ORIGINAL RESEARCH

# The Hidden Curriculum Challenges in Learning Professional Ethics Among Iranian Medical Students: A Qualitative Study

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**Background:** Medical ethics is a vital quality for the doctors which has been seriously taken into consideration in recent years. Identifying the factors affecting medical ethics may help to develop more effective ways to promote this quality in medical education. This study was aimed to explain the challenges of hidden curriculum in learning the professional ethics among Iranian medical students.

**Materials and Methods:** This qualitative study was performed on 15 medical interns of Kermanshah University of Medical Sciences in 2019 using grounded theory (GT). Sampling was started by purposive sampling and continued through theoretical sampling until complete data saturation. Data collection and analysis were done simultaneously. Data were interpreted by the constant comparative method according to Strauss and Corbin's approach.

**Results:** The results showed that the challenges of hidden curriculum for learning the professional ethics by medical students included a number of key concepts. Analyzing these concepts and taking into account the commonalities, we obtained six subthemes using a reduction inductive method, the main theme of which was "the challenge of hidden curriculum in learning the professional medical ethics". The subthemes included "decreased interest in medicine", "false beliefs", "curriculum weakness", "materialism and economic problems", "avoidance of responsibility", and "underlying problems of the medical profession".

**Conclusion:** The findings indicated six challenges in the hidden curriculum for learning the professional medical ethics. These challenges can be considered a threat or an obstacle to achieving the goals of professional ethics. Therefore, curriculum planners, education policymakers, and teachers should plan and implement the professional ethics curriculum based on these factors.

**Keywords:** professionalism, medical education, professional ethics, curriculum

## Background

Professionalism and physician wellbeing are important topics in academic medicine. Within medical education, students and trainees are exposed to professionalism in the institution's formal and hidden curricula.[1] Many of the oldest challenges live on to this day, such as who has more authority to make key decisions and what the boundaries of life are at the beginning and at the end. Two powerful driving forces are new technologies and an ever-changing culture and society.[2]

Evidence shows a strong bond between the hidden curriculum and professionalism development.[3,4] The term "hidden curriculum" was first defined by Philip

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Jackson in 1968 to describe the attitudes and beliefs children should achieve as a part of socialization to succeed at school, and Hafferty was the first to adopt this concept to the medical domain in 1994.[5] Jerald (2006) reported that hidden curriculum is an implicit curriculum that is indicative of the attitude, knowledge, and behavior delivered indirectly and unconsciously by words and practices that constitute parts of the life of everyone in the society.[6]

The literature often portrays the hidden curriculum as negative or intrinsically in conflict with the formal curriculum, although the hidden curriculum seems to have an overall positive effect on students' experiences and their developing professionalism.[7] In addition, studies have shown the negative outcomes of hidden curriculum, such as the problem of transfer of professional values and ethics. Future researchers need to concentrate on the positive outcomes as a strategy to compensate for the lost professional ethics.[8]

There are various resources in clinical settings for the nursing students in Iran for learning through hidden curriculum. These include five categories: "learning from nurses", "learning from clinical nursing managers", "physician as a learning resource", "patient as a learning resource", and "learning from the clinical setting".[9] Factors affecting the hidden curriculum consist of environmental factors (professional and organizational), human factors (teachers, peers, and staff), formal curriculum, and learner's filtering ability, which bear important messages for learners, staff, and teachers.[10]

There are four conceptual boundaries in hidden curriculum, including institutional-organizational, interpersonal-social, contextual-cultural, and/or motivational-psychological,[7] which make the hidden curriculum so important in medical education and other areas of medical education.[11] Blasco[12] argues that if three factors of formal curriculum, interpersonal interactions, and school governance are controlled, the negative effects of hidden curriculum can be reduced.

