ORIGINAL ARTICLE

Competence as an inevitable necessity for health care workers: a qualitative study

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ABSTRACT

Background: Competence plays a great role in improving the quality of health care; it has remained a complex concept in developing societies and has no precise dimensions that may be due to the lack of studies in this area. It is necessary to study competence and its dimensions in the healthcare system.

Aim: To explain competence, based on the experiences of health care workers.

Methods: This qualitative research was conducted using conventional content analysis. 26 healthcare workers from health centers located in southeastern Iran participated in the study by purposive sampling. Data were collected through semi-structured interviews and analyzed using the Lundman and Graneheim thematic content analysis.

Results: During data analysis, the main theme known as "competence as an inevitable necessity for health care workers" with four categories of "career motivation and interest", "up-to-date knowledge and skill", "critical thinking", and "self-actualization".

Conclusion: The results suggest that competence in the provision of health services should be considered as a golden standard for the growth and excellence of the health care workers. Therefore, managers, planners, and professors should always consider this concept as a challenge in providing health services, and train competent healthcare workers.

Keywords: Competence; Health care workers; Qualitative study

INTRODUCTION

Today, much attention is being paid to increasing the productivity of human resources; therefore, competent staffs are very important for any system¹. Competence is a combination of observable and measurable knowledge, skills, abilities, and personal attributes that help enhance emplovee performance and ultimately lead to organizational success². Competence, directly and indirectly, affects job performance, indicating how individuals should either perform their duties or behave in specific situations³. Competent and developed human resources are the main factor in organizational competitions when they can be scientifically and rationally managed and their thoughts and abilities are used for organizational goals⁴. Meritocracy is one of the factors contributing to the prosperity and commitment of employees. Establishment of meritocracy is not a simple phenomenon, but a long-term and logical process⁵. Meritocracy starts with those who are interested in merit, develops with people selected according to merit and continues with competent people⁶.

The concept of competence in health care workers is important by its very nature⁷. A strong sense of competence is available in health care workers because of the type of services and communication they provide with clients, their important and vital role in the health and quality of life of people. Therefore, it is necessary to train and invest in competent health care Vworkers⁸⁻¹³. Competence needs to be strengthened in health care providers¹⁴. McKinley and Perino (2013) showed that higher levels of competence directly contributed to increased satisfaction among health care personnel. Also,

competence indirectly has affected the error reporting rate¹⁵⁻¹⁷. Verma et al. (2006) reported that the competencies of health care professionals should be studied because the results of these studies will clarify standards of performance and expectations in interdisciplinary learning¹⁸. In Bagheri et al.'s study (2009), the emerging themes of the competent nurse were categorized into five main categories: creativity, proper communication, correct vision, skill and knowledge¹⁹. Lindberg (2006) described five dimensions of understanding competence in critical care included the ability to cooperate, being able to perceive the situation, being aware of abilities and limitations, being able to act, and being able to disregard the technology7. According to Raina and Pande (2012), the issue of competence depends on the context in which people work. From their point of view, people's perceptions, norms, culture, and organizational rules are effective in shaping the competence of employees²⁰. Therefore, it is necessary to explain the dimensions of competence for employees in different societies.

The health care system in Iran is hierarchical and has regular structures with a logical relationship between levels. Health centers are the first places people contact with the healthcare system, and healthcare workers are in charge of case-finding, screening, follow-up and referral of patients from health centers to health facilities²¹. Due to inequality in deprivation and lack of credit in the south-east²², the health care system needs competent and dedicated staff to provide appropriate health services to the people.

Although competence plays a great role in improving the quality of health care, it has remained a complex concept in developing societies and has no precise

dimensions that may be due to the lack of studies in this area. It is necessary to study the concept of competence in healthcare system; so we tried to address dimensions of competence in healthcare providers using the experiences of health care workers by a qualitative approach to content analysis. Qualitative research is an important tool for understanding human emotions and experiences that cannot be achieved through a quantitative study. Content analysis is an approach to understanding, interpreting, and conceptualizing the meaning of qualitative data²³. Therefore, by using workers' experiences, presence of a theoretical framework and rational reasons for the impact of competence on one's performance, such competencies will be aligned with adopted strategies and goals and health activities will be done effectively and efficiently²⁴. The views and experiences of health care workers can open new horizons for health policy makers and lead to the design and implementation of appropriate programs to deliver effective health care.

