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Expectations and satisfaction of elderly people with health services provided at a public nursing home in Iran

Expectativas y satisfacción de las personas mayores con los servicios de salud brindados en un asilo público de ancianos en Irán

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ABSTRACT:

The population of the elderly has grown steadily in recent years and process of bringing them to the nursing home has risen. Based on available evidence the elderly care system is challenging, complex, multivariate, timely and continuous. Assessing satisfaction with health services is a measure of service quality and a way to improve its delivery. This study examines the expectations of the elderly about providing health services and satisfaction with the services provided in one of the Iranian nursing homes. This descriptive study was conducted in 2017 in the Kahrizak elderly community as one of the governmental centers in the capital of Iran. All of the elderly who were willing to participate in the research, 156 people, were evaluated for the importance of the services and satisfaction of the services provided by the elderly satisfaction questionnaire on services provided in the nursing home created by Lapre and wright in 2013. The demographic variables of the elderly were gathered using relevant questionnaire. After validity and reliability of questionnaire, the data were analyzed using descriptive and inferential statistics in SPSS software version 22. The mean scores of services that elderly people consider and expect from nursing home is reported to be 115.05 ± 14.29 (out of 5 score = 4.26). The mean score of services provided to the elderly in Kahrizak nursing home was 101.17 ± 10.43 (out of 5 score = 3.74). The mean difference between the two variables of the elderly services expected to be carried out and services provided at the center was 13.87 ± 19.13 which is statistically significant. In this study, most of the demographic variables such as age, sex, marital status of the elderly have no statistical effect on the expected services and the satisfaction of the elderly, and the difference between them ($P > 0.05$). The results show a relatively good level of satisfaction among the elderly with the services provided in the Kahrizak nursing home, while there is a significant difference with the expectations of the elderly from the health care system from their point of view. This reflects the need for a codified program to improve the provision of health services based on the needs and priorities of the elderly in the elderly care centers.

KEYWORDS: Satisfaction with Services, Expectations, Elderly, Nursing Home.

AUTHOR NOTES

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RESUMEN:

La población de personas mayores ha crecido de manera constante en los últimos años y el proceso de llevarlos al asilo de ancianos ha aumentado. Según la evidencia disponible, el sistema de atención a personas mayores es desafiante, complejo, multivariado, oportuno y continuo. La evaluación de la satisfacción con los servicios de salud es una medida de la calidad del servicio y una forma de mejorar su prestación. Este estudio examina las expectativas de los ancianos sobre la prestación de servicios de salud y la satisfacción con los servicios prestados en uno de los hogares de ancianos iraníes. Este estudio descriptivo se llevó a cabo en 2017 en la comunidad de ancianos Kahrizak como uno de los centros gubernamentales en la capital de Irán. Todos los ancianos que estaban dispuestos a participar en la investigación, 156 personas, fueron evaluados por la importancia de los servicios y la satisfacción de los servicios proporcionados por el cuestionario de satisfacción de los ancianos sobre los servicios prestados en el hogar de ancianos creados por Lapre y wright en 2013. Las variables demográficas de las personas mayores se recogieron mediante un cuestionario relevante. Después de la validez y la confiabilidad del cuestionario, los datos se analizaron mediante estadísticas descriptivas e inferenciales en el software SPSS versión 22. Los puntajes medios de los servicios que las personas mayores consideran y esperan del asilo de ancianos son de 115.05 ± 14.29 (de 5 puntaje = 4.26). La puntuación media de los servicios prestados a las personas mayores en el hogar de ancianos Kahrizak fue de 101.17 ± 10.43 (de 5 puntuación = 3.74). La diferencia de medias entre las dos variables de los servicios para ancianos que se espera realizar y los servicios prestados en el centro fue de 13.87 ± 19.13 , lo cual es estadísticamente significativo. En este estudio, la mayoría de las variables demográficas como la edad, el sexo, el estado civil de los ancianos no tienen un efecto estadístico sobre los servicios esperados y la satisfacción de los ancianos, y la diferencia entre ellos ($P > 0.05$). Los resultados muestran un nivel de satisfacción relativamente bueno entre los ancianos con los servicios prestados en el hogar de ancianos de Kahrizak, mientras que hay una diferencia significativa con las expectativas de los ancianos del sistema de atención médica desde su punto de vista. Esto refleja la necesidad de un programa codificado para mejorar la provisión de servicios de salud en función de las necesidades y prioridades de los ancianos en los centros de atención a personas mayores.

