

Determining depression level of caregivers providing home healthcare services

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ABSTRACT

OBJECTIVE: Due to increase in elderly population as result of longer life expectancy and the incidence of chronic disease, greater importance should be given to elderly care and the needs of primary caregivers. The purpose of this study was to determine depression status of caregivers who were providing in-home healthcare services.

METHODS: This study was conducted with caregivers for 63 home-dependent patients who benefited from the services provided by Kartal Dr. Lutfi Kirdar Training and Research Hospital Family Practice Clinic between May 15, 2013 and July 1, 2013 using a socio-demographic variables questionnaire and the Beck Depression Inventory. Data were analyzed using Kolmogorov-Smirnov test, Mann-Whitney U test, Student's-t test and chi-square test.

RESULTS: Of the total, 87.3% of survey participants were women . Average age was 52.47 years; 73% were married, 17.5% were single, and 9.5% were widows. Monthly income of 50.8% of participants was between TL 1000 and 3000. Of all the patients, 77.8% were totally, and 22.2% were semi-dependent. Depression was detected in 61.1% of patient relatives who were responsible for patient healthcare and in 22.2% of paid professional caregivers ($p=0.052$). Depression was detected at rate of 37% in caregivers who had been providing nursing care for less than 1 year, 63% for those who had been caregivers for 1 to 5 years, and for those providing care for more than 5 years, rate was 63 %. Rate of depression in study participants overall was 55.6%.

CONCLUSION: Duration of providing care, dependency level of patient, and level of intimacy affect caregivers. They need psychological support.

Keywords: Beck; caregiver; depression; home care.



Received: November 24, 2015 *Accepted:* October 23, 2016 *Online:* November 12, 2016

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Increases in average life span, disability rates, and incidence of chronic diseases have brought about an increase in the number of applications to medical institutes with resultant crowding in hospitals. Prevention of the crowding in hospitals, reduction of health care expenses, and providing more comfort to home-care patients have revealed the crucial need for home health care services in the whole world [1, 2, 3].

Home health care services had been firstly brought to agenda in the United States of America in the 18th century, and in 1960s Medicare (government health insurance for elderly), and Medicaid (health insurance for the poor) had been legalized. Owing to dramatic cut they ensured in hospital health care expenditures, since then these health insurance systems have been widely used [4].

In our country, home health care services were legalized in the year 2005 and they were firstly applied by private health care organizations. With application of family medicine health care services, and establishment of Home Health Care Services, Ministry of Health, and Social Welfare started to offer home health care services free of charge [5].

Ministry of Health, and Social Welfare defined home health care services as “services provided by trained personnel with the intention to facilitate adaptation of the bedridden patients caused by an ailment or senility to their present condition, to decrease their burden, and shorten their recovery process” [6].

In association with bed-, and home-dependent state due to senility, chronic disease and/or disability, physical, and mental state of the patients are impaired, and subsequently caregivers experience various problems. Each individual is in need of basic prerequisites as being loved, appreciated, and self-realized, and social environments. Individuals providing health care services most of the time make sacrifices from their lives. However their services are not appreciated as they expect, and they are forced to estrange themselves from social life [7, 8, 9].

According to TÜİK (Turkish Statistical Institute) data, in the year 2000, the population aged ≥ 65 years constituted 5.7% of the general population [10], while in the year 2013, this ratio raised

to 7.7 in 2013 [11]. Increases in elderly population, and incidence of chronic diseases will also increase the number of home-dependent patients, and their caregivers, and accordingly the problems of their health care providers will come to light [12].

In the light of all this information, our study was planned, and realized based on a justification that investigations aiming at determination of depression levels of the caregivers providing home health care services for home-dependent patients is needed desperately.

MATERIALS AND METHODS

A face-to-face survey study was performed with caregivers who provided home health care services for 63 patients who applied to the outpatient clinics of family Medicine of Dr. Lütfi Kırdar Kartal Training and Research Hospital between 05.05.2013, and 07.01.2013. In this survey we aimed to encompass all of target group who received home health care services during the aforementioned time interval, rather than selecting a special sampling. As data collection tool interview forms prepared by the investigators, and Beck Depression Scale (BDS) so as to determine their levels of depression were used. The participants were interrogated regarding various sociodemographic variables as age, gender, educational state, income level, marital status, number of years spent for the care of the patient, their intimacy to the patient (professional personnel or a relative caring for the health of the elderly people), and dependency state (totally or partially dependent) of the patient.

Based on the responses given to the questions contained in the BDS forms, severity of depression was categorized as minimal (0–9 pts), mild (10–16 pts), moderate (17–33 pts), and severe (≥ 34 pts) [13].

The data obtained were analyzed using SPSS (Statistical Package for the Social Sciences) package program. For normal distribution of continuous variables Kolmogorov-Smirnov test was employed. The groups with continuous variables were compared based on their distribution patterns with Mann-Whitney U or Student-t-test. For the comparison of categorical variables chi-square test was used. $P < 0.05$ was accepted as the level of statistical significance.

