Devising ethical codes for e-contents in e-learning

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Abstract

Background: Promoting ethics is one of the goals of education, but the free flow of communication and divulging unethical behaviors in e-learning make the urgent need to clarify ethical values. Therefore, the aim of this study was to prepare ethical codes to develop and deliver e-contents.

Methods: A draft of e-content ethical codes was prepared based on the literature review. Then, it was further revised by e-learning, medical education, ethics, and e-content experts. Finally, the draft was finalized through a 2-round Delphi process among related experts all over the country.

Results: The final document of e-content ethical codes, including introduction, definitions, and 7 ethical code statements, was devised.

Conclusion: Considering the difference between e-content and other kinds of publications, this set of ethical codes can be used straightforwardly to assess ethical aspects of e-contents.

Keywords: Ethical codes, E-content, E-learning, Delphi method

Conflicts of Interest: None declared

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Introduction

There are significant differences between keywords 'morale' and 'ethics'. The term morale implies the correct and wrong principles in behavior and deed, but the term ethics is a system that is based on a person or groups of people and includes the values or functional principles that have direct relationship with or without meticulousness of certain actions and their results (1). Nowadays, ethics is in the focus of attention and at the center of many developments worldwide. Mankind follows a rational and ethical approach to meet their physical and spiritual needs. Hence, the existence of ethics could be known as the center of future changes. This approach mostly affects the majors and services that are dependent on providing services (3).

For most of the professions and businesses, there are different ethical principles, regulations, and standards at the organizational, national and even international levels that have been developed under the title of professional ethics (4). Professional ethics are a set of dos and don’ts that address the experts of businesses and are related to their professional responsibilities (5). These principles can be helpful when there is a conflict between a particular activity and conflicting ethics in a profession. One of the instruments of establishing professional ethics is the ethical codes, which are a collection of principles and standards of peculiar human deportments which determine persons and groups’ behaviors. As a matter of fact, in all professions, the dos and don’ts must be explicated in a ration-
al process to provide the commonsense of values which must be kept and publicized in organizations (5). In occupations, which human relationships and relation with persons are more intense either as a customer or colleague, observing these principles seems to be more urgent (4); like the medical profession in which human relationships are crucially important in terms of the patient’s mental or physical weakness. By all means, this issue pertains both to the medical profession and disciplines of this area, and even other fields of study such as nursing (6), engineering (7), research in medicine (8), genetics (9), psychology (10), and tens of other areas develop and administer their own regulations and ethics.

The advent of information technology and telecommunication has shone on all aspects of human and social life, and by removing the boarders and times, it has changed the world into a village (11). The limitations and physical areas of education as well as learning, like the walls of universities and classes, have been removed; therefore, education and learning are possible everywhere (12). These efforts have resulted in creating new concepts and areas titled as e-learning, which is based on adaptation of computer technologies, multimedia, and processors. Using e-learning has completely changed the teacher-centered concept and process and modified the education style into a student-centered approach. E-learning proposes a wide range of flexibility in teaching methodology, managing content, synchronous and asynchronous interaction between teachers and students, the organization and structure of the course, educational plans, and finally assessing and evaluating students (13). Moreover, e-learning is not a separate concept from education; rather, it is another definition of it which takes place within a network where a collection of multimedia technologies and telecommunications are being engaged (14).

With the advent of e-learning, due to the close relationship with human information, ethical issues become more intense. Generally, the main aim of education is to promote ethics. However, the free stream of communication in virtual education and the incidence of immoral behaviors call for an extremely urgent action to adopt moral behaviors (15). The issues concerning technology ethics and electronic content (e-content) are various that each of which contains points and various subdivisions.

Thus, in this study, it was aimed to prepare ethical codes to develop and deliver e-contents.

Methods
This developmental research study was done in 3 steps.

