.5% in 1998 and 91.9% in 2003), the fact that the exact wording of the question used to solicit this data was changed over the time period means direct comparisons are not possible (World Bank 2007).

Pool B (general aid)

Causal

Two causal studies reported changes in ante-natal care coverage:

- Hounton et al. (2008) found that increasing ante-natal care coverage was shown to be associated with a statistically significant reduction in the risk of pregnancy-related mortality (P=0.032).

- The access of rural females to formal ante-natal care during their first pregnancy was not influenced by the Engender Health project in Nepal (Mathur et al. 2004).

Another causal study reported that ANC coverage was higher amongst the aid intervention group in Birampur (78.9%), compared with the two comparison groups in Bochagani (71.8%) and Debiganj (73.8%). However it is not clear if the discrepancy is attributable to the Dinajpur SafeMother Initiative (Barbey et al. 2010).

Correlation

Five studies implied an increase in ante-natal care coverage as a result of aid-funded interventions:

- The number of women who received any ante-natal care in Egypt failed to increase between 1992/3 and 2000 in Egypt (remaining constant at 52.9%), although the Campbell et al. (2010) study, which cites these figures, concurrently reports a 35% increase in ANC coverage over the period, calling into question the veracity of data cited.
- Aid funded improvements in health care infrastructure in Rwanda may have been responsible for the observed increase in the total number of new ante-natal clients, the coverage rate of new ante-natal care clients and all 4 ante-natal visits completed between the baseline and follow-up periods in a study by Price et al. (2009). It is unclear, however, if these estimates arose by chance as no significance tests were reported.
- The PAIMAN project in Pakistan reported modest changes in the percentages of women who received 3 or more ante-natal visits during their last pregnancy between 2005 (27%) and 2008 (35%) (Senlet et al. 2008).
- One study pointed to an increase in the percentage of mothers of children age 20-23 months who had received one or more ante-natal care visits during their last pregnancy in programme districts in Timor Leste; the findings are based on estimate figures however (Mize 2008).
- One study showed an apparent increase in the take-up of ANC visits (from 45% to 60% at end-line) for an Actionaid initiative in Nepal (Options Ltd 2010).

Unmet need for family planning (MDG 5.6)

Pool A (Paris-style aid)

Causal studies

No causal studies evaluating the impact of aid on the unmet need for family planning were identified by our search.

Correlation

A World Bank (2006) study suggests that the percentage of women with an unmet need for family planning in Bangladesh decreased from 18.1% in 1993/4 to 11.2% in 2004 (World Bank 2006).

Pool B (general aid)

Causal studies

No causal studies evaluating the impact of aid on the unmet need for family planning were identified by our search.

Correlation studies

A World Bank (2008) study reported on the met need for family planning. Here, the met demand for family planning increased slightly in rural Upper Egypt from 69% in 2000 to 73% in 2005, but was virtually unchanged for Egypt as a whole (84% in 2000 and 85% in 2005). Only Upper Egypt and the Frontier Governorates documented improvements in meeting existing demand, rising from 74% to 78% and 75% to 85%, respectively. The demand of women with no education was the least satisfied (at 81%), while those with some, primary

education (87%) and (86%) or (88%) secondary education was 87%, 86% and 88% respectively (World Bank 2008).

