



## REPORT



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# **A scoping exercise for a review of the effectiveness of health promotion interventions of relevance to suicide prevention in young men (aged 19-34).**



**Evidence for Policy and Practice  
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## **EXECUTIVE SUMMARY**

- Suicide is now the most common cause of death for young men aged under 35. This group is therefore a priority for action in the National Suicide Prevention Strategy (DoH, 1999a). It is important that suicide prevention initiatives are evidence-based. This report presents the results of a scoping exercise to identify (i) whether systematic reviews which might help to identify effective health promotion interventions of relevance to suicide prevention amongst young men aged 19-34 have already been carried out; and (ii) if not, what a new review in this area might look like.
- Although there is currently an incomplete picture of the risk and protective factors for suicide amongst young men, promising health promotion approaches may include strengthening communication and support for problems between young men and other young men, their families, friends, advice services, GPs, and other professionals. Interest in such wide-range approaches guided the conduct of this scoping exercise.
- The work detailed in this report was conducted in two parts. The first part involved examining a recent EPPI-Centre systematic review on the barriers to, and facilitators of, good mental health amongst young people (aged 11 to 21) for any findings and recommendations relevant to reducing suicide amongst young men aged 19 to 34. The individual studies included and excluded from this report were also examined.
- Several general recommendations from this review were found to be relevant to young men aged 19 to 34 for example, it may be more appropriate to frame interventions in terms of developing young people's coping strategies rather than explicitly on preventing suicide. As none of the evaluation studies included in this previous review covered individuals from this population group, it was difficult to pull out specific recommendations. However, as the review synthesised the findings of studies examining young people's views (two of which did include young men from this group), specific recommendations for interventions to test in the future could be drawn out for example, recommended interventions include those which build on coping strategies identified by young men, such as creative expression, and increased leisure opportunities.
- Only a handful of potentially high quality primary studies evaluating the effectiveness of interventions for young men aged 19 to 34 were identified from the studies excluded from the EPPI-Centre review.
- The second part of the scoping exercise aimed to identify other relevant high quality systematic reviews. Our searches of multiple sources yielded a total of 424 citations, of which 140 met our inclusion criteria of potentially being a high quality systematic review focused on relevant outcomes (e.g. suicide, depression, help-seeking, communication skills). However, none of these reviews focused specifically on young men. Of those which focused on both men and women, only a tiny proportion highlighted in their abstracts any differences in findings according to gender.
- A more detailed examination of the full reports of a sub-set of these reviews revealed that it was possible to pick out the findings of individual studies which

focused on young men, or highlighted gender differences. However, this was necessarily a fragmented approach to answering an important question.

- On the basis of these results, we therefore recommend that a new systematic review is commissioned specifically to address the question of effective approaches to health promotion for young men aged 19 to 34.
- We recommend that any new review should include international studies which rigorously evaluate the effectiveness of interventions, alongside other types of UK based studies. The inclusion of the latter type of study can help in two ways: (i) by providing contextual information to interpret the results from international studies; and (ii) in the face of limited rigorous evidence of effectiveness, by helping to set a future intervention development and evaluation agenda. Studies of young men's views are likely to be an important starting point for this kind of agenda.
- This report recommends two possible options for a new review (i) a 'population focused review' and (ii) an 'intervention focused review'.
- The 'population focused review' would address the question "What are the effects of interventions, within the scope of health promotion, for young men aged 19 to 34 on outcomes of relevance to reducing suicide?" This review would be restricted to studies focused on young men only, but would take a broad approach to the intervention types, setting and outcomes it included.
- The 'intervention focused review' would address the question "What are the effects of particular interventions suggested by 'expert-driven' research or by young men themselves, on outcomes relevant to reducing suicide?" This review would not set restrict studies to those focused on young men only, but boundaries would be set by 'types' of interventions (e.g. peer counselling interventions, professional development, increasing accessibility of services).
- For either review option, it will be important to engage a range of stakeholders in the development of review protocols in order to help set priorities for the specific review boundaries.

## **1.0 BACKGROUND**

The reduction in the number of suicides by at least one fifth by the year 2010 is a key target of *Our Healthier Nation* (DoH, 1999a). The consultation document for the National Suicide Prevention Strategy for England (DoH, 2002) aims to take forward this target and highlights a number of key risk groups. One of these is young men under the age of 35. Suicide is now the most common cause of death amongst this group.

Although many risk and protective factors for suicide have been proposed, it is not yet clear which are most important or how they might achieve their effect. Some of the risk factors proposed include 'psychosocial' factors such as depression, low self-esteem, alcohol problems, impulsivity and anger control problems and 'situational' or 'social' factors such as social support networks, life stressors or family functioning (e.g. Kerfoot, 2000; Lester *et al.*, 1997). Some researchers have explored why rates of suicide amongst young men have been rising since the 1970s. Appleby *et al.* (1997) suggest that there has been an increase in risk factors since this time, with more unemployment, divorce, and substance misuse. Such factors are compounded by a lack of contact with services which may help to prevent suicide. Canetto (1997) examines differences in suicidal behaviour amongst men and women in terms of meanings of masculinity and femininity. She argues that attempted suicide amongst young men violates notions of masculine strength and that surviving a suicidal act is culturally unacceptable for young men.

There are various approaches to preventing suicide such as improving mental health services and reducing access to methods of suicide. Health promotion is another approach. This has been advocated both for reducing risk factors and helping to build protective factors for good mental health. Different perspectives on the 'causes' or risk factors for suicide often have different implications for health promotion interventions. Hodgson *et al.* (1996) have defined mental health promotion as: "the enhancement of the capacity of individuals, families, groups or communities to strengthen or support positive emotional, cognitive and related experiences" (Hodgson *et al.*, 1996: 56). This definition clearly illustrates the wide range of possible approaches to (mental) health promotion amongst young men, from individually based education programmes to strategies for strengthening communication and support between young men and other young men, their families, friends, advice services, GPs, and other professionals.

