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Original Article

Analysis of metaphors for basic concepts of nursing students

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Abstract

Aim: Nursing is an applied profession and it contains some basic concepts. These concepts are health, disease, human, environment, nursing. In addition to these concepts, the concept of care is a compulsory concept. Concepts can change meaning according to place, time and even user. Metaphors contribute to the analysis of how concepts are perceived. The essence of the metaphor is to understand and experience something according to another kind of thing. This study aims to reveal nursing students' perceptions related to basic principles about nursing by means of metaphors and evaluate these metaphors according to common goal and features.

Material and Methods: This study has been carried out with 74 people who are the first year nursing students and agreed to participate in the study. While collecting research data, a participant information form which was developed by researchers and composed of 15 questions including multiple choice and open-ended ones has been used. Participant information form; İt consisted of sociodemographic questions and open-ended questions (used in determining the metaphors of nursing basic concepts (health, disease, human, environment, nursing, care). For example; "Health is like ..." "Because ..."

Results: In our study, 182 metaphors have been developed by taking into consideration what the participants have said about these concepts. 76 (41.7%) of these metaphors are positive, 68 of them (37.3%) are negative and 38 (20.8%) of them is both positive and negative.

Conclusions: Nursing students mostly perceive nursing profession, care and health positively.

Keywords: Nursing; student; concept; metaphor.

INTRODUCTION

The concept is the basic building block of a theory and is used to convey thoughts. The concept helps an object or situation to shape in our minds (1). Nursing is an applied profession and covers certain basic concepts. These concepts are health, disease, environment and nursing (2). In addition to these concepts, the care concept has to be examined as the existence of this profession. The meaning of concepts may depend on place, time and even people. Metaphors contribute to the analysis in figuring out how the concepts are perceived (3). The essence of metaphor is to understand and experience something according to another thing. The metaphors express the meaning emphatically and individually by using less word. Metaphors are especially effective in learning abstract concepts (4).

Individuals can explain concrete and abstract concepts through the metaphors, which are mental images (3,5). A close relationship exists between the metaphors and mental models. The metaphors shape our paradigms, experiences, mental and emotional experiences. They give a certain framework to mental and emotional experiences. Then, other concepts are tried to be understood by using these concepts and new mental models are established with the help of similes and figure of speech (6). The metaphors is a form of conservation in which a word or sentence refers to an object or opinion. This word or sentence is used instead of the other with the aim of revealing the similarity between them. Accordingly, the metaphors are often used to understand a phenomenon (7). The metaphors help determining how people perceive the concepts intended to be analyzed (3,8). People often use the metaphors while describing both their own emotions and thoughts and also others' emotions and thoughts (9). This is important for people to determine

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life view and to reveal the perception of events. The metaphorical idioms that initially sound as complicated statements only achieve their goals with the readers' interpretation (6). For this reason, this study is based on the thought of analyzing metaphors which have been developed by the first year nursing students in order to understand how they perceive these concepts.

It will be useful to understand metaphors related to nursing profession concepts and how they perceive this profession. Therefore, it is aimed to reveal the perceptions of nursing candidates about the basic concepts of nursing through metaphors.

MATERIAL and METHODS

The study has been carried out with the 74 people people who are the first year nursing students. These students took "Basic Principles and Applications in Nursing" the Faculty of Health Sciences, Uludag University during the spring term in 2016-2017. Data meeting was at the end of the course period. While collecting research data, a participant information form which was developed by researchers and composed of 15 questions including multiple choice and open-ended ones has been used. Participant information form; İt consisted of sociodemographic questions and open-ended questions (used in determining the metaphors of nursing basic concepts (health, disease, human, environment, nursing, care)). For example; "Health is like ..." "Because; ...". The researchers collected the participant information forms one by one.

The information forms have been delivered to each participant by the researchers, they have been informed about the metaphor concept and they have been accompanied in order to ensure that they have completed the practices individually until the end of data collection process. Then, the metaphors about nursing created by the participants have been gradually carried out.

1. Firstly, the metaphors developed by the participants are listed and coded.

2. The coded metaphors have been analyzed one by one in terms of their common features.

3. The metaphors obtained from the participants have been categorized.

4. Two experts have been consulted to ensure the reliability of the study for the created categories.

5. The categories are tabulated and interpreted.

The created metaphors have been categorized under 3 categories (positive, negative, both positive and negative) with their interpretations in the questionnaires collected from the participants in the analysis of the data. Besides, frequency and percentage values of the data about personal information of the participants have been analyzed by using SPSS package program.

