How Iranian Medical Trainees Approach their Responsibilities in Clinical Settings; A Grounded Theory Research

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Abstract

Background: It seems we are now experiencing “responsibility problems” among medical trainees (MTs) and some of those recently graduated from medical schools in Iran. Training responsible professionals have always been one of the main concerns of medical educators. Nevertheless, there is a dearth of research in the literature on “responsibility” especially from the medical education point of view. Therefore, the present study was carried out with the aim of presenting a theoretical based framework for understanding how MTs approach their responsibilities in educational settings.

Method: This qualitative study was conducted at Shiraz University of Medical Sciences (SUMS) using the grounded theory methodology. 15 MTs and 10 clinical experts and professional nurses were purposefully chosen as participants. Data was analyzed using the methodology suggested by Corbin and Strauss, 1998.

Results: “Try to find acceptance toward expectations”, “try to be committed to meet the expectations” and “try to cope with unacceptable expectations” were three main categories extracted based on the research data. Abstractly, the main objective for using these processes was “to preserve the integrity of student identity” which was the core category of this research too. Moreover, it was also found that practically, “responsibility” is considerably influenced by lots of positive and negative contextual and intervening conditions.

Conclusion: “Acceptance” was the most decisive variable highly effective in MTs’ responsibility. Therefore, investigating the “process of acceptance” regarding the involved contextual and intervening conditions might help medical educators correctly identify and effectively control negative factors and reinforce the constructive ones that affect the concept of responsibility in MTs.

Keywords ● Qualitative research ● Responsibility ● Medical students ● Iran

Introduction

The virtue of “being responsible” as one of the basic features of human moral agency has now a known standing in interpersonal relationships. The professional doctor-patient relationship is one
the main and basic examples of human relations. For this reason, “responsibility” is one of the main characteristics of medical professionalism highly expected to be observed as a medical core value. For this reason, training responsible professionals has always been a major focus of attention for medical educators, too.

Generally, health professionals are “personally accountable” for their professional practice. Consecutively, medical trainees (MTs) are also personally accountable and of course responsible to accomplish their assigned educational duties. Nevertheless, despite having this fundamental importance and general scope of use as Mergler has pointed out, there is yet an absence of a clear definition of “responsibility” in the existing literature. Duty, blame, accountability, liability, commitment, obligation, etc. are classic examples of the concepts based on which “responsibility” is practically explained or defined. Moreover, the concept of “personal responsibility” itself has yet been investigated in a limited number of published research and theoretical studies as an independent and ascertainable subject of research. Despite this general shortage, there are studies in which attempts have been made to introduce or investigate some “social” aspects of this concept. Medical education is a common field of study in which most of these studies have been done.

The present study aimed at presenting a theoretical based framework to help medical educators understand how responsibility is taken on and fulfilled by MTs at educational settings of clinical care. Using the “grounded theory methodology”, practically, this study contributes to an understanding of the concept of responsibility in MTs. The results could be useful for solving the emergent “responsibility problems” among MTs and those recent alumni. On this basis, the general questions of the research were: (i) how MTs take on and fulfill their responsibilities in clinical settings, (ii) how MTs describe and reason for their way of acting as responsible agents, (iii) what experiences and perceptions do participants have regarding responsibility in MTs.

**Participants and Methods**

**Participants and Sampling**

Participants in this study were fifteen MTs. Moreover, ten clinical experts and professional nurses were also interviewed about responsibility in MTs. All undergraduate MTs in their 5th to 7th year of education and all graduates with a residency background of at least 6 months were considered compatible for sampling. In addition, we interviewed those nurses who have had a supervisory role, at least in a period of their professional work and those clinical experts with a background of at least one year experience in clinical training. Strategies of purposeful sampling, maximum variation sampling and snowball sampling, and a strategy for sampling concepts (theoretical sampling) were used for the study.

**Data Collection and Analysis**

25 in-depth, open ended, semi-structured interviews were carried out to collect the data. Additionally, the information of 8 reflective essays was also added to the study to ensure the saturation state within (sub) categories. In this regard, MTs were given an essay guideline and asked to write around a 500-word essay. In line with the reflective writing purposes, we tried to invoke self-reflection and self-awareness about their responsibility in clinical settings.

The mean duration of interviews with MTs was about 73 minutes and with clinical experts and professional nurses 50 minutes. Four MTs, one nurse and a clinical expert were piloted with the initial interview protocol. The collected data was analyzed using the three-stage approach of Strauss and Corbin methodology utilizing MAXQDA 2007 software (VER BI GmbH, Berlin, Germany). To establish the trustworthiness of the research, we used member checking, debriefing (auditing) with supervisors and constant comparative analysis.

