



Critical Interpretive Synthesis of The Concept of Value in Medical Education

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Abstract

Introduction: Educational programs and curriculums are developed using underlying concepts of value. The development of values-based curriculum and access to education based on values requires clarification of the concept of value. This article is an interpretive review of the large body of diverse and complex literature on the concept of value in medical education.

Methods: This project used critical interpretive synthesis (CIS) to carry out qualitative analysis and synthesis of the literature in critical interpretive style. The main review question was the clarification of the concept of value in medical education, which produced over related 800 articles; 70 articles related to the research objective were studied by purposive sampling. After identifying the main categories and sub-categories, a well-reasoned synthesis of the contradictory findings in different studies was conducted. New concepts and relationships between concepts were created using CIS of documentation related to the concept of value and the philosophy and place of values in medical education.

Results: To perceive the concept of value and its use in the design and development of medical curriculum, a loop of concepts related to the concept of value was created. A more useful means of understanding value is offered by the synthetic constructs of principle-, outcome-, and virtue-oriented values. This triad of value loops shelters institutional, programming, and curricular levels of the education system.

Conclusion: This new theoretical conceptualization of value in the education system can be an appropriate guide for value-based educational programs and curricula in medical education in every context.

Introduction

All countries are trying every day to be close the gap in educational development. Education systems play an important role in the development of societies through training manpower. Therefore, changing or improving structures, systems, processes, and methods of classical education and research can be helpful. Creating changes and improvements, especially in the field of education, can help create better conceptual structures.¹

In Iran, the development of medical education is one of the main objectives of the Ministry of Health and Medical Education (MOHME) and the entire education system throughout the country. Values, in the spiritual and affective domains, are considered in training program development in many countries around the world as a basic guideline for education development. We are going to

go to this guideline as well. The first step is clarification of the concept of value and re-envisioning this concept based on our specific context of the system of medical education. Although our national educational documentation has a value based perspective, but there is no objective education program or curricula dedicated specifically for this purpose.² Courses such as ethics and Islamic Education are taught in the traditional way and transfer basic concepts. According to research, this type of education does not guarantee the internalization of values and value based conduct, behavior, or character. As in other countries, we need to provide value-based field experiences in our programs and curricula. This study provides the theoretical basis for program development through a new conceptualization of the concept of value.

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The literature on the concept of value is large, diverse, and complex. Especially when deciding to establish value-based curricula and programs, a lack of clarity about what the concept of value means has been identified as a major problem. A review of this area by CIS would be of most benefit if it were to produce a theoretical basis that is not so abstract that it lacks empirical applicability.

Materials and Methods

Various methods exist for synthesizing data. CIS is a relatively new approach to the synthesis in qualitative style. The purpose of CIS is to develop new concepts and theories through the process of interpretive review and synthesis. The CIS style of review differs from the other aggregative inquiries, which only assemble and give a brief statement of the main evidence findings.^{1, 2, 3}

CIS has similarities with the Conventional Systematic Review (CSR) methodology in its first steps but differs in details. Clarification of the concept of value and reconceptualization of it in medical education is the main review question here. But, at the beginning, this question only specifies the field of our research and is not complete. By the end, however, its original shape gradually becomes clear. The review question was specified iteratively by modifying the question in respect to search results and findings from retrieved items.⁴

As in literature reviews, searching for CSR is similar but combines more plan of actions to achieve its overall aim, including searching electronic databases and websites, as well as keeping in touch with experts. In this search, we found literature relating to our research question and over 800 articles related to the topic of research; the 70 articles related to the research objective were studied by purposive sampling. We used purposive sampling initially to select papers and later used theoretical sampling to add, test, and develop the emerging analysis. This project includes each type of research design.

In CSR we have specific criteria for critically appraising the quality of the articles' designs, but in CIS our aim is to prioritize papers that appear to be relevant instead of focusing on particular study types or papers with specified methodological standards. Quality assessment is done during analysis and synthesis.⁵

Data extraction was done in both qualitative and quantitative papers by extracting the titles of the categories and sub-categories using the terms of the paper itself as well as a summary of the relevant material.

