How we implemented an integrated professionalism curriculum to 2nd year medical students at the National University of Ireland Galway Medical School, with examples from students' final output

ANTONIA MCNAIR, CONOR MORAN, ERINN MCGRATH, SYED NAQVI, CLAIRE CONNOLLY, VERNA MCKENNA & THOMAS KROPMANS

National University of Ireland Galway, Ireland

Abstract

Since the introduction of professionalism in medical curricula worldwide, little evidence has been published to exemplify good educational practice. The Medical school at the National University of Ireland Galway teaches professionalism in an interdisciplinary manner, integrating the learning objectives of health informatics, understanding health & illness in society, medical law and ethics. Students work in small groups on clinical cases. Enquiry-based learning is used as the teaching method following a few introductory lectures on specific objectives. Students present their work in the format of a scientific essay. The latter is assessed by a board of reviewers. The purpose of this article is to demonstrate evidence of excellent professional output and illustrate the benefits to a fully integrated professionalism curriculum.

Introduction

Professionalism has been defined as "the aspiration to and wise application of the principles of excellence, humanism, accountability, and altruism that rest upon a foundation of clinical competence, communication skills, and ethical, and legal understanding" (Arnold & Stern 2006). Professionalism was introduced at National University of Ireland Galway (NUIG) in 2006 using international standards, (Thistlewaite 2005; Lachman & Pawlina 2006; Christianson et al. 2007); however, there is still little consensus or uniformity regarding the successful application of a cohesive professionalism curriculum. This is in part due to the Buttimer (2003) and Fortrell (2003) model that was initially implemented. It failed to specify clear learning objectives, teaching methods or methods of assessment. This was remedied somewhat by the publication of nine necessary behaviors for physicians by the American Medical Colleges (Swick 2000). Internationally there is ongoing research and discussions on how to teach and assess professionalism effectively (Stein 1993; Swick 2000; Talbott 2005; Van Mook et al. 2009). This article hopes to illuminate some of the benefits of applying an integrated, multidisciplinary approach to professionalism curricula.

In 2nd year semester 2 (Professionalism 2.2), the taught content of the professionalism module is delivered primarily during 2.2 while 2.1 (year 2 semester 1) focuses on clinical skills. Special Study Modules are also incorporated throughout 2.2 to enhance the students' learning experience. Each semester awards 30 ECTS credits (European Credit Transfer System; European Commission 2004), where 1 ECTS credit is equal to 25 h of notional learning time; 6 ECTS credits are available per semester to deliver 'Professionalism'.

Practice points

- An EBL focus for professionalism curriculum
- Students self-directed learning to achieve goals and encourage personal interest
- Incorporated ethical, legal, sociological, psychological, and technological aspects of health, illness, and disease
- Integrated learning objectives of health informatics; understanding health & illness; medical law & ethics by 2nd year students

What we did

During semester 2.2, the students are challenged to produce a scientific essay, to publication standard, based upon scenarios designed to incorporate the ethical, legal, sociological, psychological, and technological aspects of health, illness and disease. Apart from a few introduction lectures on subject areas, enquiry-based self-directed learning (EBL) is the primary teaching method as it promotes personal research and allows the students to become more familiar with the multifarious resources at their disposal, such as e-journals and databases (Long et al. 1999; Price 2001; Thomas et al. 2007). Students have contact with the faculty fortnightly in the form of a

Correspondence: Thomas Kropmans, National University of Ireland Galway, College of Medicine, Nursing & Health Sciences, Comerford Medical Education Centre Room 204, University Road, Galway, Ireland. Tel: 91 353 495478; fax: 91 353 495512; email: thomas.kropmans@nuigalway.ie

designated tutor for guidance but the research choice is primarily the students'.

One such case, undertaken by the group of students listed, was that of an 18-year-old male and the difficulties surrounding his recent diagnoses of Antisocial Personality Disorder (ASPD). Their final paper demonstrates, superlatively, the integrated approach to professionalism taken at NUIG. Examples are reproduced here in order to highlight the value of this educational method.

The students opened with background statistics and information on ASPD, applying both their skills in informatics as well as their knowledge of current medical research to emphasize the relevance of their article and to give context to their findings; "It is estimated that 9.1% of the American population suffer from a personality disorder as described in the DMV-IV (Bender 2004) and that 1% of all personality disorder patients have ASPD (Lenzenweger et al. 2007)."

