

Use of Narratives for Experiential Learning in Bioethics for Medical Students

Rupali Gajare¹, Aniruddha Malgaonkar^{2*}, Sundaram Kartikeyan³, Srabani Bhattacharya⁴, Sandhya Khadse⁵

¹Assistant Professor, Department of Anatomy, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India

²Assistant Professor, Department of Community Medicine, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India

³Professor and Head, Department of Community Medicine, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India

⁴Professor and Head, Department of Physiology, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India

⁵Dean, Rajiv Gandhi Medical College, Kalwa, Thane-400605, Maharashtra, India

*Corresponding author: Aniruddha Malgaonkar

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Abstract

This before-and-after study (without controls) with educational intervention was conducted at a municipal medical college to evaluate the effect of experiential learning in medical students by using narratives that focus on the affective domain. Medical students aged 18+ years, of either gender, were explained about the study. The participants took a pre-test, which was designed to seek the response of participants to ten bioethics-related narratives. Subsequently, the students were exposed to bioethics training wherein the narratives were discussed and a post-test, identical to the pre-test, was administered. A total of 120 students (53.33% females; 46.67% males) participated in the study. The gender differences in the pre- and post-test responses were not statistically significant. The difference was not statistically significant in pre- and post-test responses to questions in two narratives – surrogacy by childless couple and medical termination of pregnancy in case of congenital anomaly. The significant improvement in the post-test scores of participating students implied that they have inculcated the values learnt in their training. Narratives can simulate real-life situations and discussion on these narratives can help students in internalizing theoretical ethical concepts, improve moral reasoning and facilitate in handling certain ethical dilemmas that can improve doctor-patient relationship.

Keywords: Affective domain, Bioethics, Experiential learning, Narratives.

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INTRODUCTION

The Medical Council of India has decided to implement the Attitude, Ethics and Communication Module (AETCOM) in all medical colleges in India and has recommended minimum hours to be allocated at various levels of the MBBS course for the AETCOM module training [1]. The module contains prepared case scenarios for discussion with students and suggests innovative methods to teach students in an endeavour to develop ethical and professional attitudes and good communication skills. Though the medical curriculum has been designed with specific learning objectives that primarily address three domains – cognitive, psychomotor and affective, there remains a predilection in favour of acquiring competencies in the cognitive domain and to a lesser extent, in the psychomotor domain [2]. The traditional curriculum did not provide for formal training for acquiring skills in the affective domain. It was expected that expertise in communication, ethical functioning, respect for diversity, empathy and professionalism would be gathered by observing peers or senior teachers [3, 4]. This so called “hidden curriculum” depended to a large

extent on chance and the traditional pattern of medical education failed to produce health care personnel who can provide compassionate and holistic health care [2, 5]. Due to poor skills in the affective domain, health care personnel are vulnerable to conflicts that can adversely affect patient care and interpersonal relationships in health care settings [6, 7]. Many institutions in the developed countries offer need-based structured integrated programmes to cater to the increasing demand for training in bioethics [8].

Subsequent to the Belmont Report [9] and the outrage in the aftermath of the Tuskegee Syphilis study in the USA [10], the four principles of bioethics (autonomy, non-maleficence, beneficence and justice) were created by two professors from Georgetown University, USA [11], in 1979. The first principle of bioethics, viz. autonomy, occurs in the presence of an intention to intervene along with transfer of the required knowledge and in the absence of external influences [12]. This principle is implemented through informed and voluntary consent. Ethical dilemmas arise while dealing with the autonomy of children, adolescents,

psychiatric patients or unconscious patients. Irrespective of cost-benefit, cost-effectiveness, or risk-benefit analysis, autonomy should always be respected [13]. The second principle, non-maleficence, denotes consciously abstaining from doing harm and is closely related to respect for life, quality of life and non-discrimination on the basis of race, religion, or gender [12]. The third principle, beneficence, is the commitment that all human beings must act for the benefit of others [12] and such an action is to be determined as beneficial from the subject's perspective [13]. The fourth principle viz. justice was envisaged as distributive justice, in which scarce therapeutic resources are expected to be distributed as per need and usefulness [12], so that underprivileged individuals have an equal likelihood of access [13].

The complexity of ethical issues necessitates careful exploration to obtain the precise answers. The ethical dilemmas posed in situations, such as, confidentiality, disclosure of bad news, and informed consent requires pertinent knowledge of laws and policies. The health care personnel should be trained in application of this knowledge to the situation and in demonstration of communication skills. Though medical students unhesitatingly prefer being taught medical ethics by medical teachers using medical terminology, all this teaching can be annulled if the teacher is not seen to be practising what he/she teaches [14]. Ethical principles need to be inculcated in students of medical, nursing, and paramedical courses so that these inter-dependent systems work in concert. The teaching sessions should be participatory and interactive and utilize a combination of methods, such as, traditional lecture, case-based learning, problem-based learning, discussion on narratives and use of audio-visuals [15]. To strengthen the role of ethics in medical education, it is necessary to devise methods of evaluating performance in attitudes and ethics. The unfeigned patient-doctor encounter can be replicated but is difficult to evaluate [15]. The time to introduce the content of a medical ethics curriculum has been debated in many studies [16, 17]. Though inculcating such values at an impressionable age is important, there should be a continuum in teaching of medical ethics because a medical career is one of life-long learning.