Understanding the factors affecting professionalism may help to develop more effective approaches to promote this quality in medical education.[13] Studies have reported end-of-life issues, dealing with financial issues, and handling socio-cultural beliefs of patients and relations as some challenges that medical doctors are ill-prepared for using the current training they receive. Medical students encounter ethical challenges for which they have not been adequately trained to resolve.[14] In one study, poor patient–doctor communication and provision of substandard care

to most cases were reported as the challenges of medical ethics.[15] Another study reported ethical dilemmas as a part of medicine, but the types of challenges, their frequency, and the nuances of problems were systematically studied in low-income environments. The most challenging reported sources of resource allocation are limited resources and patients inability to pay the costs.[16]

Many authorities have suggested that the professional attributes of physicians are in decline. Multiple factors, both personal and organizational, influence the professionalism of individual physicians. Studies suggest that the crucial elements of professionalism, including empathy and humanism, decline rather than develop during the medical school program and residency training process.[17] The implementation process is influenced by both structural factors and factors related to clinicians having different values, interests, and experiences. Structural challenges include the organizational factors, recruitment and training of ethics facilitators, deliberation model, planning and recruitment of participants, and support of the ward managers and the project group. Expectations and pre-understanding, understanding a physician's job, and challenges experienced by ethics facilitators are found among clinicians.[18]

To evaluate the medical ethics curricula, it is necessary to identify the challenges of teaching and assessment of medical ethics. Some challenges include lack of ethics in clinical learning goals, lack of teaching time, and lack of appropriate assessment. Ethics teaching is generally not integrated into clinical practice. Barriers to evaluation lead to inadequacy in this area and there are few consequences for the lack of ethical evaluation.[19] This process indicates that teaching professional ethics is not ideal. Therefore, it is urgent to prepare and modify the curriculum of professional ethics and include it in the educational content in order to promote the capabilities of the teachers in nurturing professional ethics in the students.[20]

Five main themes that influence professional nursing in both positive as well as negative manners include "communication", "motivation and attitude", "organizational culture and structure", "academic education", and "supportive resources".[21] There are barriers to environmental, administrative, and personal standards, respectively.[22]

The most important challenges of implementing the professional ethics in clinical settings are lack of in-service training and educational programs and inappropriate head nurse–staff communication, lack of suitable equipment in wards and rotational shiftwork in the environmental domain,

and lack of technical skills in the individual care-related domain.[23] The staff-related barriers include efforts to meet the patient's physical needs, poor motivation, routine work, inability in communicating with the patient, and lack of holistic care. The patient-related barriers consist of lack of patient request, lack of knowledge, and physical conditions. The management-related barriers comprise the lack of facilities, including insufficient space, high workload, crowded wards, and staff shortage.[10]

The incidence of lapses across the 11 domains is shown for both pre-clerkship and clerkship. Of students who have witnessed a lapse of professionalism, the six most frequent categories reported at the pre-clerkship level are arrogance, impairment, cultural or religious insensitivity, breach of confidentiality, lack of conscientiousness, and abusing power asymmetries. At the clerkship level, the six most frequent categories of lapses of professionalism are the same. It should be noted that bias and sexual harassment are not far behind at the clerkship level, whereas they are infrequently reported at the pre-clerkship level. In both groups, the least frequent lapses include misrepresentation, collaboration with industry, acceptance of gifts, and compromising ethical principles.[24]

Moreover, for the factors affecting professional ethics, most participants have emphasized responsibility, work conscience, and positive energy related to others.[25] Regarding personal attitudes towards and beliefs about medicine, some studies in Iran have shown that a positive attitude about being a good physician encourages students to select medicine. In contrast, some students have argued that their family insist that they become a doctor, contrary to their interest.[26] A summary of literature shows that medical ethics is a critical quality for physicians that has received serious attention in recent years. Medical ethics is influenced by the management and facilitators, resources, culture, society, beliefs, attitude, relationship, and environmental, educational and curricular, organizational, psychological, financial, and personal factors. Explaining the challenges of hidden curriculum in learning the professional ethics may help to develop more effective ways to promote this quality in medical education. The purpose of this study was to explain the challenges of hidden curriculum in learning professional ethics among Iranian medical students.

