Best evidence medical education and psychiatry in Ireland: a three step framework for change

Allys Guerandel, Seamus MacSuibhne, Kevin Malone

Ir J Psych Med 2008; 25(4): 120-122

Education and training in psychiatry in Ireland is at a crucial and challenging time. It is a time of change in national and international approaches to medical education. New models in the delivery of care for people with mental illness are evolving, and are being influenced by societal and cultural changes. The general public no longer accept medical authority unquestioningly, and the medical profession is increasingly aware that clinical decision-making should be grounded in best available evidence. Undergraduate teaching in psychiatry is embracing the concept of evidence-based medicine in the delivery of psychiatric care. Has the parallel concept of best evidence medical education (BEME) been embraced at the postgraduate level?

The Irish universities, following the trend of what is happening internationally, are revisiting their teaching and learning approaches and modifying the undergraduate psychiatry programs accordingly. The Irish Psychiatric Training Committee (IPTC) is in the process of reforming the educational strategies for psychiatrists in training, while the College of Psychiatry in Ireland is establishing itself. Here lies an opportunity to embrace and apply the concept of BEME in Irish psychiatry.

BEME is the conscientious, explicit and judicious use of current best evidence in making decisions about individual educational programs. Harden and Lilly² define it as the implementation, by teachers in their practice, of methods and approaches to education-based on the best evidence available.

The practice of BEME means integrating individual educational expertise with the best available external (ie. literature) and/or internal (ie. programme evaluation) medical education evidence from systematic research. The importance of the concept has been recognised internationally.

There is a clear conceptual parallel to evidence-based medical (EBM) practice, and just as EBM has the Cochrane

*Allys Guerandel, Consultant Psychiatrist, Department of Psychiatry and Mental Health Research, St Vincent's University Hospital/University College Dublin, Elm Park, Dublin 4, Ireland. Email: a.guerandel@st-vincents.ie.

Seamus MacSuibhne, Special Lecturer and Senior Registrar, Department of Psychiatry and Mental Health Research, St Vincents University Hospital/University College Dublin, Elm Park, Dublin 4.

Kevin Malone, Professor, Department of Psychiatry and Mental Health Research, St Vincent's University Hospital/University College Dublin, Elm Park, Dublin 4, Ireland.

*Correspondence

SUBMITTED: MAY 13, 2008. ACCEPTED: OCTOBER 7, 2008.

Collaboration, the Campbell Collaboration³ collates and systematically reviews best practice in medical education. There are many perceptual biases that impede the inclusion of BEME. Some may regard teaching as an art and not a science and therefore searching for evidence is not appropriate. Perhaps 'proper' scientifically conducted studies are not available, and the process of medical education may be too complex with too many confounding factors. There is also a suspicion of the educational jargon in which much medical education research is couched. Peterson explores and counters these myths.⁴

Three steps to the integration and implementation of BEME into Irish psychiatry

1. Awareness and access

There is an urgent need to raise the awareness of BEME in academic and clinical staff in psychiatry. It is critical to move from opinion-based to evidence-based teaching approaches, if Irish psychiatry is to keep in line with progress in medical education at international level.

Opinion-based decision-making has dominated the debate on medical education and training thus far. Much of the discussion in educational planning groups involves debates about assumptions about what quality in medical education is, and differing traditions of teaching. Norman highlights the need to encourage practitioners to assess current evidence and to guide their teaching and curricular decisions.⁵

In parallel with the national universities, bodies such as the IPTC and College of Psychiatry in Ireland will need to support clinical teachers and tutors in accessing information from BEME projects such as the medical education division of the Campbell collaboration, and the Cochrane Collaboration's Effective Practice and Organisation of Care Group. Facilitating access to medical educational literature will help develop BEME, in the same way as efficient access and retrievability of information through Cochrane Collaboration and similar resources has helped the growth of Evidence Based Medicine. A small but specific example is encouraging institutions to allow access to web information, which can be a problem in settings where web access is restricted.

Equally, the relationships between teaching clinicians, clinicians involved in various aspects of curriculum design and the experts in medical education in national universities needs to be fostered and developed.

