Original Article

Health Culture and Presenting a Paradigmatic Model Focusing on Human Papillomavirus Disease

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Abstract

Objective: In this study, we developed a paradigmatic model focusing on human papillomavirus (HPV) diseases, in order to formulate a theory by investigating pathology in health culture using Grounded Theory, as an inductive and exploratory research method.

Materials and methods: It was a qualitative study, and data were collected using in-depth interviews with 20 people (10 men and 10 women) with cultural and religious specialties (clergy). In total, twenty interviews were conducted (mean duration = 45 min) using a semi-structured guide consisting of open-ended questions. All recordings were transcribed verbatim in Persian. All items were extracted based on the participants' responses and related literature. After data collection, the basic theory analysis was performed in terms of the three steps as follows: free coding, axial encryption, the implementation, refinement, and writing the theories in line with selective coding theoretical models. Finally, the paradigm model was determined from the presented models.

Results: The paradigm model emerged from professors, clergy, and authorized people, showed that religious taboos about sexually transmitted diseases; lack of wise management, comprehensive supervision, compliance with health standards in the country, proper legislation regarding sexually transmitted diseases as causal factors, awareness, health education in the country, public demand for health, individual dignity, punishment for health detractors, familiarity with individual rights as intervening factors, concern for human lives, health, and belief in fatalism; ethnic differences; irresponsibility; risk perception; high cost of HPV vaccine; immorality in health speech; disregard for people's lives; gender differences as contextual factors; and the consequences is increasing burden of diseases due to sexually transmitted disease such as (HPV).

Conclusion: It seems the overall lack of a health-based approach could be a major concern due to the weakness of cultural management in society that requires the involvement and intervention of all policymakers, health planners, authorized people, professors, elites, and clerics to control this major cultural health problem.

Keywords: Human Papillomavirus; Health Policy; Faculty; Clergy

Introduction

Human papillomaviruses infect epithelial cells and cause a variety of lesions ranging from common warts to neoplasia and cervical cancer. Papilloma virus contains the smallest viral DNA, which can cause tumors. These viruses have various types with the capability of infecting a huge range of animals and humans. High-risk papillomaviruses such as

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HPV-18 and HPV-16 can cause cervical cancer. It was estimated that about 29000 new cases and 275,000 deaths in 2008 were resulted from the virus, and the virus by having the smallest viral DNA, has the ability to make tumors, and it has become a global problem (1, 2). Cervical cancer is the second most common cancer among women worldwide, and 99.7% of cervical cancer is associated with HPV and is usually asymptomatic until advanced stages and also unfortunately is very difficult to treat it in advanced stages. Therefore, the most important issue in the control of uterine cervical cancer is regular screening of all eligible women. Zare et al. showed that the impact of education on puberty health issues on attitude and performance was one of the basic needs of puberty health and reproductive puberty among 12-14 year old girls and could raise the level of knowledge and awareness in youth on the cultural framework and religious beliefs in society. This cancer prevalence can also be significantly reduced by the use of prevention methods (3). One of the most effective strategies in controlling HPV is vaccination and immunization prior to the first sexual intercourse (4). However, this requires pathological research in health culture that can provide a paradigmatic model focusing on human papillomavirus (HPV) diseases that is appropriate for the Iranian Islamic community.

Pathology begins with the observation of the effects of injury. In Pathology, causality is sought (5). On the other hand, the paradigm is the dominance and the intellectual and cultural framework that has formed a set of patterns and theories for a group or society. Each group or community analyzes and then describes the facts about itself within the framework of the patterns that is accustomed to it (6, 7). Studies have shown that women's knowledge of the relationship between cervical cancer and HPV is low. However, nearly two-thirds of women had a positive attitude about vaccination before the age of 18 years old to prevent their children. 92% of those who were surveyed, believed that their children need education before marriage (8-10). In reproductive age prior to the first sexual intercourse, this cancer is preventable by HPV vaccination integration into the health system (11).

There are few studies in Iran conducted on the relationship between HPV and cervical cancer. Researchers have also emphasized in their studies on the prevention by cultural activities such as pre-adolescent physical education, prevention of high-risk sexual behaviors, pre-marriage education, planning by health and cultural policy makers, and vaccination. Also, they have considered that screening in terms of the WHO measures could be implemented by health professionals in the country. Therefore, a study was designed with the aim of investigating pathological pathways in health culture and presenting a paradigm model focusing on human papillomavirus (HPV) diseases in 2018.

