

Superstition in health beliefs: Concept exploration and development

Mohammad Taher¹, Shahzad Pashaeypoor², Mohammad Ali Cheraghi¹,
Mahmood Karimy³, Akram Sadat Sadat Hoseini⁴

¹Intensive Care and Management Nursing Department, School of Nursing and Midwifery, Tehran University of Medical Sciences, ²Public Health of Department, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran,

³Health Education and Health Promotion Department, Saveh University of Medical Sciences, Saveh,

⁴Pediatrics of Department, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran

ABSTRACT

Concept exploration and development of superstition is the aim of this research. Superstition is a complex concept, needs to be clarity, removes it from its mundane state, and gives it a scientific richness. To use a list of questions extracted from a review of the literature to analyze, develop, and explore superstition. It was assessed according to studies conducted in three fields sociology, psychology, and nursing. The maturity of the concept was determined in four areas, epistemology, practicability, semantics, and deduction/logic. Nurses must discover people's beliefs and superstitions. Although the concept of superstition is commonly used, many of its features and aspects were still unclear.

Keywords: Concept analysis, nursing knowledge, superstitions

Introduction

Demographic, circumstance-related, social and psychological factors can affect change in the society and individuals. Since understanding these changes depends on social factors, the assessment of the concept is easier; meanwhile, when the psychological-cognitive aspect of a concept is more prominent, understanding it becomes very difficult. Superstition is a concept with a pronounced psychological-cognitive aspect. It is proposed as "beliefs about particular events that cannot be interpreted by scientific reasoning."^[1] Superstition refers to both actions and beliefs that are described by unnatural elements: consequently, modern science opposes superstition. Despite the many

scientific and technological advances in the modern world and the information explosion, superstitious tendencies still linger in human life, and these beliefs are so interwoven with people's thoughts that no limits can be construed for them.^[2] Superstition relates one event to another without showing a natural or scientific reason for this relationship; in some cases, superstition also includes a chance.^[3] The concept of "luck" is also recognized as a psychological and philosophical concept that affects people's behavior when actively present in them.^[4] Superstition is a part of the culture and is associated with an irrational inclination toward uncontrollable and unexplainable elements and beliefs; these beliefs provide us with a sense of understanding and control of the environment.^[5] Superstition is mainly rooted in history, culture, and myths throughout the world, and as stated earlier, it affects individuals' behavior.^[6] In a survey conducted in Germany, 62% of people were found to be superstitious.^[7] In a study conducted in India, 60% of the patients believed in luck

Address for correspondence: Dr. Akram Sadat Sadat Hoseini, Pediatrics of Department, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran.

E-mail: ashoseini@tums.ac.ir

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and superstition with regard to illnesses.^[8] Exaggerated beliefs and ideas have found their place in people's communications and eventually turn into strong beliefs and can even affect health behaviors.^[9] Researchers emphasize how beliefs become more important in times of illness than at any other point in life and contribute to the acceptance of the meaning of illness.^[10] A study in 2009 showed that, in their experience of cancer, some of the participants did not believe in the abnormal division of cells or any scientific explanations and instead believed in the role of luck and superstitions.^[10] Another study in 2003 also showed that the belief in good or bad luck is associated with people's mental health.^[11] A study conducted in 2008 showed that, in addition to poor finances, a strong belief in luck and superstition also makes people refrain from chemotherapy as a treatment for breast cancer.^[12] Rogers (1992) pointed out that people with irrational beliefs have ill thoughts that prevent them from being flexible and creating change in themselves. The values in which each individual believes thus affect their beliefs about human needs, health, and illness and directly affect their response to diseases, the choices of treatment, and the quality of life.^[13] A person with rational beliefs has flexible health beliefs and accepts change.^[14] The recognition of beliefs is effective in the achievement of health and treatment goals. The ability of the medical personnel, such as physicians and nurses, to recognize the patients' beliefs and values, which constitute their motivation for decisions and behaviors, better enables them to provide the patient with effective training and counseling and pave the way for behavior change. The present study was, therefore, conducted to conceptualize superstition and chance and facilitate change in health beliefs and behaviors in patients by identifying the factors affecting health beliefs and behaviors.