The students were also encouraged to include a discussion of the case notes outlining their views on the different issues it suggested to them. In this case, they though it pertinent to research and discuss the areas of autonomy, consent, and the ethics involved in using functional Magnetic Resonance Imaging as a diagnostic tool. This more rounded approach to patient care, where the emphasis is not only on medical expertise but also the human impact of medical care, clearly demonstrates the effectiveness of an integrated approach to professionalism where they are given equal standing. "As a group we were also concerned about the myriad of aspects of autonomy and consent in this case . . . Ethical oversight may also be an issue as functional Magnetic Resonance Imaging is still a largely experimental tool and using it in diagnosis, as is described in this case, may be highly controversial (Paris 2007, 2008)."

Health and illness

"Health and Illness" was an important strand of the integrated curriculum which the students applied in their essay. They displayed their understanding of the importance and application of the biopsychosocial model of illness throughout but particularly in their treatment of 'labeling' and the psychological effect a diagnosis of ASPD may have on a young man. This interest in patient quality of life and subsequent exploration of the literature allowed the students to assess different measurement methods and make more informed decisions both in their essay and in their future careers. "It seemed prudent to learn more about the different methods for evaluating quality of life (QoL) as this is an integral facet of the appraisal of mentally ill patients . . . there is a risk that [the Global Assessment of Functioning] may overlook the biopsychosocial model of illness and the patients concerns however the GAF is more useful in a research setting as it allows standardization of the results." They also noted that "At present there is a distinct gap in ordinary people's knowledge of personality disorders leading to negative consequences of diagnosis and 'labeling' such as social exclusion and stigma . . . It is possible that many of the difficulties they face could be alleviated or even eliminated by greater recognition of mental illness."

The students were also encouraged to develop critical appraisal skills in relation to published scientific work. This included determining the differences between types of articles as well as within articles for scientific credibility. This group of students felt it worthwhile to assess 12 articles related to their case, ranging in scientific integrity from opinion pieces to meta-analysed review articles. Their treatment of an article detailing original research by Wright et al. (2007) illustrated their knowledge of experimental design. The article was praised for its use of random selection of participants within eligibility, from both rural and urban areas while using a standard questionnaire with open-ended questions to ensure objectivity. It was criticized, however, for failing to be controlled, blinded or determining the level of education of participants. The critical thinking skills developed throughout this assignment could only be taught via EBL as tradition classroom learning is insufficient.

What's next

It was felt by both faculty and students that compiling such an essay was the most effective way of tackling such a far reaching and multidisciplinary subject as professionalism. Students in both first and second years find these professionalism assignments particularly challenging which is in line with other findings (Ashby et al. 2006). This is not for the content, however, but mainly due to inexperience with an EBL technique (Broderick et al. 2010; Gallagher et al. 2010). Enquiry-based 'self directed' learning is introduced in Professionalism as a life-long learning strategy, encouraging students to follow up lines of enquiry that are personally interesting to them (Long et al. 1999). It also allows the students to concentrate their efforts on areas that they feel they are particularly weak while promoting social interaction and cohesion which can be difficult to achieve in a mass system (Price 2001).

Conclusion

Despite the initial difficulty with EBL, overall, the students felt that it was a positive experience. One student group wrote, "Overall we found as a group that evidence-based learning was a very active process and hugely benefited the final outcome of our research. With our group tutor's help and support, working as a team made the process more efficient while also permitting self learning. We feel that this year's process followed up and further improved what we had learned from the first year of 'Professionalism'. Although we understand that personal development is a lifelong process, EBL has guided us in the right direction to becoming health professionals with a holistic approach to patient care" (Gallagher et al. 2010).

Six of these different case studies, researched and compiled by 12 groups of 10 2nd year medical students, show that self-directed EBL with a multidisciplinary approach to patient care can give a more rounded medical education that seeks to treat the whole person. The skills developed during this project, for finding, assimilating and appraising large amounts of scientific knowledge, while maintaining a patient-centered outlook, are

invaluable to any medical professional and will stand these medical students in good stead in their future practice.

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Notes on contributors

ANTONIA MCNAIR was a 2nd year medical student when preparing the manuscript and a member of professionalism subgroup B3.

CONOR MORAN is a group member of Professionalism subgroup B3 preparing the content of the assignment in year 2.2.

ERINN McGRATH is a group member of Professionalism subgroup B3 preparing the content of the assignment in year 2.2.

