

Innovation in ethics and professionalism course: Early experience with portfolio-workbook

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Abstract

Objective: To analyse students' perception regarding the use of portfolio-workbook in ethics course.

Methods: This mixed method study was conducted at the King Abdulaziz University, Jeddah, Saudi Arabia, in 2014, and comprised fourth-year medical students. The "portfolio-workbook", developed on principles of cognitive load and guided learning theories, contained essential reading material. Learning sessions were also facilitated by teaching tools like role-plays, movie/video clips, vignettes, etc., followed by reflective writing exercises.

Feedback questionnaire with open- and closed-ended questions was used to collect data. Quantitative data was analysed for frequencies and percentages. Content analysis was conducted for the open-ended responses.

Results: Of the 20 participants, 10(50%) considered using portfolio-workbook as difficult initially. However, on completion of module 16(80%) found it easy. Moreover, 17(85%) appreciated it as a learning tool. Besides, 19(95%) students found teaching videos and 13(65%) found open discussions as effective learning tools. Portfolio-workbook as an assessment tool was preferred by 19(95%) students.

Conclusion: The use of portfolio-workbook in teaching ethics to undergraduates was found to be encouraging as it generated interest and interaction.

Keywords: Undergraduate, Medical ethics, Professionalism, Portfolio, Workbook. (JPMA 66: 1149; 2016)

Introduction

Medical ethics and professionalism (E&P) is being taught and practised since the days of Socrates and Plato, and it was an integral part of training of Muslim medical graduates in the Middle Ages.^{1,2} Today, it is considered a trait without which a doctor is considered incomplete.^{3,4} During the evolution of modern medical science, doctors gradually, though unintentionally, adopted an over-authoritative role and became the main focus in healthcare system. This naturally caused problems, more ethical than technical, and it was realised that patients should be the focus of all activities. Renewed efforts to teach ethics and professionalism geared up in 1990s and now it is being taught (formally or informally) in most under- and post-graduate medical programmes throughout the world.^{5,6} It is a prerequisite for accreditation of medical colleges and universities in many places.⁷ The goal of ethics teaching is to improve the quality of patient care by identifying and attempting to resolve ethical issues that arise in medical practice.⁸ It is a complex area that is challenging for students, as well as educators, and requires tailored educational approaches.⁹

However, despite its immense importance, there are still no evidence-based, recommended strategies for teaching ethics in order to achieve the outcomes of the course in most medical colleges of the world and the situation is equally worse in Saudi Arabia.^{10,11} Even now, lectures are the most commonly used method of teaching E&P courses, not only in developing countries but even in the West,^{12,13} with few places bringing innovation for improving the process.¹⁴ Therefore, one of the authors with background of ethics and medical education developed a Portfolio-Workbook (PWB) for E&P course, as a tool for teaching, learning and assessment for ethics in undergraduate medical education.

The PWB is developed on the principles of cognitive load and guided learning theories. It is a 40-page booklet containing reading material related to common topics in bioethics, exercises using pictures and vignettes for students to reflect on what they have learned and collect evidence from their formal or informal clinical experiences. The PWB is used in collaboration with other teaching tools, including video demonstrations, students' presentations and role-plays for selected topics (Table-1). Students discuss and write their reflections on the topics in the PWB. It is believed that this innovation will improve the delivery of content, students' understanding and learning of the subject, thereby contributing in achieving the ultimate goal of producing ethically sound and professionally competent young doctors.

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Since this is a novel method of teaching and learning for our students, it is thought important to know how students feel about the innovation. The current study was planned to analyse students' perception regarding the use of PWB for teaching and assessment of bioethics to undergraduate medical students.

Subjects and Methods

This mixed method study, involving self-administered questionnaire and focused group discussion, was conducted at the King Abdulaziz University, Jeddah, Saudi Arabia, in 2014, and comprised 4th year medical students.

The anonymous questionnaire asked the students regarding their perceptions on the use of PWB for teaching and assessment, how easy/difficult they considered its use, how much they believed it would be helpful in their profession, use of supplementary tools along with the PWB and whether they would like to use such workbooks in other disciplines. The students were provided space for reflecting on the questions asked.

The PWB contained essential reading material covering all the aspects of medical ethics and professionalism in the course specification, including common controversies in the field. Each student is given the PWB prior to commencement of the module. During a two-week module, students completed the exercises given in the workbook, while they were facilitated with small-group discussions, students' presentations, video demonstrations and role-plays as supplementary teaching and learning tools, on the topics expressed in PWB (Table-1).

Data regarding students' perception of PWB and how it affected their learning during the module was gathered at the end of the module, after the assessment was over. Self-administered questionnaires were distributed among the students and they were asked to complete and return them. After the questionnaire were returned, one faculty member performed focused group discussions, during which open-ended questions were asked and students were given time to reflect on their thoughts. The students' discussion was noted by the faculty member.

Quantitative data was analysed for frequencies and percentages. Notes taken during the discussion were reviewed independently by two authors (other than the facilitator) for deriving themes and categories from students' responses on open-ended questions during focused group discussions. The themes and categories common in both were considered major.