Whether these interventions bring about more benefit than harm is a crucial question. There is therefore a need to collate the evidence for the effectiveness of health promotion efforts of relevance to the prevention of suicide amongst young men. This document reports the results of a scoping exercise to assess the extent to which such a collation has been undertaken.

## **2.0 AIMS**

This scoping exercise addressed the following questions:

- (i) Are there any existing systematic reviews which examine, either in part or in full, the effectiveness of health promotion interventions of relevance to reducing suicide amongst young men aged 19 to 34?
- (ii) Is there a need for a new systematic review to examine the effectiveness of health promotion interventions of relevance to reducing suicide amongst young men aged 19 to 34?
- (iii) If there is a need for such a review, what questions could it address within which boundaries (e.g. study types, interventions, outcomes and population groups)?

In order to address these questions, the scoping exercise aimed to:

- (i) Examine the relevance of the findings of a recent EPPI-Centre systematic review on the barriers to, and facilitators of, good mental health amongst young people (aged 11 to 21) for effective interventions for reducing suicide amongst young men aged 19 to 34.
- (ii) Search for other systematic reviews which examined the effectiveness of health promotion interventions of relevance to reducing suicide and/or focused on young men;
- (iii) Examine a sub-set of these reviews in more detail according to their focus, methods and presentation of findings in order to examine their potential for identifying effective health promotion interventions of relevance to suicide prevention amongst young men aged 19 to 34; and
- (iv) Make recommendations for whether a new review is needed and if so, what that review might look like.

## **3.0 METHODS**

The work was carried out in two parts (i) an examination of the EPPI-Centre review on young people and mental health; and (ii) the identification and classification of other relevant existing systematic reviews.

### **3.1 The EPPI-Centre mental health review**

The review was examined to identify any conclusions and recommendations of relevance to reducing suicide amongst young men aged 19 to 34. As access to the individual studies included in the EPPI-Centre review was possible, a re-examination of these studies was undertaken. The quality and findings of those studies which specifically focused on young men or allowed an examination of findings according to gender, were summarised.

In addition, the studies which had been excluded from our descriptive mapping because they focused on populations outside of its age range (11 to 21) were re-screened to identify any studies which focused on young men within the current age range of interest.

### **3.2 Other systematic reviews**

#### **3.2.2 Inclusion and exclusion criteria**

In order to be considered relevant to this scoping exercise reviews had to be:

- (i) A potentially high quality systematic review (as a minimum standard reviews had to state their search strategy and their inclusion and exclusion criteria);
- (ii) Focused on one of a number of outcomes relevant to suicide prevention as a result of interventions falling within the scope of health promotion;  
OR
- (iii) Focused on the effectiveness on any type of outcome of health promotion interventions for young men.

Reviews were excluded if their focus excluded men.

The following groups of outcomes were considered to be relevant to suicide prevention:

- 'Suicide outcomes' (e.g. completed suicides, non-fatal suicide behaviour, thoughts about suicide, media reporting of suicide, skills of peers, family and professionals in supporting those with suicidal thoughts).
- 'Mental health outcomes' defined as those which may act as risk or protective factors for suicide (e.g. incidence of mental illness such as depression, negative affective states such as hopelessness, anger, loneliness; self-esteem; coping skills; social support; access to professional services).
- 'Other relevant outcomes' defined as behavioural or structural outcomes known to correlate or co-occur with suicidal behaviour (e.g. alcohol or drug problems; unemployment, poverty).

These inclusion criteria were designed to capture reviews focusing on a wide range of interventions targeted at both the individual (e.g. to increase their coping skills) and the social environment in which they live (e.g. to increase professional, peer and family support skills).

### **3.2.2 Identifying systematic reviews**

Reviews were identified in three ways:

#### **a) *On-line registers of reviews***

- The EPPI-Centre register of effectiveness reviews relevant to health promotion and public health.
- The Database of Abstracts of Reviews of Effectiveness (DARE) held by the NHS Centre for Reviews and Dissemination.
- The Health Technology Assessment database, held by the NHS Centre for Reviews and Dissemination.
- The Cochrane Database of Systematic Reviews.

For the EPPI-Centre register of effectiveness reviews, a search was conducted using the register's standardised keywording strategy. To identify potentially high quality systematic reviews with a focus on the relevant age group, searches to identify reviews which stated their search strategy and inclusion criteria ('search strategy stated' AND 'inclusion criteria stated') were combined with a search to identify reviews covering young people or adults ('adults' OR 'young people').

For the remaining registers, two separate search strategies were employed using combinations of 'free-text' terms. The first strategy combined two sets of terms to identify reviews focused on relevant outcomes (e.g. 'suicide', 'depression', 'communication skills') AND focused on relevant interventions, defined as being within the scope of health promotion (e.g. 'education', 'prevention'). The second strategy sought reviews which had terms appearing in their titles to indicate that they were potentially focused on young men (e.g. 'young men'; 'prisoners'). The second strategy was employed to ensure the identification of any reviews with a sole focus on young men regardless of the type of outcome on which the review focuse.

#### **b) *Bibliographic databases of research literature***

The EPPI-Centre register of effectiveness reviews and DARE are a result of systematic and exhaustive searches of general bibliographic databases of research literature (e.g. MEDLINE, EMBASE and PsycLIT), supplemented with hand searching of journals and personal contacts. To maximise comprehensiveness, searches were also conducted on ERIC and the Social Science Citation Index from 2000 onwards in order to identify reviews completed since the last update of the EPPI-Centre register.

Again, two separate search strategies were employed using the same combinations of 'free-text' terms outlined above. Because ERIC and the Social Science Citation Index contain both primary research and reviews, these terms were also combined with terms to identify reviews (e.g. 'review', 'overview', 'meta-analysis', 'synthesis').

### **c) Hand searching**

The searches of specialist registers of systematic reviews and more general bibliographic databases were supplemented with hand searches of the following sources:

- The 'Evidence from systematic reviews of research relevant to implementing the 'wider public health' agenda' report prepared by contributors to the Cochrane and Campbell Collaborations and held by the NHS Centre for Reviews and Dissemination.
- The Health Development Agency's 'Evidence Base'.
- The National Electronic Library for Mental Health.

