

Health perception of nurses and affecting factors

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Abstract

This study was carried out to determine the health perception of the nurses and the affecting factors. The study was carried out with the participation of 80 nurses working in the state hospital in Gumushane city centre. The data were collected using the nursing introductory information form and the 'The Perception of Health Scale'. In the analysis of the data, Kruskal–Wallis and Mann–Whitney *U* test with frequency, percentage, mean and standard deviation were used and in the examination of the relations between variables, Pearson correlation test from nonparametric methods was used. Of the nurses participating in the study, 92.5% were women, 7.5% were men, 46.3% were graduates, 68.8% loved their work, 62.5% were satisfied with the service and 60% worked in shifts. In literature research, sufficient numbers of studies were found to examine the health perception of nurses. It is recommended to increase the work in this area.

Keywords: Health, health perception, nurse.

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1. Introduction

The concept of health that is the basic right of every person varies according to individuals, cultures, disciplines and time. Despite being a universal concept, the most accepted definition today, with no common definition, is the definition of the World Health Organization (WHO) (Sengel, 2016). WHO defines health as; 'A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (Ay, 2007; Birol, 2005; Tugut & Bekar, 2008; WHO, 2014).

The concept of health is divided into two: subjective and objective. Subjective health; it is the perception of the individual's own situation in physical, social and spiritual aspect. According to this point of view; some people may perceive health as a 'fulfilment of social duties' while others may even consider cold as a major disease. So, if the individual is not sick, he or she may perceive himself as healthy (Capik, 2006; Sengel, 2016). Factors such as age, gender, values, beliefs, professional responsibilities, experiences and culture play an important role in perceiving subjective health (Diamond, Becker, Arenson, Chambers & Rosenthal, 2007; Sengel, 2016). Objective health means non-existence of disease according to physical examination and diagnostic tests. To call an individual as healthy, he/she should perceive himself/herself as healthy and be objectively healthy as well. That's why, the subjective perception of health as well as the objective data of the individual should be known when the individual is evaluated (Bolsoy & Sevil, 2006; Capik, 2006; Sengel, 2016).

In order to be able to decide whether an individual is healthy or not, the health perception term is used. Health perception is widely used to evaluate one's own health status (Doganay & Ucku, 2012; Idler & Benyamini, 1997). In other words, health perception can be defined as 'a composition of personal feelings, thoughts, prejudices and expectations about the individual's own health' (Capik, 2006; Koraltan, 2017).

Within the healthcare system, the nursing profession, which provides protective service to individual, family and society, provides therapeutic and rehabilitative care services, contributes to the welfare and well-being of the individual, is needed in every field where people exist (Ay, 2007; Ulusoy, 2000; Zambak & Fadiloglu, 2004). It is very important for nurses who have an important place in the healthcare system to determine their own health perceptions.

2. Aim

This study was carried out to determine the health perception of the nurses and the affecting factors.

3. Method

A total of 125 nurses working in the Gumushane State Hospital located in the city center of Gumushane formed the universe of the study. The study was conducted with the participation of nurses who are eager and volunteer. It was targeted to reach 95 nurses working at the hospital but the study was completed with the participation of 80 nurses (64%) due to the annual leave, the maternity leave and the unwillingness of nurses to participate in the study.

The data were collected using the 'The Perception of Health Scale (PHS)' with the information form that identifies the socio-demographic and occupational characteristics of the nurses. Nurses' introductory information form consists of 20 questions in total: nine questions including socio-demographic information of nurses (age, gender, marital status, number of children, education level, continuing education programme, family structure, place of life and income status) and 11 questions including professional characteristics (current department, duty in the service, number of years working as nurse, number of different services in total work time, number of nurses working in the department, working status in the hospital, liking the occupation, satisfaction with the current department, work type, weekly working hours and the mean number of patients given daily care).

The PHS is a scale developed by Diamond et al (2007) to measure health perceptions of adults. The validity and reliability study of the scale in Turkey was studied by Kadioglu and Yildiz (2012). PHS is a five-point Likert-type scale tool consisting of 15 items. This scale consists of four subscales such as the Centre of Control (2, 3, 4, 12 and 13 items), Self Awareness (5, 10 and 14 items), Certainty (6, 7, 8 and 15 items) and Importance of Health (1, 9 and 11 items). 1, 5, 9, 10, 11 and 14 items are positive attitude; 2, 3, 4, 6, 7, 8, 12, 13 and 15 items are negative statements. Positive statements are scored as 'Strongly agree = 5', 'Agree = 4', 'Neither agree nor disagree = 3', 'Disagree = 2' and 'Strongly disagree = 1'. Negative expressions are scored inversely. The minimum score that can be taken from the scale is 15 and the maximum score is 75 (Diamond et al., 2007; Kadioglu & Yildiz, 2012).