Materials and methods

Accordingly, it was a qualitative study, and subjects were selected using purposive sampling method in-depth interviews with 20 people (10 men and 10 women) from professors of Islamic Education department of Shahid Beheshti University of Medical Sciences and cultural specialists and authorized person of Science Research and Technology and Education ministries of Tehran city in 2018. In total, twenty interviews were conducted (mean duration = 45 min) using a semi-structured guide consisting of open-ended questions. All recordings were transcribed verbatim in Persian. All items were extracted based on participants' responses and related literature. After data collection, the basic theory analysis was performed in terms of the following steps:

The first stage of this theory was the first line of interview that had some useful concepts in early identification and coding (free coding). The next step was the theory that at this point, the concepts were merged into a broader sense (axial encryption). The third stage was the implementation, refinement and writing the theories in line with selective coding theoretical models. Finally, the paradigm model was determined from the presented models.

We used the inductive and heuristic research method called Grounded Theory and helped formulating the findings-based theory. Data collection, formulation of research questions, data gathering, data coding in three stages, Open coding, Axial coding, Optional coding, writing analytical notes: Writing ideas and their interpretation of data, Writing and formulating theory. This was done using a paradigm that embodied the conditions, content, and interactions/outcomes strategies and outcomes. Causes: Events that lead to the occurrence or spread of phenomena. Phenomenon: The central idea, incident or event that the chains of interactions/actions are directed to manage or deal with or to which the series of behaviors relate. Contextual: a series of special features signifying the phenomena. That is, the location of events and events

belonging to the phenomena along the next spectrum of fields represents a series of specific conditions in which action / interaction strategies occur. Intervening conditions: Structural conditions belonged to phenomena affect interaction/interaction strategies. Interaction: Strategies for controlling, managing, and dealing with phenomena under specific observed conditions, Outcome: Outcome and interaction, Paradigm Pattern: In basic theory, we relate categories in a series of relationships to a category that is a statement of causal conditions, phenomena, contexts, mediating conditions, and interactions/outcomes strategies and outcomes. In the case of human resources, the effects of injury occur in a variety of ways, called behavioral issues.

The study was approved by the ethics committee of Shahid Beheshti University of Medical Sciences (Reference Number: 012.1397.REC.SBMU.IR).

Results

The mean ± SD age of the study population was 37.70 ± 8.07 (23-67) years old. Table 1 Showed a paradigmatic model based on the views of the professors participating in the study.

Table 2 showed a paradigm model based on the opinions of clergymen participating in the study.

Table 3 showed a paradigm model based on the opinions of authorized participating in the study.

Figure 1 showed paradigm model extracted from the viewpoints of the professors, clerics, and authorized peoples.

Discussion

The results showed that the lack of a health-based approach was the main paradigm of this study, due to the lack of cultural management in the community**.** By investigating the paradigmatic model from the professors' point of view, lack of role for cultural activities appropriate for Iranian society, lack of education to show the importance of vaccination and appropriate time for in need people, lack of education and prevention of cervical cancer, and lack of education causes of sexually transmitted diseases and their prevention are listed as causal factors.

Table 1: A paradigmatic model based on the views of the professors participating in the study

Core category		Condition	Strategies	Outcome
Lack of cultural education program	Causal Condition	There was no role for cultural activities appropriate for Iranian society Lack of training to show the importance of vaccination and the right time for people in need Insufficient education and preventing cervical cancer, insufficient education and preventing STDs.	Presenting a cultural program tailored to Iranian society. Providing cultural activities to encourage at-risk people and promoting the cultural level of preventing STDs.	Increased risk of morbidity and mortality from cervical cancer, increased economic cost and lack of health.
	Intervening Condition	Vaccination of human papillomavirus is not a part of vaccination of the health system Human papillomavirus vaccination is not a part of reproductive health programs. Pre-adolescent vaccination is associated with the cultural problems or lack of awareness and ethnic and religious beliefs.	Education program to reduce the risk of HPV. Providing rules for cultural programs for community awareness. Using modern communication technologies to change the attitude of young people in the field of personal health. Pre-puberty awareness to tackle and prevent STDs helps institutionalize health culture. Changing the cultural attitudes of society.	
	Contextual Condition	Gender difference religious beliefs, Ethnic differences	Promoting the cultural level of preventing STDs. Providing an appropriate gender education program. Breaking the religious taboos. Introducing Ethnicity to Influential Persons (Clerics)	