The results of all searches were downloaded into reference management software (EndNote) and then screened according to the inclusion criteria outlined above.

All search strategies are presented in full in Appendix A.

### **3.2.3 Classification of systematic reviews**

All review citations meeting the inclusion criteria were classified according to two dimensions: their outcome focus and their population focus.

In terms of outcome focus, reviews were coded to indicate whether they focused on one of three groups (as defined above in section 3.1.1):

- 'Suicide outcomes'
- 'Other mental health outcomes'
- 'Other relevant outcomes'

In terms of population focus, review citations were coded to indicate whether they focused:

- Solely or mainly on young men, including those within the range 19 to 34 years.
- Solely or mainly on men of any age.
- On both men and women.

Those that focused on both men and women were further classified according to whether they highlighted findings or conclusions specifically for young men. Those that did not were classified according to whether their focus covered the 19 to 34 age range or excluded this age range (e.g. those reviews solely focused on children or older age groups).

These codes were initially applied to titles and abstracts of reviews. Because of the short time-scale of this scoping exercise, priority was given to obtaining the full reports of reviews focused on 'suicide outcomes' regardless of population group; those focused on men regardless of outcome focus; and those which explicitly indicated that they focused on the 19 to 34 age group.

When full reports were available, the above codes were re-applied. Those remaining were subjected to further examination. This involved describing reviews according to their review question(s) or objectives and focus; the number and focus

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of included studies; any conclusions made which were specifically relevant to young men aged 19 to 34; and their conclusions.

## **4.0 RESULTS**

### **4.1 The EPPI-Centre mental health review**

This review was commissioned by the Department of Health to address the question 'What are the barriers to, and facilitators of, good mental health amongst young people aged 11 to 21 years?' and was completed in 2001. The review employed broad search strategies to identify studies relevant to the prevention of mental health problems or the promotion of positive mental health. Relevant studies were descriptively mapped and quality screened. A sub-set of these studies were selected for in-depth review. This part of the review focused in particular on the prevention of suicide, self-harm and depression, and the promotion of self-esteem and included three 'types' of study (systematic reviews, outcome evaluations and studies of young people's views).

#### **4.1.1 Relevant conclusions and recommendations**

The review drew three main conclusions: that there is a scarcity of good quality research evaluating the effectiveness of mental health promotion, particularly in the UK; that young people have clear views on the barriers to, and facilitators of, their mental health; and that there is little research to guide mental health promotion amongst 'socially excluded' groups. Despite the limited evidence-base uncovered, the review was able to identify a small number of well-designed evaluations which had demonstrated that a range of different interventions could be effective in bringing about positive changes amongst some groups of young people. Ineffective interventions were also identified. Using these findings, five recommendations for policy and practice were made. When the findings of studies of young people's views were considered alongside intervention research, promising interventions to develop and test were highlighted. On this basis a further 12 recommendations were made for a future evaluation agenda.

Although this review was not focused specifically on young men aged 19 to 34, a number of the recommendations seem pertinent to this population group.

In terms of the effectiveness of interventions:

- Interventions appear to need to be focused on specific mental health issues (e.g. self-esteem) rather than tackle multiple issues or mental health issues in general.
- It may be more appropriate to frame interventions in terms of developing young people's coping strategies (e.g. for dealing with stress and anxiety) rather than explicitly on preventing suicide.
- Interventions should not rely solely on the presentation of information, but should include skill development components, reinforced by support at different levels (e.g. in the home, the community and society).

In terms of what kinds of interventions should be developed and tested in the future, the following interventions matched young people's views but had not yet been subjected to rigorous evaluation:

- Interventions which aim to tackle the material circumstances of young people's lives (e.g. lack of money; employment opportunities; racism and other discrimination; feelings of powerlessness; and a lack of leisure opportunities).
- Interventions which foster supportive relationships within families and other social networks.
- 'Peer counselling' interventions'.
- Interventions which build on the coping strategies identified by young people (e.g. physical activities, creative activities, engaging in pleasant activities).

A more cross-cutting recommendation for the development of future interventions was also made:

- Interventions need to make sure that their content and presentation is relevant to the context of young people's everyday lives. Young people do not relate to medically or professionally defined concepts such as 'mental illness', and they associate negative meanings with the terms 'mental health'.

#### **4.1.2 Re-examining the findings of individual studies.**

As indicated above, the young people's mental health review included three types of studies: existing systematic reviews; studies evaluating the effectiveness of interventions to prevent mental health problems/ promote positive mental health (outcome evaluations); and studies of young people's views on mental health. Only the outcome evaluations and the view studies are considered further here. The systematic reviews are covered in section 4.2 below.

##### **a) Outcome evaluations**

The review identified a total of 185 outcome evaluations from a range of countries. Only 47 of these were deemed to meet the topic related criteria for our in-depth review (a focus on the prevention of suicide or depression or the promotion of self-esteem or coping). Of these, 30 met our methodological inclusion criteria (employment of a control group, presentation of pre- and post-test data). Sixteen of these had already been included in existing systematic reviews and were not considered further. The remaining 14 underwent detailed data extraction and assessment of methodological quality and five studies were deemed to be able reliably to estimate the effectiveness of interventions.

None of these five studies included young men of between 19 to 34 years. Going back to the 181 outcome evaluations which dropped out of the review at various stages, only eight were focused specifically on young men. Of these, four studies included men falling between the ages of 19 to 34 (Abbey *et al.*, 1989; Giacobbe and Traynelis-Yurek, 1992; Ritchie, 1999; Spence and Spence, 1980).

A total of 1026 citations which were excluded from the descriptive mapping of the review because they did not focus on young people aged between 11 and 24 were re-screened. However, no further outcome evaluations focused on young men falling between the ages of 19 to 34 were identified.