Step 1: The first step was to prepare the first draft of ethical codes for e-content that included reviewing texts, library studies, extracting ethical concepts, and reviewing the ethical codes for publication (2), changing the concepts into ethical codes, and completing the content of the accomplished codes. Ethical codes and guidelines for publication that had already been developed and approved by the Ministry of Health and Medical Education were considered as the core resource to be justified for e-content.

Step 2: The second step was to form a specialized committee, including pundits in e-learning, and producing e-content and using specialists in ethics for holding specialized sessions to develop the drafts of ethical codes. First, these sessions were held in small panel discussions and, in the meantime, notetaking and recording the sessions were done. Then, this information was implemented and the major codes and themes were extracted qualitatively. The sessions were held 4 times.

Step 3: The third step was to validate the draft of codes and finalize them using the ideas of pundits all over the country, which was done using Delphi method. In this study, pundits referred to specialists in e-learning and medical education who were experienced in producing areas and the clinical specialists who were experienced in producing content and virtual teaching at least for one semester, and the specialists in ethics. These experts have been selected from the universities with active e-learning centers, including Tehran, Shahid Beheshti, Iran, Shiraz, Esfahan, Mashhad, Tabriz, Birjand, and Kerman Universities of Medical Sciences. The Delphi method was run twice, with 40 experts that expressed their no conflicting interests in Delphi questionnaire.

Results
First, all the electronic and published sources were reviewed. After searching in various databases, relevant concepts with e-content were extracted by 2 persons independently. Then, they compared their search results to ensure the accuracy of the extracted concepts. These concepts were prepared in a listed format from the beginning and some codes were considered for the concepts. The draft of ethical codes was compiled with 14 cases by the research team using this information. This step was finished in July 2017. Drafting ethical codes of e-contents was reviewed and discussed by applying the focus group method, including 14 e-learning experts. Four 3-hour sessions were held. Moreover, in addition to notetaking from the recommended cases, all the presented contents were recorded during the sessions. After reviewing the presented notes and information by researchers, the required items were added to the draft. Also, 2 more codes were added to the draft after focus group sessions. This step was performed in one month.

In the next step, to reach a consensus for the accuracy of the draft of ethical codes of e-contents, Delphi method was applied within which the opinions of 40 specialists in e-learning, medical education, ethics, and clinical sciences were used. Data were extracted, categorized, and collected in a list of opinions. Also, the views of the experts at the Minority of Health and consensus were identified. At last, by applying the intended changes, the information was sent to the participants to leave their comments at last opportunity. According to the latest opinions, in the last form, ethical codes of e-contents, including 7 items, were achieved (Table 1).

Discussion
Ethics have existed and regarded as the means for evaluating human deeds. Nowadays, ethical discussions are more important than ever. In different professions and majors, for functions and decisions to be homogeneous
and to prevent applying personal opinions and taking actions which are harmful for the beneficiaries, developing and following ethical codes are inevitable. The existence of these codes and their efficacies on persons involving in that area are effective (16, 17). Several ethical codes in technology and information security have been developed. This is mainly because of the presence of various information technology groups, as the result of which various opinions regarding the codes in this area have been developed. In the present study, these codes were reviewed analytically and the result of the reviews showed that the codes have dealt more to the security of data, users, skills and abilities, contracts, and costs (18-21). In Iran, the general guideline of ethics among medical sciences’ studies, national ethics guideline in publishing medical sciences’ productions, and national ethical guidelines in special areas as have been already developed and approved. However, there are some differences between technology-based contents with other scientific publications that shows the necessity of devising specific ethical codes. In this study, a set of ethical codes for e-contents was developed. Some of the codes or statements were similar to ethical codes for publication (2), but some new codes were added, and some concepts changed or summarized with respect to e-content specifications. This document can be used straightforwardly for e-contents.
Conclusions

Ethical codes that are suitable for the structures and methods of preparing these contents should be delivered to detect infringements and not to follow the principles and standards to approve them based on documents. In this study, the ethical codes of e-contents were produced with the cooperation of related experts which could be used either in national or international scales.

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Conflict of Interests

The authors declare that they have no competing interests.

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