

INSTRUCTIONAL METHODS AND TECHNIQUES

Principles for Development of Multi-Disciplinary, Mental Health Learning Modules for Undergraduate, Postgraduate and Continuing Education

MICHAEL TARREN-SWEENEY & VAUGHAN CARR

Centre for Mental Health Studies, School of Medical Practice and Population Health, University of Newcastle, Australia

ABSTRACT **Background:** *People experiencing mental health problems have greater contact with health and welfare professionals in generalist settings than with specialist mental health services. Yet the capacity for generalist professionals to respond effectively to mental health problems is often compromised by inadequate mental health training. The Discipline of Psychiatry at the University of Newcastle developed a series of CD-Rom mental health learning modules for professionals working in non-mental health settings. The paper describes the principles that guided the development of a series and how those principles were applied.*

Development principles: *The following development principles were adopted. The series should: (i) have a multi-disciplinary application; (ii) be adaptable for presentation in multiple educational domains; (iii) be accessible for rural and remote practitioners; (iv) combine structured solutions-focused lessons (directed learning) with elements of problem-based learning; (v) include working problems that are authentic and relevant; and (vi) describe normal, abnormal and cross-cultural manifestations of problems.*

Application of principles: *The model guided the development of a short course series on professional engagement with people who have personality problems. The learning modules provide generic, multi-disciplinary training for a range of practitioners, including nurses, primary care physicians, social workers, psychologists and magistrates. The modules have been adapted for use in undergraduate medical education, postgraduate programs (in population health, nursing, psychology and drug and alcohol studies) and continuing education.*

Conclusion: *In contrast to traditional diagnostic-focussed psychiatry training, the model directly addresses the mental health training needs of health and welfare professionals using a multi-disciplinary, problem-based approach.*

Author for correspondence: Michael Tarren-Sweeney, BA.Hons (Psych), GradDipEpid (Psych Epid), Centre for Mental Health Studies, University of Newcastle, Callaghan, NSW, 2308, Australia. E-mail: Michael.TarrenSweeney@newcastle.edu.au

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Background

Professionals working in health and welfare settings are frequently confronted by mental health problems that are complex, challenging and poorly understood. Their capacity to respond effectively to these problems can be compromised by inadequate knowledge and lack of specific skills. At worst, their responses may contribute to or exacerbate a person's emotional or mental problems. Consider the scenario of a self-injuring patient who presents at a busy accident and emergency department. Hostility, impatience or lack of sensitivity by emergency staff may reinforce the patient's negative self-image. Conversely, an excessively sympathetic response by staff may elicit further self-injury if the patient is manipulative.

Health and welfare professionals are rarely trained to monitor their emotional or cognitive responses to such challenging events as unrestrained anger, child abuse, excessive suspicion or threats of violence. They can fail to recognize the presence of mental health problems or are unaware of avenues for referral. In spite of this, people with mental health problems have much greater contact with professionals working in welfare settings and in primary care and other generalist health settings than they do with mental health service providers. It is in response to this need that the University of Newcastle's Discipline of Psychiatry developed a series of multi-disciplinary mental health learning modules, titled "Psychological Solutions for Health and Welfare Professionals". This paper describes the principles that guided the development of the series, the application of those principles, as well as some information about design, evaluation and cost.

Demand for Mental Health Education

The demand for multi-disciplinary mental health learning modules was identified both formally and informally. A former dean of the University medical school requested that the Discipline of Psychiatry develop mental health courses for undergraduate health programs. This reflected the school's strategic goal to extend its provision of multi-disciplinary education. A second impetus came from the establishment in 2001 of the Centre for Rural and Remote Mental Health (CRRMH) in the regional city of Orange, as an arm of our academic psychiatry department. Funded by the New South Wales Department of Health, the CRRMH has a primary involvement in mental health education for health and welfare professionals in rural and remote communities. The need for increased

mental health training in primary care settings was identified by the Commonwealth Government, followed by the introduction of a mental health training scheme for primary care physicians (Australian Divisions of General Practice, 2002).

It was initially suggested that we develop multi-disciplinary courses on common psychiatric presentations, such as depression and anxiety. However, our experience with non-specialist services (including primary care, general medical, and child and family welfare services) suggests that health and welfare professionals have greatest difficulty in engaging with people with personality disturbances. Similar perceptions were communicated by CRRMH education providers through their contacts with rural practitioners. Yet in spite of this, we found almost no educational materials on how to manage and respond to severe personality problems, aside from specialist treatment protocols. It is paradoxical that the most challenging clients are also the least understood. Furthermore, our review of existing mental health training suggests it is narrowly geared towards the needs of mental health specialists (specifically psychiatrists, mental health nurses, and clinical psychologists), and that it is diagnostically-focussed. Existing mental health education is poorly matched to the training needs of generalist professionals.