PALABRAS CLAVE: satisfacción con los servicios, expectativas, ancianos, asilo de ancianos.

INTRODUCTION:

All clients referring to the health system are at risk of injury, the elderly are among the most vulnerable group of community and are more and more exposed to medical and clinical injuries due to physical and mental conditions that have been encountered in their evolutionary period. Recently, due to improved nutrition and health, the lives of humans have been prolonged. Therefore, day by day, the number of elderly people is increased. Today, about two thirds of all elderly people live in developing countries, and by 2025 this figure will reach 75% (Gül FÇ, Kara H, Nazik H, Kara DÖ, Karaca B. 2017). According to United Nations data, in 2050, 22 percent of the world's population will be 60 years and 16 percent will be 65 years old (Fattori et al., 2014). The population of people aged 60 years and older in Iran in 1975 was 5.4 percent and will reach 10.5 percent in 2025 and 21.7 percent in 2050 (Ergan, B., Kırmızıgül, E., Uzun, Ö., & Çöplü, L. (2017).

Considering the profound changes that have taken place in recent decades in the social and economic structure of society, especially in the family, it can be anticipated that the elderly of future generations will face more complex problems and issues than previous generations. A number of factors including changes in the structure of the family from the widespread to the nuclear family and the increase in apartment life, immigration to improve livelihoods, change in employment and marriage, have led to a failure to pay attention to the needs of families to the elderly and, therefore, to meet their basic needs and social isolation, behavioral disorders, and ultimately the delivery of seniors to the nursing home (Nasiri et al., 2016).

The number of elderly centers grew from 2005 to 2008 years, with the number of centers ranging from 158 in 2005 reached to 287 in 2008 and the number of service recipients increased from 10342 to 19245 (Ghazi et al. 2012). The place where the elderly live is a very important part of the quality of life, comfort and mental health of them. The physical space and the physical condition of the place vary from person to person. But the fact that a person feels that he/she is living in his/her own house is at the head of all the factors affecting mental health, so that, among various moves, the transfer to the elderly, in the texts (literature), is known as the most important one in the elderly (Mokhtari and Ghasemi, 2011).

Satisfaction is one of the indicators for assessing the quality of health care in all countries, and satisfying clients and the expected outcomes of caregivers and health officials (Parker et al., 2012). Also, more satisfaction, increases sense of security and relaxation significantly, which is itself the cause of patient's continuous recovery (You et al., 2013). One of the factors affecting the satisfaction of the elderly is self-satisfaction from the environment in which he or she lives. Therefore, addressing the well-being of the elderly is considered as a tool for measuring the productivity and effectiveness of health services and can be used to decide on the management of consumption and the quality of care for the elderly patients, as well as evaluate the performance of the organization at a national level (Arab et al., 2010). Also according to the investigations carried out in Iran, only 1% of the approved laws are related to the elderly, of which 62% are economical, 22% are social and 16% are welfare and health, and the need to pay attention to the health care system is emphasized (Mokhtari and Ghasemi, 2011). Therefore, the patient's expectations must be met by the healthcare organization and the services provided must be in line with the patient's expectations, in which case the patient's satisfaction will be obtained. Therefore, the evaluation of the patient by the health care professional scientifically and professionally has a significant effect on patient satisfaction and is a factor in ensuring the desired results in health care and treatment (Sahibzadeh and Rahimian, 2009). The aim of this study is to assess the elderly expectations of providing health services and their satisfaction with the services provided in one of the Iranian nursing homes. It is hoped that the results of this study can be considered as an important factor for future planning of the government and the Ministry of Health in order to improve the quality of health services and related to the needs of this group of vulnerable populations.