TABLE 1. Distribution of participants based on their sociodemographic characteristics

	n	%
Gender		
Female	55	87.3
Male	8	12.7
Educational status		
Illiterate	5	7.9
Primary school	18	28.6
Secondary school	15	23.8
Lycée	16	25.4
University (associate degree, licence, postgraduate)	9	14.3
Marital status		
Married	46	73
Single	11	17.5
Divorced	6	9.5

RESULTS

Study population (total n, 63) consisted of 55 (87.3%) female, 46 (73%) married, 18 (28.6%) primary school- graduate participants with an overall median age of 52.4 (27–81) years (Table 1).

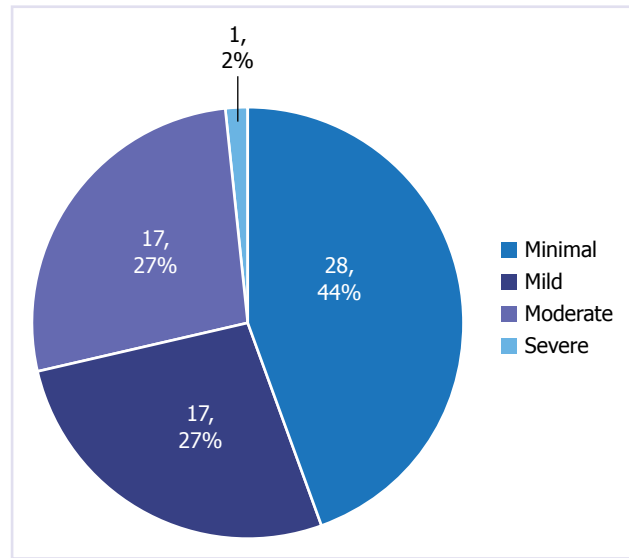
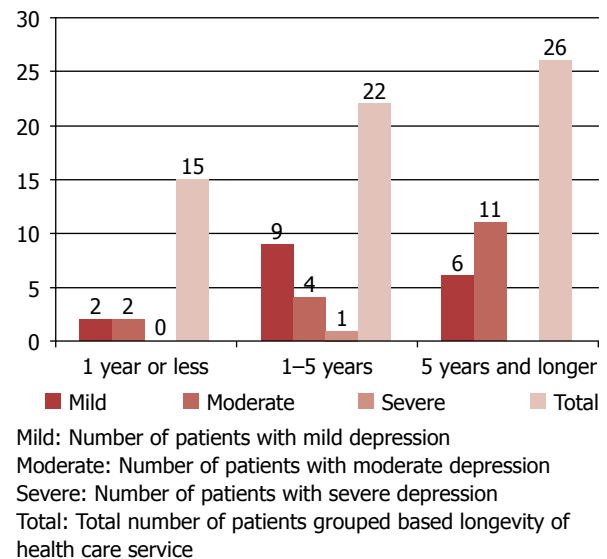
Monthly income of the caregivers were 1000–3000 (n=32; 50.8%), ≤1000 (n=29, 46%), and ≥3000 (n=2; 3.2%) Turkish Liras.

Fifty-seven (85.7%) participants were relatives or intimates of the patients, while 9 (14.3%) participants were professionals caring for the elderly people.

The caregivers enrolled in the study were providing healthcare services for fully- (n=49; 77.8%) or semi-dependent (n=14; 22.2%) patients

Mild, moderate, and severe degrees of depression were detected in 17 (27%), 17 (27%), and 1 (1.6%) participant caregiver, respectively (Figure 1).

Depression of various degrees of severity was seen in 61.2% (n=30) of caregivers of the totally dependent patients (mild, n=12; moderate, n=17, and severe, n=1), while mild depressive state was noted in 35.7% (n=5) of the health care personnel caring for semi-dependent patients (p<0.05). Depression

**FIGURE 1.** Distribution of frequency of depression among all participants.**FIGURE 2.** Distribution of severity of depression according to the duration of health care service.

was observed in 61.1% (n=33) of patients' relatives, and in 22.2% (n=2) of paid caregivers (p=0.052). Depression was also detected in caregivers who were offering health care services for home- dependent patients for ≤1 (37%; n=4), 1–5 (63%; n=14), and ≥5 (65%; n=17) years in indicated percentages, respectively. (p=0.051) (Figure 2).

DISCUSSION

In this study which was performed to draw attention to integrated approach in the presentation of home health care services, and detect rates of depression among caregivers, and most effective depression-stimulating factors, we revealed that 87.3% of the nursing personnel was of female gender. Altun et al. (1998), and Akca et al. (2005) also indicated that majority of these health care providers consisted of female caregivers [14, 15].

Based on the results of Household Labor Force Survey implemented by Turkish Statistical Institute, employment rate of Turkish population aged ≥ 15 years relative to the general population was 45.9% in the year 2013. Employment rates among male, and female population were estimated as 65.2, and 27.1%, respectively [11]. When these outcomes, and responsibilities, and social position imposed on female population by traditional population structure are taken into consideration, detection of higher number of female caregivers should not be a surprising outcome.

