

Can suicide in young men be prevented by improving access and delivery among primary care services?

ABOUT 5000 people kill themselves every year in the United Kingdom (UK) and deaths among men account for nearly 80% of these, three quarters being between the ages of 15 and 24 years. Since the beginning of the 1990s suicide has become the commonest cause of death in young adult men, greater than that for road traffic accidents.¹ In response to these worrying statistics, the Department of Health in England produced a *National Suicide Prevention Strategy* with the aim of decreasing deaths from suicide by 20% by the year 2010.² Particular emphasis has been made on improving services to engage young men and a national collaborative will be established to monitor non-fatal deliberate self-harm. The reasons for the rise in suicide rates for young men, when the suicide rates for women and older men are falling, remain elusive. However, social factors in the context of changing gender roles may be important.³ Increased occupational instability has been proposed as one factor, as have social and economic changes that have allowed women to leave unsatisfactory relationships.⁴

Several papers in this month's Journal have sought to better understand the problem. Le Pont *et al*,⁵ reports the findings of the French Sentinel Network of General Practitioners. This network, consisting of about 500 GPs, provides weekly updates on a range of indicators including suicide and attempted suicide. They, too, found that suicide is commoner among men, and suicide attempts among women. They also found that the majority of suicides were in the age groups 25–44 years and in those over 59 years. In keeping with UK data they found the commonest method of suicide was hanging.

One way to conceptualise the problem is by using Goldberg and Huxley's filters on the pathway to care.⁶ The first filter concerns the decision to consult and attendance at a primary care setting. Issues relate to both the patients' help-seeking behaviour and the accessibility of the primary care professionals. Since the original description, the range of primary care settings available has broadened with the advent of NHS walk-in centres and the variety of front-line primary care professionals. The second filter is concerned with what happens once a person is seen by a primary care professional and includes whether or not the mental health problem is mutually recognised, agreed and acknowledged and then subsequently assessed with a view to formulating a treatment plan (which may need referral). The third filter describes referral from primary care professional to specialist mental health professionals within or outside of the practice, or to other appropriate agencies.

The most important factor associated with suicide in men and women is the presence of mental illness.^{4,7,8} Owens and colleagues undertook the psychological autopsy of 100 suicides in Devon, of which a quarter were males under 35 years of age.⁹ They found that 68% had clear evidence of mental illness in the month prior to suicide. They concluded that the

major barrier to receipt of care for mental health problems prior to suicide was non-consultation, that is, at the first filter. This concurs with previous research that found considerable psychiatric morbidity among the general population yet low primary care consultation rates, especially among men, of whom over 60% with severe depression had not contacted their GP in the previous year.^{10,11} Stanistreet *et al* have focused on young males aged 15–39 years who died from suicide or violent accidental death in Merseyside and Cheshire.¹² They found that relatively few males consulted their GP in the 3 months before dying from suicide or violent death. They conclude that prevention strategies need to focus on ways to encourage men with emotional or substance misuse problems (which increase their risk of violent death) to consult GPs.

Biddle and colleagues looked at factors influencing help-seeking behaviour in young adults when mentally distressed or suicidal.¹³ Young males were particularly unlikely to seek help when mentally distressed or suicidal unless severely distressed, and they tended not to seek lay support either from family or friends. Biddle and colleagues concluded that sex differences in help seeking may be a possible contributor to gender differences in suicide.¹³

Another factor that remains to be studied in this area is accessibility to primary care professionals for young men. Young men in employment may find it difficult to attend practices unless the practices opening hours accommodate them. Men may not be so familiar with either a practice or the individual practitioners and may prefer the accessibility and relative anonymity of the newer walk-in centres. Angst *et al*,¹⁴ have described the coping styles of depressed men. These often involve exercise, alcohol or substance misuse, rather than seeking help, either from professionals or friends and family. This differed from women in the study, who tended to confide in friends and family.

Regarding the second filter, it has been suggested that improving the ability of GPs (and primary care professionals) to recognise and treat mental illness is a key factor in suicide reduction. Owens *et al*, however, show that there was a much higher degree of depression recognition and management by GPs than is usually quoted in studies.⁹ Nevertheless, they also found that risk assessments were only recorded in 15% of suicides. There could be several possible reasons for this finding, some of which could relate to factors involved in the third filter (that is, the decision to refer). Stanistreet *et al* point out the rarity of suicide for the average GP, for whom a suicide only occurs every 4–7 years.¹² If we consider those patients who kill themselves who have consulted a GP, this will only happen approximately once every decade — therefore, only a handful of times throughout a GP's career.¹²

Primary care professionals may also need to assess males differently from females. Angst and colleagues found that

depressed males are as functionally impaired as depressed females but have fewer classic symptoms of major depression.¹⁴ This may mean that the assessing primary care professional may need to have a slightly lower threshold for making a diagnosis in males than is traditionally believed. It may also be the case that other male-specific symptoms such as aggressiveness, irritability, risk-taking or alcohol and substance misuse should be taken into account when making an assessment.¹⁵