Ethics statement

Institutional permission and Faculty Research Commission Permission have been obtained for the study (Faculty of Health Sciences, Uludag University). Written informed consent was obtained from the students who accepted to participate in the study.

RESULTS

Examining the socio-demographic data of the participants, it is seen that 94.5% (67 people) of them are in the age range of 18-21, 83.8% (62 people) of them are females, 95.9% (71 people) of them do not work in another job. Moreover, questioning knowledge level about basic principles, 90.5% of them (71 people) express that they know about the explanations of basic nursing principles. 86.5% of them (64 people) state that they love their profession.

Table 1 shows the distribution of the metaphors created by the participants according to positivity. According to Table 1, it is seen that students have created 15 positive metaphors for health concept, 35 negative metaphors for disease concept, 12 negative metaphors for human concept, 17 both positive and negative metaphors for environment concept, 23 positive metaphors for nursing concept.

Table 2 shows the distribution of metaphors, created by the participants about the health concept according to the positivity. According to Table 2, the students associate the health concept with jewelry metaphor (money, diamonds, treasure, gold, gift, Indian fabric) at the highest rate (16.2%).

Table 3 shows the distribution of metaphors, created by the participants about the human concept according to the positivity. According Table 3, human concept is associated with the nature metaphor (Soil, Flower, Tree, Vineyard, Plants) at the highest rate (22.9%).

Table 4 shows the distribution of metaphors, created by the participants about the disease concept according to the positivity. According to Table 4, disease concept is associated with the restless life metaphor (Unhappiness) at the highest rate (8.1%). None of the participants has stated positive or both positive and negative metaphor.

Table 5 shows the distribution of metaphors, created by the participants about the nursing concept according to the positivity. According Table 5, nursing concept is associated with the family metaphor (Mother and Aunt) (16.2%).

Table 6 shows the distribution of metaphors, created by the participants about the care concept according to the positivity. According Table 6, care concept is associated with the nature metaphor (Garden, Flower, Tree, Plant) at the highest rate (10.8%).

Table 7 shows the distribution of metaphors, created by the participants about the environment concept according to the positivity. According Table 7, environment concept is associated with the forest metaphor (Tree, Cactus, Flower, Garden) at the highest rate (9.4%).

Table 1. The Distribution of Metaphors that the Students Associate with the Concepts

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive and Negative Metaphor
Health	15	7	6
Disease	0	35	0
Human	5	12	11
Environment	12	7	17
Nursing	23	4	3
Care	21	3	1

Table 2. The Distribution of Metaphors Associated by the Students with Health Concept according to Positivity

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive And Negative Metaphor Number
HEALTH	Comfortable and peaceful + Family, +++ Insurance + To breathe, oxygen, air ++++++ The dynamo of the food processor Heart Jewelry (money, diamonds, treasure, gold, gift, Indian fabric) ++++++++++ Worship The Sun and the World ++ Power Water ++++ Dessert (strawberry cake, chocolate, profiterole)+++ The most important piece of puzzle + Ocean Beauty	Cicada Self-seeker friend Candle + Kite Industry The base of the building Elapsed time ++	Weather forecast Child + Living / Life / Lifetime +++++++ Responsibility Food and Tea Nature / Flower / Tree / Field / Soil

+ shows how many participants express the metaphor

Table 3. The Distribution of Metaphors that the Students Associate with Human Concept According to Positivity.

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive And Negative Metaphor Number
HUMAN	Mirror Animals+ Diamond jewelry ,Money, Collection ++ Puppy+ Attendant	Labirent / A Difficult Riddle + Cat +++++++ Ferris Wheel Russian Roulette Puzzle Turnstile Food + Box Mining Sprit Toy (Puppet) Glass	Sun / Fire+ Nature (Soil, Flower, Tree, Vineyard, Plants) ++++++++++++++++ Night and Day Earth / Universe+++ Technology (Computer, Phone, Machine, Robot) +++++ Water ++ Eye Fruit (Apple, Pomegranate) + Silvery Pencil / Ink ++ Cake Dough Book

+ shows how many participants express the metaphor

Table 4. The Distribution of Metaphors that the Students Associate with Disease Concept According to Positivity