The statistical analysis of the data that reveal the perception of health and the affecting factors of nurses taken in the scope of the study was made by using SPSS 23 package program in a computer environment. In the analysis of the data, Kruskal–Wallis and Mann–Whitney *U* test with frequency, percentage, mean and standard deviation were benefitted and in the examination of the relation between variables, Pearson correlation test of nonparametric methods were used. Significance level was taken as $p < 0.05$. In the analysis of the data, Kruskal–Wallis and Mann–Whitney *U* test with frequency, percentage, mean and standard deviation were benefitted and in the examination of the relation between variables, Pearson correlation test from nonparametric methods was used. Significance level was taken as $p < 0.05$.

4. Results

Table 1. Distribution of socio-demographic and work-life characteristics of nurses (N = 80)

	Features	N	%	Features	N	%	
Age	18–29 years	45	56.3	Education level	Medical Vocational Training in High School	15	18.8
	30–39 years	27	33.75		Associate degree	15	18.8
	40 years and above	8	9.95		Undergraduate	37	46.3
Gender	Female	74	92.5	Continuing education programme	Postgraduate	12	15
					Doctor's degree	1	1.3
	Male	6	7.5		Associate degree	8	10
Marital status	Married	44	55	Place of life	Undergraduate	13	16.3
					County	12	15
	Single	36	45		No	48	60
Family structure	Extended Family	6	7.5	Level of love for the profession	Village	3	3.8
	Elementary Family	74	92.5		Province	65	81.3
Income status	Income less than expenditures	11	13.8		Satisfaction with the current department	Loves	55
				Does not Love		7	8.8
				Indecisive		18	22.5
Income status	Income equal to expenditures	53	66.3	Satisfaction with the current department	Satisfied	50	62.5
					Not Satisfied	7	8.8
Income status	Income more than expenditures	16	20		Partly Satisfied	23	28.8

The socio-demographic and work-life characteristics of the nurses who agreed to participate in the study are shown in Table 1. Of the nurses participating in the study, 92.5% were female, 7.5% are male, 55% were married, 45% were single, 58.8% had no children, 22.5% had two children and 18.8% graduated from Medical Vocational Training in High School, 18.3% graduated in associate degree,

46.3% had a bachelor degree, 81.3% lived in city centre, 66.3% had equal income to expenditure, 92.5% had elementary family structure, 90% worked as service nurse, 90% worked as permanent staff, 68.8% loved their occupation, 62.5% were satisfied with the working department and 60% worked in shifts (Table 1). The mean age of the nurses was 29.9 ± 6.4 , the mean study year was 8.4 ± 6 years, the mean number of department changed during the work period was 3.5 ± 2.5 , the mean total number of nurses working in the department was 7.4 ± 3.5 , the mean weekly total working hours were 48.2 ± 10.5 and the mean total number of patients given daily care was 33.6 ± 67.6 .

Table 2. Comparison of the nurses' socio-demographic and work-life characteristics and the mean score values of the PHS and its sub-dimensions