Suicide is a very rare event. Improving filters one, two and three by improving access, risk assessment and referral are probably only partial solutions at best. There are likely to be fundamental societal factors involved which are much harder to influence. Firstly, we need to understand whether male depression is different as an entity from female depression or simply a difference in a few symptoms. How much of male behaviour in depression is socially determined, and how much can it be changed by interventions in childhood that seek to encourage the ventilation of feelings and discussion with others? All of these questions are susceptible to careful research and some studies are already under way to involve users in improving the permeability of filter one (see research activities in <http://hsr.iop.kcl.ac.uk/primarycare>). We hope that publishing studies such as the ones in this month's *BJGP* will encourage others to take up the challenge.

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ANDRÉ TYLEE

Professor and Head of Section

PAUL WALTERS

MRC Fellow, Section of Primary Care Mental Health, Institute of Psychiatry, King's College London, London

Address for correspondence

Professor André Tylee, Section of Primary Care Mental Health, Institute of Psychiatry, PO28, David Goldberg Building, Health Services Research Department, De Crespigny Park, Denmark Hill, London, SE5 8AF. E-mail: a.tylee@iop.kcl.ac.uk.

Interprofessional collaboration and interprofessional education

PRIMARY health and social care is increasingly delivered by different professionals and agencies working together. Collaborative practice has now assumed critical importance. It focuses on meeting the needs of patients and clients — its shared objective. Its effectiveness depends on clarity concerning the roles, collaborative skills and limitations of different team members, as well as on their clinical skills. Excellent communication is essential.

Preparing professionals to work in this way is a challenge both before and after qualification. The contribution of interprofessional education, both in universities and workplaces, has increasingly been the subject of study and experiment during the last 25 years. (It is now widely accepted in this country that 'interprofessional education' refers to occasions when two or more professions learn from and about each other [often as they consider a clinical problem together]. The term 'multiprofessional education' refers to occasions when they learn side by side.^{1,2}) The development of interprof-

essional education, now widely spread across the United Kingdom (UK), is rooted in two beliefs; first, that better communication and teamwork between different sorts of professionals and agencies are likely to benefit not only patients, clients and informal carers, but also professionals themselves; secondly, that interprofessional education can contribute to developing these aspects of their work, by combating ignorance, prejudice and tribalism and increasing understanding, respect and mutual support. Communication and teamwork have gained in their importance to general practitioners in a range of clinical contexts, where coping with the problems exceeds the capacity of any one profession.

While the most notorious failures in interprofessional communication, collaboration and teamwork have been in child protection and the care of serious mental illness, disasters do sometimes occur from the same failure in both primary and secondary medical care, while minor problems occur every day, whether through individual shortcomings or system fail-

ure. The recent Laming Report³ raises the question whether disasters such as the Climbié case can be prevented by organisational changes alone — by managerial structures to improve supervision, coordination and accountability.⁴ There has been a growing belief that an earlier and more fundamental approach is also needed — by influencing professional knowledge, skills and attitudes through education. Working together must be grounded in learning together.⁵⁻⁷

Collaboration or teamwork does not always ensue by instinct between professionals trained in separate streams and whose earlier education is likely to have been driven by competition between individuals. It depends on attitudes that cannot be taken for granted.⁸

We need evidence that better collaboration benefits patients, clients and professionals. A recent study drew on a national sample of 400 healthcare teams involved in primary, secondary or community health care (together with many of their patients).⁹ This research indicates that primary healthcare teams with clear objectives, higher levels of participation, and emphasis on quality and support for innovation, provide the most effective patient care, organisation and interdependent working. The greater the degree of communication and regularity of meetings, the higher the level of effectiveness and the greater likelihood of new and improved ways of delivering patient care. The better the team functioning in these ways, the better the mental health of members and the greater the likelihood that that they will stay in post. Members of such teams have relatively low levels of work stress — lower than those working in looser groups or individually. Those working in teams are also buffered from the negative effects of organisational climate and conflict. In primary healthcare teams especially, a diverse range of professional groups working together is associated with higher levels of innovation in almost every domain of performance.

*'The quality of team working was powerfully related to team innovativeness; the clearer the team's objectives, the higher the level of participation in the team, the greater the emphasis on quality and the higher the support for innovation in the team, the more innovative the team.'*⁹

We also need evidence that interprofessional education can promote better collaborative practice. Two recent monographs, both derived from the work of the Centre for the Advancement of Interprofessional Education (CAIPE), review the present state of interprofessional education in health and social services in this country and evaluate its effectiveness in improving collaboration.