METHOD:

This survey is a descriptive study aimed at assessing the level of expectations of the elderly regarding the provision of health services and satisfaction with the services provided in a public nursing home of Iran (2017). In this study, all elderly people living in the Kahrizak residential houses formed the research population. In the preparation of the sample, the researcher was present at various shifts in the center, and the questionnaire of satisfaction with services provided was completed by the elderly (a total of 156 individuals of both sexes) who were eligible according to the inclusion and exclusion in a self-report manner and using convenience sampling method. That way the sampling has been continued until the desired number has been completed. The study inclusion criteria were residency for at least one year and having no cognitive problems at the center as well as the exclusion criteria were also the experience of the new crisis such as deaths of the loved ones and being admitted to the hospital. To measure the expectations and satisfaction of elderly with the nursing home health care system, the elderly satisfaction questionnaire with provided services in nursing home developed and evaluated psychometrically by the Lapre and wright in 2013 was used. The questionnaire consisted of 75 questions in three sections. The first section included demographic information of the elderly. The second section was about the important and necessary care for the elderly. At the beginning, 27 sentences (5 Likert scores) for elderly care services, one question for evaluating the nursing home where the elder living, and finally a table for elderly rating in relation to important services for the elderly, which can be scored from (1- unimportant, 5- very important) and the third part was exactly like 27 questions of the first section in five dimensions and about the services provided at the nursing home and experienced by the elderly - measured using the five-point Likert Scale (1:unsatisfied-5:very Satisfied). The questionnaire consists of five dimensions of responsiveness and hospitality, courtesy and personal approach, inclusive and care access, system orientation and safety, and two final questions that evaluated the nursing home care elderly feelings about living in this center and scored using a seven points Likert scale. Qualitative content validity was used to assess the validity of the questionnaire. To this end, out of 12 faculty members of the Nursing and Midwifery Faculty who have been studying or experiencing nursing care, they were asked to comment on the relevance of the questionnaire to the objectives. As a result, the questions were translated

and delivered to the teachers, and changes were made to the way in which the phrases were written and verified. To determine the reliability of the questionnaire of elderly satisfaction with the provided services, the internal consistency method (Cronbach's alpha) as well as to evaluate the instrumentation stability, re-test and intra-class correlation coefficient (ICC) were used. The questionnaire was filled out by 20 elderly residents of the nursing home for 10 days. The Cronbach's alpha coefficient was reported at 0.952 and thus the questionnaire was reliable. Based on the ethical considerations of confidentiality, after explaining the purpose of the research and obtaining permission from the research units, questionnaires without name in shifts of morning, evening and night were distributed among the elderly. Also, the researcher was present at the relevant place and answered the questions and the questionnaires were completed as self-declaration. The data were analyzed by SPSS software version 21 using descriptive and inferential statistical methods.

RESULTS:

Findings showed that 84 women (53.8%) and 72 men (46.2%) were in this study, most of them 72 ± 9 years old. Most of the elderly in this study were widows (45.5%) and only 15.4% of them were divorced. The majority of the elderly in this study were covered by health insurance (32.66%). 53.23% of the elderly in this study were illiterate, and only 0.3% of them had PhDs.

Table 1 shows the results of independent T and ANOVA tests. Only insurance type had a significant effect on the satisfaction of the services provided in the nursing home ($P < 0.05$). Also, the only statistically significant demographic index on the importance of services for the elderly was education ($P < 0.05$). Other demographic variables studied in the elderly were not generally effective in the level of expectation of the elderly and their satisfaction with the provided services. Meanwhile, in the difference of importance and satisfaction (dissatisfaction), none of the demographic variables studied had a significant effect ($P < 0.05$).