Ethical considerations of a scientific work, including written informed consent and confidentiality were also followed. Additionally, the time and place of interviews were determined with the agreement of each participant.

**Results**

Socially, “awareness of the position” sufficiently made MTs to “accept” liability for it and try to meet its requirements. Moreover, according to the data, the process of “responsibility” in MTs could be seen as a dynamic social deal, namely a “duty-right deal”, in which duty referred to the position-related duties expect MTs to meet as a trainee and the right, to respect and fairness they reciprocally expect to be introduced in that position. Overall, the surrounding conditions of this social deal would establish MTs a “student identity” or a “dynamic positional identity”. Promoting the identity and preserving it from any imperfection illustrated to be the main activity MTs tried to be involved in, either consciously or unconsciously. In this way, “responsibility”
was the main activity MTs employed to preserve and promote their “student identity”. The research core category, “try to preserve the student identity” could relate the emergent three main research categories, namely “try to find acceptance toward expectations”, “try to be actively committed to the duty” and “try to cope with unacceptable expectations”.

Try to Find Acceptance Toward Expectations

“Acceptance” implied to play a basic role in MTs responsibility, according to the participants. Generally, “finding acceptance” as a protecting process could support MTs against any expectations that they thought not to be within the scopes of their formal position-related responsibilities (“foreign expectations”). For this purpose, MTs often evaluated expectations using two sets of criteria; namely cognitive and emotive.

Moreover, the data showed that the “acceptance” was not simply a matter of black and white but could be gained across the “spectrum of acceptance”. Additionally, it was revealed that the “acceptance process” could be affected by a vast number of contextual (e.g. religious beliefs of MTs, efficacy of official pre-university educations, etc.) and intervening conditions (e.g. conflict of interests, non-standard working conditions, etc.).

Cognitive acceptance. Cognitive evaluation of expectations was a routine protecting strategy employed by MTs for the express purpose of assessing the assigned duties against a number of cognitive “acceptability criteria or standards”. In this way, the evaluation was usually carried out using a “comparative approach”; therefore, expectations usually compared with these standards to determine their acceptability. According to the informants, the conformity of expectations with the following criteria were usually assessed: “the formal rules and regulations”, “justice”, “rationality”, “MTs’ physical and psychological ability”, “MTs’ attitude and perception”, and “the pros and cons of (not) being responsible”. For instance, a 5th year undergraduate medical student (MS) explained how he compared an assigned duty with the formal rules, “I did not accept to write the patient’s medical note at all; I knew based on the educational rules, that was not a duty of mine, but an intern’s [a 7th year MS]”.

Emotive acceptance. “Emotional evaluation” of the assigned duties was the other protecting strategy MTs employed with the aim of determining the “emotional acceptability” of the present expectations. The data showed that this kind of evaluation was routinely done unconsciously unless something annoying or undesirable triggered off the emotive reactions and made MTs to react knowingly. Like cognitive evaluations, MTs also used a “comparative approach” to assess whether the existing expectations were in line with the “emotional criteria”. In this way, they should at least partly “feel interested in doing the duty”, “feel well motivated to do the duty” and “should not consider the duty beneath their dignity” until they do the duty as expected.

For instance, a final-year undergraduate explained how she thought doing some special tasks were beneath her dignity as a MS: “Sometimes, we consider doing some tasks as too basic to be done by a MS; in fact we might look at [the] task as a nursing [duty] or even a work that should be done by a simple hospital staff”.

Try to be Actively Committed to the Duty

(Showing Commitment)

The data showed that, “try to be committed to the duty” was a common developmental strategy employed by MTs after they could gain a reasonable level of acceptance toward expressed expectations. In this regard, the data categorized into the following three sub-categories:

Commitment to others. MTs felt that they had to “support” patients, their families, peers, etc. or at least not to withhold what they were able to do for them. Moreover, they thought they had a duty to “respect” patients and their demands; lots of MTs believed patients should be treated respectfully even though they were not respectful of the health care team. Additionally, MTs thought “feeling empathy for” and “being fair to” others, whether patients, peers, etc. were the two other instances of responsibility in the health care environment.

Generally, considering “the economic problems of patients”, “patients’ wants and desires”, try to “spend enough time with patients” and “understanding their condition” were among the most prominent instances of support which MTs expressed in the interviews. In an instance, a graduate student described her supportive view as the following:

“I think physicians should feel sympathetic to their patients; although it seems very difficult to be performed in practice, but actually a caring student should treat patients as his or her own family members; see the patient as her father, her brother or her mother., I think she should do her best for them”.