## Materials and Methods
### Methods

Adopting an inductive approach, this qualitative study was conducted on 15 medical interns of Kermanshah University of Medical Sciences using GT. The sample selection was initiated by purposive sampling and continued by theoretical sampling until complete data saturation. Saturation refers to the repetition of obtained information and confirmation of the previously collected data.[27] Purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources. This involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced in a phenomenon of interest.[28] The study participants included 15 last-year medical interns (eight females and seven males). Of them, 10 were single and five were married. The mean age of the participants was 28±3 years.

## Tools and Credit

Data were collected by semi-structured interviews. Prior to the interview, each participant was contacted by telephone. In a separate face-to-face meeting, the participant's satisfaction and intimacy were established. The participants were provided with necessary explanations about the purpose of the study and the obtained results if they wished. Interviews were conducted at Imam Reza, Mohammad Kermanshahi, and Farabi hospitals, and Kermanshah Medical School. The average duration of each interview was 80 minutes (minimum 65 and maximum 100 minutes).

Data collection and analyses were done concurrently. Interviews were started with simple and general questions and continued with more detailed questions. The interviews were conducted in a quiet room at the office next to the hospital library in a secluded setting that was comfortable for the participants. Prior to the interview, an explanation was provided about the formal and hidden curricula as well as professional ethics, and both parties came to an understanding of these concepts. Interviews began with the question, "Please share your experiences in learning professional ethics". Answering this question led to questions such as "What did you learn in and out of college?", "What challenges did you face in learning professional ethics?", "What are the barriers to implementing professional ethics?", and "Why is professional ethics ignored in some settings?"

All interviews were recorded, noted down concurrently, and confirmed by the participants. The data obtained from each interview were transcribed to be coded and interpreted by the constant comparative method according to Strauss and Corbin's approach. Strauss and Corbin, inspired by pragmatic thinkers, believe that there

are multiple facts and that the outside world is a symbolic representation. Currently, this approach is used as a theoretical framework in qualitative research.[27]

## Interpretation of Data

After each interview, the researcher carefully listened to the interviews several times to obtain a deep understanding of the materials. The tapes were transcribed, read line by line, and coded using the keywords or phrases from the transcripts or inferred by the researcher. Three stages of open, axial, and selective coding were done on the data. During the study, different methods were applied to ensure the accuracy and reliability of data. An attempt was also made to gain the trust of the participants and add to the perception of the research environment by long-term communication and contact with the research locations. Three persons coded the data to ascertain the accuracy and objectivity of the data and codes. After coding, the transcripts were returned to some participants to confirm the accuracy of the extracted codes and interpretations.

## Results

The study participants included 15 last-year medical interns. The data obtained from the interviews were promoted to more abstract levels following detailed analyses and constant comparisons based on meaning similarities and were finally included in general classes. According to what the participants stated, each of these classes was concurrently described and adapted to the literature of the subject. The primary codes were gathered in a collection depending on their congruity and research question and were given a conceptual label. The concepts were then allocated to categories based on the message they contained. These concepts had their special meaning and were differentiated from one another by the concepts they supported. The categories also constituted the classes. The researcher classified the categories into six classes as "the challenges of hidden curriculum in learning the professional ethics among Iranian medical students", which is described below. In fact, there is an inductive process in this classification which moves from the raw data to the concepts, categories, and abstract classes and normally emerges from the platform of data.

(A) Decreasing interest in medicine: the participants stated declining interest in medicine as one of the traumatic factors of professional ethics. This included the components: motivation for studying after passing the entrance exam (code 103), regret about not studying and living (code 102), lack of interest in basic science courses (code 108), failure to meet individual demands (code 101), disinterest in the field (code 111), unemployment in the society and coercion in medical choice (code 112), disgust at the field of medicine (115), and continuing education for a sense of competition and dislike (code 114).