Access to medical education expertise is crucial. Simply having access to the evidence is not enough, psychiatrists involved in teaching need to know how to apply this evidence to their teaching situation. Another specific example in

Ireland would be providing accessible and relevant training in Teaching and Learning for clinicians. For example, medical educationalists are familiar with the QUESTS (Quality, Utility, Extent, Strength, Target and Setting of interventions) criteria, which have been developed for use by teachers in the health-care professions for evaluating the reliability and relevance of evidence to their own teaching situation, but clinicians in general may not be. Hart and Harden describe the application of these criteria in practice.⁷

Familiarisation of relevant clinical staff with this and similar strategies in medical education is necessary, if Irish psychiatry is to embrace BEME. This reflects the need for those engaged in postgraduate training to work alongside medical educationalists.

2. Institutional support for BEME practice as an integral part of medical teaching and training

Teaching skills are not simply lecturing or examining but include approaching these tasks on the best evidence available, and making decisions about this report. An awareness of the need for self-assessment and continuing professional development is paramount to developing the culture of BEME. Individuals engaged in teaching postgraduate psychiatry should be encouraged to develop lifelong learning strategies. Protected time and opportunities for development should be made available to them.

In this regard, the directors of the various training schemes, the IPTC and the College of Psychiatry of Ireland have an essential role in providing support to individuals that engage in BEME. Changes in medical training are easier to 'sell' to clinicians if the evidence base for changes is presented along with the change itself. For example, problem-based curricula have been implemented in Northern European countries for some time and an evidence base for their effectiveness has been recognised.⁸

An evidence based ethos in medical education at postgraduate level makes accountability and quality assurance easier. This in itself should be an incentive for directors of the various postgraduate psychiatric training schemes to facilitate the integration of BEME in Irish psychiatry.

Furthermore, efforts to promote evidence-based practice must include fidelity measures and self-correcting feedback mechanisms. BEME practices should be emphasised as a required feature of a 'good teacher'. Practice behaviours may be influenced if this is a criterion for promotion and appointment of staff and reflected in reward systems.

3. Improving research in medical education

The need for formal evidence-based medical education has only recently been acknowledged within Irish psychiatry. Medical education in general is a developing field in Ireland, hence the recent changes in undergraduate curricula in Irish medical schools.

Changes in undergraduate teaching obviously involve collaboration between academics in teaching and learning based in universities and medical teachers. At postgraduate level, however, this collaboration is less readily available, and yet would be of great benefit to curriculum development.

In University College Dublin/St Vincent's University Hospital we have set up a senior registrar special interest group in medical education, with direct input from the Centre for

Teaching and Learning in UCD.

A move to evidence-based teaching will encourage more and better research in medical education. It is absolutely essential that all changes to postgraduate training are based on recognised principles of adult learning. Adult learning and teaching (andragogy) differs significantly from that of children (pedagogy), and similarly postgraduate workplace-based training differs from undergraduate university-based training. Evaluation of any change is necessary to ensure effectiveness.

Resources for training in and implementing educational research are essential. This research can take place at hospital, departmental and community level. It should also be integrated with the larger remit of medical education to seek further validation for educational interventions.

Collaboration between university teaching and learning departments, the training schemes in psychiatry, the IPTC and the College of Psychiatry of Ireland in furthering this type of research would be a major step towards the integration of BEME and Irish psychiatry, and towards Irish psychiatry putting its mark in this field at international level.

Developing international links, and participating in collaborations such as Campbell, would strengthen medical education research and further improve the quality of BEME-focused research and practice.¹⁰

Weimer¹¹ writes that "done correctly, the evaluation of instruction is more sophisticated, objective, and accurate than our assessment of research productivity". Research in medical education is feasible, possible, and of direct benefit to teaching standards, clinical practice, and patient care.