Commitment to self-improvement. MTs thought they had the responsibility to improve
Medical trainees’ responsibility in clinical settings

In this regard, a 5th year undergraduate student explained her study schedule and stated, “... during a morning round, I realized that I need to learn much more about diseases and their treatments if I am going to be a qualified physician; so I decided to schedule a studying program which could cover my weaknesses”.

Commitment to fulfill academic duties. Lots of MTs thought they were legally and/or morally or even religiously obliged to fulfill their assigned duties as qualitatively as they could. Generally, feeling to be responsible and consequently, accountable for the assigned duties, as a common attribute, made MTs to be more active, cooperative and reliable in doing their academic responsibilities. Commonly, there were different presentations of “commitment” in practice according to the participants. In this way, MTs might feel “inclined to meet the assigned duties”, attempt “to be actively engaged in doing duties”, “try to do their best”, “facilitate working conditions and professional relationships” to better perform duties, “compensate the overdue” and “carefully observe the current rules/regulations”. In his statement, for example, a pediatrics resident explained how he had tried to facilitate the process of examination of children for doing his best of duty:

“... I felt always inconvenience of the fact that I often could not dominate children during examination;... so I thought I had to introduce new strategies at least because of my own advantages. Fortunately, I could design and illustrate new positions to examine children”

Try to Cope with Unacceptable Expectations

The data showed that, “try to cope with unacceptability” was a common strategy employed by MTs when they could not gain a reasonable level of acceptance toward the assigned duties. According to the data, these strategies could be totally categorized into two sets of effective and non-effective ones in respect of their positive or negative consequences for the “responsibility”:

Effective strategies. Those strategies considered effective that when used by MTs could pose the least defect to the accomplishment of “responsibility” in practice. In other words, employing these strategies could cause the least negative consequences, especially for patients, hospital economy, etc. One of these strategies, “not to accept to do or reject the expectation” usually employed when MTs intended to counter an unacceptable expectation frankly. Nevertheless, some participants believed that many MTs were not courageous enough to reject meeting an expectation so directly; therefore, they might prefer to “put up with or tolerate” the unpleasant situation in the hope that it is casual and would be finished in sight. Of course, these students usually had their own reason or logic for choosing this second strategy. In this regard, tolerating “for the sake of innocent patients”, “for the fear of being punished” and “avoiding inconvenience and problem” were three justifications mainly expressed in the data.

In addition to the above strategies, some MTs were in “an attempt at reconciliation with” the emergent unacceptability. Generally, two sub-strategies were used for this purpose, “to make a change of mind or take a different view” and “self-persuasion”. In this way, MTs often tried to inspire themselves with different and of course compatible thoughts or provide some justification for doing the tasks. By the way, the process of reconciliation did not always provide a convenient change for MTs; because it sometimes accompanied with feelings of pressure and dissatisfaction as a 6th year MS expressed this fact in her remarks:

“... We know that not all orders are reasonable enough to be followed or even within the scope of the current rules for an extern [a 6th year MS], but actually, there is no other choice for us than to meet them. More often than not, we might convince ourselves that the situation improves over time; although we are feeling dissatisfied”.

Non-effective strategies. Strategies considered being non-effective, or even ineffective, when they run counter partly or totally to the accomplishment of “responsibility” in practice. According to the data, there were three common non-effective strategies employed by MTs: “to practice with a lack of interest and motivation”, “making light of duty”, and “to retaliate negatively”. “Lack of motivation” explained by lots of participants as a critical and growing issue among MTs. Generally, poor motivation rendered MTs indifferent toward their educational duties, patients, observing rules or ethical principles. Therefore, “lack of empathy” for patients’ pain and suffering was implied as a common indicator of poor motivation among MTs.
Additionally, some MTs might “make light of their academic duties”. Therefore, they often did not take up their duties as seriously as they should. “Dereliction of duty”, “to find a way to evade or shirk responsibility”, “try to shift or impose responsibility to others”, “do not make the best endeavors when performing duties” and thus “doing a poor job” and “showing a poor respect for rules, regulations and principles” were instances of making light of the duty.

The data revealed that a few MTs might adopt a third strategy in opposition to the perceived unacceptability and therefore, express their dissatisfaction in despicable behaviors or acts. “To become bad-tempered” toward patients and/or colleagues, “disregarding senior orders”, “not welcoming constructive comments”, “disregarding patients” and “to do a retaliatory negative action” were main instances of this strategy. Many informants believed MTs often did covert actions instead of overt ones when they intended to retaliate in a negative manner. An example of this kind of behavior was explained by a clinical expert: “… When we are strict to MTs educationally, then we should worry about the possible unsatisfactory outcomes; in fact, they would evaluate the ward and of course our educational activity negatively in response to that strictness”.