(B) False beliefs: the participants viewed the following factors in the hidden curriculum that influence professional ethics: attempting to escape the failure (code 109), fear of success (code 112), not helping due to no requests (code 113), investigating the patient's fear of punishment (code 106), believing in the impact of chance on success (code 102), having a connection for a career promotion (code: 115), having a sense of pride (code 107), being good to others (code 101), refusing to confess (code 104), and refusing to apologize for wrongdoing (code 101).

(C) Weakness in the curriculum: The failure of curriculum is a factor in the hidden curriculum that affects professional ethics. It consisted of factors such as failure of basic science in the formation of professional ethics (code 104), failure of professional ethics lesson to affect professional ethics in practice (code 105), medical ethics lesson in professional ethics class (code 108), planning an inappropriate lesson in professional ethics (code 112), scientific weakness and morality barrier (code 114), ethics with lessons not learned (code 103), barriers such as incompetence of graduates (code 108), and doctors' failure to follow ethics in the future (code 109).

(D) Materialism and economic problems: Among the damages to professional ethics are economic problems and materialism. This component consisted of factors such as material barriers to professional ethics (code 106), physical barriers and lack of facilities (code 107), economic barriers to professional ethics (code 109), impact of economic problems on professional ethics (code 111), discontent with discrimination and injustice (code 112), impact of advertising on the reputation of medical practice (code 114), greed preventing adherence to professional ethics (code 108), material motivation for the medical practice (code 115), and injustice in health services (code 103).

(E) Avoiding responsibility: the comments about the impact of this component on professional ethics included self-esteem while feeling responsible (code 101), self- and family preference over other patients (code 102), self-preference rather than patient preference (code 110), merely focusing on the patients' treatment and disregarding their morale (code 112), replacing another person in conflicts between his/her wish and the patient's wish (code 105), and disregarding the patient's expediency (code 104).

(F) Background problems of the medical profession: the components found for this category included overcrowding and busyness impeding professional ethics (code 107), exhortations to inform the patient of his illness (code 108), effect of fatigue on non-compliance with professional ethics (code 113), non-observance of physicians due to the death of patients (code 103), impact of inappropriate environment on professional ethics (code 111), adherence to partial and situational ethics (code 115), changing the ethical environment (code 106), patients' immorality as the cause of doctors' professional immorality (code 112), blame for doing a good job of obstructing professional ethics (code 114), students' failure to care for the patient (code 109). These findings are presented in Table 1 in the form of themes, subthemes, and key concepts resulting from the axial coding.

In summarizing the findings, "decreased interest, false believes, weakness in curriculum, materialism and economic problems, irresponsibility and background problems" were identified as the main challenges of the hidden curriculum in learning professional ethics among Iranian medical students. These findings are shown in Figure 1.

## Discussion

The purpose of this study was to explain the challenges of the hidden curriculum in learning the professional ethics among Iranian medical students. The results showed one theme and six subthemes as well as a number of key concepts as the Hidden Curriculum challenges in learning professional ethics among Iranian Medical Students. The subthemes included "decreasing interest in medicine", "false beliefs", "weakness in the curriculum", "materialism and economic problems", "avoidance of responsibility", and "background problems of

the medical profession". Understanding the factors affecting professionalism may help to develop more effective approaches to promote this quality in medical education.[13]

The findings of this study showed that the declining interest in medicine was considered one of the damages of the hidden curriculum to professional ethics. Some studies have indicated the negative role of the hidden curriculum. This negative role is related to the problems resulting from the transfer of values and ethics,[7] part of which is related to the students' lack of adequate ethical education[9,29] and the other part is attributed to the students' lack of motivation and attitude.[17,21,26] This factor may be related to the underlying problems in the workplace. Some studies have reported sexual harassment during the internship program.[22] Initially, it seems that students, especially in Iran, choose medicine voluntarily.