In the first monograph, Barr reviews the present state and future needs of interprofessional education.¹ He summarises the findings of 10 national or regional surveys published between 1989 and 2001 which together provide evidence about the spread and distribution of this development in the UK, the professional groups involved, the topics considered to lend themselves best to shared learning, the educational aims and methods adopted and the evaluations undertaken.

The second monograph¹⁰ offers a critical review of evaluations carried out hitherto (replacing an earlier review¹¹). The Joint Evaluation Team concentrated on 53 studies, most of

which are about post-registration continuing development (traditional staff development based on workshops or short courses or on interprofessional education that occurred as a by-product of a quality improvement initiative). The majority are from the United States and are evenly divided between hospital and community settings. The learning experience is almost always formal and of medium or long duration. Nursing and medicine are the most frequently represented professions. The evaluation designs are dominated by 'before and after' and by longitudinal studies.

Among the 53 studies the evaluators found 14 that reported improved cooperation and communication. Twenty-four reported changes in knowledge and skills, 12 reported changes in behaviour, 21 reported changes in organisational practice and nine reported benefit to patients. Out of the total, five studies reported no change. There were no negative outcomes reported.

As methods for evaluating interprofessional education have evolved, it has become apparent that the main focus for evaluating university-based interventions is change in attitudes or perceptions and in knowledge or skills. Interprofessional educational initiatives in the workplace to improve quality can best be evaluated by behavioural changes in the organisation or delivery of care, and by benefits to patients and clients.

It is important at this early stage of development that the product of these evaluations should be viewed against the wider background that there have been inherent difficulties of method in evaluating many other types of educational initiative, for instance the vocational training of general practitioners or the continuing education of all doctors.

The evidence reported above is relevant to the Quality Team Development initiative of the Royal College of General Practitioners, which assesses the performance of primary care teams. This initiative has the same multidisciplinary educational, developmental and supportive purpose as CAIPE and it is proving effective.¹²

It has become clear that the success of interprofessional education does depend on careful choice of ways of learning. In so far as the drive to improve health and social care includes a focus on teamworking, the thrust must be to research, develop and implement better ways of learning that can support this in practice. The priorities are: first, more evaluations, especially those that aim to relate different educational methods or programmes, via collaboration, to patient benefit; secondly, the training and accreditation of interprofessional teachers; thirdly, more experiments in introducing an interprofessional strand into pre-qualification programmes to counter early negative stereotyping; and finally, more initiatives, however small, in workplace learning, where different professionals work together to tackle a real clinical problem, or to improve a service that is of interest and importance to them and to their patients and clients.

JOHN HORDER CBE

FRCGP, RCGP President 1979–1982 and Founder of CAIPE

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Address for correspondence

Dr John Horder, 98 Regents Park Road, London NW1 8UG.

Screening for colorectal cancer: decisions in general practice

MODERN medicine offers a range of screening opportunities with varying degrees of proven value. General practitioners (GPs) need to be able to respond to patients' requests to discuss the risks and benefits of the different programmes. Occasionally, a patient will ask whether to undergo screening tests for colorectal cancer, but with many other patients the GP will be in doubt whether to raise the question. Guidelines are generally in favour of offering asymptomatic persons older than 50 years of age fecal occult blood testing, followed by colonoscopy if positive, even if they are at low risk for cancer.^{1,2} It is not surprising that gastroenterologists are in favour of screening. However, when evidence is missing or controversial, guidelines are likely to reflect the strong beliefs of their writers. Moreover, guidelines are frequently unhelpful for discussing the pros and cons of screening procedures with patients.

To be equipped for this discussion, we must be able to deal with two questions: Will screening for colorectal cancer significantly prolong the life of people at low risk for this disease? Will it improve their quality of life?

Two systematic reviews addressing this topic were recently published.^{3,4} Walsh and Terdiman conclude that: 'The recommendation that all men and women aged 50 years or older undergo screening for colorectal cancer is supported by a large body of direct and indirect evidence'.³ For fecal occult blood testing, their conclusion was based on the fact that in three randomised trials the relative risk for mortality from colorectal cancer was 0.79 to 0.85 in people who were screened biennially compared with those not offered screening.⁵⁻⁸ No data are provided on complications of the screening procedures. Only one small controlled randomised trial tested sigmoidoscopy for screening,⁹ while no trials on colonoscopy have been reported as yet.

The Cochrane reviewers,⁴ included four randomised controlled trials on fecal occult blood testing,^{5-8,10} and reached a combined estimate of a reduction in colorectal cancer mortality of 16% (relative risk [RR] = 0.84, 95% confidence interval [CI] = 0.77 to 0.93). They conclude that: 'if 10 000 people were offered a biennial Hemoccult screening programme and two-thirds attended for at least one Hemoccult test, there

would be 8.5 deaths (95% CI = 3.6 to 13.5) from colorectal cancer prevented over 10 years.' Depending on which trial's data are used, 1.8 to 3.4 serious complications from colonoscopies will occur per 10 000 people.