SYED NAQVI is a group member of Professionalism subgroup B3, who prepared the content of the assignment in year 2.2.

CLAIRE CONNOLLY, former is a anesthesiologist, lecturer of Health promotion, and a group tutor of subgroup B3

VERNA MC KENNA is a lecturer of Health & Illness, and a group tutor of Professionalism 2.2.

THOMAS KROPMANS, is a senior lecturer in Medical Informatics & Medical Information due date designer/director of the Professionalism strand in years 1 and 2 of the School of Medicine, NUIG.

References

Arnold L, Stern D. (eds.) 2006. What is medical professionalism? Measuring medical professionalism. New York: Oxford University Press. pp 15–37.

Ashby J, Hubbert V, Cotrel-Gibbons L, Cox K, Digan J, Lewis K, Langmack G, Matiti M, McCormick D, Roberts L, et al. 2006. The enquiry-based learning experience: An evaluation project. Nurse Educational Practise 6: 22–30.

Bender E. 2004. Personality disorder prevalence surprises researchers. Psychiatric News - American Psychiatric Association 39: 12–40.

Broderick C, Chauhan N, Core A, Fahey L, Gurney, M. 2010. Informed consent in assisted reproduction. In assignment professionalism 2.2. Ireland: National University of Ireland Galway, School of Medicine.

Buttimer J. 2003. Preparing Ireland's doctors to meet the health needs of the 21st century, Report of the postgraduate medical education and training group. Medical Education and Training (MET) group.

Christianson CE, McBride RB, Vari RC, Olson L, Wilson HD. 2007. From traditional to patient-centered learning: Curriculum change as an intervention for changing institutional culture and promoting professionalism in undergraduate medical education. Academic Medicine 82: 1079–1088.

European Commission 2004. Education & Training European Credit Transfer and Accumulation System (ECTS) http://ec.europa.eu/education/lifelong-learning-policy/doc48_en.htm

Fottrell P. 2003. Medical education in Ireland: A new direction. Report of the working group on undergraduate medical education and training. Dublin: Higher Education Authority.

Gallagher O, Galvin B, Gubbins A, Kelly P, O'Callaghan M, Rushe C, Salim I. 2010. The Professor and the Pharmacy. In assignment professionalism 2.2. Ireland: National University of Ireland Galway, School of Medicine.

Lachman N, Pawlina W. 2006. Integrating professionalism in early medical education: The theory and application of reflective practice in the anatomy curriculum. Clinical Anatomy 19: 456–460.

Lenzenweger MF, Lane MC, Loranger AW, Kessler RC. 2007. DSM-IV personality disorders in the national comorbidity survey replication. Biological Psychiatry 62: 553–564.

Long G, Grandis S, Glasper E. 1999. Investing in practice: Enquiry and problem based learning. British Journal of Nursing 8: 1171–1174.

Paris J. 2007. An overview on gender, personality and mental health. Personality and Mental Health 1: 14–20.

Paris J. 2008. Treatment of Borderline Personality Disorder: A Guide to Evidence-Based Practice. New York: Guilford Press.

Price B. 2001. Enquiry-based learning: An introductory guide. Nursing Strand 15: 45–52.

Stein AA. 1993. The legal definition of professionalism in medicine. Archives of Pathology Laboratory Medicine 117: 120–121.

Swick HM. 2000. Toward a normative definition of medical professionalism. Academic Medicine 75: 612–616.

Talbott JA. 2005. Professionalsm in the health sciences: Lessons learned from its definition, evaluation, and teaching in a medical school. Journal of Veterinary Medicine Education 32:237–241.

Thistlewaite JE. 2005. Professionalism and medical education. Medical Teacher 27: 659.

Thomas JB, Clarke B, Pollard K, Miers M. 2007. Facilitating interprofessional enquiry-based learning: Dilemmas and strategies. Journal of Interprofessional Care 21:463–465.

Van Mook WN, Van Luijk SJ, O'Sullivan H, Wass V, Harm Zwaveling J, Schuwirth LW, Van Der Vleuten CP. 2009. The concepts of professionalism and professional behaviour: Conflicts in both definition and learning outcomes. European Journal of Internal Medicine 20:85–89.

Wright A, Jorm A, Harris M, McGorry P. 2007. What's in a name? Is accurate recognition and labelling of mental disorders by young people associated with better help-seeking and treatment preferences? Social Psychiatry & Psychiatric Epidemiology 42:244–250.