For interpretive synthesis, CIS draws on strategies from meta-ethnography, but with some modifications. Refutational synthesis means create a synthesis from inconsistent findings of articles. Value judgments of many discourses and arguments in various articles were done in order to develop developing our own synthetic argument. Lines-of-argument synthesis in CIS means the creation of a third construct and a network of constructs that help to clarify the main question.⁶

Analysis started with accurate inspection of the papers. Recurring themes were identified gradually through

critique. Then, specified themes that helped to explain the concept of value being described in the literature were generated by constant comparison of theoretical structures and categories of our analysis and the relationships between them.^{7, 8} After identifying the main categories and sub-categories, a well-reasoned synthesis of the contradictory findings in different studies was conducted. With a critical interpretive analysis of the documentation relating to the concept of value and the philosophy and place of values in medical education, new concepts and relationships between concepts were reconceptualized and rebuilt. Quality determination was performed during analysis and critical interpretive synthesis of studies being considered for the project.

Ethical considerations

The present study was approved by Medical Research and Ethics Committee of Shahid Beheshti Medical University, Iran. The code of ethics related to this research project are respected.

Results

We discovered that in much of the evidences there is a semantic boundary between value and other concepts. Highlighting the differences between value and semantically close words is the basis for concept clarification.

In psychology, value is considered equal to need: basic biological needs and values and secondary needs and values are formed in community groups. Need is to be fixed through a series of incentives or rewards, and its importance diminishes or disappears but the importance of value is in itself and therefore inherent. For example, when someone wants respect, the basic units of respect for him is valuable, but the supply gradually lose its importance. Here, respect is valuable but is not value, because values do not gradually lose their importance.⁷

Some say belief is synonymous with value. Showing the difference between our beliefs and values can be a little confounding. We usually use both to guide our actions and behaviors and to form our attitudes towards different things, but they are fundamentally different. Beliefs are convictions that we usually hold to be true without actual proof or evidence. However, when beliefs get stronger, they can transform into certain principles or philosophies to be followed consistently in life, otherwise called values.⁸

Semantically, ethics is the closest to the concept of value. Value is a fundamental, guiding belief. We use these principles to define that which is right, good and just. We determine right versus wrong and good versus bad by guiding our value sets. Values are our standards. We then compare everything with these standards to determine if it meets that standard or not, and to evaluate its merit.⁹

Ethics is about our actions and decisions. We characterize acting ethically when we act in ways which are consistent with our beliefs and values. Acting unethically means one's actions are not congruent with one's values – one's sense of right, good, and just. The definition of ethics is not an individual activity; it is defined societally. In societies with

a single religious or cultural belief system, as is the case in our country, ethical and moral may be defined as the same thing.¹⁰ Morals are values assigned to a belief system, typically a religious system. These types of values get their authority from a higher being or higher authority.¹¹ In societies where there are plural belief systems there can be very different opinions as to whether a given action is ethical (or moral). And as a matter of fact there are ethical dilemmas, where the challenge of choices is not between what we believe to be right or wrong, but between competing rights.¹² The classic case: "Is it ethical to steal a loaf of bread to feed a starving child." The answer, "It depends." i . .