Core Category

The central category (or core category) represents the main themes of the research and thus, all other major categories can be related to it.13 In this study, the core category emerged as “try to preserve the integrity of positional identity”. The “positional identity” for MTs was the one started to be grasped conceptually when admitting medical school and often continued to strengthen and materialize during medical education; we name this identity here as “(medical) student identity” or with a little disregard “professional identity”. Commonly, the identity provided MTs a “sense of identity”. Generally, it was important for MTs to respond satisfactorily to this sense. Therefore, they often attempt to preserve the integrity of their “student identity” and to demonstrate a perfect view of that to others. Practically, “responsibility” provided MTs an opportunity to follow these goals thus, heighten their “sense of identity”, and consequently gain satisfaction and a sense of security. Overall, “understanding the position” or “awareness of the position” would prepare MTs to accept and bear their position-related responsibilities. Therefore, from the social point of view, MTs basically, knew and deeply felt that they were bonded to some specific MT-related obligations which were expected them to bear and fulfill when they accept to be a member of the medical profession.

“Try to find acceptance toward the assigned duties” as an identity protecting process, “try to be committed to meet the duties” as an identity developmental process and “try to cope with unacceptable expectations” as an identity coping process, were the main involving processes which could explain how MTs approached the concept of “responsibility” in the clinical settings to preserve their identity. Figure 1, illustrates a more comprehensive view of the responsibility process in MTs.

Discussion

We were entirely unsuccessful in finding any qualitative research, which investigated the process of “responsibility” among university students. Nevertheless, generally, concepts of “professionalism”17 and “professional commitment”18 were to be the most inclusive of the content of “responsibility”, but evidently could not meet the specificity criteria of the subject. Thus, we think the present work could substantially contribute to the literature on “responsibility” in both fields of medical ethics and medical education.

MTs’ professional identity often forms and develops under the complex interaction of a great number of contextual and intervening factors, including MTs’ personality, motivations, quality of inter professional relationships, role models, etc.19,20 In this way, our data suggested that “responsibility” could be a practical criterion for rough determination of MTs’ quality of professional identity, its developmental state and affecting factors regarding the context under study. As shown, in this respect, “being responsible” could help MTs to settle, develop and strengthen their “student identity”, yet, in a positive feedback establishment of the identity could also help MTs to act more responsibly. Therefore, we think that the study of etiology and pathology of the concept of responsibility in educational settings could be extended and related to MTs’ professional identity and thus determines what negative and/or positive elements are working in this area.

As the data illustrated, the quality of MTs’ responsibility was greatly dependent upon the quality of their “acceptance” towards the assigned duties. Although, “acceptance” and its process seem to be a well-known topic in psychology21,22 but as the entrance window of “responsibility” it has not been investigated yet to the best of our knowledge. Overall, for
improving the process of “finding acceptance” in MTs we propose other than holding regular investigations for the identification of influential factors. Medical educators should help the process to be facilitated through exertion of well-planned and responsibility oriented medical curricula, effective use of role models, performing persuasive and responsibility oriented seminars or discussions with students based on the cognitive and emotive criteria by which MTs evaluate acceptability of expectations routinely.

Moreover, as the data showed, “self-awareness” about the social position has a basic and determining role in how effectively MTs being able to take on their responsibilities in practice. In this way, helping MTs to widen, deepen, and strengthen their “self-awareness” about their outstanding social position as a healthcare is also proposed as a strategic approach to enhance the quality of their responsibility and commitment to the profession. In this way, establishing a more effective socialization process in MTs with the aim of enhancing their quality of “professional identity” and thus their “responsibility” is also suggested.

**Conclusion**

The findings of this study indicates that the concept of responsibility in MTs is not a simple but rather a completely complex theme, which might be influenced in practice by any number of personal and external (environmental) factors like MTs’ motivation, religiosity, work load, etc. Although this investigation might contribute basic information to the literature of responsibility, especially in the field of medical education, but conducting more thorough investigations seems to be a necessity.

Socially, besides medicine, responsibility is an integral part of all human social activities. In this way, not only philosophically the concept has been discussed and accepted in almost all secular philosophical schools of thought, deontology, consequentialism, etc., but also it has spiritually been considered and approached in holy books. For example, Quran the holy book of Muslims considers human beings responsible...
to the Allah’s blessings and thus introduces his responsibility as a “divine trust” and states. “Surely we offered the trust to the heavens and the earth and the mountains, but they refused to be unfaithful to it and feared from it, and man has turned unfaithful to it; surely he is unjust, ignorant” (Quran 33: 72).