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive And Negative Metaphor Number
DISEASE	-	Restless life (Unhappiness) +++++ Swamp + Flora + Shadow + Nightmare +++ Cigarette Gum + Dark Malevolent person ++++ Little Wolf + Malfunction, defective tool + Stain on clothing (dirt) + Snake Death + Enemy ++++ School Fire Earthquake, accident ++ Laundry Pale flower Goat Ready Cake Purgatory Boomerang Love, Beloved one Coal + Poison, Ivy +++ Rotten food (rotten strawberry or cake etc.) ++ Mountain Salt poured on wound Autumn Sleep Poverty Tick / microbe + Internet	-

+ shows how many participants express the metaphor

Table 5. The Distribution of Metaphors that the Students Associate with Nursing Concept According to Positivity

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive And Negative Metaphor Number
NURSING	Drug Gift Heart + Rainbow / Cloud + Marathon Running Support / Vertebral Column / Skeletal +++ Repairman ++ Rain Coat in Cold Weather Family (Mother and Aunt) ++++++++++ Angel +++ Soil + Washing Machine Seasons / Day and Night + Education and Technology Gardener Tree / Olive Branch +++ Environmental Protectors You Dessert + Associations + Music Soldier / National Service / Protector/ Hero ++++++	Dead End Alcohol Partial Medicine Puddle	Life / Living + Water ++ Matryoshka doll

+ shows how many participants express the metaphor

Table 6. The Distribution of Metaphors that the Students Associate with Care Concept According to Positivity

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive And Negative Metaphor Number
CARE	Notebook /order /cleaning/eraser +++++	House +	Charging +
	Marriage	Plague +	
	Eating +	Hair	
	0.9% NACI +		
	Sports and music +		
	Mother +++		
	Nature (Garden, Flower, Tree, Plant) +++++++		
	Air ++		
	Repair ++++		
	Elderly		
	Technology (telephone, etc.) +		
	Gardener +		
	Conscience /compassion +		
	Water / stream ++++		
	Worship ++		
	Table		
	Makeup +		
	Gold / money / precious stone / gasoline+++ +		
	Chocolate sauce +		
	Blood		
	Watch		

+ shows how many participants express the metaphor

Table 7. The Distribution of Metaphors that the Students Associate with Environment Concept According to Positivity

Concepts	Positive Metaphor Number	Negative Metaphor Number	Both Positive And Negative Metaphor Number
ENVIRONMENT	Field +	Bin	Drug +
	Eye	Ivy	Mutualist Relationship / Philosophy Of Karma
	Clothing	Ungrateful Cat	Table
	Chocolate +	Candle +	Friend+
	Ironing Board	Toy	Industry
	Cover	Microbe / Danger +	Weather forecast +
	Heart +	Cigarette +	Time/ Gravity +
	Sky / World +		Science and Technology +
	Cake Tin		Seasons+
	Road / Highway / Line		Tomorrows
	Tea / Coffee+		Sea / River+
	Our house +		Forest (Tree, Cactus, Flower, Garden) ++++++
			Food / Fruit+++
			Door
			Tea Plate
			Municipal +
			Bag

+ shows how many participants express the metaphor

DISCUSSION

The concept is the name of perceptions, events and situations that can be observed and felt. The concepts help shaping a object or a situation in our minds. The concept determines a lot of situations rather than one. Generally, it is necessary to explain more like what is the concept (1). For this reason, people often use certain concepts to explain the metaphors with the aim of enhancing our perceptions in terms of roles, events and experiences (10). Basic theoretical knowledge of nursing profession consists of basic concepts. The basic concepts are different forms of nursing theorists and used to reflect their understanding. However, there are common concepts that can be used directly or indirectly in all nursing theories. These concepts are concepts of human, health, environment, disease and nursing. In addition to these concepts, the concept of maintenance is a compulsory concept to be examined as the reason for this profession. Concepts can change meaning according to place, time and even user. Metaphors contribute to the analysis of how concepts are perceived. The essence of the metaphor is to understand and experience something according to another kind of thing (1). In our study, 182 metaphors have been developed by taking into consideration what the participants have said about these concepts. 41.7% of these metaphors are positive, 37.3% of them are negative and 20.8% of them is both positive and negative. The metaphors related to the nursing reflect roles, responsibilities in terms of health and different

thoughts (10). As in all professions, nursing profession can be perceived as positive or negative in society (11). For instance, the fact that nurses are associated with "white angels" underlines that they care and preserve others and they are expected to be away from humanistic weakness (10). The study, carried out by Beydağ et al. (2008) with the students of nursing and health officer department of health college, showed that the half of the participants stated that perception of the society towards their profession is partially positive (12). Similarly, 82% of the metaphors related to nursing profession are composed of positive metaphors. The participants of this study associate the nursing concept with family metaphor 16.2% at the highest rate. The participants have explained the reason of this situation by saying that nursing profession covers many things such as worrying like a family and showing affection and sacrifice. In a similar way, according to the study of Kale and Çiçek (2015) the common metaphors used by nurses are slave 16.4%, hodman 15.4% and angel 13.2% (13).