There is an interaction between value and attitude. As we said before, belief is our internal feeling that something is true, though this belief may be unproven or irrational. We assign a measure of the worth or importance of something as value. The way we live our lives is reflected in our beliefs and values. Our attitudes are the way in which these values are expressed through words and actions. Attitudes are responses that are a result of our values. Values are more or less permanent, while attitudes are a result of our experiences and can change with favorable experiences.¹³ Common attitudes and behaviors of a particular group are defined as norms, and this group belief is called "normal." Culture consists of the norms and values of any organization. The attitudes and behaviors of the members of any organization are called norms of it and what is important to the members is called values. The remarkable thing is that values can create their own norms, and in turn norms give a sense of shared values.¹⁴

According to the above, value is different but related to these concepts. Generally, values are used as the criteria for defining optimal conditions and for choosing among various options. Values show the ideal situation.¹⁵ To perceive the concept of value and its use in the design and development of medical curriculum, we identified a loop of concepts related to the concept of value. A more useful means of understanding value is offered by the three synthetic constructs of principle-oriented, outcomes-oriented and virtue-oriented values. Principle-oriented values lead to the development of laws, policies, regulations, and codes for professional and ethical duties and responsibilities. Outcomes-oriented values lead to the definition of the desired final outcome and the expected learning outcomes through policy making, program design, curriculum development, and management procedures. Virtue-oriented values lead to excellence through developing character traits. At the same time, this triad of value loop opens the umbrella at different levels of the education system including institutions, programs, and curricula (Figure 1).

Beside this, our worldview for other assorted values is also important: wisdom, self-perception and man-made philosophy or divine source and revelation.¹⁶ Spiritual moral crises develop the concept of values education. Education uses values for quality improvement training.¹⁷ We conclude that a value reference framework for value-

based education is needed. In our country, we should look for successful teaching values, the education system should make a list of values as a reference of values, and universities should consult with members and decide based on the reference of values to adapt to local needs. Since our worldview is Islamic, this list can be adjusted based on the values of the Koran and Islam.¹⁸ The conceptual model that underpins value in the educational system shows our interpretive findings and synthesis.

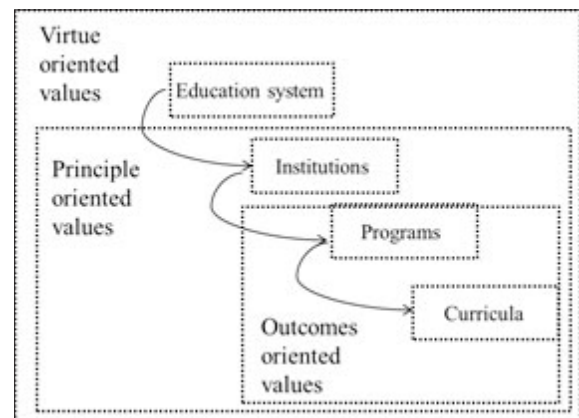


Figure 1. triad of value loop, at different levels of the education system

Discussion

Using CIS, we have shown what we mean by the concept of value in comparison to closely related semantic concepts. In our higher-level synthesis, we have identified what we believe about value development in the educational system. Our clarification of the concept of value paves the way and solves the challenge of the ambiguity of the meaning of value, at least in the medical education domain.

The proposed model covers items relating to a value-based educational system. This model is a useful resource and reference for those who want to conduct value-based education. But we emphasize that this is not an absolute, definitive framework. In addition, we acknowledge that we did not provide a complete model, but these model items are necessary for developing values in our educational system. Therefore, this initial model development is a crucial step in the development of value-based policies, programs, and curricula.

This CIS project is the first step in the process of moving toward an internalization of values. Now is the time to move from the information level, expressing a series of facts and reality and fact based education, to the conceptual level, understanding the connections and interactions between facts. This understanding should happen in each individual as part of our educational system. Then the individual is centered in a value based educational system, and the valuing process should happen to the individual.^{19,20}

Finally, we must say this loop should continue in order to develop a practical guideline for value based experiments in our context. Our CIS project is a part of a great work, which is scheduled by MOHME to take place in our

country, to develop the basics for experimental works and to ground and benchmark the theories in practice. We are equipped with high values of Islam and Quran to use as the reference framework in a ny development. However, we have lacked the basic research for values internalization and practical guides to the implementation of values and value judgments. It is hoped that this study will be useful to start eliminating these deficits and to improve our medical educational system.

Competing Interests

The authors declare that there is no conflict of interests.

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