Table 2: A paradigmatic model based on the views of the clergymen participating in the study

Core category		Condition	Strategies	Outcome
Existence of cultural problem with STD prevention	Causal Condition	Lack of cultural training programs to reduce the risk of HPV Not paying attention to the principles governing the family Misinterpretation of religious beliefs	Clerical intervention to convince people who are resisting to the vaccine. Clerics can help publicizing successful vaccination by health system by holding briefings for people. Involving families to prevent illness, using religion and religious beliefs to control the disease.	Prevalence and incidence of disease due to increased masking.
	Intervening Condition	Youth unemployment. Lack of awareness about people's intellectual property rights Lack of knowledge in people about personal health. Lack of vaccination before puberty.	Job creation for family formation and disease prevention. Educate people about spiritual rights and take advantage of these rights to prevent illness. Raising awareness in schools before adolescence helps institutionalizing the culture of health. Improving one's immunity against high-risk behaviors by vaccination.	
	Contextual Condition	Receiving high volume of information via the internet	Giving necessary information through the family, so that children do not need to go online.	

As intervening factors, human papillomavirus vaccination was not part of the health system vaccine, human papillomavirus vaccination was not part of reproductive health programs, and pre-adolescent vaccination was associated with cultural problems or lack of awareness and ethnic and religious beliefs. Also, contextual factors were gender differences, religious beliefs, and ethnic differences.

Table 3: A paradigmatic model based on the views of the authorized participating in the study

Core category		Condition	Strategies	Outcome
Existence of cultural problem to STD prevention	Causal Condition	Incompatibility of information with the growth of children, Increasing the age of marriage, Decreasing puberty age, Increasing information exchanging, Population increase, Increased migration, Changing economic conditions, Disconnection between parents and children	The education system must have a well-defined curriculum for the upbringing of children and be tailored to the country's needs. Educating the families to give their children correct and controlled information, Using native culture, Using reference groups, Using religious capacities, Entering into trouble before marriage, Harm reduction with planned management, Reducing the injuries using appropriate consultants, Not sensitizing a group who need no more awareness. Reducing sensitivity in different layers to facilitate, Capacity utilization, Responsible planning based on their mission, Focusing on endangered community, Creating Health in the middle school	Decrease in sexually transmitted disease control based on country culture and specific planning
	Intervening Condition	Lack of a safe and restrictive approach, Not reaching the minimum consensus for the management system, Lack of decision making with dynamic expertise, The authorities and the clergy have not faced the problem, The religious elites and leaders have not faced the problem, Lack of awareness about existing capacities	Aligning school instruction with media, Separating affected people from others, Providing an atlas to determine the extent of the problem, Investigating the cause of the problem, Getting help from existing capacities, Timely training, Making people aware of their responsibilities and mission, Accompanying teens for disease prevention	
	Contextual Condition	The spirit that governs diversity, Dealing with individual humiliation, Lack of awareness. This problem is a managed project. Weakening the spirituality, Increasing the spirit of materialism	Religious education without reinforcement, Religious education and rational choice, Bolding the talk of God in the minds of children, Paying attention to cyberbullying, Filtering virtual space, Virtual space management	