Adopting the profession and practicing it professionally, that is, the awareness of the profession is established in student life and continues throughout the life of the profession (12). Those choosing their professions willingly perceive their professions positively thus they can be more happy and peaceful during their profession life (13). Many factors such as family structure, environment conditions, financial possibilities, personal features are effective in choosing nursing profession, which has a crucial role in maintaining, healing and developing human health. However the positive or negative effects of these factors have a vital role in creating profession awareness (14). Instructors concern particularly the fact that the students are influenced at this extends (15). Yılmaz et al. (2014) stated that 69.7% of the nurses perform their profession willingly (11). 86.5% of our participants have said that they love their profession. 82.1 % of the participants associate nursing concept with metaphors with positive meanings.

Since human is the focus of the nursing, the nurses should understand human concept. Human can be defined biologically, psychologically, sociologically and philosophically. On the other hand, the whole of human has more complicated and larger structure than these elements (11). It is more possible to analyze how the complicated human concept is perceived thanks to the metaphors. 22.9% of the participants associate human concept with the nature metaphor (soil, flower, tree, vineyard, plants) in our study. The reason of this situation is linked to the fact that human, a living creature which is born and dead, requires interest and is sensitive, has the same features with the nature.

The description of health depends on perception. According to the WHO, health "is not the absence of any disease but a complete state of physical, emotional and social goodness". This definition is not sufficient to explain health and disease concept. It is known that while even the disease cannot be measured easily in nowadays, health is difficult to measure. However, it allows great flexibility in defining the concept of health and disease (2). 16.2% of the students associate the health with jewelry and 8.1% of them describe disease with a restless life. The students link this to health to be more valuable and precious than anything else. For the reason of disease metaphor, they have said that disease is hard and devastating. This situation can be interpreted why these students have chosen nursing as a profession.

Since nursing practices are based on theories establishing nursing concepts concept and theory development studies have been continuing for years. These efforts have begun with Florence Nightingale for the first time and continued with many theorists until today. In our country, nurses have been using "Nursing Care Models" widely for the last decade (16). However, no matter which model is used, every model has tried to explain the concept of care from its own perspective. When we define the care term as "to observe / to look", it is a word to name anything. Indeed, we look at / observe anything going on around us at any time. However, "to look" and "to see" are different actions; while to look is an action which is involuntary and random, to see is to perceive the object or phenomenon at which we look, choose and select it willingly. In cases when the eyes cannot see, we can see by perceiving with other sense organs. We often see objects or phenomena, that is in the scope of our perception selectivity and draw our attention (17). Thus, when our perceptive differences reflect on the care concept, its meaning may change. 10,8% of the students associate the care with the nature in our study. The environment concept, in which the nature concept is included, first started with the theory of Florence Nightingale and continued until today. Since Nightingale believes if the environment is not balanced, the person is stressed and the nurses are responsible with maintaining the balance (18). The results of the study show that 12 of 36 metaphors developed by our participants choosing the nursing profession are positive, 4 of them negative and 17 of them are both positive and negative. Among these, the most repeated metaphor is forest with the rate of 9.4%. The reason of choosing forest metaphor is that it is seen as inclusive, protective and makes one feel like bad as if prick, quite diverse and becoming beautiful when caring.

CONCLUSION

How nurses describe this profession has effective role in terms of managing holistic and patient focused care. This description can be accessed thanks to metaphors used by nurses while defining their profession. This study aims to understand how the first year nursing students perceive professional concepts along by metaphoralizing nursing concepts. Nursing students mostly perceive nursing profession, care and health positively. However, they often perceive human and disease concepts negatively. It has also been determined that they perceive the environment concept as both positively and negatively. The complexity of factors in perception about the profession, professional image and profession choice can be enlightened by understanding these metaphors.

Limitations of the study

This study has several limitations. First, This study was carried out only in the students of the nursing department in Bursa province (Uludag University). Therefore, it does not cover all nursing department students. Second, on the basis of metaphors, cultural variables played a role. however, no measurements were taken to evaluate the cultural difference in our study. Third, we did not use a p value adjusted for multiple

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