TABLE 1.
The mean score of importance (expectations) of the satisfaction of the elderly and the difference between the two variables in the nursing home according to the demographic variables

Variable	Values	Number	Percent	The importance of services			Service Satisfaction			Difference between importance and satisfaction		
				Mean	SD	P	Mean	SD	P	Mean	SD	P
Gender	Female	84	53.8	4.33	0.54	0.322	3.76	0.45	0.787	-0.57	0.56	0.417
	Male	72	46.2	4.18	0.52		3.73	0.29		-0.045	0.46	
	Total	156	100	4.26	0.53		3.74	0.39		-0.51	0.51	
Marital status	Unmarried	32	20.5	4.18	0.60	0.355	3.73	0.40	0.354	-0.46	0.55	0.940
	Married	29	18.6	4.09	0.59		3.59	0.22		-0.50	0.54	
	Divorced	24	15.4	4.07	0.79		3.64	0.39		-0.43	0.61	
	Widow	71	45.5	4.38	0.43		3.83	0.42		-0.55	0.51	
	Total	156	100	4.36	0.53		3.75	0.38		-0.51	0.52	
Kind of insurance	Health	51	32.7	4.51	0.31	0.035	3.92	0.36	0.004	-0.59	0.46	0.234
	Social security	37	23.7	4.21	0.58		3.53	0.32		-0.67	0.58	
	health Service	25	16	4.26	0.68		3.98	0.43		-0.28	0.50	
	Other	43	27.6	3.96	0.51		3.60	0.31		-0.36	0.48	
	Total	156	100	4.26	0.53		3.74	0.38		-0.59	0.52	
Education	Illiterate	83	53.2	4.03	0.33	0.017	3.63	0.33	0.172	-0.41	0.53	0.673
	Elementary	27	17.3	4.66	0.32		4.00	0.46		-0.66	0.50	
	Secondary	11	7.1	4.38	0.42		3.88	0.32		-0.50	0.64	
	Diploma	16	10.3	4.60	0.13		3.74	0.43		-0.85	0.48	
	Up to diploma	19	12.2	4.57	0.33		3.85	0.44		-0.72	0.45	
	Total	156	100	4.26			3.74	0.39		-0.51	0.51	

Table 2 shows the results of paired T-test. The mean scores of services that the elderly cares about and expect to be done is 115.05 ± 14.29 (mean of 5 scores = 4.26), while the mean score of service provided in the nursing home to elderly, is 101.17 ± 10.43 (mean of 5 scores = 3.74). The studied elderly gave the most importance among the dimensions of the importance of services to system orientation (4.37 out of 5) and the least of them to safety (3.99 out of 5). Also, the highest mean score of satisfaction of elderly people living in the nursing home, by dimensions related to capacity and access to care and safety, 3.94 out of 5, and the least of them were responses and hospitality, reported 3.62 out of 5. The mean difference between the two variables (13.87 ± 13.92) indicates the gap between the expected services and what is actually provided in the nursing home. The gap is compared with the zero score, and the more difference of score with zero, the greater gap. Most of the gap is related to the responsiveness and hospitality dimensions and the direction of the system respectively. There was no significant difference between importance and satisfaction in safety dimension of the questionnaire ($P > 0.05$).

TABLE 2
The mean score of importance (expectations), the satisfaction of the elderly and the difference between the two variables in the nursing home

Variable	The importance (expectations) of the service			Satisfaction with the service			The gap between the importance and satisfaction of the service			P
	Mean	SD	score out of 5	Mean	SD	score out of 5	Mean	SD		
Total score (out of 135)	115.05	14.29	4.26	101.17	10.43	3.73	13.87	13.92		<0.001
Responsiveness and hospitality (out of 45)	38.5	5.06	4.22	32.58	4.11	3.62	5.46	5.31		<0.001
Courtesy and personal approach (out of 35)	29.98	3.43	4.28	29.98	3.15	3.79	3.44	4.37		<0.001
Inclusion and care access (out of 20)	17.17	2.22	4.29	15.78	2.29	3.94	1.39	2.07		<0.001
System orientation (out of 25)	21.86	2.47	4.37	18.37	2.14	3.67	3.49	3		<0.001
safety (out of 10)	7.98	1.68	3.99	7.89	1	3.94	0.08	1.55		0.679

In Table 3, overall satisfaction of services provided by the nursing home was 3.64 ± 0.75 (mean of 5 points). Mean score of satisfying the needs of the elderly from their point of view was 4.76 ± 0.91 (mean of 7) and the feeling of the elderly toward nursing home was 4.20 ± 1.07 (mean of 7 points).