Results

All the 20 respondents, considered the use of PWB in E&P

Table-1: Topics and supplementary teaching tools.

Topics in the PWB	Supplementary tools
Learning through Portfolio	
Professionalism & Ethics	Video clips Role-play
Principles of Ethics	
Attributes of a medical professional	Video demo
Medical ethics – Islamic perspective	
Confidentiality	Video demo Role-play
Consent	Video demo Role-play
Breaking bad news	Video demo Role-play
Justice and equity	Video demo
Conflict of interest	Video demo
Role of doctor in community	Role-play
Pre-natal diagnosis and foetal rights	
End of life care	Video demo
Research ethics	
Publication ethics	Video demo
Common controversies in medical ethics	Students' presentation
Abortion	
Breach of confidentiality	
Genetic research	
Medical mistakes	
Physician-assisted suicide	
Relief of suffering at the end of life	

PWB: Portfolio-workbook.

module helpful in enhancing their capabilities to discuss and deal with ethical issues in a professional way.

Moreover, 19(95%) students preferred portfolio as an assessment tool. They attributed this preference to the effects of portfolio use in reducing the stress of final examination and its ability to keep the interest alive in each and every session from the first day to the last.

Regarding the difficulty perceived by students in completing the PWB at the start of the module, 10(50%) students thought it was difficult for them, but, after completion of the module 15(75%) considered it easy to follow and fill.

Furthermore, 19(95%) students found teaching videos and 13(65%) found open discussions as effective learning tools (Figure). Besides, 19(20%) students appreciated that their language skills and 18(90%) believed that their reasoning skills had improved.

Moreover, 13(65%) students suggested the use of portfolio in other modules as well.

Table-2: Content Analysis of responses to open-ended questions.

Themes	Categories		
Student interest/ involvement	Enhanced Participation	Increased Satisfaction	Experience sharing
Supplementary learning tools	Videos/ movie clips	Role plays	Ethical dilemmas
Attitude towards patient care	Empathy	Duties of a doctor	
Assessment	Burden	Environment	
Writing skills	Opportunity	Confidence building	Self-analysis

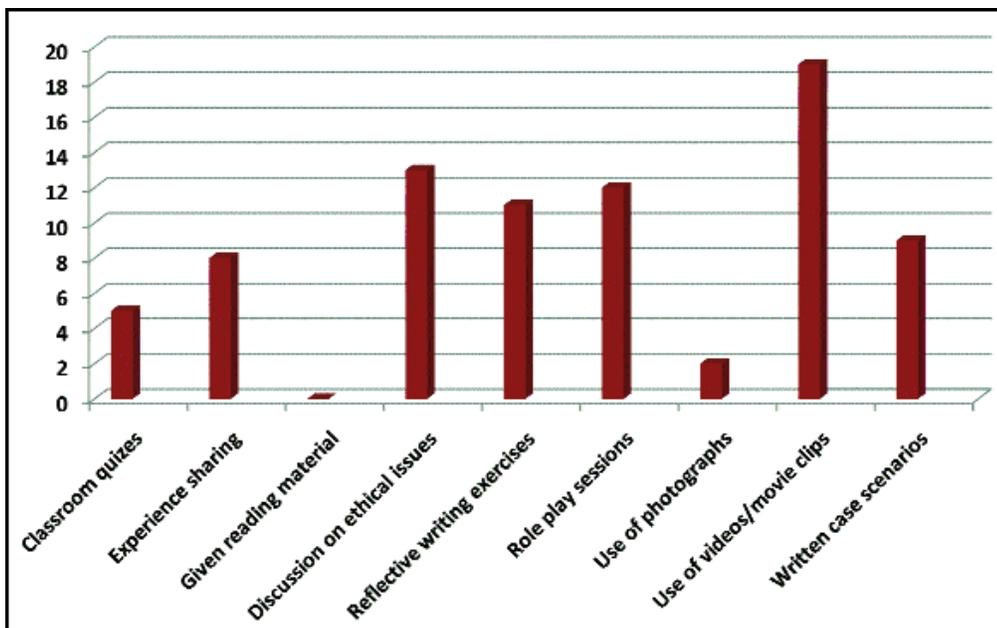


Figure: Which supplementary teaching tools in portfolio were more effective?

Five major themes emerged from the students' responses during the discussion. Each theme was discussed in different categories by the students (Table-2).

Discussion

A few decades ago, ethics was considered a part of the "hidden curriculum" which students were expected to learn "on their way" to graduation through peers and "role-models". This learning was opportunistic, sporadic and could not be measured. Ethics is becoming a part of formal curriculum in most medical institutes, with broad agreement on the competencies, outcomes and topics to be included in under and post-graduate ethics curriculum.¹⁵ However, the challenge of "how to teach?" and "how to assess?" ethics is still unsolved.^{16,17} The aim of E&P course at our institute is to facilitate students' thought process for decision-making and discourse in dealing with day-to-day ethical issues in medical profession. To achieve this outcome, students are taken through the principles and their applications in different socio-cultural situations.