A number of potential topics were considered for inclusion in the first series. The demand for individual topics was not formally surveyed. However, colleagues were consulted widely, including those specializing in the treatment of personality disorders and those working in generalist settings. Our own experiences in such settings also guided the selection of topics. A short list of topics was considered in terms of the availability of evidence-based content. This first Psychological Solutions series contains the following titles: Self-injury; the Aggressive Person; the Difficult Personality; Suspicion Beyond Reason; and Eating Problems.

Development Principles

Multi-Disciplinary Approach

The first principle adopted was that learning modules should have educational relevance for a broad range of professions and services. Much of the knowledge and skills that professionals require to work effectively with people with mental disorders is generic and can be disseminated without reference to one's profession.

Multiple Educational Domains

The modules were also designed for use in multiple educational domains. This principle reflects the view that there is a need for mental health training in university degree programs, as well as in the professional workforce.

Access for Professionals in Rural and Remote Areas

Australia is a vast country, with its population (and education providers) based mainly on the southern and eastern coastal fringe. Health and welfare professionals working in rural and remote regions do not enjoy equitable access to continuing mental health education. They and their clients also have poor access to specialist mental health services. Hence it can be argued that such professionals require training that increases their competence and promotes multi-skilling and self-reliance. We adopted the principle that mental health learning modules should be developed in a format that maximises accessibility for rural and remote practitioners.

Solutions-Focused, Problem-Based Learning

Traditional psychiatry training has a diagnostic focus. This approach has limited utility when applied to mental health training for the broader health and welfare fraternity. It is our view that health and welfare professionals require mental health training that is problem-focussed and which increases the effectiveness of their engagement with people with mental disorders. A recent review of the efficacy of various educational models supported the use of both directed learning and problem-based learning (PBL) in psychiatry training (McGuckin & Burke, 2002).

Extend the Immediacy and Relevance of Working Problems

People with personality problems often have complex and ambiguous presentations. Professionals are likely to engage more effectively with such people if they can anticipate and respond appropriately to problems that are ill-defined. Unfortunately, diagnostic-focused training has tended to give a somewhat false impression that people's lives and problems can be described precisely. Hence we believe there is an imperative for developing working problems and associated scenarios that are authentic (i.e. are "true-to-life") and which reflect the real-world complexity of people's lives and problems.

Normal, Abnormal and Cross-Cultural Manifestations of "Problems"

The final development principle addresses the content of generic mental health training. We suggest such training should not examine problems exclusively in terms of morbidity. While some mental disorders conform well to a disease model (e.g. schizophrenia), others are somewhat arbitrarily distinguished from normal states. Problems that define mental disorders, such as symptoms and maladaptive personality traits, exist on a continuum, and are manifested by people with and without mental disorders, as well as in culture-specific ways. Furthermore, emotions that are a normal part of life (e.g. anger, anxiety and sadness) are clinically significant for some people. A little information can be dangerous. Without having some understanding of normal, abnormal and cross-cultural manifestations of behaviour, professionals are at risk of "pathologiz-

ing” their clients’ presentations, particularly when those clients are challenging or confronting.

Application of Principles

Multi-Disciplinary Approach

The first series on personality problems was targeted to a broad range of health and welfare professionals, including nurses, primary care physicians, social workers, various medical specialties, psychologists and magistrates. Accreditation of the modules as continuing education short courses is being sought from various professional colleges. A semester-length postgraduate course has been constructed from the first series of learning modules, which follows a personality disorders theme. The course will be offered from 2004 as an elective in postgraduate programs in Nursing, Psychology, Population Health and Drug and Alcohol studies.

Multiple Educational Domains

The modules are developed for flexible delivery in two ways. Firstly, each is constructed within a series that follows a common theme and has common educational goals. This allows modules to either be offered as discrete, standalone, continuing education short courses or to be combined in semester-length courses. Second, in order to match the learning modules to varying levels of prior knowledge, content is introduced at different levels of complexity (starting with an elementary introduction to the topic and finishing with best-evidence strategies for professional response). Research papers and reviews are included as optional reading.

To date, we have been able to offer the modules as continuing education short courses, to combine several modules into a semester length multi-disciplinary postgraduate elective and to include modules as short-course components within a Health Equity Selective for third year medical students.

Access for Professionals in Rural and Remote Areas

A distance learning format was thought to provide the best access to mental health training for geographically-isolated professionals. Two computer-based technologies were considered for delivery of modules by distance learning, namely the internet and CD-Rom. The principal advantage of delivery via the internet is that learning materials can be readily revised and updated. CD-Rom is unable to do this, but it offers the potential for instant delivery of high quality media. To date, fast internet connection remains elusive or unaffordable for most Australians, and this is particularly so for people residing in rural and remote areas (Internet Society of Australia, 2002). Furthermore, dial-up internet connections in rural and remote Australia are often unreliable (Regional Telecommunications Inquiry,

2002) and are generally too slow to facilitate online learning. CD-Rom has been the preferred technology for delivery of postgraduate population health courses within our medical school and for delivery of postgraduate psychiatry courses by the NSW Institute of Psychiatry (Burke, 2001). Presently then, CD-Rom appears to provide the best medium for distance learning in Australia.