TABLE 3
Mean score of overall satisfaction of services, the feeling of the elderly
towards the nursing home and the realization of the needs of the elderly

Variable	Mean	SD
The quality of service provision and overall care from the elderly point of view (out of 5)	3.64	0.75
Realization of the elderly needs (out of 7)	4.76	0.91
Elderly feeling towards nursing home (out of 7)	4.20	1.07

DISCUSSION:

The main objective of this study was to assess the satisfaction of the elderly with the services provided in the nursing home and the extent of the gap between the expected level of the elderly and the services provided at the center. The results show a relatively high level of satisfaction with health services provided, though upgradeable. However, there is a significant difference between the expectations of the elderly and the care provided to them in this study. In the study of the findings of this research, the following points are discussed.

The mean score of service that older people care about are indicative of relatively high demands, the life expectancy of the elderly, and valuing high quality of life by them. The studied elderly considered the most important among the dimensions of the importance for system orientation services, which included choosing the time of sleep and awakening, eating, dressing, leaving the center and privacy, indicating the power of choice, decision-making, and maintain their personal habits. The findings of the Oxing's study in China showed that the diet and the variety of meals, the structure of the nursing home, the availability of efficient equipment and manpower for the treatment of diseases and the existence of interpersonal relationships are the important and effective factors on satisfaction of elderly with the services provided at the nursing home. The goal of providing services in nursing home is to address the multiple and important needs of the elderly, protect their rights and legitimate interests, respect their dignity and improve their quality of life, which will make the elderly satisfied with the service provided by nursing home (Xing et al., 2016). In the jahanpour's and colleague's study, care should be taken to increase the patient's trust and improve the services provided with respect to the privacy of patients. (Jahanpour and Rasti, 2014). Also, the results of Lauren's study showed that giving the right to choose the elderly based on their priorities is one of the mechanisms for maintaining the autonomy of the elderly and, subsequently, increasing their satisfaction with health care. Also, access to health care providers, having a right to choose in the health care process, including participation in care and decision-making, will increase satisfaction in the nursing home (Bangerter et al., 2016). Therefore, individual attention to the characteristics and the feeling of freedom in choosing the personal affairs of the elderly, according to the studies conducted, will have the greatest impact on increasing their satisfaction.

The mean score of satisfaction with the services provided in the nursing home indicates a relatively good quality of service provided to the elderly in the nursing home, although significant but also upgradeable. Also, the highest mean score of satisfaction among elderly people living in the nursing home based on the dimensions are related to the capacity and access to care and safety. The dimension of capacity and access to care is about interacting with other elderly, physicians, and other health care providers as well as engaging in day-to-day activities. Haugan's study showed that nurse-patient interaction was significantly associated with mental health and global well-being. The interaction of nurses and elderly people living in high quality nursing homes with the aim of increasing the moderation of their condition can increase mental and physical health, well-being and spiritual performance in this vulnerable population (Haugan, 2014). Also, interpersonal communication between nursing home residents and health care providers requires

commitment, interrelationships and interpersonal competence of caregivers to understand the needs of each resident and make effective communication (Nakrem et al., 2011). It should be noted that satisfaction is influenced by factors such as mental health, awareness of rights, communication skills of the clients, and the ability to communicate with clients and the cultural, social and personality factors of both groups (Mortazavi et al., 2013). The results of this study, in line with the studies mentioned above, show the strong influence of the center's interpersonal relationships and interactions on the satisfaction of the elderly. Therefore, it can be concluded that one of the main pillars of satisfaction at the desirable level is the existence of interpersonal interactions in accordance with the individual needs of the elderly and their participation in the activities of the center and enjoyment of self-esteem. Also, the safety dimension concerns not stealing in the center and keeping the deceased from the eyes of other elderly people that indicate the effect of relaxation to increase satisfaction. The El-Jardali's study also emphasized the importance of promoting a safety culture as the first and most important step in promoting the desired outcomes in patient care (El-Jardali et al., 2011).