Most of (85.7%) the caregivers who participated in our study were relatives of the patients. In many studies performed in Turkey on caregivers providing health care services for patients in need, it was observed that caregivers were mostly relatives of the patients (their sons, mothers, siblings) [13]. TAYA (Research on Turkish Family Structure) survey study conducted in 1992 revealed that 63% of the elderly was living at their home, with one of their children (36%) or nursing homes (1%) [16]. In TAYA survey study performed in 2011, the study participants aged between 18–60 years responded to the question related to their thoughts about their living place when they will become old, and unable to take good care of themselves as nursing home (nearly 17%), and 32% of them wanted to receive home health care services. In the same study, higher number of youngster wanted to stay at nursing homes or requested home health care services. Considering changing sociocultural environment, and inadequate number of available nursing homes [17], the critical importance of home health care services in the future becomes apparent.

Diagnosis of depression, their triggering factors, and classification have been the subject of researches, and debates for years. In a study performed among middle-aged people, lifetime prevalence of depression was found as 19 percent [18]. However researchers have detected varying incidence rates in special populations, and different segments of the society when compared with the population in general. Sahin et al. detected incidence rates of depression among individuals aged over 65 years staying in nursing homes, and living at their homes as 48.1, and 34.2%, respectively [19]. In a USA study on caregivers providing nursing care for chronic needy patients, the incidence of depression has been reported as 40 percent. In the same study, correlation between depressive symptoms, age, educational level, and the degree of nursing neediness of the patients was reported [20]. In a study by Aksayan, and Cimete, the authors reported that 66% of the caregivers experienced fatigueness, anxiety, and altered social life, and requested health professional at home to solve these problems [21].

In our study depression was detected in 55.6% of all caregivers. When workload, and emotional intimacy of the caregivers towards their patients were taken into consideration, higher incidence rates of depression are anticipated among nursing staff. Depression was observed in 61.2% ($n=30$), and 35.7% ($n=5$) of study participants who were providing health care services for their fully-, and semi-dependent patients, respectively ($p<0.05$). These findings may be attributed to challenging nursing care of fully dependent patients, impaired psychological mood of caregivers, their isolation from their social environment, and their sparing less time for themselves in comparison with those caring for semi-dependent patients.

In studies performed, a significant correlation was detected between duration of health care services and incidence of depression. In cases where long-term patient care is required, depressive symptoms have been detected in 40–70% of caregivers, while diagnosis of depression has been made in 50% of them [22]. In our study, depression was detected in caregivers who were providing health care services for ≤ 1 (37%) year, 1–5 (63%), and >5 (65%) years in indi-

cated incidence rates (Figure 2). Significant increase in depressive symptoms in line with the longevity of health care services might be related to isolation of the caregivers from their social environment, and friend circle, feeling themselves lonely, and increase in emotional intimacy with the patient. Therefore, the caregivers should be informed about burden of this process, and possible inconveniences, and necessary precautions should be taken. To this end, studies should be performed so as to protect mental, and physical health of caregivers, and required investigations, and follow-up should be conducted within the context of home health care services.

In our study depression was significantly more frequently detected among relatives attending their patients when compared with professional caregivers. Depressive state was detected in 61.1% of these relatives, and in 22.2% of professional caregivers. Similar comparative study has not been encountered in the literature. Significant difference between both groups as for rates of depression may be attributed to much stronger emotional ties of the relative caregivers with their patients, and establishment of more closer empathy between these two groups. Professional caregivers who were paid for health care services they provide, may not develop emotional intimacy, and emphasize less frequently with the patient. In conclusion, lower rates of symptoms of depression in this group are anticipated. However it should not be forgotten that depression is a clinical diagnosis, and making a definitive diagnosis of depression without clinical evaluation based on BDS scoring system is not an appropriate approach.

As established in various studies concerning the effects of sociodemographic variables on depression, low income level, illiteracy, unemployment, female gender, widowhood, and other social problems are among risk factors for depression [23]. Contrary to expectations, in generalizations performed as a result of these studies similar prevalence rates of depression have been detected in populations with high, and low income levels [24, 25, 26]. Similarities were detected between rates of depression, and gender, income level, age, schooling, and marital status of our study participants without any significant correlation among these parameters.

Conclusion

The importance of home health care service which is a new application for our country is obvious, and consensus is forming about its increasing impetus in near future. However outcomes of our study we performed during implementation of health care services have revealed that providing services for patients is not a satisfactory approach. Besides, caregiver's need for psychologic, and physical support has been also revived in our study. Health care services should be improved, and provided with a multidisciplinary approach, and requirements for caregivers should be considered within this context.

Conflict of Interest: None declared.

Financial Disclosure: The authors declared that this study has received no financial support.

Authorship contributions: Concept – B.A, M.R.D.; Design – B.A; Supervision – B.A.; Data collection &/or processing – B.A., M.G., N.A., A.N.; Analysis and/or interpretation – B.A, M.G., N.A., B.H.D., M.R.D.; Literature search – B.A., M.G.; Writing – B.A., M.G., I.K.K.; Critical review – B.A., M.S., M.R.D.

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