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References

1. Williams G. Responsibility as a virtue. Ethical Theory and Moral Practice. 2008;11:455-70. doi: 10.1007/s10677-008-9109-7.
2. Thistlethwaite J, Spencer J. Professionalism in medicine. New York: Radcliffe; 2008.
3. Lynch J. Clinical responsibility. Oxon, United Kingdom: Radcliffe; 2009.
4. Megler A. Personal responsibility: the creation, implementation and evaluation of a school-based program. Brisbane, Australia: Queensland University of technology; 2007.
5. Barilan YM. Responsibility as a meta-virtue: truth-telling, deliberation and wisdom in medical professionalism. J Med Ethics. 2009;35:153-8. doi: 10.1136/jme.2008.025411. PubMed PMID: 19251964.
6. Clancy A, Svensson T. Faced with responsibility: Levinasian ethics and the challenges of responsibility in Norwegian public health nursing. Nurs Philos. 2007;8:158-66. PubMed PMID: 17581243.
7. Ruyter DD. The virtue of taking responsibility. Educational Philosophy and theory. 2002;34:25-35.
8. Asemani O, Iman MT, Khayyer M, Tabei SZ, Sharif F, Moattari M. Development and validation of a questionnaire to evaluate medical students’ and residents’ responsibility in clinical settings. J Med Ethics Hist Med. 2014;7:17-24.
9. Faseleh-Jahromi M, Moattari M, Peyrovi H. Iranian nurses’ perceptions of social responsibility: A qualitative study. Nurs Ethics. 2014;21:289-98. PubMed PMID: 24036668.
10. Boelen C, Woollard B. Social accountability and accreditation: a new frontier for educational institutions. Med Educ. 2009;43:887-94. PubMed PMID: 19709014.
11. Gibbs T, McLean M. Creating equal opportunities: The social accountability of medical education. Med Teach. 2011;33:620-5. doi: 10.3109/0142159X.2011.558537. PubMed PMID: 21774647.
12. Kwizera EN, Iputo JE. Addressing social responsibility in medical education: The African way. Med Teach. 2011;33:649-53. doi: 10.3109/0142159X.2011.590247. PubMed PMID: 21774652.
13. Patton MQ. Qualitative evaluation and research methods. 2nd ed. Newbury Park, CA: Sage; 1990.
14. Strauss A, Corbin J. Basics of qualitative research: techniques and procedures for developing grounded theory. 2nd ed. Thousand Oaks, California: Sage; 1998.
15. Ross PT, Williams BC, Doran KM, Lysson ML. First-year medical students’ perceptions of physicians responsibilities toward the underserved: an analysis of reflective essays. J Natl Med Assoc. 2010;102:761-5. PubMed PMID: 20922919.
16. Asemani O, Iman MT, Moattari M, Tabei SZ, Sharif F, Khayyer M. An exploratory study on the elements that might affect medical students’ and residents’ responsibility during clinical training. J Med Ethics Hist Med. 2014;7:8.
17. Kashani MF, Dabiran S, Noroozi M, Aramesh K. Professionalism in postgraduate students of TUMS: patients perspective. Iranian Journal of Medical Ethics and History of Medicine. 2010;3:46-56.
18. Gould D, Fontenla M. Commitment to nursing: results of a qualitative interview study. J Nurs Manag. 2006;14:213-21. doi: 10.1111/j.1365-2934.2006.00577.x. PubMed PMID: 16600010.
19. Broadhead RS. The private lives and professional identity of medical students. New Brunswick, New Jersey: Transaction Books; 1983.
20. Goldie J. The formation of professional identity in medical students: Considerations for educators. Med Teach. 2012;34:e641–e8. doi: 10.3109/0142159X.2012.687476. PubMed PMID: 22905665.
21. Cordova JV. Acceptance in behavior therapy:
22. Hayes SC, Jacobson NS, Follette VM, Dougher MJ. Acceptance and change: Content and context in psychotherapy. Reno, NV: Context Press; 1994.
23. Akerjordet K, Severinsson E. Emotional intelligence in mental health nurses talking about practice. Int J Ment Health Nurs. 2004;13:164-70. doi: 10.1111/j.1440-0979.2004.0328.x. PubMed PMID: 15361171.
24. Weidman JC. Socialization of students in higher education; organizational perspectives. In: Conrad CF, Serlin RC, editors. The Sage handbook for research in education; engaging ideas and enriching inquiry. Thousand Oaks, California: Sage Publications; 2006. p. 253-62.