The lowest mean score belongs to responsiveness and hospitality of satisfaction questionnaire that is about committed, professional and accessible health caregivers for fast response within a specified time frame, having the power to choose for meals, correct information, maintaining quality of life as much as possible. Also, the mean difference between the two variables indicates the gap between the expected services and what is actually provided in the nursing home. Most of the gap is related to responsiveness and hospitality dimensions and system orientation, respectively. A survey conducted with the aim of evaluating the autonomy importance of the elderly living in the nursing home in 2012 showed that when the elderly speaks of his or her needs and requests, the way caregivers respond is also likely to affect their sense of trust and their sense of freedom. The results indicate the effective role of health care providers's responding to the desired understanding of the elderly about having the right to choose their own (Custers et al., 2012). The results of this study also indicate the effective role of committed and educated health care providers and the increased empowerment of the elderly in increasing the satisfaction of the elderly.

Elderly people with higher education have paid more attention to different factors in satisfaction. With the increase in education and the change in the quality of life, it seems that the expectations of people from the health care system will increase. Laitinen quotes Pope: "Satisfaction should be considered as something related to expectations. Lower expectations lead to more satisfaction and expectations may be based on demographic and socioeconomic characteristics (Laitinen, 1994). The results of the Arab and colleagues' study suggest that by increasing the level of education of the elderly, their satisfaction will be reduced. In fact, higher education increases the expectations of the elderly from the health care system. On the other hand, older people with higher education are more aware of the patient rights charter, and therefore it is understood that there are more expectations from the health care unit that is consistent with the current study (Arab et al., 2010).

Also, having health insurance has increased satisfaction. In a study in China in 2016, the results indicated that insurance alone would not increase the satisfaction of the elderly (Ding, 2017). While in a study that aimed to investigate the relationship between insurance and life satisfaction, people who did not have insurance had less satisfaction with life (Tran et al., 2017). Also, appropriate social support for elderly is one of factors that ensure life satisfaction (Wedgeworth et al., 2017) Therefore, it can be concluded that having insurance guarantees the health of the elderly, which will increase their satisfaction. Other demographic variables studied in the elderly were not generally effective in the level of expectation of the elderly and their satisfaction with the provided services. Meanwhile, in the difference between the importance and satisfaction (dissatisfaction), none of the studied demographic variables had a significant effect indicating the elderly have a common understanding of the causes of dissatisfaction. Examining the demographic variables of the elderly in the nursing home show that these elderly people are different in demographic terms with the elderly who live in their home, so that the study conducted by Tavafian in 2014 on the elderly living in the home shows, 89% of the elderly are married, while in this study, 18.6% of the elderly living in the nursing home are

married. In the elderly, 84.6% were economically independent, and this ratio is 33.2% for elderly living in nursing home (Tavañan et al., 2014). A study by Dehghani (2016) also shows that satisfaction with services offered at one of the Iranian hospitals indicates that satisfaction with provided services in men is lower than that of women due to the involvement of men in paying the costs of providing health care, while women are dependent on their families to cover their costs (Dehghani Ahmadabad et al., 2016). This indicates the difference between the general population of the elderly and the place of delivery of health services to the residents of the nursing home studied in this study and one of the possible causes of the lack of effect of these variables on the importance and satisfaction of the elderly of the services provided.

CONCLUSION:

The results show a relatively good level of satisfaction of the elderly with services provided in the Kahrizak nursing home, while there is a significant difference with the expectations of the elderly from the health care system from their point of view. This reflects the need for a codified program to improve the provision of health services based on the needs and priorities of centers for the care of the elderly. Paying attention to the autonomy of the elderly, respecting their decision and accountability of health care providers in accordance with the needs of the elderly, effective interpersonal interactions and improving the quality of life will lead to satisfaction of the elderly living in the nursing homes.

Research limitations: According to this research, only in one of the public nursing homes in Tehran, in order to be able to generalize the results of the study more, it is necessary to carry out this research in the care centers of other elderly people.

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