Opportunity

Menin and McGrew reflect that while professional standards and guidelines are well established for patient care and research, teaching methods and practices are most often guided by personal beliefs and opinions and rarely by the standards of scholarly inquiry, evidence and professionalism prevalent in research and patient care.¹²

At this opportune time of change in the teaching of psychiatry at postgraduate level, Irish psychiatrists as a group need to be made aware of changes in medical education and recognise the need for improving educational approaches. Clinicians involved in teaching need to be informed, ready and willing to embrace BEME.

It is recognised that medical education and training focused mainly on knowledge alone does not strongly influence practice behaviours, but needs to focus on skills and attitudes also. To embrace and develop this aspect of training, changes are necessary.

With the new College of Psychiatry of Ireland adopting 'learning' as part of their motto, and with two out of the three pillars of their structure being continuing professional development and postgraduate training, teaching and training becomes central to psychiatry in Ireland.

These bodies responsible for post-graduate psychiatry teaching will need to scrutinise the evidence as to what should be changed; what new approach and methods should be adopted and how they can be introduced more effectively.

Individual psychiatrists themselves require support to inform themselves, and to recognise the need to develop medical education skills, to be able to embrace BEME. Are we ready for this challenge in psychiatric education?

Declaration of interest: None

References

- 1. Mac Suibhne S, Guerandel A, Malone K. 21st century psychiatry teaching for 21st century doctors: how modern teaching methods may improve patient care. Ir Med J 2007 Jun; 100(6): 484-6.
- 2007 Jun; 100(6): 484-6. 2. Harden RM, Lilley PM. Best evidence medical education: the simple truth. Medical Teacher, 22; 2; 2000
- 3. Accessible at campbell.gse.upenn.edu/index.html
- 4. Peterson S. Time for evidence based medical education. BMJ 1999; 318: 1223-
- 1224 5. Norman G. Evidence and evaluation. Advances in Health Sciences Education 2000; 5(1): 1-2

- Harden RM, Grant J, Buckley G, Hart IR. BEME Guide No 1: Best evidence medical education. Medical Teacher 1999; 21(6): 553-562.
- 7. Hart I, Harden RM. Best evidence medical education (BEME): A plan for action. Medical Teacher 2000; 22(2): 131-135
- 8. Dolmans BHJM, Snellen-Balendong H, Wolfhagen IHAP, Van der Vleuten CPM. Seven principles of effective case design for a problem-based curriculum. Medical Teacher 1997; 19: 185-9
- Knowles M. The Modern Practice of Adult Education; Andragogy versus Pedagogy. The Association Press: New York, 1970
- Levinson-Rose J, Menges R. Improving College Teaching: A Critical Review of Research. Rev Ed Res 1981; 51(3): 403-434
- 11. Weimer M. "Exploring the Implications: From Research to Practice" in "Effective Teaching in Higher Education: Research and Practice. Eds: Smart RP, Smart JC. Agathon, 1997
- 12. Menin S, McGrew MC. Scholarship in teaching and best evidence medical education: synergy for teaching and learning. Medical Teacher 2000; 22(5): 468-471

Guidelines for Authors

Criteria

The Journal's aim is to publish original scientific contributions in psychiatry, psychological medicine (including surgery and obstetrics), and related basic sciences (neurosciences, biological, psychological, and social sciences). Its scope includes any subspecialties of the above, eg. behavioural pharmacology, biological psychiatry, child and adolescent psychiatry, mental handicap, forensic psychiatry, psychotherapies, psychiatry of old age, epidemiology, rehabilitation, psychometrics, substance misuse, sexual studies, linguistics, and the history, philosophy and economics of psychiatry.

The Journal will accept original papers, clinical case reports, brief research reports, review articles, perspective articles, historical papers, editorials, practice reviews (medical audits), letters to the editor and book reviews. Review articles are usually invited. Original data papers receive top priority for speedy publication. Manuscripts should be prepared in accordance with the guidelines of the International Committee of Medical Journal Editors.¹ All case reports must have the patient's consent before an article can be published.

The page following the title page should carry an Abstract followed by a list of three to 10 Key Words or short phrases drawn, if possible, from the medical subject headings (MeSH) list of Index Medicus.

