

## Health Care Condition of Frail Elderly and Their Health Care Givers Problems

Hossein Jafarizadeh<sup>1</sup>, Hossein Habibzadeh<sup>2</sup>, Yousef Mohammadpor<sup>1</sup>, Hamideh Khalilzadeh<sup>1</sup>,  
Alireza Rahmani<sup>1</sup>, Davood Rasoli<sup>1</sup>, Peyman Mikaili<sup>3,\*</sup>

<sup>1</sup> Instructor of Nursing, Nursing and Midwifery faculty, Urmia University of Medical Sciences, Urmia, Iran

<sup>2</sup> Assistant Professor of Nursing, Nursing and Midwifery faculty, Urmia University of Medical Sciences, Urmia, Iran

<sup>3</sup> Department of Pharmacology, School of Pharmacy, Urmia University of Medical Sciences, Urmia, Iran

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### ABSTRACT

Improvement of life conditions and the increase of lifetime as well as life expectancy lead to the occurrence of senility. The aim of this study was to explore comprehensively the needs of the frail elderly so that they could be provided with suitable services.

**Material and Methods:** Data were collected using a questionnaire (including information concerning the elderly and their caregivers) devised by the researchers.

**Results:** Findings showed that almost frail elderly (%42) were in the age range of 65-70 and %4 of them were in the 85-90 age range, and their mean age was 72.9 years with SD=5.68. %44 of the frail elderly were female. %56 of the female and %36 of the male subjects had lost their spouses. The most important concern of %64 of female and %84 of the male frail elderly were hygiene and health problems. The most common reason for hospitalization (%56) for the first time was heart disease. More than 3 types of drugs were used by %60 of the female and %44 of the male disabled aged. The results of this study revealed that there was a significant difference between the mental state of male and female frail elderly ( $p=0.007$ ). Findings revealed %66 the caregivers of frail elderly were in the 35-55 age range and their age mean was 47.7. The youngest and oldest of them were 20 and 82 years old, respectively, and %62 of them earned no income while %22 had 140-200 USD per month. %81 of them were female and %88 of them were married and had children. Additionally, results showed that %100 of the male and female caregivers did not use official care.

**Conclusion:** Findings demonstrated that due to various reasons the frail elderly were severely vulnerable to high risks, therefore, they are in need of continuous care.

**KEY WORDS:** caregivers, the frail elderly, health-care condition

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### INTRODUCTION

Senility is a biological process which includes all living creatures, including human beings. We cannot stop the aging; however, we may prevent or delay the disabilities and disorders due to the aging through applying suitable methods and care, so that man may enjoy a long life with health and welfare, which have long been the desire and aim of the human being (1). According to the prediction of the United Nations' Funds of Population (UNFPA), about %25 of population of the developed countries and about %12 of population of the developing countries will be the elderly (2).

There are striking and rapid changes among the eighty and more years old people in all European countries. This will lead to different consequences, the most evident of which is an increase in the number and ratio of dependent people (3). The statistics published by WHO revealed that there is an increase of about three decades in life expectancy at birth time throughout the world since the beginning of this century. The world's senile population amounted to 590 million people since 1999. It is anticipated that it will reach 1200 million people in the next 25 years, which means a %100 increase in this age group in comparison with the %50 growth in the other age groups worldwide. The aged who are 80 years and older comprise %12 of above 60 year-old population and it is estimated that by 2050 people above 80 years will form %21 of the elderly population (5).

The total number of Iranian senile population has changed from %3.3 to %6.6 of the whole nationwide population during the last five censuses from 1956 to 1996. This means an increase of %100 (2).

Shajari (1994) wrote that old people's needs for hygiene or medical services are different according to age classification published by W.H.O. So a 75 year-old individual needs more services than the previous group and by the age of 85 and older s/he will receive most services (6).

Stanhope, Mand Lancaster, J (2000) wrote that more than half of old people have difficulties in doing Basic Activities of Daily Living (e. g. bathing, clothing and eating) and Instrumental activities of Daily Living (e.g. cooking, consuming drugs, using money) and there are disproportionate disabilities in people from older age groups (7).

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\*Corresponding Author: Peyman Mikaili, Department of Pharmacology, School of Pharmacy, Urmia University of Medical Sciences, Urmia, Iran, email address: [peyman\\_mikaili@yahoo.com](mailto:peyman_mikaili@yahoo.com)

In considering this major change, what is most worrying is that most aged people are economically consumers and unconstructive, socially alone and secluded, and with regard to health and sanitation they are subject to chronic diseases and their subsequent disabilities as well as inabilities, resulting in increasing dependency among the aged(8). Evidently, providing every community with effective and skilled services necessitates familiarity with and recognition of the needs and caring and health problems, etc. of that special community.