Narrative is a learning method that enables the student to reflect on the data at a higher level of thinking, form opinions and derive conclusions, which can be communicated to colleagues and facilitators. The student can defend his/her conclusions or develop new conclusions during this discussion. Narrative bioethics is a peculiar type of bioethics with a narrative dimension that connects with other dimensions of the medical humanities, sociology, philosophy, ethics and literature. Real-life narratives, gathered from residents and interns of the same institution, if used for discussion on a particular bioethics issue, may increase the interest levels of the students' and change their

perspectives [18]. Since these real-life narratives contain inherent principles, cross-cultural value systems and tenets, these have the potential to help students to envisage problems from other points of view. Despite having similar core ethical values, health care personnel belonging to different cultures may have contrasting approaches in the application of medical bioethics [19].

The objective of this study was to evaluate the effect of experiential learning in medical students by using narratives that focus on the affective domain.

MATERIALS AND METHODS

This before-and-after study (without controls) with educational intervention was conducted at a municipal medical college in Thane, Maharashtra, India between September 2018 and January 2019. After approval from the Institutional Ethics Committee, prospective participants (MBBS students aged 18+ years, of either gender) were explained about the study. The participants were assured of anonymity and confidentiality and were told that they could withdraw from the study at any time and written informed consent was obtained. The participants took a pre-test, which was designed to seek the response of participants to ten bioethics-related narratives. All the narratives were based on situations in different settings and they reflected ethical or behavioural conflicts. The narratives pertained to patient autonomy; child mistreatment; child exploitation; child adoption by childless couple; surrogacy by childless couple; informed consent; dealing with request for euthanasia by a patient with terminal illness; pre-natal sex determination and abortion in congenital defect. Subsequently, the students were exposed to training as per AETCOM module [1] wherein the above-mentioned narratives were discussed and a post-test, identical to the pre-test, was administered.

The pre- and post-test scores were tabulated in Microsoft Excel (Microsoft Corporation, Redmond, WA, USA) and statistically analysed using EpiInfo Version 7.0 (public domain software package from the Centers for Disease Control and Prevention, Atlanta, GA, USA). The data were presented as frequencies. Karl Pearson's Chi-square with Mantel-Haenszel correction (where required) was calculated. A "p" value of <0.05 was considered as statistically significant.

RESULTS AND DISCUSSION

A total of 120 students (64 females; 53.33% and 56 males; 46.67%) participated in the study. The gender differences in the pre- and post-test responses were not statistically significant. The difference was not statistically significant in pre- and post-test responses to questions in two narratives – surrogacy by childless couple and medical termination of pregnancy in case of congenital anomaly. However, the differences in pre-

and post-test responses to questions in eight narratives

were significant (Table-1).

Table-1: Comparison of pre- and post-test responses

Sr. No.	Topic of Narrative	Pre-test (n=120)	Post-test (n=120)	Chi-square value #	p value
1	Lack of patient autonomy	49	25	11.253	0.0008 *
2	Lack of patient autonomy	68	30	24.903	<0.0001 *
3	Child mistreatment	52	105	51.735	<0.0001 *
4	Child exploitation	58	110	53.651	<0.0001 *
5	Child adoption by childless couple	43	81	24.093	<0.0001 *
6	Surrogacy by childless couple	40	46	0.652	0.419
7	Informed consent	56	100	35.458	<0.0001 *
8	Euthanasia in terminal illness	81	103	11.273	0.0008 *
9	Pre-natal sex determination	15	0	16	<0.0001 *
10	MTP in congenital anomaly	57	70	2.826	0.093

Karl Pearson's Chi-square with Mantel-Haenszel correction (where required); * Significant
MTP = Medical termination of pregnancy

Narratives have been used for understanding and subsequent decision-making in challenging circumstances that require a precise attitude on the part of health care personnel [20, 21] and can help in addressing moral conflicts [22]. The narratives must be capable of arousing emotions, empathy and compassion and creating moral dilemmas, just as in a real-life situation, so that the trainees remember to retain their attitude and maintain the ethical principles during their decision making [13]. Use of narratives in bioethics has the potential to yield better informed and more insightful moral decisions by inter-relating ethics, moral reasoning and the social dimension [13, 22].

During the process of discussion on the ethical issues pertaining to a given narrative, the students can analyse, clarify and contemplate and this can lead to strengthening of or alteration in their views and opinions. Reflective dialogue between peers permits refinement of students' views in relation to learning ethics [23]. Using an experiential approach to lectures would help in developing cognitive and affective domains and facilitate successful teaching [24]. Besides being enjoyable and acceptable, the use of narratives for teaching could promote knowledge and values [25]. However, some students may find it difficult to respond to narratives because they are unable to identify with the feelings and emotions that the situation elicits and they are not personally involved in such a situation [26].

CONCLUSION

Present study revealed significant improvement in the post-test scores of participating students, implying that they have inculcated the values learnt in their training. Teaching ethical issues using the lecture format may, at best, be informative, but will not be applicable in real-life situations. Narratives can simulate real-life situations and discussion on these narratives can help students in internalizing theoretical ethical concepts, improve moral reasoning and facilitate

in handling certain ethical dilemmas that can improve doctor-patient relationship.

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