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Writing as therapy

Effects on immune mediated illness need substantiation in independent studies

Recently *JAMA* published a trial of a “get it off your chest” writing exercise.¹ Seventy one patients with asthma or rheumatoid arthritis were randomised to write about the most stressful experience they had ever had or about their plans for the day for three separate 20 minute periods over a few days and then to drop their completed essay into a sealed box. The study apparently showed a significant improvement in standard measures of disease severity in both conditions four months later. An accompanying editorial exhorted readers to abandon the Cartesian split between mind and body, and acknowledge the growing evidence in support of behavioural interventions that reduce emotional stress as therapies for diseases that are mediated in part by the immune system.² Do these results stand up, and is it therefore time to heed this call?

Therapeutic writing is a hot topic on both sides of the Atlantic. In the United Kingdom the focus tends to be on descriptive accounts and somewhat speculative psychodynamic explanations for subjective improvements in health status. A recent book provides moving case studies of patients who came to terms with physical or psychological illness through creative writing and offers several different options for promoting the use of the pen in the therapeutic encounter.³ In the United States, in contrast, the focus is on formal “scientific” research aimed at validating the impact of short, sharp, and highly standardised writing exercises on physical measures of illness. The emphasis of such research is on showing that measurable things change, even though we may not yet be able to explain why.

Pennebaker was one of several US psychologists who developed a standard writing task some years ago. He tested it extensively on college students and other healthy volunteers⁴ before popularising it in the lay press as a self help strategy for coping with stress.⁵ Subsequent work by several authors, summarised in a systematic review by Smyth,⁶ explored the effect of this and similar standard writing tasks on a wide range of variables in healthy volunteers. The variables were physiological (for example, skin conductance, helper and suppressor lymphocyte function, serum cortisol), psychological (wellbeing, social functioning, “adjustment”), and behavioural (grade point average, visits to the doctor). All 13 primary studies identified in the review showed a positive effect of the writing task on the chosen variable, but there was marked heterogeneity of effect size, suggesting that confounding factors

were important in some studies. The possibility of publication bias was not fully explored, there was no convincing “dose-response” effect—that is, the impact of the writing task was not related to the number or length of sessions—and none of the subjects was ill to begin with.

In the *JAMA* study Smyth et al recruited patients with symptomatic asthma or rheumatoid arthritis through advertisements in newspapers and on clinic noticeboards. Potential participants (who were paid for their participation) were screened by telephone to confirm eligibility, establish commitment, and exclude those “deemed unable to comply with the protocol.” Of 465 people who called to express interest, 126 were randomised, of whom 14 (12 in the experimental group) withdrew before starting the study and another 5 (1 in the experimental group) withdrew before completing it. Participants supplied demographic data and underwent baseline investigations including a general quality of life score before being introduced to the writing exercise. Asthma severity was measured by forced expiratory volume in one second (FEV₁), in which a 15% change from baseline was taken as significant. Arthritis severity was assessed by a standard clinician ranked score (from 0 (asymptomatic) to 4 (very severe)) in which a significant change was defined as one scale point. Clinical assessors were not told the allocation of participants.

Overall nine of 43 controls and 33 of 83 in the experimental group were classed as having improved at four months. The study apparently had sufficient power to have a 90% chance of detecting a clinically significant improvement if one existed. The results at four months reached statistical significance at the P<0.001 level, and by my calculations they translate into a number needed to treat of about five for improvement in disease status (95% confidence intervals 3 to 36). Differences between the groups at intermediate periods of two weeks and two months were less impressive and not overall statistically significant.

What are we to make of these findings? It seems frankly implausible that a total of 60 minutes’ writing on a subject unrelated to the disease should have a clinically significant impact on two different chronic diseases four months later. But if we are to reject the findings of a randomised controlled trial we should do so on the grounds of validity and generalisability, not on whether we believe the results. The potential biases

in this study are not difficult to spot. The highly selected participants may well have encountered the intervention (and the popular expectations associated with it) in the media previously. Those given the neutral writing exercise probably guessed they were controls. The "objective" measures of disease severity are open to assessment bias, which may have had an influence if the subjects told the assessor what they had done in the writing task. Finally, the outcomes in the two different diseases should probably have been analysed separately rather than summed.

But perhaps my interpretation is biased by my own cultural prejudices. I have an instinctive empathy with Bolton's approach to writing therapy as an art rather than a science³ and a personal distaste for quick fix interventions that smack of pop psychology and have been marketed to the public through the same channels as Billy Graham and the F Plan diet. If others in the UK share this cynicism our scientific community

is probably the ideal ground to attempt to replicate Smyth et al's study in an uncontaminated population that has no prior expectations of the intervention.

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Intensive care medicine comes of age

And offers a multidisciplinary model for future emerging specialities

Lord Nuffield is reputed to have said, "Anyone can give an anaesthetic and that is the problem." This could equally well have been said of intensive care medicine over the past 30 years—a specialty without a home and until recently without a recognised training in the United Kingdom. This summer, however, intensive care medicine was recognised in both the UK and Europe under the European specialist medical qualification regulations. Other countries have established training programmes in intensive care medicine, but the UK's is unique in that a multidisciplinary group planned the training for a multidisciplinary specialty. The establishment of the specialty thus holds lessons for other emerging multidisciplinary specialties—and it may have wider benefits for the parent specialties.

The basis of intensive care medicine is wide, incorporating skills from many disciplines, and several specialties have always had an interest in it. More than 18 countries have established training programmes in intensive care medicine, and this diversity of background has led to there being almost as many different approaches to training as there are programmes. In Spain intensive care medicine is based largely on acute medicine; in the United States at least four specialties have individual training programmes with no single core curriculum; and in six countries the training is only available through the specialty of anaesthesia.¹ Even in Australia, which has had a clearly defined programme since 1976, there are still two main pathways for training, through either medicine or anaesthesia. These are significantly different in content, although there are major efforts to unify the approach.

In the UK the specialty has been a long time coming, but it has been developed by multidisciplinary collaboration, and the result is that it provides from the outset a final common pathway. This is no mean feat since it has evolved through the endeavours of an intercollegiate board representing no fewer than six royal

colleges as well as other interested groups such as the Intensive Care Society. The certificate of completion of specialist training is achieved through dual accreditation. It requires a certificate of completion in a base specialty as well as completion of advanced training and another certificate of completion in intensive care medicine. The base specialties include anaesthesia, medicine, and surgery. At present there is an examination open to all intensive care medicine trainees, which is voluntary. This in itself is an interesting initiative for a new specialty. The diploma provides substantive evidence of having undertaken a training programme, and, as with other qualifications, it will probably in time achieve currency in the job market both in the UK and overseas. The examination is also unusual in that it tests breadth and depth of experience and the ability to critically appraise current trends rather than the ability to remember large bodies of knowledge.

Recognition for intensive care medicine not only confirms its transition from amateur to professional status but also lays the foundations for proper development of the specialty. But the benefits are even more far reaching. Training in intensive care medicine should influence all its base specialties. The plaintive cries from some specialties that "our trainees don't look after the sick patients anymore" are now potentially answerable since one role of the new specialty will be to facilitate training in the management of the critically ill. The long term effect may therefore be improved patient care in ordinary wards, a problem highlighted recently.²

Not surprisingly, countries where intensive care medicine has grown from a single specialty are now making serious efforts to produce a final common pathway. The UK example shows that it is possible to plan that pathway as multidisciplinary from the outset and that intercollegiate cooperation is essential in designing and delivering a quality training structure. There are other areas of medicine where new specialties are emerging from several different disciplines, and the