According to the statistics of Iranian Healthy Living organization, %91 of Iranian aged people are living with their family members and 23 percent of them are cared for by their children (9). For this reason, care planning and awareness of their psychosocial needs must be carried out within the family(10).

Care giving to the elderly is associated with many stresses, such that the caregivers are sustained to social seclusion which causes them to be less tolerant of the caring responsibilities. They can participate less often in social activities, resulting in their suffering from mental disorders (11).

Shyu(2000) wrote that the caregivers did not have enough time for social life, vacationing, their friends and who generally had no time for their own privacy, a limitation in social life that is possible to threaten their psychiatric state(12).

Caring for the aged people at home is accomplished with economical problems for their families, as well. Their caregivers stated that they had more stresses regarding the financial problems due to the caring needs of the elderly and 35 percent of them were nearly or exactly living on the poverty line and had an unsuitable and low hygienic life(13).

Taking into account the prediction that the aged and their families had numerous problems concerning this issue, lack of similar studies and adequate information in this field, we set out to carry out a study entitled "Health care condition of the disabled aged residing in the 13<sup>th</sup> region of Tehran Municipality and their health caregivers' problems" so that the needs and difficulties of the frail elderly are comprehensively recognized and suggestions regarding the strategies of taking care of the aged are offered in a way that the pressure of responsibility and caring stress decrease.

## METHODS AND MATERIALS

This is a descriptive cross sectional study the population of which consisted of 50 disabled elderly (25 male and 25 female) who possessed the qualifications for being included in the study. The items of qualifications for joining the study included: Being over 68 years old, having acute or chronic diseases, having disorders of doing Activities of Daily Living and receiving care at home and having an unofficial caregiver at home at the time this study was done.

After arrangements had been made, homes of the disabled aged visited and consent forms obtained, the questionnaire was completed by the researcher after the homes were visited a few times and the elderly and their caregivers were interviewed. Data collecting tool included a two-part questionnaire as follows:

### A-The study subjects' demographic characteristics:

The questions of this part were made using valid references and sources such as Nursing outcomes classification (N.O.C) and basic Geriatric Nursing and The Journal of Facts and Research in Gerontology supplement.

### B- Caregivers' demographic specifications:

The questions of this section were designed by the researchers themselves. First of all, the questionnaire was translated into fluent Farsi language, according to the subjects' cultural conditions. Then both the English questionnaire and its Persian translation were given to seven different professors who were research experts and faculty members of Iranian Universities of Medical Sciences so that the reliability, validity and assurance of correct translation of the questionnaire could be determined. After making suggested corrections and amendments, the reliability of the above-mentioned questionnaire was confirmed. The "test-retest" was used for the evaluation of its validity. Initially the questionnaire was applied to 8 subjects (4 male and 4 female) in this research. Then it was given to the same subjects after 7 days again and the collected data were compared with each other and finally the validity of the research tool was confirmed with  $r = 86\%$ .

The above-mentioned data from 50 questionnaires, each including 156 questions were analyzed after their being processed with the SPSS software system through descriptive statistics on the same direction of the study goals and answers given to questions. The data were delivered in the form of tables and figures.

### Ethical considerations:

The following items were observed for ethical considerations:

1. For accessibility to the subjects we presented a written introduction letter and obtained the authorities' permission.

2. We introduced ourselves to the subjects and gave them the necessary details, so that they could arbitrarily take part in the study and all of the subjects took part in the study with satisfaction.
3. We assured the subjects that all of the information will be kept in top private condition. For this reason the subjects were informed during the interview that mentioning their name and family name is not necessary.
4. All of them filled and signed the consent form wisely.

## RESULTS

**Findings related to frail elderly:** Findings showed that most of the frail elderly (%42) were in the 65-70 age range and %40 of them were in the 85-90 age range, and their mean age was 72.9 years with SD=5.68.

Also the study findings indicated that %44 of the frail elderly were female. %56 of the female and %36 of the male subjects had lost their spouses.

Findings revealed that the most important concern of %64 of female and %84 of the male frail elderly were hygiene and health problems. The most common reason for hospitalization (%56) for the first time was heart disease. More than 3 types of drugs were used by %60 of the female and %44 of the male disabled aged. (**Table 1**).