Method

The concepts used in sociology are often complex, and the concept of superstition is no exception to this rule. In analyzing a concept, the analyst tries to determine the history, circumstances, and issues of the concept and the outcomes associated with it.^[15] The concept development strategy is a method that directs the meaning of a concept toward further clarity and removes it from its mundane state and gives it a scientific richness.^[16] Morse *et al.* carried out an analysis of the concept and its progress toward greater clarity. The first stage of analysis involves determining the maturity or immaturity of the concept, and the move toward the development and exploration of the concept then begins. A literature review is often used to determine the level of maturity of the concept, which involves a search in databases related to the subject. Next, the concept development is taken up to identify its boundaries, history, features, and outcomes.^[17]

Analysis of the concept maturity level

Concept maturity is determined by finding out whether or not it has been used as a scientific and clear concept. If the concept is found to be immature, further studies on it should pursue a qualitative approach, or in the case of extensive access to informational data, a review of literature should be carried out.

As stated, the literature review is a method for determining the maturity of a concept, so that the scientific nature and clarity of the concept can be assessed. The present study uses the method proposed by Morse *et al.* to determine the level of maturity of the concept. This method includes four parameters and assesses concepts in terms of epistemology, logic, practicability, and semantics.^[17] When reaching maturity, the boundaries and features of the concept can be determined and its outcomes can also be demonstrated, and this process leads to the proper use of the concept in objective-based studies.^[16]

The present study used questions extracted from the review of the literature for carrying out the concept analysis, development, and exploration. These questions determine the maturity of the concept and can reflect the interdisciplinary connection that has been logically combined and listed. Once the questions were extracted, the research team assessed each of these scientific references to find the inherent connection between this concept and other disciplines and facilitate the exploration of the concept. Also, the features, boundaries, and outcomes of the concept are determined based on the questions.^[16] In other words, first, the questions are determined; then, scientific references and studies are accessed so that interdisciplinary connections with this concept (such as in nursing, sociology, and psychology) can be determined. Then, the concept exploration is carried out to identify the scientific meaning of the concept and decrease its inherent complexity. Finally, a theoretical statement is issued to help further clarify the concept.^[17]

Ethical approval

This research did not need any informed consent because we did library research. References and quotations were written based on the journal guideline.

Results

In common terms, superstition (or the belief in it) is a routine and common word that is also defined as luck, intuition, irrational thoughts, and locus of control. To remove the concept from its mundane state and scientifically enrich it, the concept was assessed according to the studies conducted in three fields, that is, sociology, psychology, and nursing.

Nursing

A small part of the information and studies conducted were related to nursing. The concept of superstition in nursing is mainly manifested in people's irrational beliefs, and this superstitious and irrational understanding has been shown to affect physical and mental health in the field of nursing.^[18] Some people with superstitious thoughts and a belief in luck even associate their physical illness with this concept. For example, in a study conducted in 2012, 40% of the patients blamed their physical illness on superstitious thoughts such as "evil eye."^[19] In a study conducted by Taher *et al.* (2013), the patients with hypertension who believed in superstition and luck did not properly adhere to their treatment regimen.^[19] In a study

by Abrehderi *et al.* (2012), diabetic patients with superstitious beliefs had poor self-care.^[20] A study conducted by Omeje in Nigeria (2011) showed that people with superstitious beliefs do not properly follow their medical and medicinal instructions.^[21] In a study conducted in Turkey, epileptic patients with superstitious attitudes used charms and magic to treat their illness instead of following medical instructions.^[22]