## **b) Studies of young people's views**

A total of 12 UK studies of young people's views were included in the young people's mental health review. Only three of these included young men within the relevant age range. One of these focused solely on young men (Aggleton *et al.*, 1995), one focused on both young men and women but highlighted gender differences in views (Friedli and Scherzer, 1996) and one focused on both young men and women but did not highlight gender differences in views (Armstrong *et al.*, 1998). This latter study is not considered any further here.

Friedli and Scherzer (1996) identified the following familiar gender differences in reported coping strategies in their sample of 1,853 young people: young men preferred 'doing' to 'talking' as a way of coping; 35% of young men compared with 25% of young women used regular exercise to 'de-stress'; 21% of young men but only 15% of young women went to the pub to forget their troubles; 35% of young women and 28% of young men reported seeking help from a counsellor.

In a study aiming to explore the factors that contribute to, and protect against, psychosocial disorders, Aggleton *et al.* (1995) focused on the mental health of 160 young men aged 16 to 20. Participants included young men at relatively high risk of developing psychosocial disorders and young men with a history of mental health problems. Family discord, unemployment, not having a stable home, having nothing to do, fears for the future and relationship difficulties with partners were identified as sources of stress and distress. These were described as often being interlinked and cumulative. Perceived restrictions on freedom, a deep anxiety about violence and a lack of material resources were central to views on what caused anger, annoyance and frustration. A lack of anything to do/ places to go, not being taken seriously by adults and the potential for getting into trouble with the police were identified as getting in the way of ambitions. Talking about feelings was seen as unrealistic and problems were dealt with by: being creative, doing sport and (for some) using drugs and self-harming. Getting angry seen by some as way of coping with feelings of depression. Sources of support were seen as male friends for a source of solidarity, companionship and identity; 'special' (usually girl) friends were seen as providers of emotional support.

The above findings suggest several recommendations for appropriate interventions for young men. These include possibilities for addressing the difficulties and reluctance young men have in talking about problems and seeking help, as well as building on young men's existing strengths and ways of coping by, for example, using anger creatively, and providing low cost opportunities for participating in sport and creative activities. At the same time, young men's views highlight the importance of strategies which tackle those adverse material circumstances which can undermine young men's mental health.

## **4.2 Other systematic reviews**

### **4.2.1 Identification of reviews**

Our search strategies yielded 424 citations to be screened for relevance. A total of 140 citations met our inclusion criteria on the basis of their title or abstract (a potentially relevant and high quality systematic effectiveness review). Table one on the next page shows where these 140 review citations were found.

Table 1: Number and per cent of potentially relevant and high quality systematic review citations found within different bibliographic sources (N=140)

Source	N	%
Registers of systematic reviews	85	61
Hand searching	37	26
General bibliographic databases	18	13

Most review citations (61%) were found on registers of systematic reviews. The most productive of these was the EPPI-Centre's in-house health promotion reviews database, which found over 40% of all of the reviews identified. The next most productive reviews database was CRD's DARE, which found 25 reviews (18% of the total). Searches of general bibliographic databases found a further 37 reviews (26% of the total). Hand searches were also productive, finding 18 reviews not identified by other methods.

#### 4.2.2 Classification of systematic reviews

This section describes the 140 review citations according to their mental health focus and population focus<sup>1</sup>.

##### a) Mental health focus

Table 2: Number and per cent of potentially relevant and high quality systematic review citations according to outcome focus (N=140)

	N	%
'Suicide outcomes'	7	5
'Other mental health outcomes'	42	30
'Other relevant outcomes'	65	46
Broader focus	26	19

Table 2 shows that only 5% of the reviews focused directly on reducing suicide incidence. Almost a third (n=42), were focused on a broader range of mental health outcomes (e.g. depression, self-esteem). A further 65 reviews (almost half of the total) were focused on other outcomes considered potentially relevant (e.g. drinking, drug-taking or crime). We also found a 26 reviews (19% of the total) that had a broader focus than any of the above types of outcome but that were still likely to contain individual studies looking at such outcomes (e.g. reviews of workplace health promotion).

##### b) Population focus

The studies of interventions for young men are likely to be spread throughout reviews. Table 3 shows that none of the 140 reviews appear to focus solely on men,

<sup>1</sup> A bibliographic list of all 140 of these reviews is available on request.

let alone young men. From the information available in review citations, it appears that just over a third of reviews (n=51) appear to have excluded studies involving young people. This leaves a total of 89 reviews that may focus on or contain studies of people of the relevant age range. In 74 of these reviews the age or gender focus of the review cannot be ascertained. In only 15 reviews (11% of the 140) is it possible to tell from the citation that a review focused on the relevant age range (gender is only highlighted as an issue in the citation for 3 of these 15).

Table 3: Number and per cent of potentially relevant and high quality systematic review citations according to population (N=140)

	N	%
Young men	0	0
Men of any age	0	0
Men and women	140	100
Includes relevant age group and an examination of gender differences highlighted in review citation	3	2
Includes relevant age group but an examination of gender differences NOT highlighted in review citation	12	9
Unclear from review citation whether relevant age group included	74	53
Excludes relevant age group	51	36

### 4.2.3 Further analysis of a sub-set of reviews

To examine whether reviews which focused on both men and women could have the potential to identify the effectiveness of health promotion interventions for young men, attempts were made to obtain the full reports for a sub-set of identified reviews. This sub-set was restricted to those reviews which focused on ‘suicide outcomes’ regardless of population group, and those focused on other mental health outcomes when the review citation explicitly indicated that it covered the 19 to 34 age group. A total of 18 review citations for 15 separate reviews fell into this category. We were able to obtain 10 of these within the time scale for this scoping exercise<sup>2</sup>. Two of these were subsequently excluded, one because it did not turn out to be a systematic review and one because it did not report a review of the effectiveness of interventions. Eight full review reports were examined. Pertinent findings from these are discussed below. More structured detail on each review is presented in Appendix B.