However, they continue to lose their interest due to failing to meet their goals and facing problems as some have claimed that physicians and other healthcare professionals have faced challenges since the beginning of medical practice.[2]

Incorrect beliefs affecting professional ethics were among the factors influencing the hidden curriculum. Some studies have reported environmental factors (professional and organizational), human factors (teachers, peers, and staff), formal curriculum, and learner skills have important implications for students, staff, and teachers.[21] Some events in the pre-apprenticeship and internship periods also lead to a decline in student professionalism. Some highlights include arrogance, cultural or religious insensitivity, breach of confidentiality, lack of conscience, and abuse of power asymmetries.[22] Regarding the personal attitudes towards and beliefs about medicine, some studies in Iran have shown that a positive attitude about being a good physician encourages students to choose medicine.[26] A part of this may be related to the cultural and religious discussions.[25] In countries with a religious-cultural approach, professional ethics is influenced by ideological beliefs.

Weaknesses in the curriculum were identified as one of the pathologies of professional ethics in this study. In support of this finding, studies have shown that students do not have enough training in professional ethics to prepare them for ethical challenges in practice.[9] Some essential elements of professional ethics, including empathy and humanism, are reduced rather than developed during the medical school education process.[13] Some barriers to medical ethics development, including lack of ethical issues in clinical learning goals, and shortage of teaching time, and

**Table 1** List of Themes, Subthemes, and Key Concepts Related to the Pathological Role of the Hidden Curriculum in the Formation of Professional Ethics in Medical Students

| Themes | Subthemes | Key Concepts |
|--------|-----------|--------------|
| Challenges of the hidden curriculum in learning the professional ethics among Iranian medical students | Decreased interest in the medical profession during the course of study | Loss of motivation to study after passing the entrance exam, regret about not studying and living, lack of interest in basic science courses, failure to meet the individual demands, professional ethics barriers, interest in engineering and continuing education in engineering, unemployment in society as the cause of choosing medicine, hatred and dislike of medicine, continuing education for the sake of completing and studying against interests. |
| | False cultural and social beliefs about the medical profession | Trying to escape rejection and fear, fear of success, not helping because of no requests, dealing with the patient for the fear of reprisal, effect of luck on success, having connections and chance for career promotion, taking pride in professional ethics, being good for the sake of approving of others, refusing to confess, and refusing to apologize for being mistaken. |
| | Weakness in the university's formal curriculum in teaching medical ethics | Failure of basic science to influence the formation of professional ethics, ineffectiveness of professional ethics, ineffectiveness of medical ethics in the professional ethics class, inappropriate curriculum as a factor to disrespect professional ethics, scientific weakness and ethics-hindering factors, failure to teach ethics, obstacles such as graduates' inadequacy, and lack of ethics on the part of the physicians in the future. |
| | Preferring individual interests such as materialism and economic problems | Material barriers to professional ethics, physical barriers and lack of facilities, economic barriers to professional ethics, impact of economic problems on professional ethics, dissatisfaction with discrimination and injustice, impact of advertising on the medical profession for celebrities, greed hindering adherence to professional ethics, material incentives for the medical profession, and injustice in the healthcare system. |
| | Avoiding responsibility for the patients and society | Preferring self-relaxation while feeling responsible, self-esteem and self-esteem against the other patients, self-esteem in emergency situations, merely focusing on the patients' treatment and disregarding their morale, replacing the others while having a conflict, self-preference over the patient's wishes, and disregarding the patient's interests. |
| | Underlying problems of the medical profession in practice | Overcrowding and busyness impeding professional ethics, excuses to inform the patient of his illness, impact of fatigue on non-compliance with professional ethics, failure to adhere to the physicians' deaths, impact of inappropriate environment on professional ethics, relative ethics, dependence on the situation, changing the ethical environment, changing the patients' professional ethics, blame for the positive work ethic barrier, if students do not pay attention, the student does not care. |