Sociology

In sociological terms, everybody can be said to have superstitious beliefs—some more and some less. Jahuda elaborates on this issue and writes: “Superstition is a relative and time- and place-dependent term; at the present time, we have no objective means for differentiating between superstitious beliefs and therefore cannot divide the world’s people into intellectual and superstitious groups; we can only say that some people are more or less superstitious than others.”^[23] Superstitious beliefs have bewitched people. Many people from different societies believe that the number 13, the crow’s singing, seeing an owl, and the breaking of a mirror are bad luck. These beliefs are 1000-year-old superstitions and some of them have gained a place in the culture.^[24] The literal and proverbial meanings of superstition are similar in many cultures. “*Khboraaafab*” (meaning “superstition”) is an Arabic word from the root word “*Khorj*,” which means “fruit harvesting.” *Khboraaafab* also means “a tale, a corrupt idea or a false idea,” and its plural form is “*Khboraafaat*.” The Oxford dictionary defines superstition as the “incorrect understanding of the cause and effect relationship and an extreme belief in the effect of supernatural elements on human life.” The singular word “*Khorafab*” is literally defined as “an unsubstantiated story.”^[1] In *Amid Persian Dictionary*, “*Khboraaafab*” has been defined as “a false anecdote” or “words spoken in vain.”^[25] The cause of superstitious behaviors and thoughts is the ruling culture of the society that affects generations by affecting individuals. At the social level, superstitious tendencies can result from the observation of other people’s behaviors.^[26] Poverty and social deprivation are also to blame for superstitious tendencies. People who live in such societies are condemned to intellectual inertia and consider themselves prisoners of destiny; in other words, they fear innovation, are badly dependent on the rule of tradition, are passive, and have no power to change their destiny. Social pressure and emotional stress are high in poor societies, and this issue makes life insecure and stressful for the people and paves the way for superstition. According to sociologists, superstition is deeply rooted in social deprivation and can easily enter a society through people’s thoughts, but is very difficult to be removed from minds because it has penetrated the culture.^[27] Superstitious behaviors are still witnessed in modern societies. For instance, golf players believed that using various superstitious techniques such as showing their thumb, wearing white socks and playing on Sundays bring them luck, increase their chances of success and prolong their life.^[27]

Psychology

In this field, the belief in luck and superstition is defined as the focus and locus of control. Rotter is one of the experts in this

field, and the idea of a locus of control was first proposed by this scientist. The locus of control determines whether people have influence over their life or not. According to Rotter’s theory, people either have an internal or external locus of control. Those with an internal locus of control consider themselves in charge of their own destiny; that is, they determine their fate themselves. People with an external locus of control, meanwhile, believe that superstition and luck are in charge of their destiny; in other words, this group of people are fatalists and consider the fate and supernatural elements in charge of their destiny.^[19] From another perspective, people become superstitious in the face of issues such as death, illness, and adverse events, which have always caused mankind anxiety and feelings of failure, fear, and anger. In such cases, the failure to find a logical explanation for the event through science and logic makes people turn to superstitious beliefs to relieve themselves of inner turmoil and anxiety.^[28] In other words, they blame all the events in their life on factors beyond their own control as well as the environment so as to diminish their own responsibility and accountability and, thus, reduce their anxiety and tension.^[27]

Maturity of the concept of superstition

As discussed earlier, the first stage of concept analysis is to find evidence of the concept’s maturity and its inclusion in a discipline. This evidence is used to determine the maturity of the concept in four parts, including epistemology, practicability, semantics, and logic.

Epistemology

Has the concept been clearly defined? In the field of nursing, the concept of superstition has been combined with other concepts, such as “beliefs.” Alice^[29] argues that belief does not only refer to thoughts, perspectives, and attitudes but also represents thinking, feeling, and behaving. These processes happen together and have a significant effect on each other, and beliefs are thus the determinants of health and quality of life. A study conducted by Bayat and Shahsavari (2012) showed that health beliefs affect health behaviors. In the field of sociology, the focus is on cultures, and concepts arising out of the context are a reflection of the inside of the culture.^[30] For instance, “intuition” is a kind of belief that refers to the supernatural dimensions of humans. This category includes beliefs such as summoning ghosts and witchery; cultural factors affect intuition extensively. Unluckiness, misfortune, the breaking of a mirror, and the malevolence of the 13th day and sneezes coming in pairs or as single all fall into the field of sociology.^[24]