Three of the eight reviews focused on suicide prevention (Guo and Harstall, 2002; Hider, 1998; Ploeg *et al.*, 1999). None of these included studies which covered our age range of interest but Ploeg *et al.* (1999) did highlight several gender differences in the findings of their included studies. Young women were more likely to be satisfied with interventions, and young men were more likely to experience harmful effects of the interventions. The authors state “It is not known...if the specific content of the program impacts more positively on females than on males or if the group or school setting results in more positive outcomes for females. Our

<sup>2</sup> We were unable to obtain the following reviews: Biblarz *et al.* (1991); Larimer and Cronce (2002); Middlebrook *et al.* (2001); Poikolainen (1999); and Wilson and Lipsey (2000).

understanding of the causes of suicide among males, who are less likely to seek help and more likely to be successful, is incomplete” (p14). Overall the authors conclude that there is insufficient evidence to support school-based curriculum prevention programmes for young people (positive and harmful effects were identified). They suggest that narrowly focused interventions may be less effective than comprehensive, multi-strategy programmes addressing high risk behaviour. Similar conclusions were reached by the other two reviews. Guo and Harstall (2002) concluded that the review had found insufficient evidence either to support or not support curriculum based suicide prevention programs in schools. Hider (1998) concluded that there is uncertainty about school or community based suicide prevention interventions delivered by health or other professionals (e.g. teachers). Hider (1998) further concluded that targeting at risk groups; lobbying for restriction of means to suicide; encouraging responsible reporting of suicide; and education programmes for GPs to enable better recognition of mental illness appear to be promising approaches. An appreciation of cultural factors was also highlighted by this author as important for the prevention of suicide.

Two reviews focused on other mental health outcomes. Nicholas and Broadstock (1999) reviewed the effectiveness of interventions amongst youth (aged 14 to 24) which (i) aimed to prevent the development of mental health problems relating to substance abuse, conduct disorder, mood, eating disorders and anxiety; and (ii) aimed to intervene in the early stages of mental health problems. Of the 35 included studies, 14 focused on young people falling between the ages of 19 to 34. Two studies focused on young men in particular. The first of these evaluated an intervention providing education and skill development for the prevention of steroid use and was found to lead to changes in knowledge and attitudes (but not behaviour) in a sample of 80 young men in the USA with a mean age of 16 years. The second evaluated a violence prevention programme (education and skill development) with 309 15 to 21 year old African Americans (70% male). The study found reductions in self-reported aggression but not for weapon carrying. Tilford *et al.* (1997) examined the effectiveness of interventions for preventing mental disorders, promoting positive well-being, or developing protective factors for mental health amongst children, young people, adults and older people. Of the 72 included studies, 42 focused on young people falling between the ages of 19 to 34, and one study focused specifically on young men. This study evaluated a cognitive stress reduction intervention programme for young men aged up to 18 in the USA. Using a randomised control trial with a very small sample size (N= 24), the study found the intervention to lead to reductions in anxiety and anger and an increase in self-esteem.

The remaining three reviews focused on the prevention of alcohol and drug problems (Foxcroft *et al.*, 2002; Schaps *et al.*, 1980; White and Pitts, 1997). Schaps *et al.* (1980) did not discuss differences in findings according to gender and this review is therefore not discussed any further. Foxcroft *et al.* (2002) aimed to identify and summarise rigorous evaluations of psychosocial and educational interventions targeted at the primary prevention of alcohol misuse by young people (aged up to 24). Of the 56 included studies, 19 focused on young people falling between the ages of 19 to 34. Two studies focused specifically on young men. One of these reported on a partially effective programme (at less than one year follow up) for young men aged 17 to 21 in a young offenders institution in Scotland. The other study reported no effects of an alcohol prevention programme for incarcerated young male drug users in the USA. Overall the review concluded that interventions to ‘strengthen families’ and culturally focused interventions show most promise for long term effects.

White and Pitts (1997) aimed to review the effectiveness of health promotion interventions for the prevention of substance misuse amongst young people between the ages of 8 to 25. Of the 62 included studies 22 focused on young people falling between the ages of 19 to 34, although none specifically focused on young men. However, the authors report that seven studies considered differences in findings according to gender. From these studies it appears that programmes are more successful for girls. Overall the authors concluded that there is insufficient evidence to assess the effectiveness of the range of approaches to drug education and that there is a need to develop more focused interventions which take into account the context of drug use and to tailor interventions to the specific needs and experiences of participants.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

This section is structured according to the questions posed at the beginning of this scoping exercise.

### **Are there any existing systematic reviews which examine, either in part or in full, the effectiveness of health promotion interventions of relevance to reducing suicide amongst young men aged 19 to 34?**

Examining the EPPI-Centre mental health review, it was possible to highlight general recommendations of relevance to mental health promotion for young men. However, no specific recommendations could be made about the effectiveness of health promotion interventions with this group. By examining studies highlighting young men's views, this earlier review is able to suggest ideas for interventions to develop and test in the future. It also found a handful of primary studies which could contribute to a new review focused on young men.

Our attempts to find other relevant systematic reviews failed to find any which solely or mainly focused on young men aged 19 to 34. We did, however, find many reviews that covered both young men and young women. Amongst these, it was rare for review authors to draw out conclusions about any gender differences. When we looked in more detail at a small sub-set of reviews, we found that it was possible to pick out relevant findings of individual studies included in the reviews. However, such a fragmented approach is limited in terms of providing a comprehensive answer to questions about the effectiveness of interventions for young men.

### **Is there a need for a new systematic review to examine the effectiveness of health promotion interventions of relevance to reducing suicide amongst young men aged 19 to 34?**

Given the above, we therefore recommend that a new systematic review be commissioned. In the next section, we recommend two possible options for a new review.