The Title, Key Words and Abstract should be chosen to help future literature searchers. The Abstract, up to 150 words for an unstructured or 250 words for the structured abstract, should state specifically the main purposes, procedures, findings and conclusions of the study, emphasising what is new or important. For original papers, brief research reports, medical audits and review articles, a structured abstract is required, using the headings Objectives, Methods, Results (Findings for review articles) and Conclusions.

Under the Abstract heading of Method, include wherever applicable the study design, setting, patients/participants (selection criteria, description), interventions, observational and analytical methods and main outcome measures. (For review articles specify the methods of literature search and selection). Under the Abstract heading of Results, give the most important specific data together with their statistical significance.

References

Timely references should highlight the study's relevance to current research or clinical practice. References to journal articles ¹⁻³ and to books ⁴⁻⁶ illustrate the 'Vancouver' style,' ie. number references in the order they appear in the text, do not alphabetise. Journal titles should be abbreviated as in *Index Medicus*. The Uniform requirements for manuscripts submitted to biomedical journals has two paragraphs on statistical guidelines. These have been explained by Bailar and Mosteller.³

Tables and figures

Figures and graphs should be clear and of good quality, and should be accompanied by relevant data to facilitate redrawing where necessary. All materials sent for publication should be accompanied by a covering letter signed by all the authors, and such material will become the property of the Journal until, and if, publication is refused. Material so referred should not be sent elsewhere for publication. One copy of the manuscript should be retained by the author(s) for reference, and four copies of the manuscript and covering letter, one of these being the original, should be sent to:

Electronic submissions

Manuscripts may be sent via email to the following address: andrea@medmedia.ie Full postal address, telephone and fax numbers should be included. Where possible tables, figures and text should be included in the same document. There is no need to also submit by post or fax.

Anonymous peer-review

All contributions are peer-reviewed by three anonymous assessors and, where relevant, by the Statistical Editor whom authors may contact for help. Assessments will be sent to the corresponding author usually within six weeks. Where revisions are sought prior to publication, authors are advised to return their revision (in quadruplicate if posting), incorporating any suggestions which they agree would improve their paper. The covering letter should respond to each comment, numbered, of each assessor, indicating where the revision deals with it, or why the authors disagree or cannot incorporate it.

Each assessor will then receive the authors' revision, covering letter and the previous comments of the other assessors. After the assessors' further comments have been received, the senior editors will make the final decision, including priority and time of publication, and the right to style and if necessary shorten material for publication.

Previous publication

Manuscripts are considered with the understanding that they have not been published previously, either in print or electronic format

Declaration of Interest

In the interest of accountability all financial and material support for the research and the work should be clearly stated. Authors of original data must take responsibility for the integrity of the data and accuracy of the data analysis. All authors must have full access to all the data in the study.

Acknowledgements

Authors should obtain permission from the individuals named in Acknowledgments, since readers may infer endorsement.

References

- International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. BMJ 1991; 302: 338-41.
- Haynes RB, Mulrow CD, Huth EJ, Altman DG, Gardner MJ. More information abstracts revisited. Ann Intern Med 1990; 113: 69-76.
- Bailar JC, Mosteller F. Guidelines for statistical reporting in articles for medical journals. Ann Intern Med 1988 Feb; 108(2): 266-73.
- Daly LE, Bourke GJ, McGilvray J. Interpretation and uses of medical statistics. 4th ed. Oxford: Blackwell Scientific Publications, 1991: 428-31
- Gardner MJ, Altman DG, editors. Statistics with confidence confidence intervals and statistical guidelines. London: British Medical Journal, 1989: 103-5. [Note: British Medical Journal here is the publisher of a book, not the journal BMJ.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. Washington DC: American Psychiatric Association, 1987.
- DeAngelis CD, Fontanarosa PB, Flanagin A. Reporting financial conflicts of interest and relationships between investigators and research sponsors. JAMA 2001; 286: 89-91.
- Davidoff F, DeAngelis CD, Drazen JM, et al. Sponsorship, authorship, and accountability. JAMA. 2001; 286: 1232-4.