Practicability

Has the research been evidence-based? Superstition has no practicable definition in the fields of nursing and sociology. In other words, the emphasis on the definition of superstition in these two fields is generally on the non-demonstrability and nonscientific nature of the concept, which is not based on reality and has no tools. In psychology, however, it has a tool known as the locus of control. The locus of control tool was designed

by Watson in the 1970s within the framework of the Locus of Control Theory and has been used by various researchers.^[31]

Semantics

Has this concept been properly defined? In a study conducted by Bayat and Shahsavari in 2012,^[30] half of the participating patients stated that their disease had supernatural causes, but were not able to properly explain this concept; in other words, they were unable to define it. In sociology and psychology, personal factors such as economic status and social factors such as social support are effective on superstition. Despite these investigations, however, the main meaning remains vague in these two fields.^[32]

Deduction and logic

Has this concept differentiated its boundaries from those of other concepts? In nursing, superstition overlaps with concepts such as beliefs. In sociology, it overlaps with concepts such as intuition and belief in certain factors, such as luck. In psychology, superstition overlaps with the locus of control. Overlap means the use of these concepts in the place of one another, which shows that boundaries have not been properly distinguished or defined. After investigations in the four noted fields through the review of literature and concept assessment for superstition in nursing, sociology, and psychology, this concept revealed itself as immature and interdisciplinary. The present study will, therefore, proceed to explore and develop this concept. To this end, a list of questions was extracted from specified articles.^[5,24-26,33-35] These questions were selected because the answers to them could more broadly reveal the dimensions of the concept in all the reviewed articles. The questions were:

1. Is superstition inherent or an acquired attribute?
2. What are the consequences and outcomes of superstition?
3. What are the shared aspects of superstition in different societies? [Table 1]

Then, based on the answers, the boundaries, features, preconditions, and consequences of the concept were identified.

Boundaries of superstition

Other concepts that have close relationships with superstition and some of its features include beliefs, locus of control, and intuition. Belief is a concept that is occasionally used in the place of superstition. Intuition is also closely related to the concept of superstition, and the locus of control also resembles the concept of superstition in some ways.^[23] The boundaries of superstition are as follows: beliefs that are (1) derived from ignorance; (2)

illogical and fictitious; (3) cannot be proven objectively and scientifically. Based on boundaries, superstition has two main types: personal superstition, which is the person's ideas about the malevolence of certain days, places, and even hospitals,^[6,36] and social superstition, which is rooted in people's culture, such as the belief in good and bad luck.^[13]

The features and preconditions of superstition

- a. The lack of knowledge about events
- b. The lack of control over the environment
- c. Fatalist thinking.^[37]

In this regard, Kohler believes that superstition is an abnormal or an unscientific belief about the role of phenomena in the world that is either based on emulation or associated with ill tendencies and fatalist thinking. Fatalist thinking impedes people's acceptance of change and restoration since they feel helpless in controlling events and changing them and have no desire to progress and connect everything to fate and supernatural elements.^[25,30]

Consequences of superstition

According to Bandura's theory, a behavior can be formed following the reinforcements of that behavior and can even have positive effects. The belief in fatalism is regarded as a negative consequence.^[23] In other words, the consequences of fatalism can be positive or negative. If a person bases all the affairs of life and living on superstitious beliefs and subsequently fatalism, his satisfaction with life increases while neglecting the fact that this kind of thinking can also have negative consequences. For instance, a chronically ill person blames his illness on fate and destiny, and his stress is thus reduced and he can even be satisfied with living with a chronic disease. Nonetheless, this thinking makes him not pursue his treatment and care and he will thus witness adverse effects on his body and soul in the long term, which is regarded as a negative consequence.