Any review, however, needs to consider the possibility of finding a paucity of rigorous evaluation research to inform UK mental health promotion policy and practice. New reviews therefore need to consider the inclusion of international studies that rigorously evaluate the effectiveness of interventions, alongside other types of UK based studies. The inclusion of these other types of UK studies can provide contextual information to interpret the findings of international studies. They can also help to set, in a transparent way, a future agenda for the development and evaluation of health promotion interventions, if it is found that the evidence base for the effectiveness of interventions is limited. An example of one approach for achieving this is represented by recent EPPI-Centre health promotion reviews which have combined the findings of experimental evaluations of effectiveness with studies of young people's views (e.g. Harden *et al.*, 2001; Rees *et al.*, 2001; Shepherd *et al.*, 2001). There is a strong rationale for developing health promotion interventions on the basis of what people themselves say. This is often referred to as 'felt need'. Basing interventions on 'felt need' is also a much wider goal across public services. For example, this goal is reflected in the current commitment of the NHS to involve the public in the development and delivery of services (DoH, 1999b). The themes raised in the conclusions of the reviews discussed in this scoping exercise also emphasise the need to develop and tailor interventions according to the views and experiences of young people.

A similar approach may be important for a new review focusing on young men and mental health promotion. Synthesising what is known about young men's own beliefs, ideas and experiences may complement what is known from mainly 'expert-driven' research about mental health. Comparing these views with 'expert' views is likely to raise some interesting issues for policy and practice and perhaps some novel solutions.

**If there is a need for such a review, what questions could it address within which boundaries (e.g. study types, interventions, outcomes and populations groups)?**

We recommend two possible options for a new review.

***Option 1: A 'population focused review'.***

This review would address the question "What are the effects of interventions, within the scope of health promotion, for young men aged 19 to 34 on outcomes of relevance to reducing suicide?"

The review would restrict studies to those which solely focused on young men within this age range, but would be flexible in terms of outcomes, intervention types and settings. Although a range of outcomes should ideally be specified in advance this could be a broad range in order to capture those relevant to the known or suggested wider determinants of mental health (e.g. unemployment, housing). If boundaries were to be set, settings may be an obvious way of doing this (e.g. the workplace, the community, prison, health care settings).

***Option 2: An 'intervention focused review'.***

This review would address the question "What are the effects of particular interventions suggested by 'expert-driven' research or by young men themselves, on outcomes relevant to reducing suicide?"

The review would not restrict the inclusion of studies to those which solely focused on young men, but would set boundaries in terms of types of intervention (which in turn may set boundaries in terms of settings).

Based on the kinds of issues raised by the systematic reviews included in this scoping exercise (including those raised by young men themselves) the following types of interventions can be suggested:

- Interventions which aim to tackle the material circumstances of young people's lives (e.g. lack of money; employment opportunities; racism and other discrimination; feelings of powerlessness; and a lack of leisure opportunities).
- Interventions which foster supportive relationships within families and other social networks.
- 'Peer counselling' interventions'.
- Interventions which aim to make services more accessible.

- Education programmes for health or other professionals to increase skills for providing support to, and communicating with, young men.
- Interventions to prevent/reduce anger, aggression and violence.
- Interventions which build on the coping strategies identified by young men (e.g. physical activities, creative activities, engaging in pleasant activities).

For both review options, it will be important to engage a range of stakeholders in the development of review protocols. For option two in particular, stakeholders could be involved in prioritising which intervention type(s) to focus on. Attention will also need to be paid to any other ongoing systematic review work on any intervention type(s) chosen (e.g. by the Cochrane and Campbell Collaborations, the NHS Centre for Reviews and Dissemination, the Health Development Agency).

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## **APPENDIX A: SEARCH STRATEGIES**

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### **Registers of systematic reviews.**

#### ***(1) The EPPI-Centre register of effectiveness reviews in health promotion***

##### **#1 Keywords for systematic reviews**

(KW = 'search strategy stated' AND KW = 'inclusion criteria stated')

##### **#2 Keywords for age focus**

(KW = 'young people' OR KW = 'adults')

##### **Final Result**

#1 AND #2

#### ***(2) The Cochrane Library***

The search strategy for The Cochrane Library was implemented on 18/09/02. No date range was specified. The four searches were conducted individually due to limited capacity for using long search strings or combining terms.

##### **#1 Free text terms for Men**

men or boys or gender or prisoners or male [Restrictions: Field=TITLE ]

##### **#2 Free text terms for relevant outcomes WITH terms for health promotion**

(SUICID\*:TI or STRESS:TI) or DEPRESS\*:TI) OR (MENTAL:TI and HEALTH:TI)) OR (MENTAL:TI AND ILLNESS:TI)) OR DISORDER:TI) OR ANXIETY:TI) OR CONDUCT:TI) OR BEHAVIOURAL:TI) OR AFFECTIVE:TI) **AND** (PREVENT\*:TI OR REDUC\*:TI) OR PROMOTE\*:TI) OR INCREASE\*:TI) OR INTERVENTION\*:TI) OR PROGRAM\*:TI) OR CURRICULUM\*:TI) OR EDUCAT\*:TI) OR PROJECT\*:TI) OR CAMPAIGN\*:TI) OR EDUCAT\*:TI)) [Restrictions: Field=TITLE]

##### **#3 Free text terms for relevant outcomes without terms for health promotion**

(ALCOHOL\*:TI or DRINKING:TI) or DRUG\*:TI) or GAMBL\*:TI) or VIOLEN\*:TI) or CRIME\*:TI) or CRIMINAL\*:TI) or DELINQUEN\*:TI) or UNEMPLOY\*:TI) or POVERTY:TI) or HOMELESS\*:TI) or DIVORCE:TI) or SEPARATION:TI) or FAMILY:TI) or PARENTING:TI) or RELATIONSHIP\*:TI) or SUPPORT:TI) or COPE:TI) or COPING:TI) OR (HELP:TI AND (NEAR3:TI and SEEK\*:TI))) OR SKILLS:TI) [Restrictions: Field=TITLE ]