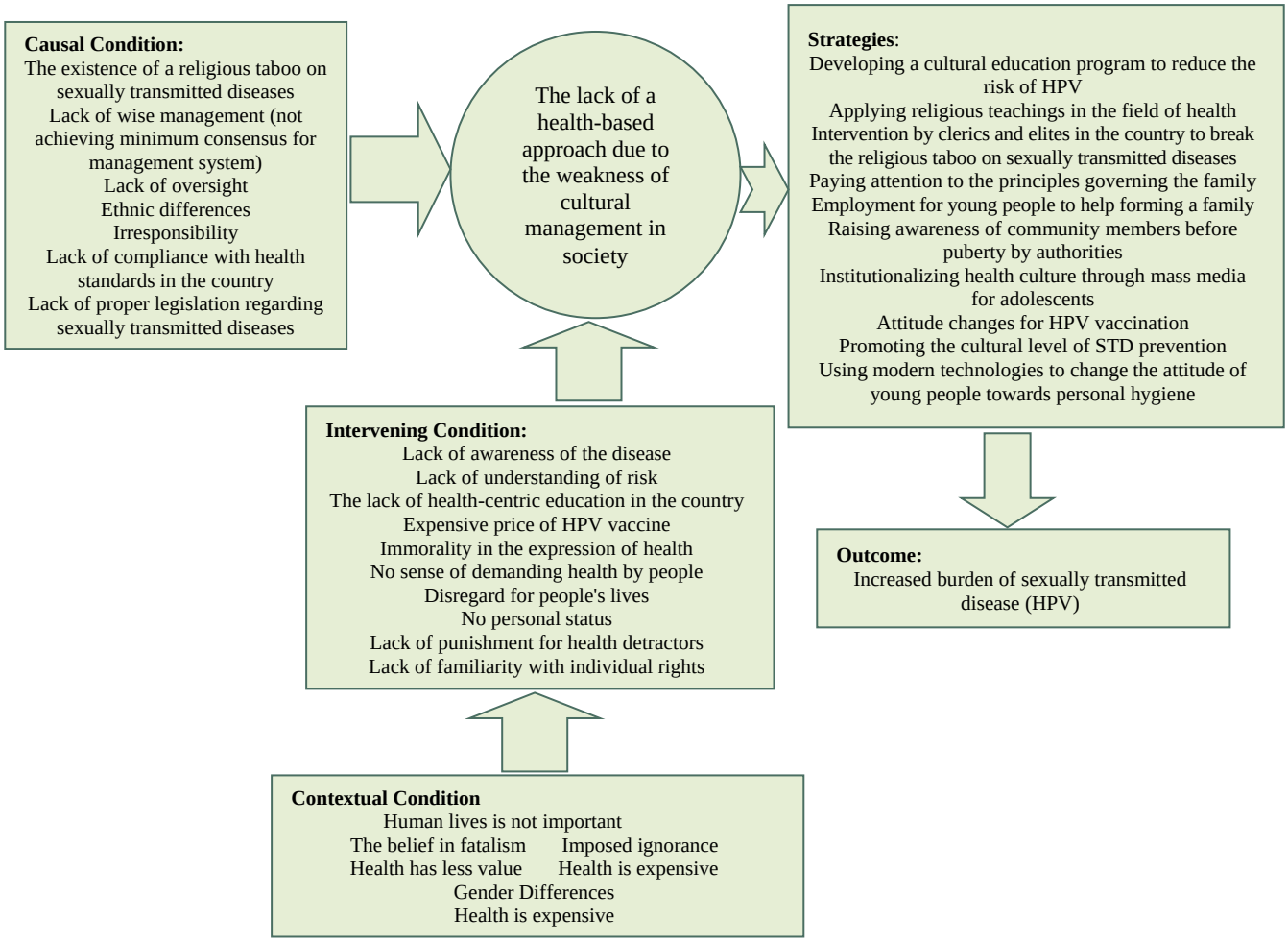

Figure 1: Paradigm model extracted from the viewpoints of the professors, clerics, and authorized subjects

Investigating the paradigmatic model from clergymen's viewpoints, lack of cultural education programs to reduce the risk of HPV, disregard for family-based principles, misinterpretation of religious beliefs as causal agents and youth unemployment, lack of awareness of their spiritual rights, lack of knowledge of people about personal health, and lack of vaccination before puberty as interventional factors; and high volume of information via the internet was considered as contextual factor.

Investigating paradigm model from authorized people's viewpoint, incompatibility of information with children growth, increase in marriage age, decreasing the age of puberty, increasing information exchange, population growth, migration increasing, economic conditions, and parent-child disconnection as causal factors; and lack of a safe and restrictive approach, lack of a minimum consensus on the management system, lack of decision-making with dynamic expertise, facing the problem of clerics, lack of elites and religious leaders with the problem, and lack of awareness of existing capacities as intervening factors; and the spirit governing diversity, coping with personal humiliation, lack of knowledge, this is a managed project by colonialists, decreasing morale spirituality, and increasing materialism were considered as contextual factors.