lack of integration into clinical ethics training practice lead to inadequacy in this regard.[15] This trend suggests that professional ethics education is not ideal.[16,30] In academic education, relevance, motivation, and attitude are also issues that affect professional ethics.[18] The most important barrier to implementing professional ethics in clinical settings is in-service training and in-service training and communication programs.[19]
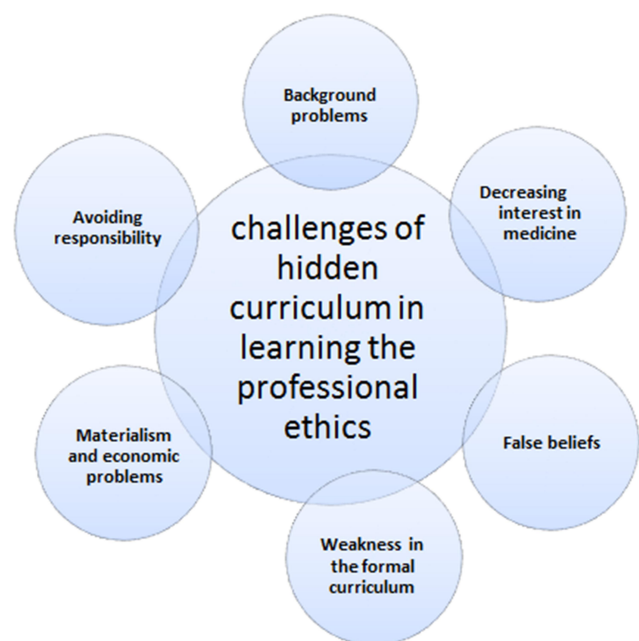
**Figure 1** Theme and subthemes related to the hidden curriculum challenges in learning professional ethics.

Materialism and economic problems were reported as the challenges of hidden curriculum in professional ethics. These challenges, as some studies show, are related to the patients' economic problems in paying for the treatment costs, budget constraints, and family welfare concerns.[12,18] Dealing with financial issues makes ethical challenges for the medical students for which they have not been adequately trained to resolve.[14] In low-income countries, economic problems and the quest for social welfare are among the issues that physicians face. Concerns about family welfare are among the challenges of physicians.[16] This even affects students' choice of field of study.

Avoidance of responsibility was one of the most significant challenges to professional ethics in this study. It is the duty of physicians to establish physician–patient communication. Studies have shown that problems related to the lack of physician–patient communication and implementation of care standards are in most cases a challenge to medical ethics.[11]

Difficulties in disclosing patient information and caring for patients who are unable to obtain consent,[12] inappropriate behavior of the nurses, lack of proper equipment in shifts and rotation units, and lack of technical skills in the area of personal care[19] can be reasons for avoiding responsibility among physicians. Some of these barriers include staff trying to address poorly motivated, repetitive

work, the inability to communicate with the patient, and the absence of care. Some other patient-related barriers include absence of requests, lack of awareness, and physical condition. Barriers to management are related to the lack of facilities, including insufficient space, high workload, crowded departments, and staff shortages.[20]

The underlying problems of the medical profession were also identified as one of the major causes of hidden curriculum problems for professional ethics in this study. Consistent with this finding, some studies have shown that institutional, organizational, interpersonal, contextual, cultural, and motivational–psychological factors influence curriculum perception as a negative concept in professional ethics.[8] Structural and physician-related factors also influence professional ethics. Structural barriers include organizational factors, recruitment and training of ethics facilitators, pattern of legitimacy, participant planning and recruitment, and support for department managers and project teams. Barriers associated with physicians comprise previous expectations and perceptions, perceptions of the physician's job, and the challenges experienced by ethics facilitators.[14,31] Among the underlying problems mentioned in previous research are standard barriers, environmental barriers, administrative barriers, and personal barriers, respectively.[18]

## Conclusion

The results of this study illustrate the role of hidden curriculum in shaping the professional ethics injuries of medical students. The main injuries were decreased interest in medicine, false beliefs, and weakness in the curriculum, materialism and economic problems, avoidance of responsibility, and foreground problems in the medical profession. These injuries can be considered a threat or an obstacle to achieving the goals of professional ethics in medical education and training programs. It is therefore recommended that curriculum planners, education policymakers, and teachers plan and implement a professional ethics curriculum in light of these factors.