We found PWB to be a novel way for the process of learning and to minimise the conflict of who, how, and how much to teach in limited time. It incorporates written information with discussion and reflection for learning which gives it the strength. The content of PWB is organised in a way that it gradually increases the cognitive load, stimulates previous knowledge and enhances learning into long-term memory, thereby learning progresses through easy (simple) to difficult (complicated) tasks (ethical issues).

Students' responses on open-ended questions during the focus discussion provided the researchers with students' perception of the course. Most of the students gave positive remarks on the course. Five major themes that emerged during the interviews are discussed here along with few of the remarks by students.

'Interest/ Involvement' was the first theme. Interactive discussions in classrooms often revolve around more vocal and expressive students with some students participating minimally or not at all. PWB effectively ensured that all students are onboard and this was seen as one of the major advantages of this innovation.

"I usually stay quiet in classrooms but in (this) module I took part in discussions. The topics interest me as they were from daily-life problems."

This was the first exposure of our students to a PWB, therefore, there was apprehension in the beginning. However, by the end of module, majority of students

became comfortable with the learning process.

Students' interaction and attention remained high throughout the module. The process of each session being followed by a reflective writing assignment and/or interactive discussion was perceived as a commendable strategy by students.

"A tool which kept us constantly in the class (both) physically and mentally."

The second theme was 'learning tools'. Each learning session was facilitated by relevant supplementary teaching tools like role-plays, movie/video clips, written case scenarios, photographs, etc. These were followed by exercises including reflective writing, presentations and discussions to clear concepts and remove ambiguity. The idea of showing movies related to medical ethics and professionalism is not new and has been practised by many.^{18,19} However, using it as a supplementary tool along with reflective writing can augment the effort. Students found movie/video clips as extremely effective.

"Effect of video clips is more penetrating, probably everlasting."

"This course has changed the way I (used to) see movies."

'Attitude towards patient care' was the third theme. There has been a longstanding debate regarding what type of doctors we should be producing, virtuous or those who are skilled to deal with any ethical situation professionally.²⁰⁻²² We believe that our method of teaching facilitates the students in developing skills for ethical decision-making and at the same time, the reflective exercises provide opportunities for long-term changes in attitude. This was evident from students' responses, who felt both an improvement in their expected attitudes in future as well as enhancement of their capabilities to deal with ethical issues professionally.

"Not only that I am more informed and more confident about dealing with the related ethical issues in (the) future but I am (also) feeling more empathy and concern towards patients."

"Now I have some clue (understanding) about becoming a complete doctor."

'Assessment' was the fourth tool. Assessment is essential to give credibility to any teaching tool.²³ For disciplines like ethics and professionalism, mere introduction of related terms and issues, and assessing knowledge by a traditional recall type end-module exam understandably does not serve the purpose. We, therefore, changed the assessment methods altogether. There was no end-of-

module exam, instead their work on PWB was assessed. This included students' reflective writing and research work on designated topics in the form of written assignments. In addition, reflective writings over a period of two weeks made it easier for the assessor to follow the progress of students' thought process over time.

"I was relaxed during the module and understood what is important for working as a doctor, (rather) than thinking about what is important for the exam."

"There is no pressure of end-module exam, so instead of mugging the theory, I was able to grasp what was needed."

'Writing skills' was the fifth theme. English is the medium of education in all medical colleges in Saudi Arabia but being a foreign language and not the medium of instruction in pre-university education, it is not without difficulties. Young graduates face problems in hospital-related documentation and it also affects their optimal output during post-graduate studies abroad.²⁴ Saudi Arabia is the 5th largest source of foreign graduates studying in the United States and bulk of them are young doctors.²⁵ Excessive and at times exclusive use of multiple-choice questions (MCQs) as written assessment further impedes writing skills.

English writing skills development was not a planned outcome of our course, and was not assessed. However, it became an important aspect of learning and students also mentioned it in their responses for open-ended questions. They felt more confident and fluent in writing and expressing in English language after two weeks of reflective writing. We believe similar efforts in other modules can bring an overall improvement.

"I am happy to see my writings in the workbook."

"I did not know (that) I can write so much in English."

The current study was not without its limitations. It had a limited number of participants due to the small number of annual enrolments. Another limitation of this study is the fact that PWB as a learning and assessment tool requires validation, therefore, it could not be recommended at this point in time. The study was conducted by the teaching faculty of the course, which may have affected students' responses, especially during the focus-group discussions. However, the course was finished and results had been announced, which minimised the influence of faculty on participating students.

Conclusion

The use of PWB in teaching ethics and professionalism to

undergraduates was found to be encouraging, and a novel way to minimise the conflict of who, how and how much ethics and professionalism to teach in limited time, while generating interest and interaction. Supplementary tools like role-plays and movie clips augmented the effort. The use of PWB not only helped in enhancing logical thinking but also aided students' reflection and writing skills.

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