Features		Control centre Mean \pm SD	Self-awareness Mean \pm SD	Certainty Mean \pm SD	Importance of health Mean \pm SD	Total Mean \pm SD
Age	18–29 years	15.88 \pm 3.88	10.31 \pm 2.00	13.02 \pm 2.80	11.24 \pm 2.40	50.46 \pm 5.23
	30–39 years	16.55 \pm 3.95	10.33 \pm 2.07	12.77 \pm 2.37	10.92 \pm 1.95	50.59 \pm 6.28
	40 years and above	13.25 \pm 3.24	11.00 \pm 1.77	12.50 \pm 2.87	10.87 \pm 2.03	47.62 \pm 5.62
		$\chi^2 = 4.622$; $p = 0.099$	$\chi^2 = 0.911$; $p = 0.634$	$\chi^2 = 0.340$; $p = 0.844$	$\chi^2 = 1.148$; $p = 0.563$	$\chi^2 = 2.486$; $p = 0.289$
Family structure	Extended family	14.83 \pm 4.26	8.83 \pm 2.71	11.16 \pm 1.32	11.16 \pm 1.60	46.00 \pm 5.62
	Elementary family	15.93 \pm 3.90	10.51 \pm 1.89	13.02 \pm 2.68	11.09 \pm 2.25	50.56 \pm 5.54
		$U = -0.752$; $p = 0.452$	$U = -1.613$; $p = 0.107$	$U = -1.905$; $p = 0.057$	$U = -0.055$; $p = 0.956$	$U = -1.960$; $p = 0.050$
Income status	Income less than expenditures	14.54 \pm 3.72	10.27 \pm 1.95	11.36 \pm 1.96	10.54 \pm 1.63	46.72 \pm 4.71
	Income equal to expenditures	15.92 \pm 3.93	10.30 \pm 2.06	12.96 \pm 2.75	11.03 \pm 2.35	50.22 \pm 5.56
	Income more than expenditures	16.50 \pm 4.00	10.75 \pm 1.87	13.68 \pm 2.38	11.68 \pm 2.02	52.62 \pm 5.53
		$\chi^2 = 2.153$; $p = 0.341$	$\chi^2 = 1.241$; $p = 0.538$	$\chi^2 = 5.927$; $p = 0.052$	$\chi^2 = 2.091$; $p = 0.352$	$\chi^2 = 7.146$; $p = 0.028$
Education level	Medical	15.33 \pm 3.99	9.93 \pm 1.98	11.66 \pm 1.87	10.46 \pm 1.55	47.40 \pm 4.80
	Vocational Training in High School					
	Associate degree	14.86 \pm 4.18	10.13 \pm 2.23	12.26 \pm 2.31	11.00 \pm 2.42	48.26 \pm 4.68
	Undergraduate	16.29 \pm 4.03	10.67 \pm 1.90	13.48 \pm 3.06	11.56 \pm 2.31	52.02 \pm 5.92
	Postgraduate	16.08 \pm 3.28	10.25 \pm 2.13	13.58 \pm 1.78	10.50 \pm 2.27	50.41 \pm 5.36
		$\chi^2 = 3.032$; $p = 0.553$	$\chi^2 = 2.662$; $p = 0.616$	$\chi^2 = 9.228$; $p = 0.056$	$\chi^2 = 4.904$; $p = 0.297$	$\chi^2 = 9.121$; $p = 0.058$
Satisfaction with the current department	Satisfied	16.38 \pm 3.97	10.34 \pm 2.08	12.86 \pm 2.74	10.72 \pm 2.12	50.3 \pm 6.2
	Not satisfied	12.57 \pm 4.42	10.57 \pm 2.57	13.57 \pm 2.50	13.14 \pm 2.11	49.85 \pm 3.89
	Partly satisfied	15.69 \pm 3.22	10.43 \pm 1.67	12.73 \pm 2.54	11.30 \pm 2.11	50.17 \pm 4.94
		$\chi^2 = 4.990$; $p = 0.083$	$\chi^2 = 0.179$; $p = 0.914$	$\chi^2 = 0.578$; $p = 0.749$	$\chi^2 = 7.659$; $p = 0.022$	$\chi^2 = 0.026$; $p = 0.987$

SD = standard deviation, U = Mann–Whitney U test statistics, χ^2 = Kruskal–Wallis test statistics, t = t test.

The comparison of the socio-demographic and work-life characteristics of the nurses participating in the study and PHS and its subscales mean score values are given in Table 2. It was found that the mean score of Perception Health Scale differed according to the family structure of the nurses ($p = 0.05$; $p < 0.05$) and income status ($p = 0.028$; $p < 0.05$). In the data analysis, it was found out that the health perception was significantly higher in the elementary family structure than in the extended family, higher in those having more income than expenditure than those having less income than expenditure or equal income to expenditure. That is, there is a direct proportion between the income situation and the perception of health.

It was found that the PHS of the nurses who formed the sample group of the study differed according to variables such as the importance of health ($p = 0.022$, $p < 0.05$), the scores they received from the subscale, satisfaction with the working department. According to the data analysis, it was seen that the subscale scores of the importance of health are significantly higher in the nurses who were not satisfied with the working department than those who were satisfied and partially satisfied.