Solutions-Focused, Problem-Based Learning

The psychiatry training provided to undergraduate students in the University's medical school includes directive learning via fixed resource sessions and acquisition of knowledge in PBL sessions (Carr *et al.*, 1996). While there are precedents for use of PBL in distance learning (Engel *et al.*, 1992; Price, 2000), the method necessarily varies from its traditional application in our medical program. PBL is typically conducted in a structured way in small group settings (David *et al.*, 1999; Wood, 2003). Though some of this procedure can be applied in a distance learning module (e.g. the development of a working problem; the use of triggers), it implies a departure from small group process (unless remote study groups of distance learners were organized). There have, however, been several examples of PBL conducted in "virtual" small groups for distance learners, both asynchronous and synchronous (Giani & Martone, 1998; Jancis, 2003). We decided to construct learning modules that couple structured solutions-focussed lessons (directed learning) with carefully constructed video dramatized working problems (problem-based learning).

An additional impediment to continuing education students' participation in PBL is their restricted access to information. While students enrolled in distance learning degree programs have access to online journals, this is presently not so for non-award continuing education students. The practitioner, who resides in a rural or remote location, typically has limited access to academic content. We partially addressed this problem by including key readings on the CD-Rom. However, a longer term goal is to negotiate access to online journals for continuing education students.

Extend the Immediacy and Relevance of Working Problems

Constructing an "authentic" scenario is somewhat dependent on the clinical and life experiences of the authors. To this extent, the scenarios developed for the present series reflect events, experiences and people that the authors encounter in clinical and welfare settings. However, the authenticity and educational merit of each scenario were also reviewed by content experts and other professionals at various stages during development. The quest for authenticity extended beyond the written word. The scenarios were dramatised on video by professional actors who had auditioned for the roles and whose performances were guided by the first author and a professional director (Figure 1).



Figure 1. Stills from video-dramatised clinical scenarios (stills are of professional actors).

Learning Module Design

The *Psychological Solutions* learning modules were developed for delivery on CD-ROM using Macromedia Authorware. A design template forms the basis of each module. While there are some minor variations in the use of different educational features, the modules essentially only differ in terms of content. Considerable effort was devoted to the design of an interface that would facilitate a sustained intellectual focus. It is designed to be engaging, without causing distraction, frustration or fatigue. It was considered important that the student should be able to move easily and quickly through the different forms of content (text, video, interactive task, etc). Most content is text-based and is presented either directly in the workspace or in PDF documents that open in the same space. Students view the video segments as high quality QuickTime movies (i.e. akin to DVD quality), again inside the workspace. The student is able to maintain an academic dialogue with their academic supervisor by clicking on an email link in the workspace.

Once a student enrolls in a short or semester-length course, they commence an educational dialogue and complete the assessment tasks. We were conscious that professionals may perceive that they are buying a CD-Rom information

resource rather than enrolling in an educational short course. Hence we have emphasized that the CD-Rom is the medium for teaching a formal course rather than a product. For this reason, we have avoided disseminating the series via an educational publisher or private CME provider.

Evaluation

Presently, each module is reviewed by content experts on two occasions. The scenario and narrative components of the working problems are reviewed prior to filming the video segments. A second content review is conducted upon completion of a draft module. Student evaluation is also sought. Students are requested to complete an evaluation survey that is attached at the end of each course's electronic workbook. Student evaluation of the university courses that include the modules (postgraduate and undergraduate) will be conducted according to standard university procedure. It is envisaged that revised CD-Rom modules will be released every 2 to 3 years with revisions reflecting student feedback. Development of new modules will be partly guided by the evaluation of existing courses. The availability of broadband internet access in rural and remote areas will determine whether future modules will be developed for the internet or on CD-Rom / DVD-Rom.

Development Costs

Development of quality learning modules involves considerable investment in time and money. It took several months to design, develop and test a common Authorware template for the present series. The template is a valuable teaching resource, as any number of courses can be built on to it. The largest cost is the time spent researching and writing the courses. We spent an equivalent of 4 months of full-time academic work compiling each module. As anticipated, professional video production is also expensive. However, we achieved some savings by filming all of the scenarios for the series in a single production schedule. By far the cheapest expenditure was that required for physical production of the CD-Roms. This represented a fairly small proportion of our overall costs. Marketing costs to date have been minimal, though they are likely to increase once we have established a formal infrastructure for enrolling continuing education courses.

Conclusion

This paper describes a model for development of mental health learning modules, which has a multi-disciplinary problem-based focus. The model

guided the development of a short course series on professional engagement with people with personality problems. Modules were designed for flexible delivery to undergraduate, postgraduate and continuing education students via distance learning. The educational merit of the series, perceived or otherwise, has yet to be evaluated. However, our goal to introduce multi-disciplinary learning modules in multiple educational domains has been achieved. With the exception of rural-based professionals, the mental health training needs of Australian health and welfare professionals are unlikely to differ greatly from their colleagues elsewhere. Hence, we think the model is appropriate for development of generic mental health training elsewhere in the world, especially where access to education is limited by geographic isolation.

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