MATERIALS AND METHODS

Design: This qualitative research was conducted using conventional content analysis. Researchers have immersed themselves in data by gaining direct information from participants for a deeper understanding of the health care workers' experiences.

Sample and setting: Twenty-six healthcare workers from health centers located in southeastern Iran participated in the study. Interviews were conducted with healthcare workers at their workplace at their convenience and with their consent after the researcher became familiar with each participant. The maximum diversity in terms of age, sex, work experience, marital status, and education level was taken into account in the selection of participants.

Participants were selected through purposive sampling, which was continued until data saturation was reached. To capture rich and diverse information, participants with different characteristics such as age, gender, marital status, years of work experience and educational status were chosen such that maximum diversity was ensured. Inclusion criteria for participants were a history of at least 1 year of work experience. All participants were able to communicate face to face in Persian. Interviews were performed individually, and each lasted 50-60 min. **Data collection procedure:** Open-ended, semi-structured interviews by the first author were used to collect data. The researcher asked participants some questions to make them acquainted with the questions and create an intimate environment. The questions included "please explain about your work experience", "would you please define competence", and "who is a competent person in your business?" Exploratory questions such as "Can you explain more?", "would you give an example?" were used in accordance with respondents' answers. The ambiguities were written in a memo to be clarified in subsequent interviews. The first author recorded all interviews with participants' consent. Data collection continued until saturation, so that no new data were added²⁵.

Data analysis: Data were analyzed using Graneheim and Lundman approach while collecting data²⁶. In the first step, the voices recorded for each interview were typed, read several times to obtain an overall understanding of the content. Second, the data was divided into meaning units that were condensed. Each meaning unit comprised sentences containing aspects related to each other. Third, the condensed meaning units were condensed and coded. In the fourth step, the codes were then refined meaning that similar codes were put together and subcategories and categories were formed. Finally, the underlying meaning and content of the data were extracted, and themes were formulated as the expression of the latent meaning of a text. A sample of the process of analysis used is shown in Table 1.

The Guba and Lincoln's criteria were used to ensure the trustworthiness of the study, expressed by Streubert and Carpenter²⁷. Interpretations extracted from participants' conversations during the interviews were re-presented to them to ensure data accuracy and credibility. For rigour in qualitative study to be evaluated, some coded parts of the interviews were returned to the participants to check the consistency of the ideas extracted by either the researcher or the participants. The categories and sub-categories extracted from the data were also sent to some experts to be revised, if necessary. The corresponding author translated the categories and quotations from the interviews from Farsi into English accompanied by English native speakers, and the results were then fine-tuned by professional editors.

Category	Subcategories	Open code	Meaning units	
Up-to- date knowledg e and skill	Up-to-date knowledge	Variability of scientific data	- Scientific information is constantly changing, but for the best service, I read the new	
		Study of new research		
		Looking for answers to questions	studies, ask the experts. I agree with the	
		Asking researchers to develop knowledge	evidence-based practice. My friend is a knowledgeable and skilled person so he is a	
		Find up-to-date scientific answers		
		Up-to-date knowledge is competence requirements	competent employee.	
	Upgrade skills	Agree with evidence-based practice	- I look at the answers to every question in the outside world and try to find the best answer	
		Skill is competence requirements		
		Upgrade skills by acquiring up-to-date knowledge	because as my knowledge gets updated so my skills improve as well.	

Table 1: Example of qualitative content analysis process

RESULTS

The study included 15 men and 11 women with an average age of 41 years with 5 -10 years of work experience. Most

of them were married and had diploma. After data analysis, the initial categories were given conceptual according to their nature. Thus, the dimensions of the participant's perception of competence were exposed, and the main theme 'competence as an inevitable necessity for health care workers with four categories of career motivation and interest, up-to-date knowledge and skill, critical thinking and self-actualization (Table 2). Each of the aforementioned categories is defined using direct quotes from the participants.

Table 2: Themes and categories extracted from the study data.

Theme		Categories
Compotonoo	an for	Career motivation and interest
Competence as inevitable necessity		Up-to-date knowledge and skill
health care workers		Critical thinking
nealth care workers		Self-actualization

Career motivation and interest: Many participants believe that primary health care providers will be competent if they are interested in the public health as well as their duties. Since, health care providers had a strong intrinsic motivation, they did not complain of a low-paid income and worked diligently to provide the health needs of the community.