Appendix 4.4: Quality Assessment Results

			Independence of the Study		Reporting on the aid intervention					Reporting on the study design and methods					Robustness of the data analysis	Reporting on confounding factors		
			Is study author a donor or recipient or linked to project?	Was study funded by a donor or recipient?	Is there a clear description of the aid intervention	Is the aid modality defined?	Is the amount of aid specified?	Is there a clear explanation of aid flow from funder to recipient?	Is there evidence of local ownership of aid funded intervention?	Are study aims and methods clearly described?	Was the method of sampling reported?	Were steps to increase the rigour of data collection reported?	Is the control group reported?*	Are the study limitations discussed?	Do the data support the study conclusions?	Does study report confounding factors?	Is study clear about possible alternative explanations behind results?	Does study report external events or factors which have affected conclusions?
Agha 2002	Causal	Pool B	unclear	yes	yes	no	no	no	no	yes	yes	yes	no	yes	yes	yes	yes	no
Baird et al. 2010	Causal	Pool B	no	no	unclear	unclear	yes	no	unclear	yes	yes	yes	yes	yes	yes	yes	yes	yes
Barbey et al. 2001	Causal	Pool B	unclear	unclear	yes	yes	no	no	unclear	yes	yes	yes	yes	yes	yes	no	no	no
Barnett et al. 2007	Correlation	Pool A	no	yes	yes	yes	yes	no	unclear	yes	no	yes	—	yes	no	no	no	no
Buckley 2006	Correlation	Pool B	no	no	unclear	unclear	no	no	no	yes	no	yes	—	no	unclear	no	no	yes
Campbell et al. 2005	Correlation	Pool B	yes	unclear	no	no	no	no	unclear	yes	yes	no	—	yes	yes	yes	no	no
COWI et al. 2007	Correlation	Pool A	no	yes	yes	yes	yes	no	yes	yes	no	yes	—	yes	yes	no	no	no
Debay 2007	Correlation	Pool B	unclear	yes	yes	yes	yes	unclear	no	yes	yes	yes	—	no	yes	no	no	no
Edwards et al. 2006	Causal	Pool A	no	no	yes	yes	no	no	yes	no	no	no	no	no	no	no	no	no
Hounton et al. 2008	Causal	Pool B	no	yes	yes	no	no	no	no	yes	unclear	yes	yes	unclear	no	no	no	no
Magnani et al. 1998	Causal	Pool A	unclear	yes	yes	no	no	no	yes	yes	yes	yes	yes	no	yes	no	no	no
Mansour et al. 2010	Correlation	Pool A	yes	yes	no	yes	no	no	yes	no	yes	unclear	—	no	yes	no	no	no
Mathur et al. 2004	Causal	Pool B	unclear	no	yes	yes	no	no	unclear	yes	yes	yes	yes	no	no	no	no	no
Meuwissen et al. 2006	Causal	Pool B	yes	unclear	yes	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	no	no
Mize 2008	Correlation	Pool B	yes	yes	yes	yes	no	no	unclear	yes	yes	yes	—	yes	unclear	yes	no	yes
Mulay et al. 1992	Correlation	Pool B	no	no	unclear	unclear	no	no	no	yes	unclear	yes	—	no	yes	no	no	no

Options Consultancy Services Ltd 2010	Correlation	Pool B	yes	yes	yes	unclear	yes	no	unclear	no	no	no	—	no	unclear	no	no	no
Perks et al. 2006	Correlation	Pool A	yes	yes	yes	yes	yes	no	yes	yes	yes	yes	—	yes	yes	yes	yes	no
Powell-Jackson et al. 2006	Correlation	Pool B	no	yes	N/A	yes	yes	N/A	N/A	yes	yes	yes	—	yes	yes	no	no	no
Price et al. 2009	Correlation	Pool B	yes	yes	unclear	unclear	unclear	no	unclear	yes	yes	yes	—	yes	unclear	yes	no	yes
Ronsmans et al. 2001	Correlation	Pool B	no	yes	yes	no	no	no	unclear	yes	yes	yes	—	yes	yes	yes	no	yes
Senlet et al. 2008	Correlation	Pool B	yes	yes	yes	yes	yes	no	no	yes	yes	yes	—	no	yes	no	no	no
Shiffman et al. 2004	Correlation	Pool A	no	no	unclear	unclear	unclear	no	yes	yes	yes	yes	—	yes	yes	yes	no	yes
Snyder et al. 2003	Correlation	Pool B	yes	no	no	yes	no	no	unclear	**			—					
Williams et. al 2007	Causal	Pool B	yes	yes	yes	yes	no	no	no	yes	yes	yes	yes	yes	yes	yes	no	no
World Bank 1998	Correlation	Pool B	yes	yes	unclear	yes	no	no	no	yes	no	yes	unclear	yes	no	yes	yes	no
World Bank 2003	Correlation	Pool A	yes	yes	yes	yes	yes	yes	yes	no	yes	no	—	yes	yes	no	yes	no
World Bank 2006	Correlation	Pool A	yes	yes	yes	yes	yes	yes	yes	unclear	no	yes	—	no	yes	yes	yes	no
World Bank 2007	Correlation	Pool A	yes	yes	yes	yes	yes	yes	yes	unclear	yes	yes	—	no	yes	yes	no	no
World Bank 2008	Correlation	Pool B	yes	yes	yes	yes	yes	unclear	unclear	unclear	no	yes	—	yes	yes	no	yes	no

* Question not applicable to correlation studies ** Snyder et al. 2003 reports a ‘meta analysis’ from several data sets; there is no systematic review preceding the meta analysis and the PRISMA check list was not applied.

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