Merged paradigmatic model of professors, clerics, and authorized people showed that there is a religious taboo on sexually transmitted diseases, the lack of wise management (not achieving a minimum consensus for the management system), the lack of comprehensive supervision, ethnic differences, irresponsibility, and lack of compliance with health standards. In the country, lack of proper legislation regarding sexually transmitted diseases as causal factor; and lack of awareness of the disease, lack of understanding of risk, lack of health education in the country, high cost of HPV vaccine, immorality in expressing health, lack of sense of health, Disregard for people's lives, lack of

individual dignity, lack of punishment for harm Health, and lack of familiarity with individual rights as intervening factors; and lack of importance for human life, lack of health, belief in fate, expensive health, imposed ignorance, and gender differences were the contextual factors that increased the burden of disease caused by sexually transmitted disease.

A high percentage of clerics agreed to formulate a cultural education program to reduce the risk of HPV. They also assessed the role of cultural programs in community awareness about the HPV dangers.

More than half of the clerics believed that the clergymen were able to persuade those who resisted against vaccination. They also agreed that clerics in different ethnicities should help the health system to successfully vaccinate by holding briefings meeting for the people.

Joseph et al. showed that cultural differences between African American and Haitian immigrant mothers were specific barriers for vaccine acceptance. Improving HPV vaccine usage among black women requires modifying culturally sensitive approaches to address specific ethnic barriers (12).

Salad et al. Conducted a study to determine if vaccination is really needed. "Muslim Somalia not having premarital sex." They showed that the current measures in the Netherlands to prevent cervical cancer are difficult for Somali women. This is because these women do not personally associate with these types of preventive measures. They suggested using the Health Belief Model to promote equal access to preventive health care among Somali women (13). Natan et al. conducted a study on Israeli mothers' attitudes toward vaccinating their daughters against human papillomavirus, and showed that approximately 65% of mothers intend to vaccinate their daughters. Behavioral beliefs, normative beliefs, and awareness have had a positive impact on mothers' intention for vaccinating their daughters. High levels of religiosity were found to negatively affect mothers' intention for vaccinating their daughters. Along with the level of knowledge and the level of religiosity, mothers' behavioral goals in vaccinating their daughters can be predicted. This demonstrates the importance of nurses 'role in transmitting the information and increasing the mothers' awareness (14). These studies confirm the findings of the present study.

Mathur et al. showed that there was a knowledge gap regarding vaccines. Girls often lacked the basic knowledge needed to make a vaccine decision. By estimating the risk of HPV-related illnesses, religion was not associated with the frequency of access to health care. Parental/guardian religious affiliation may be effective in deciding to accept the human papillomavirus (HPV) vaccine for girls aged between 9 and 18 years old; however, previous research findings have undermined the effect of religion. Also, no relationship was observed between religiosity and vaccination status. However, there was a significant relationship between religiosity and other evaluated variables (15). Findings of the study showed that religion play a major role in vaccine acceptance and it was in contrast with Mathur study.

Fogel et al. showed that Jews had fewer mental goals and norms than HPV vaccine when comparing numerous religions and religion affected their attitudes, goals, and behaviors to HPV vaccination. Also, Jews because of their low attitude toward receiving the HPV vaccine had the lowest level of vaccination**.** Evangelical Christians had the highest chance of getting an HPV vaccine. For Jewish believing adult women, there was a potential need for better efficacy of the HPV vaccine (16). In contrast with Fogel study, knowledge of importance of vaccination in the Iranian population was high. Other studies emphasized on vaccination of daughter before puberty (17-25). Given that the study was conducted on academic professionals, the findings are only generalizable to the academic population, which itself is a limitation of the study. On the other hand, the study on this population has provided significant findings for decision-making and planning that could be considered as the strengths of the study.

Proposed strategies for addressing this problem, formulating a cultural education program to reduce the risks of human papillomavirus, applying religious teachings in the field of health, intervene of clerics and elites in the country to break the religious taboo regarding sexually transmitted diseases, paying attention to the principles governing family, youth employment to help form families, raising awareness of pre-adolescent community by subordinate authorities, institutionalizing health culture through mass media for adolescents, changing attitudes to human papillomavirus vaccination, raising cultural levels prevention sexually transmitted, and using modern technologies in the field of personal hygiene is for changing the attitude of young people.

Conclusion

The overall lack of a health-based approach could be a major concern due to the weakness of cultural management in society. Accordingly, it requires the

involvement and intervention of all policymakers, health planners, authorized people, professors, elites, and clerics to control this major cultural health problem.

Conflict of Interests

Authors have no conflict of interests.

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