Table 3. The relationship between the mean score of PHS and the mean score of sub-dimensions of the scale

	Perception of health	Control centre	Self-awareness	Certainty	Importance of health
Perception of health	1				
Control centre	0.588**	1			
Self awareness	0.509**	-0.095	1		
Certainty	0.575**	0.078	0.111	1	
Importance of health	0.366**	-0.278*	0.430**	0.032	1

* $p < 0.05$, ** $p < 0.01$.

Table 3 gives the correlation coefficients between the scores of the nurses who form the study group from the PHS and the scores they got from the sub-dimensions of this scale.

There is a positive relationship between the PHS and the Control Centre sub-dimension. While the level of health perception of the nurses forming the study group is increasing, the level of the control centre is also increasing. Correlation coefficient was found as 0.588.

There is a positive relationship between the PHS and Self-Awareness sub-dimension. While the level of health perception of the nurses forming the study group is increasing, self-awareness levels are also increasing. Correlation coefficient was found as 0.509.

There is a positive relationship between the PHS and the Certainty sub-dimension. While the level of health perception of individuals who constitute the working group increases, the level of certainty also increases. Correlation coefficient was found as 0.575.

There is a positive relationship between the PHS and the Importance of Health sub-dimension. As the level of health perception of the working group increases, the level of health is also increasing. The correlation coefficient was found as 0.366.

5. Discussion

As a result of the data analysis, it was found that the mean score of the PHS differed according to the family structure and income status of the nurses, the health perception was significantly higher in elementary family structure than extended family, higher in those who had more income than expenditures than those with less income than expenditures and with equal income to expenditures. Several studies conducted in accordance with the findings of the study show that the health perception of individuals increases as the level of income increases (Ahmad, Jafar & Chaturvedi, 2005;

Ahmed, Rana, Chowdhury & Bhuiya, 2002; Hoz & Leon, 1996; Sturm & Gresenz, 2002; Vissandjee, Desmeules, Cao & Abdool, 2004). With the increase in the income level, the reason of an increase in the health perception of the nurses may be that high income increases social welfare and at the same time provides more usage of the health services.

The reason why the perception of health is higher in the elementary family structure than the extended family is that the number of people that individuals are responsible for in the elementary family structure is few and they have little time to spare themselves.

The score the PHS of nurses who were not satisfied with the working department got from 'Importance of Health' sub-dimension was found to be high. According to this result, since the nurses are not satisfied with the department they are working in, it is thought that they give more attention to their own perceptions and give importance to their health.

The difference between the education level scores of the nurses was not statistically significant. In this study, it was observed that the mean score of the PHS did not differ according to the age and education level of the nurses, and the lowest health perception was in the nurses with/over the age of 40 years. In studies conducted in the same direction as our study findings, it was reported that individuals' health perceptions decreased with increasing age (Ahmed et al., 2002; Goldberg, Gueguen, Schmaus, Nakache & Goldberg, 2001; Hoz & Leon, 1996; Vissandjee et al., 2004). In some studies, it was found that there is a relationship between education level and health perception and also found that health perception of individuals with low education level is worse than health perceptions of individuals with high education level (Ahmad et al., 2005; Szaflarski & Cubbins, 2004; Vissandjee et al., 2004). Age brings about physiological changes and psychosocial problems. The health perception of the individual may be more negative due to the increase in the age and the health problems (Capik, 2006).

6. Conclusion

In the direction of findings from this study:

Of the nurses participating in the study, 56.3% were in the age group of 18–29, 33.75% in the age group of 30–39 and 9.95% in the age group of 40 and above, 18.8% graduated from Medical Vocational Training in High School, 18.8% graduated in Associate Degree, 46.3% graduated as Undergraduate, 15% graduated as Postgraduate, 60% had no continuing education programme, 37.5% had continuous daytime work, 60% worked in a shift, 68.8% loved their job and 62.5% were satisfied with the working department.

There is a positive relationship between the Health Perception Scale and the Control Centre, Self-Awareness, Certainty and Importance of Health sub-dimensions. While the level of health perception of nurses forming the study group is increasing, the levels of self-awareness, certainty and importance of health are increasing.

All healthcare professionals, especially nurses, working in the healthcare system, have difficulties in meeting the physiological needs due to the excess number of patients, lack of personnel, length of working hours and workload related physiological needs and then, they are fatigued and can overlook their own health in this case. In the literature research, sufficient numbers of studies examining the health perception of nurses were not found. The comparison of data obtained for this reason couldn't be made due to insufficient study. It is recommended to increase the work in this area.

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