##### **#4 Further free text terms for relevant outcomes without terms for health promotion**

(COMMUNICAT\*:TI or (CONFLICT:TI and RESOLUTION:TI)) OR HOPELESSNESS:TI) OR ANXIETY:TI) OR ANGER:TI) OR AGGRESSION:TI) OR LONLINESS:TI) OR ISOLATION:TI) OR ALIENATION:TI) OR HELPLESSNESS:TI) OR BOREDOM:TI) OR IMPULSIVITY:TI) OR SELF-ESTEEM:TI) OR SELF-CONCEPT:TI) OR (((((((RESILIEN\*:TI OR VULNERAB\*:TI) OR ACCESS\*:TI) OR (WELL:TI AND BEING:TI)) OR (DROP:TI AND OUT:TI)) OR (PROBLEM:TI AND SOLVING:TI)) OR (DECISION:TI AND MAKING:TI)) OR OUTREACH:TI))  
[Restrictions: Field=TITLE ]

### ***(3) The Database of Abstracts of Reviews of Effectiveness (DARE) and Health Technology Assessment Database***

Searches were restricted by searching for Abstracts of Reviews, HTA Reports and HTA projects. No date range was specified. The five searches were conducted separately as the facility for combining

#### **#1 Free text terms for men**

young men OR older men OR elderly men OR adult men OR gay men OR men's OR mens' (in title only)

#### **#2 Free text terms for health promotion WITH terms for relevant outcomes**

(prevent OR reduc OR promote OR increase OR intervention OR program OR curriculum OR educat OR project OR campaign OR educat) **AND** (suicid or stress OR depress OR mental health OR mental illness OR disorder OR anxiety OR conduct OR behavioural OR affective (in title only))

#### **#3 Further free text health promotion WITH terms for relevant outcomes**

(prevent OR reduc OR promote OR increase OR intervention OR program OR curriculum OR educat OR project OR campaign OR educat) **AND** (affective or alcohol or drinking or drug or gambl or violen or crime or criminal or delinquen (in title only))

#### **#4 Further free text terms for health promotion WITH terms for relevant outcomes**

(prevent OR reduc OR promote OR increase OR intervention OR program OR curriculum OR educat OR project OR campaign OR educat) **AND** (aggress or hoplessness or lonliness or isolation or alienation or boredom or impulsivity or self esteem or self concept or well being or psychosocial (in title only))

#### **#5 Further free text terms for health promotion WITH terms for relevant outcomes**

(prevent OR reduc OR promote OR increase OR intervention OR program OR curriculum OR educat OR project OR campaign OR educat) **AND** (psycho social or parenting or unemploy or poverty or homeless or divorce or seperation or family or relationship or support or cope (in title only))

## **General bibliographic databases**

### **(1) ERIC**

Searching on ERIC was restricted to the years 2000-2002

#### **#1 Free text terms for reviews**

(synthesis OR meta-analy\* OR metaanaly\* OR overview\* OR review\* (in title only))

#### **#2 Free text terms for relevant outcomes**

(suicid\* OR stress OR depress\* OR mental health OR mental illness OR mental disorder OR anxiety OR conduct OR behavioural OR affective OR alcohol OR drinking OR drug\* OR gambl\* OR violen\* OR crime OR criminal\* OR delinquen\* (in title only))

#### **#3 Terms for health promotion**

(prevent\* OR reduc\* OR promot\* OR increas\* OR intervention\* OR program\* OR curriculum OR educat\* OR project\* OR campaign\*(in title only))

#### **Final Result**

**#1 AND #2 AND #3**

### **(2) Social Science Citation Index**

Searching on Social Science Citation Index was restricted to the years 2000-2002

#### **#1 Free text terms for reviews**

(synthesis OR meta-analy\* OR metaanaly\* OR overview\* OR review\* (in title only))

#### **#2 Free text terms for relevant outcomes**

(suicid\* OR stress OR depress\* OR mental health OR mental illness OR mental disorder OR anxiety OR conduct OR behavioural OR affective OR alcohol OR drinking OR drug\* OR gambl\* OR violen\* OR crime OR criminal\* OR delinquen\* (in title only))

#### **#3 Terms for health promotion**

(prevent\* OR reduc\* OR promot\* OR increas\* OR intervention\* OR program\* OR curriculum OR educat\* OR project\* OR campaign\*(in title only))

#### **Final Result**

**#1 AND #2 AND #3**

## APPENDIX B: Description of the sub-set of reviews obtained as full reports (N=8)

Systematic reviews focused on suicide					
Author(s)	Review question/ objectives / focus of review	Included studies	Conclusions/recommendations/ findings specifically about young men	Other relevant issues raised by review	Quality indicators
Guo and Harstall (2002)	To assess the effectiveness of suicide prevention programmes for children and youth.  'Children and youth' defined as ages 5 to 19.  Canada	<i>Overall number</i> = 10 (+ 2 systematic reviews) <i>Number covering age range 19 to 34</i> = 0 <i>Number solely focused on men (young men aged 19-34)</i> = 0 (0)	None	Overall review found insufficient evidence either to support or not support curriculum based suicide prevention programs in schools.	<i>Search strategy</i> : stated <i>Inclusion criteria</i> : stated <i>Quality assessment</i> : stated  <i>Reviewer's comments</i> : None
Hider (1998)	To review the effectiveness of interventions for the recognition, management and prevention of youth suicidal behaviour by primary care practitioners.  'Youth' defined as 15 to 24 years.	<i>Overall number</i> = unclear <i>Number covering age range 19 to 34</i> = unclear <i>Number focused on males (young men aged 19 to 34)</i> = unclear	No specific conclusions or recommendations are drawn out by the author.	*There is uncertainty about school or community based suicide prevention interventions delivered by health or other professionals (e.g. teachers) *Targeting at risk groups, lobbying for restriction of means to suicide, encouraging responsible reporting of suicide and education programmes for GPs to better recognise mental illness appear to be promising approaches. *An appreciation of cultural factors is important for the prevention of suicide. *Many studies have methodological weaknesses.	<i>Search strategy</i> : stated <i>Inclusion criteria</i> : stated <i>Quality assessment</i> : stated  <i>Reviewer's comments</i> *no unpublished studies were included and judgements about study quality were made by one reviewer only.
Ploeg et al. (1996; 1999)	To summarise evidence about the effectiveness of school-based adolescent suicide prevention curriculum programmes.  No age range was specified for adolescents.	<i>Overall number</i> = 11 <i>Number covering age range 19 to 34</i> = 0 <i>Number focused on males (young men aged 19 to 34)</i> = 0 (0)	The findings of 5 studies looked at differences according to gender. Young women were more likely to be satisfied with interventions, and young men were more likely to experience harmful effects of the interventions. The authors state " It is not known...if the specific content of the program impacts more positively on females than on males or if the group or school setting results in more positive outcomes for females. Our understanding of the causes of suicide among males, who are less likely to seek help and more likely to be successful, is incomplete" (p14).	*There is insufficient evidence to support school-based curriculum prevention programmes for young people (positive and harmful effects were identified). They suggest that narrowly focused interventions may be less effective than comprehensive, multi-strategy programmes addressing high risk behaviour.	<i>Search strategy</i> : stated <i>Inclusion criteria</i> : stated <i>Quality assessment</i> : stated  <i>Reviewer's comments</i> : None