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## Disclosure

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## References

1. Domen RE, Talbert ML, Johnson K. All assessment and management of professionalism issues in pathology residency training: results from surveys and a workshop by the graduate medical education committee of the college of American pathologists. *Acad Pathol*. 2018;5:1–12. doi:10.1177/2374289518773493

2. Lee J, Ward NS. Emerging ethical challenges in critical care for the 21st century: a case-based discussion. *Semin Respir Crit Care Med*. 2019;40(5):655–661. doi:10.1055/s-0039-1698408

3. Ozolins L, Hall H, Peterson R. The student voice: recognizing the hidden and informal curriculum in medicine. *Med Teach*. 2008;30 (6):606–611. doi:10.1080/01421590801949933

4. Sanjib KG, Ashutosh K. Building professionalism in human dissection room as a component of hidden curriculum delivery: a systematic review of good practices. *Anat Sci Educ*. 2019;12(2):210–221. doi:10.1002/ase.1836

5. Higashi RT, Michael AT, Steinman MA, Johnston CB, Harper GM. The 'worthy' patient: rethinking the 'hidden curriculum' in medical education. *Anthropol Med*. 2013;20(1):13–23. doi:10.1080/13648470.2012.747595

6. Alsubaie MA. Hidden curriculum as one of current issue of curriculum. *J Educ Pract*. 2015;6(33):125–128.

7. Lawrence C, Mhlaba T, Stewart KA, Moletsane R, Gaede B, Moshabela M. The hidden curricula of medical education: a scoping review. *Acad Med*. 2018;93(4):648–656. doi:10.1097/ACM.0000000000002004

8. Raso A, Marchetti A, D'Angelo D, et al. The hidden curriculum in nursing education: a scoping study. *Med Edu*. 2019;53(10):989–1002. doi:10.1111/medu.13911

9. Karimi Z, Ashktorab T, Mohammadi E, Abedi H, Zarea K. Resources of learning through hidden curriculum: Iranian nursing students' perspective. *J Educ Health Promot*. 2015;4(1):57. doi:10.4103/2277-9531.162368

10. Abbasi M, Khalajinia Z, Abbasinia M, Shojaei S, Nasiri M. Explaining the experiences of nurses about barriers of religious care in hospitalized patients: a qualitative study. *Health Spiritual Med Ethics*. 2018;5(4):36–45. doi:10.29252/jhsme.5.4.36

11. Ludmerer KM. *Time to Heal: American Medical Education from the Turn of the Century to the Era of Managed Care*. New York: Oxford University press. Inc.; 1999:71.

12. Blasco M. Aligning the hidden curriculum of management education with PRME an inquiry- based framework. *J Manag Educ*. 2012;36 (3):364–388. doi:10.1177/1052562911420213

13. Colin PW, Sh TD. The influence of personal and environmental factors on professionalism in medical education. *BMC Med Educ*. 2007;7(1):1472–6920. doi:10.1186/1472-6920-7-29

14. Ogundiran TO, Adebamowo CA. Medical ethics education: a survey of opinion of medical students in a Nigerian university. *J Acad Ethics*. 2010;8(2):85–93. doi:10.1007/s10805-010-9110-3

15. Okoye O, Nwachukwu D, Ferdinand CMO. Must we remain blind to undergraduate medical ethics education in Africa? A cross-sectional study of Nigerian medical students. *BMC Med Ethics*. 2017;18 (73):1472–6939. doi:10.1186/s12910-017-0229-2