Variables	Groups	Female		Male	
		No.	percentage	No.	percentage
age	65-70	13	52	8	32
	70-75	7	28	5	20
	75-80	2	8	8	32
	80-85	2	8	3	12
	85-90	1	4	1	4
Marital status	married	11	44	16	64
	Deceased spouse	14	56	9	36
History of hospitalization	yes	20	80	22	88
	no	5	20	3	12
Nutritional status	Suffering from malnutrition	4	16	2	8
	At risk of	12	48	8	32
	Lack of suffering from	9	36	15	60
Independence in ADL	Aided and Supervised	25	100	24	96
	Relatively dependent	0	0	1	4
Doing activities	Walking	3	12	9	36
	Going to park	0	0	12	48
	Watching TV	23	92	21	84
	Visiting friends and relatives	5	20	4	16
	Going to mosque	7	28	8	32
	Studying books or newspapers	1	4	2	8
	Doing artistic activities	0	0	1	4

**Table 1:** Demographic information of the studied subjects.

There was no significant relationship between the male and female subjects' mean nutritional status ( $p = 0.88$ ), hygienic beliefs ( $p = 0.074$ ) and their gender (**Table 2**).

Variables	Groups	Female		Male	
		No.	Percentage	No.	Percentage
age	20-30	3	9.4	2	11.1
	30-55	19	59.4	13	72.2
	Over 55 yrs	10	31.2	3	16.7
Amount of income	140,000-200,000	1	3.1	10	55.5
	More than 200,000	1	3.1	7	38.9
	Lacking in income	30	93.8	1	5.6
Marital status	Married with children	29	90.6	16	88.8
	Married without children	3	9.4	1	5.6
	unmarried	0	0	1	5.6
Employment of official caregiver	yes	0	0	0	0
	no	32	100	18	100
	yes	0	0	0	0
Reasons for not using official caregiver	Financial issues	26	81.3	17	94.4
	Lack of need	5	15.6	1	5.6
	Not accepting the elderly	1	3.1	0	0

**Table 2:** Demographic information of the studied subjects.

Findings revealed that there is a significant relation between the male and female subjects' mean emotional status ( $p=0.004$ ). This means that the male subjects' mental status is better than that of the female subjects.

variable	t statistic	Degrees of freedom	Level of significance	result
Mental status	2.83	48	0.007	Difference is significant

**Table 3:** Comparison of the frail elderly nutritional status and hygienic believes based on their gender.

**Findings related to the caregivers of frail elderly:** Findings pointed out that 66% of the frail aged caregivers were in the 35-55 age range and their age mean was 47.7, with a standard deviation of 14.18 years. The youngest and oldest of them were 20 and 82 years old, respectively, and 62% of them earned no income while 22% had 140 – 200 \$ U.S. a month. 81% of them were female and 88% of them were married with children. Also, results showed that 100% of the male and female caregivers did not use official and authorized care (**Table 2**).

### DISCUSSION AND CONCLUSIONS

Results demonstrated that 44% of the female frail elderly and 64% of male subjects were married. Findings of Delavarkhan's study revealed that 66% of the male elderly lived with their wives and children whereas 24% of the female elderly lived with their husbands and children. The percentage of the female subjects who lived alone was considerably more than that of the male subjects but the percentage of married male subjects was more than that of the female aged. The reason for this great difference is that men tend to remarry soon after their wives' death while women remain widows even if they are relatively young at the time of their husbands' death (1).

According to the results 76 percent of the female frail aged were illiterate whereas only 44 percent of the male frail elderly were illiterate. The results of Delavarkhan's study showed that in general the level of illiteracy is very high among the frail elderly. The level of the illiteracy in female subjects is more than that in the male subjects, resulting in their being dependent on others which, along with changes in measurements and values induced from citizenship, lead to making the elderly troublesome and finally results in their being kept and cared for in old people's home (1).

Results showed that 84 percent of frail elderly indicated hospitalization history during the last years. The most common cause of the first time hospitalization was cardiac problems (50%). 60% of female subjects and 44% of male subjects were using more than 3 types of drugs. Matteson, MA and McConnell, ES. (1997) wrote that: receiving health care reaches its maximum level among the old population at the final years of life. This is three times more probable for the older people than the 85 year-old to become dependent and 7 times more probable to be a nursing home resident. They have 2.5 times more mortality eventually of dying in comparison with the people with 65-74 years of age. Old people use more medical facilities and manpower than young people do and have about two times more hospitalization, hospitalization duration and prescribed drugs consuming (14). Findings showed that the main reason for hospitalization in the frail elderly during the past years was cardiac problems (64%) and other factors were respiratory (56%) and digestive (32%) problems. In his study, Hesamzadeh (2004) concluded that about half of the elderly (47%) suffered from heart disease and hypertension (15%). Results pointed out that 48% of the frail elderly didn't suffer from malnutrition but 40% were subject to it and unfortunately 12% of them were suffering from malnutrition. The results of Chop and *et al.* study indicate that 25% of the aged of 65 years of age and older suffer from one type of malnutrition. Although poverty is the main factor of malnutrition, it is not the only one. It is estimated that 50% of all of the ill and hospitalized elderly had malnutrition. Presumably this is mainly due to less physicians passing nutritional training subjects. In addition to the above-mentioned reasons for nutritional disorders in the elderly, one can point out to depression, lack of movement for going to supermarkets, unbalanced nutritional regimen, food chewing and swallowing disorders, chronic diseases and consuming specific drugs which reduce appetite (16).