Unfortunately, the reviews do not answer our question. A reduction in the rate of mortality attributed to colorectal cancer cannot be automatically translated into reducing total mortality. If people die from other causes to balance or exceed cancer mortality they will want to know that.

Cancer-related mortality was used in trials on screening mainly because each cancer accounts for a small proportion of total mortality, and trying to show a reduction in the overall death rates will demand an enormous (and greatly impractical) sample size. However, in a study looking at 12 published randomised trials of screening for cancer, Black *et al* showed that in five of them the cancer-related mortality and the total mortality went in opposite directions.¹¹ In four out of the five (two of them on fecal occult blood testing) disease-specific mortality was lower in the intervention group, but total mortality was increased in this group. In another two out of the 12 trials, the magnitude of the reduction in cancer-related mortality and in total mortality was inconsistent.

Looking at trials for prevention of colorectal cancer, total mortality was reported in three studies of fecal occult blood testing,⁵⁻⁸ (but not in a fourth¹⁰). The combined results for people undergoing biennial testing showed a RR for total mortality = 1.00, 95% CI = 0.98 to 1.02. Longer follow-up periods reported for two of the studies showed again identical overall mortality in both study arms.^{12,13}

In the one small randomised trial evaluating the effect of screening by sigmoidoscopy,⁹ the screened group showed a significantly higher overall mortality (RR = 1.57, 95% CI = 1.03 to 2.40); but a significant reduction in colorectal cancer incidence (RR = 0.2, 95% CI = 0.03 to 0.95) compared to the control group. No data on cancer-related mortality were presented.

One explanation for this discrepancy is that colorectal cancer related deaths accounted for 3-4% of the total deaths in the control groups, and for 3% in the screening groups.⁵⁻⁸ The chances that this small proportion will influence risks of total

mortality are small. A competing explanation is that bias was introduced by counting cancer-related deaths. For example, because colorectal cancer was more likely to be diagnosed in the screening group, deaths were more likely to be attributed to cancer (rather than to another cause) in this group. A second possible bias is that interventions (by necessity more numerous in the screening group) caused deaths that were difficult to assign to the intervention, and were assigned to some underlying disease.¹¹ It is impossible to decide in favour of one of the two competing explanations; however, the analysis by Black *et al* raises grave concerns that a bias was at work (second explanation).¹¹

There are implications for research arising from this dilemma. First, the total number of deaths should be collected, reported and used in systematic reviews and meta-analyses, even if the primary outcome of the primary research was cancer-related mortality. Secondly, complications related to interventions should be carefully documented and reported. Thirdly, methods more accurate than death certificates should be used to define the cause of death. And finally, the preferred outcome even in screening trials should be total mortality, and the researchers should show convincing reasons to select any other primary outcome. These points are important not only for researchers, but also for practitioners that look for the best evidence to share with their patients.

In clinical practice an effort should be made to define those at medium to high risk for colorectal cancer, for whom other considerations and data than the ones quoted here apply.² In a study published in the current issue of the Journal, Rose *et al* show that GP computerised registers can be used effectively to identify cases of colorectal cancer, and through them families at high risk.¹⁴

In a consultation that is initiated by a person aged 50 years or older, at low risk for colorectal cancer, we should explain the different modalities for screening, their advantages and disadvantages. We should make it clear that even if benefit for cancer-related mortality exists, its absolute magnitude is very small.⁴ We should also mention that for the only modality that was tested in randomised controlled trials (testing for occult blood in the stool), no reduction in total mortality was shown in the trials or in a combination of the available trials' results. With small benefits or risks at stake, it might be that personal preferences,¹⁵ such as the aversion of a person to the disease, will play a major role in the decision. In this case, testing for occult fecal blood is not satisfactory, because of its high false-negative rate.

In the absence of a national policy, we would not advise raising the question with people at low risk for colorectal cancer. Results of two large trials (including more than 250 000 participants and using sigmoidoscopy as the screening modality) are going to be released in the near future.¹⁶⁻¹⁹ Hopefully they will provide better evidence for making decisions. Namely: a narrowing of the confidence interval around the risk for total mortality, and a robust figure for complications of the screening procedures. These should help practitioners to help patients arrive at better informed decisions.

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LEONARD LEIBOVICI
MD, Professor of Medicine

ABIGAIL FRASER
MPH

SARAH HELLMANN
PhD, Department of Medicine E, Rabin Medical Center,
Petah Tiqva; Sackler Faculty of Medicine,
Tel-Aviv University; Tel-Aviv, Israel

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Address for correspondence

Professor Leonard Leibovici, Department of Medicine E, Beilinson Campus, Petah-Tiqva 49100, Israel. E-mail leibovic@post.tau.ac.il.