16. Ingrid M, Frehiwot D, Dawit D, Marion D. Clinical ethics dilemmas in a low-income setting - a national survey among physicians in Ethiopia. *BMC Med Ethics*. 2019;20(63):1472–6939. doi:10.1186/s12910-019-0402-x

17. Thulesius HO, Sallin K, Lynoe N, Löfmark R. Proximity morality in medical school – medical students forming physician morality "on the job": grounded theory analysis of a student survey. *BMC Med Educ*. 2007;7(27). doi:10.1186/1472-6920-7-27

18. Henriette B, Reidar B, Elsebeth S, Ch. BM, Lotte H. Implementing ethics reflection groups in hospitals: an action research study evaluating barriers and promotors. *BMC Med Ethics*. 2019;20(49):1472–6939. doi:10.1186/s12910-019-0387-5

19. Brooks L, Bell D. Teaching, learning and assessment of medical ethics at the UK medical schools. *J Med Ethics*. 2017;43(9):606–612. doi:10.1136/medethics-2015-103189

20. Safari Y, Yoosefpour N. Dataset for assessing the professional ethics of teaching by medical teachers from the perspective of students in Kermanshah university of medical sciences, Iran (2017). *Data Brief*. 2018;20:1955–1959. doi:10.1016/j.dib.2018.09.060

21. Habibzadeh H, Ahmadi F, Vanaki Z. Facilitators and barriers to the professionalization of Nursing in Iran. *Int J Community Nurs Midwifery*. 2013;1(1):16–25.

22. Tayebi N, Omidi A, Chahkhoei A, Aliravari H, Haghshenas A. Barriers standards of professional ethics in clinical care from the perspective of nurses. *Rev Latinoam Hipertens*. 2019;14(3):265–270.

23. Khaki I, Abbasi M, Khalajinia Z, Momenyan S. Barriers to observance of the codes of professional ethics in clinical care: perspectives of nurses and Midwifery of hospitals affiliated with Qom university of medical sciences in 2016. *Health Spiritual Med Ethics*. 2018;5 (1):33–39. doi:10.29252/jhsme.5.1.33

24. Hendelman W, Byszewski A. Formation of medical student professional identity: categorizing lapses of professionalism, and the learning environment. *BMC Med Educ*. 2014;14(139). doi:10.1186/1472-6920-14-139

25. Dehghani A, Mosalanejad L, Dehghan-Nayeri N. Factors affecting professional ethics in nursing practice in Iran: a qualitative study. *BMC Med Ethics*. 2015;16(1):61. doi:10.1186/s12910-015-0048-2

26. Gardeshi Z, Amini M, Nabeiei P. The perception of hidden curriculum among undergraduate medical students: a qualitative study. *BMC Res Notes*. 2018;11(1):271. doi:10.1186/s13104-018-3385-7

27. Ratnapalan S. Qualitative approaches: variations of grounded theory methodology. *Can Fam Physician*. 2019;65(9):667–668.

28. Palinkas LA, Horwitz SM, Green CA, et al. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Adm Policy Ment Health*. 2015;42(5):533–544. doi:10.1007/s10488-013-0528-y

29. Safari Y, Yoosefpour N. Data for professional socialization and professional commitment of nursing students — a case study: Kermanshah university of medical sciences, Iran. *Data Brief*. 2018;21(21):2224–2229. doi:10.1016/j.dib.2018.11.088

30. Safari Y, Alikhani A, Safari A. Comparison of blended and e-learning approaches in terms of acceptability in-service training health care workers of Kermanshah university of medical sciences. *Int J Pharm Technol*. 2016;8(2):12893–12902.

31. Safari Y. Clarifying evidence-based medicine in educational and therapeutic experiences of clinical faculty members: a qualitative study in Iran. *Glob J Health Sci*. 2015;7(7):62–68. doi:10.5539/gjhs.v7n7p62