**APPENDIX B: Description of the sub-set of reviews obtained as full reports (N=8) cont'd**

Systematic reviews focused on other mental health outcomes					
Nicholas and Broadstock (1999)	To review the effectiveness of interventions amongst youth which (i) aim to prevent the development of mental health problems relating to substance abuse, conduct disorder, mood, eating disorders and anxiety; and (ii) aim to intervention in the early stages of mental health problems.  'Youth' were defined as aged 14 to 24.	Overall number = 35 Number covering age range 19 to 34 = 14 Number focused on males (young men aged 19 to 34) = 2 (1)	No specific conclusions or recommendations are drawn out by the authors.  Two of the included studies focused on men. The first evaluated an intervention providing education and skill development for the prevention of steroid use which was found to lead to changes in knowledge and attitudes (but not behaviour) in a sample of 80 young men in the USA with a mean age of 16 years. The second evaluated a violence prevention programme (education and skill development) with 309 15 to 21 year old African Americans (70% male). The study found reductions in self-reported aggression but not for weapon carrying.	*Interventions before mental health complications arise are more developed in the areas of substance abuse and conduct disorders, but less developed in the areas of mood, anxiety and eating disorders *Studies in this review suggest that interventions in any area are limited in their effectiveness. It is not clear whether this is due to a lack of good quality studies (particularly with adequate long-term follow-up) and/or because modest improvements would be expected from young people who are in relatively good health.	Search strategy: stated Inclusion criteria: stated Quality assessment: stated  Reviewer's comments: Review restricted to studies conducted between 1995 and 1999.
Tilford et al. (1997)	<b><i>What interventions have been shown to be effective in preventing mental disorders, promoting positive well-being, or developing protective factors for mental health?</i></b>  All age groups covered: children; young people; adults; older people.	Overall number = 72 Number covering age range 19 to 34 = 42 Number focused on males (young men aged 19 to 34) = 1 (0)	No specific conclusions or recommendations are drawn out by the author.  One included study evaluated an cognitive stress reduction intervention programme for young men aged up to 18 in the USA . Using an RCT with a very small sample size (N= 24), the study found the intervention to lead to reductions in anxiety and anger and an increase in self-esteem.		Search strategy: stated Inclusion criteria: stated Quality assessment: not stated  Reviewer's comments: The lack of nay quality assessment of primary studies suggests that the findings of the review may be unreliable.

**APPENDIX B: Description of the sub-set of reviews obtained as full reports (N=8) cont'd**

Systematic reviews focused on other mental health outcomes					
Foxcroft et al. (2002)	To identify and summarise rigorous evaluations of psychosocial and educational interventions aimed at the primary prevention of alcohol misuse by young people.  Young people defined as aged up to 25 years.	Overall number = 56 Number covering age range 19 to 34 = 19 Number focused on males (young men aged 19 to 34) = 2 (2)	No specific conclusions or recommendations are drawn out by the author.  Two studies evaluated alcohol misuse prevention programmes for young men. One study reported on a partially effective programme at less than one year follow up for young men aged 17 to 21 in a young offenders institution in Scotland. The other study reported no effects for incarcerated young male drug users in the USA.	*A 'strengthening families programme' and a culturally focused intervention show most promise for long term effects.	Search strategy: stated Inclusion criteria: stated Quality assessment: stated  Reviewer's comments: None
Schaps et al. (1980)	To review the effectiveness of drug prevention programmes. <b>To compare the effectiveness of those providing information only with those providing other intervention strategies.</b>  Review covered all age ranges.	Overall number = 35 Number covering age range 19 to 34 = 6 Number solely focused on men (young men aged 19-34) = Not Stated	None	Authors conclude that newer prevention strategies <i>may</i> have greater potential than strategies providing information only.	Search strategy: unclear Inclusion criteria: stated Quality assessment: stated  Reviewer's comments: The lack of clarity about the search strategy suggests that the findings of the review may be unreliable.
White and Pitts (1997)	<b>To review the effectiveness of health promotion interventions for the prevention of substance misuse amongst young people.</b>  'Young people' defined as aged 8 to 25 years	Overall number = 62 Number covering age range 19 to 34 = 22 Number solely focused on men (young men aged 19-34) = 0 (0)	Seven studies considered differences in findings according to gender. From these studies it appears that programmes are more successful for girls.	*There is insufficient evidence to assess the effectiveness of the range of approaches to drug education. *There is a need to develop more focused interventions which take into account the context of drug use and the need to tailor interventions to the specific needs and experiences of participants.	Search strategy: stated Inclusion criteria: stated Quality assessment: stated  Reviewer's comments: None

*A scoping exercise for a review of the effectiveness of health promotion interventions of relevance to suicide prevention in young men (aged 19 to 34)*