Manifesto

Superstition is adherence to delusions that have no intellectual or scientific explanation and lead to superstitious behaviors that are caused by a false notion of the causes and effects of events. It is rooted in human ignorance and has significant effects on people's culture and health and prevents them from beginning restoration and has negative effects on the individual and society. Given the definitions in the three fields of nursing, psychology, and sociology, the concept of superstition should be removed from its

Table 1: Dimensions of the concept in all the reviewed articles

Question	Nursing	Sociology	Psychology
Is superstition an inherent or an acquired attribute?	People are inherently superstitious	Superstition is the result of observing other people's behaviors	Superstitious tendencies in different situations
What are the consequences of superstition?	The prevalence of physical problems, increased health care costs	Intellectual inertia, fear of innovation, inability to affect change	Reduced anxiety and stress, fatalism, increased satisfaction with life
What are the shared aspects of superstition in different societies?	Adherence to superstition in care affairs and life, derived from ignorance and affecting all three fields of sociology, nursing, and psychology, having a fatalist spirit		

mundane state and be scientifically enriched. Given the discussed issues, having an everyday definition in all three fields can affect people's physical, psychological, and mental health. How can a concept enchant people and have negative effects on them but not have a clear definition or defined boundaries? The concept of superstition and luck is recognized as a concept arising out of the contexts of cultures, and this context-derived concept affects the people of that culture in various dimensions. It, therefore, requires evidence-based research, in which negative effects can be known through the demarcation and differentiation of boundaries. Once negative effects are identified, they should be properly determined and appropriate measures should be taken to manage them. Evidence-based research can identify these negative effects and provide appropriate measures. Research and, subsequently, evidence-based measures can only be carried out when boundaries, dimensions, and definitions are specified. Concept clarification is equivalent to evidence-based research.

Conclusion

People still believe in superstitions all around the world. Superstitions are overwhelming in some cultures but limited in others—even though they still do exist. For example, in the case of Europe, a survey in Germany showed that half of the people in northern Germany, 68% of the women and 38% of the men are superstitious. Moreover, more than 40% of Americans believe in superstitious treatments.^[13] In Africa, 70% of people turn to indigenous treatments such as charms and witchery to treat their illness.^[38] A study showed that African people are intensely superstitious and modern technologies have not been able to reduce their superstitious tendencies.^[13] In East Asia, in countries such as Taiwan, nurses believe in good and bad luck.^[39] In India, 62% of schizophrenic patients turn to witches for treatment and heavily believe in superstitions.^[40] In Turkey, “evil eye” is a popular phrase and people assiduously follow this belief.^[41] In other words, superstitious thinking exists throughout the world, but it becomes harmful when it enters the domain of health and affects people's well-being and becomes a part of the individual's health beliefs. For instance, a patient refusing to take his medication and follow his treatment regimen who thinks to himself “Whatever happens will happen” is actually saying “Whether I take my medicine or not, what happens will happen.” Such superstitious thinking undermines all medical advances because if the patient is superstitious and refuses to take his medications, even the most effective medicines produced will be worthless. This instance shows the adverse consequences of this harmful belief. With this superstitious belief, a pregnant woman refuses to adhere to her dietary regimen and gives birth to a sick child and thus imposes socioeconomic losses on the family and community. In the Islamic view, one of the goals of Prophet Muhammad according to the Quran is to fight delusions and superstition. For example, Surah Al-A'raf, verse 157, reads “He relieves them of their burden and the shackles which were upon them”; it thereby considers the removal of chains and burden among the responsibilities of the Prophet. In this context, “chain” means the superstitions that had enslaved people in that

era. The medical team's mission should be planned such that it changes superstitious thinking. This goal can be accomplished by submerging in people's beliefs in order to discover all their irrational and superstitious beliefs. The values in which the person believes affect his quality of life and his choice of treatment during illness.

Language development

This study showed that superstitious beliefs exist throughout the world. Although the concept of superstition is commonly used, many of its features and aspects were still unclear. Attempts were made to determine the dimensions, boundaries, consequences, and features of this concept through exploration and development, and this method helped identify the commonalities of the concept of superstition with other concepts. Nonetheless, some questions about this concept may have remained unanswered, and future qualitative studies can help clarify them as well.

Knowledge translation

Moreover, the effect of the nursing profession on the quality of life and the control and treatment of diseases and their complications is not a secret to anyone. One of the requirements of nursing is, therefore, to discover people's beliefs, albeit irrational, and superstitious or logical. The medical team must fight these superstitious thoughts so as to reduce their adverse consequences.

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Conflicts of interest

There are no conflicts of interest.

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