A female participant with 15 years of experience said: "I love my job. Otherwise, I might not have been able to work in the healthcare system. Love and motivation is essential asset for competence. During my work experience, I did not find anyone who would be successful without a love of work".

A male participant with 11 years of experience said: "*It is my love to this profession that causes me to sacrifice my family's peace with a low-paid income for the sake of a healthy society. Serving people make me calm*".

Up-to-date knowledge and skill: Most participants believed that competent health care workers preferred scientific promotion because they can increase their ability to meet the health needs of the community through technical and up-to-date knowledge. Therefore, they study hard and try to have an evidence-based practice. Identifying, interpreting, and applying the best evidence, they have improved their performance, updated their knowledge with the best evidence available, leading to innovation and creativity in their performance.

A female participant with 8 years of experience said: "Scientific information is constantly changing, but for the best service, I read the new studies, ask the experts. I agree with the evidence-based practice. My friend is a knowledgeable and skilled person so he is a competent employee."

A female participant with 8 years of experience said: "I look at the answers to every question in the outside world and try to find the best answer because as my knowledge gets updated so my skills improve as well".

Critical thinking: The majority of participants argued that critical thinking was one of the characteristics of a good healthcare worker. These people can decide and solve problems based on logical reasoning and evidence, and they do not make emotional decisions because of the nature and sensitivity of their job. This type of thinking in many cases leads to mental self-sufficiency, cognitive skills and the right decisions in the process of problem-solving.

A male participant with 7 years of experience said: "*I* cannot solve many problems easily, so I study, consult and analyze to find the best solution because I cannot use trial and error for the public health".

A male participant with 14 years of experience said: "Years of the work experience have taught me that if I want to succeed, I should not make hasty and emotional decisions".

Self-actualization: From the participants' points of view, the most important characteristic of a competent healthcare worker is that people trust him/her psychologically and attract to him, so that he/she can accomplish her/his goals related to the public health. Therefore, these are self-actualized people who, despite their low incomes, are willing to provide honest service even in rural and deprived areas. They are patient, honest and disciplined people who are not tired of hard work and are constantly striving to create the ideal conditions in their workplace and tolerate problems.

A female participant with 3 years of experience said: "In our profession, if people don't trust you, nothing will ever happen."

A male participant with 17 years of experience said: We must first have an educated and humane personality in order that people trust us."

A female participant with 5 years of experience said: The secret to my success is that I have honestly dealt with the people and their problems and I've accompanied them."

DISCUSSION

The findings of this study, based on the experiences of the participants, showed that competence is an inevitable necessity for healthcare workers. As health professionals play an important role in community health, they need to acquire up-to-date knowledge and skills in addition to career motivation and interest. On the other hand, they must have critical thinking so that they can make the right decision in the face of crises and health problems. They also need to be self-actualization so that they can empathize with people in the community with patience, resilience, and proper interaction. It seems that by training competent healthcare workers, there will be results such as professional promotion, "Increase the quality of service" and "Increasing community health" (Figure 1).

The career motivation and interest was the first category as well as the first indicator of competence in healthcare workers. This finding is consistent with the study by Bagheri et al. (2018) who found that attitudes and positive motivation were related to moral, spiritual, and cultural dimensions and included one's values, beliefs, and ultimately lead to competence in people¹⁹. The attributes of successful and competent individuals are a professionally positive perspective and interest in doing the job²⁸. Karimi et al (2016) defines competence as a combination of the motivation, attitude, skill, and knowledge needed to perform an effective role²⁹. From the perspective of Hauenstein (2000), competence is a motivational and behavioral prerequisite for successful performance in a given role or job³⁰. According to Griffiths et al. (2012) his job, by its very nature, can lead to job burnout if it is not accompanied with interest and affection³¹. The close relationship between competence and the concept of quality of care has made the love of work, love of patients and commitment to the profession an important part of the job¹⁹. Thus work and love are consonant with the need for competence.

Professional commitment is a kind of attitude that shows the level of interest, love, loyalty and dedication of health care workers towards their job and their willingness to stay in the organization³². This attitude has three dimensions: commitment affective, commitment continuance, and commitment normative³³. Researchers have argued that, given the centrality of work in individual and overall social well-being, the economic notion of a social welfare function must be further expanded when we examine the efficiency properties of workplaces. Political scientists emphasize the essential role of access to work as a prerequisite for citizenship³⁴.