Findings pointed out that 92% of the female subjects and 84% of the male subjects watch TV every day. Shajary wrote that the existence of physical difficulties (particularly musculoskeletal and motion problems) in old people is among the other important factors which induce less physical activities such as walking, going to mosque and religious meetings. Literacy is useful and suitable for spending leisure time, such that most of them pointed to studying books and magazines, participating in friendly meetings as well as scientific and literary discussions as their most delightful occasions of their life (6).

Additionally, findings showed that 66% of the frail elderly's caregivers were in the 35-55 age range and their average age was 47.7 years. In his study, Babaie (2002) showed that the average age of the caregivers was 42 (17). The American caregivers' average age was 46, 12% of whom were 60 years and older.

Whereas most of them were involved with two or more generations, which means growing their children and taking care of the old members of their family (18), results showed that 46.9% of the female caregivers and 44.4% of the male caregivers were sometimes satisfied with their physical health. Landy (2001) wrote that the physical problems of the caregivers will increase if time of caring for the frail elderly increases (18). After some months and years of taking care, the family members will sustain physical diseases, too (19). Findings indicated that familial

diversity induced from the keeping of the frail elderly rarely happens in %43 of female caregivers and occasionally among %55.5 of male caregivers. In the form of a study, Babaie (2002) concluded that %56, %24 and %20 of the caregivers suffered from moderate, severe, and mild familial problems, respectively (17). Repp and Reynold wrote: due to reversal of roles and responsibilities, caring for the diseased and dependent aged will cause diversity among the family members (20). Results of the study showed that %34.3 of the female caregivers and %38.9 of the male caregivers pointed to the caring for the elderly as a cause for their altering entertaining activities and also %37.5 of the female caregivers and %55.6 of male caregivers often felt a lack of support and caring on the part of the family members. Babaie (2002) showed that %51 of the families had moderate, %31 high and %18 had mild problems in spending their leisure time (17). As for the social difficulties, Repp and Reynold (1999) in their studies concluded that individuals may be faced with limitation in social activities, disturbance of leisure time, lack of privacy, opposition with other family members and economical pressure when the roles and duties of the family members in covering the needs of frail elderly increase (20). Findings revealed that %63.3 of the male caregivers of the frail elderly occasionally had absence from delay in getting to their workplace. %86.7 of the male caregivers pointed to a lack of covering of supportive sources in providing the excessive expenses of the caring and lowness of family income and %100 of male caregivers indicated lack of receiving support on the part of their employers. In his study, Babaie (2002) showed that %62 of the male caregivers indicated moderate, %25 mild and %13 high levels of occupational problems. In addition, %52 of the caregivers indicated moderate, %42 high and %6 low levels of financial problems. Keen (1998) wrote that caring for an old family member often causes changing in the caregivers' occupation. Cress (2001) wrote: caregivers of the frail and dependent female elderly have to lose his/her occupation or reduce work hours. To answer the research question, results of the study revealed that for different reasons such as old age, illiteracy, etc. the frail aged severely sustained injury and were exposed to a high level of hazards. Thus, to prevent irreparable injuries, they need caregivers to provide them with continuous caring, a caring plan the reduction or omission of which will sustain the elderly variety of diseases and injuries. If this community of the society fails to receive enough attention and care, they will gradually tend to have function disturbance and may encounter misbehavior within their family and community and the possibility of delivering the aged to nursing homes or other centers of caring for the aged will. According to our findings, caregivers have a variety of problems which strongly necessitates the support of the government and other organizations. If caregivers receive these supports and consequently do not sustain difficulties and other complications, not only will the elderly stay at home and keep away from the complications of living in nursing homes, but also caregivers will obtain more opportunities of being alone, thinking and so on and married caregivers who have children and form more than %90 of the caregivers and who, in addition to caring for the aged, must take care of their own families can have more convenience to supervise their families and stand away from negative impressions of delivering the elderly to nursing homes.

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