Also, competent healthcare workers should have upto-date knowledge and skill because they can practice correctly in healthcare services with up-to-date knowledge, practical learning and timely action. In line with this result, researchers believe that scientific competence is a significant reason for either one's occupational success or failure^{19,35}. Klein and Fowles (2009) also consider the scientific dimension as the primary condition of competence³⁶, because attaining the next stages of competence such as problem-solving skill requires up-todate knowledge³⁷. Evidence-based performance cannot be reached without up-to-date knowledge. Other research has also emphasized scientific knowledge in competence, stating that up-to-date knowledge of new technology will help achieve the desired skills and reduce errors and mistakes7,8.

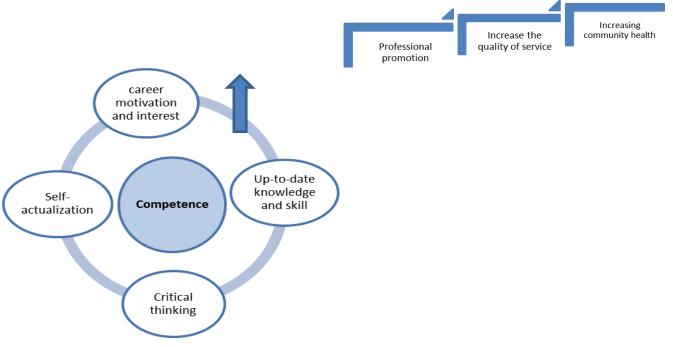
Critical thinking is one of major characteristics of the competent healthcare workers which can result in rational reasoning, right decision making and solution. Health care workers may face crises that cannot deliver quality service without this skill. Critical thinking and creativity are also inseparable parts of the problem-solving skill. In confirmation of these results Kauertz et al. (2012) identified

Figure1: Model of competency in health care workers.

the problem- solving skill as one of the attributes of competence. They believe that scientific competence is necessary for the problem-solving skill³⁵. Chang et al (2011) found a positive relationship between nurses' critical thinking and competence³⁸. It seems that critical thinking should be apparently strengthened in the education, training, and utilization of the healthcare workers.

Self-actualization is a category which may be less explicitly mentioned in other studies. Self-actualization means that a health care worker has reached selfawareness, considers serving others as the shortest path to sublimation, takes his/her responsibility as best he can and has reached competence. When one knows him/herself, he/she tries to remove unethical acts and reach perfection³⁹. When one communicates with the inner self and recognizes it, he/she realizes a treasure of truths and spirituality as well as his/her value. He/she with his real knowledge can use all the forces around him/her to achieve sublimation. If one wants to reach perfection and progress, he/she must be interested in doing righteous deeds⁴⁰. According to Abraham Maslow, self-actualization is a high class in attaining perfection and it is also basic in the pyramid of human needs⁴¹. Maturation has been used in a qualitative study (2012) on competence in clinical nursing which can be in line with self-actualization⁴². According to Ghafari and Mohammadi, it is in ethical conditions that proper services can be delivered, and they are referred to as a sacred activity, a committed service, a sense of altruism and sympathy⁴³.

This study had one limitation. The current study was conducted on healthcare workers in southeastern Iran, so the results cannot be generalized to other societies, especially advanced ones.



CONCUSION

The results suggest that competence in the provision of health services should be considered as a golden standard for the growth and excellence of the health care workers. The career motivation and interest was the first and the most important category as well as the first indicator of competence in healthcare workers. A competent healthcare worker, as a self-actualized person strives to solve clients' problems and promote his career through personal growth, self-awareness and a positive attitude with a set of scientific abilities and skills. With good health care workers in the system, one can expect important and valuable outcomes such as increased decision-making power, improved quality service, service delivery, career advancement, and most importantly, ethical and humane values. Therefore, managers, planners, and professors should always consider this concept as a challenge in providing health services, and train competent healthcare workers. Further studies are recommended to develop kinds of competence in different populations with different cultures.

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Ethic and consent: Ethics endorsement was made by the Ethics Committee of Kerman University of Medical Sciences (KMU.REC.1398.461). The purpose of the study was explained to the participants before interviews. The participants were also assured that their information would be confidential and they could withdraw from the study at any time. After obtaining written consent, the interviews were conducted individually at the appropriate time and place.

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