

Social Profile of Elderly In Al -Gadarif Region in Eastern Sudan: 2014-2015Mahassin Mohammed Osman Mohammed^{1*}, Sara Lavinia Brair², Mustafa Elnimeiri³

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Received: 1-8- 2015

Revised: 22-8-2015

Published: 27-9-2015

Keywords:*Elderly
Required assistance
Spent time
Exercise and health*

Abstract: Population ageing is a current phenomenon that occurs worldwide due to improved standard of life and health care and services in most of the world countries. In recognition of this phenomenon, geriatric education was recently introduced as part of medical and health sciences. The overall objective of the study to assess the health status and factors affect the health of elderly 65 years and above in El Gadarif region (locality) in Eastern Sudan. This was descriptive cross-sectional study conducted in ElGedarif region. Data were collected by using standardized interview questionnaire for 388 participants. Statistics analysis was done using SPSS and chi-square test. The survey findings showed that 8.4% of the participants of the survey required assistance on eating, 9.5% , on bathing, 8.8% on dressing, while 46.4% required assistance on shopping, and 25% on taking medication. The findings also showed that 45.6% of the participants spent time watching T.V, 44.6% listening to radio, 48.4% engaging in interpersonal communication, and 14.8% reading. Chi-square results for testing significant relationship between taking medication and hypertension showed (P Value 0.06), the equivalent results between chronic disease and assistance in shopping was P value=0.000, between health status and exercise sports was (p-value 0.000) and between Exercise Sports and sufficient sleep was (P Value: 0.0). The results of the study reflected the very crucial role of the family in supporting the elderly in El Gadarif region, and showed that most of the participants were able to practice their daily life (routine) activities by themselves.

INTRODUCTION

The world population is rapidly aging. Between 2000 and 2050, the proportion of the world's population over 60 years is expected to double from about 11% to 22%. During this period, the absolute number of people aged 60 years and above is expected to increase from 605 million to 2 billion (WHO, 2014b).

The worldwide increase in longevity has been to a large extent due to the decline in

deaths from cardiovascular disease, as well as improved coverage and effectiveness of health interventions (WHO, 2014a).

In recent years there has been an increasing international awareness of health issues relating to aging populations (Surya Kantha, 2010). A substantial number of studies have been conducted in different parts of the world on geriatric populations but only few of such studies have been done in developing countries (Gomez, 2009).

In Sudan, caring for elderly people is mainly provided by the families. The extended family supports and helps its aged members in any way possible (Luis Alberto D'Elia, 2008). Due to increased awareness of the problems and needs of the elderly people, a number of relevant organizations have been established in this country recently. One of such organizations is the Sudanese Society for Older People Care. This organization was established in Khartoum in 1994 with the aid of Help Age International along with individual sponsors. Its goal is to help the elderly. The specific areas of interest/engagement of the organization include: geriatrics opened health days, nutrition programmed of older people, support of income generation projects for older people, advocacy and awareness raising programs for older people, training of volunteers, support for old people houses and researches on the situation of older people.

In ElGadarif region, a nursing home was established in 2010. This home, which is administered by the State Ministry of Social Affairs, accommodates at present only five elderly men.

Despite these efforts, little is known about the health needs of elderly population in Sudan in general and in El Gadarif Region in particular.

RESEARCH METHODOLOGY

Study design: This is a descriptive cross-sectional community-based study

Study area: This study was conducted in El Gadarif Locality, which is located in El Gadarif State in Eastern Sudan. El Gadarif State has an area of 75,263 km² and an estimated population of approximately 1,400,000 and 4 Localities (El Gadarif Locality is one of these Localities). The population of El Gadarif Locality is about 330593 divided into six Districts and 103 Neighborhoods.

Survey population: All population of the age 65 years and above in El Gadarif Locality were covered by the study, their number estimated to be 12019. For the purpose of this study they were divided into four age groups: (65-74) young old, (75-84) Middle-Old, (84-95) old-old, and (95 and above) elite-old. Following this age grouping, a sample of 388 was drawn from this population and interviewed.

Study instrument: Data was collected by interview through an administered questionnaire which was fulfilled by the participant or his/her care attendant. The questionnaire included a number of relevant variables, such as:

- Background information (age, sex-marital status, education, level-economic).
- The participant's general health condition (Based on his/her subjective opinion and self-assessment) including chronic illness, current treatment.
- Geriatric review system (vision, hearing, memory, depression, control bladder-control bowel).
- Life style (information including, following special diet, smoking alcohol, and taking snuff).

Ten data collectors helped in conducting the survey; 4 nurses and 6 members of the social committees of the neighborhoods trained before participating in conducting the survey

Sample technique: The technique used was cluster random sampling each neighborhood was considered as a cluster. The sample was distributed among the six districts of the locality, 24 clusters were selected randomly. The survey was carried out over a month around the mid of the year 2014.

Ethical consideration: An ethical approval was obtained from the Institutional Review Board at Alneelain University, the locality and the popular committee. In addition an

informed consent was obtained from each participant prior to the interview

Data analysis and clearance: Data was analyzed using statistical package for social sciences (SPSS) version 19 and presented in tables and graphics. Cross tabulation was done and used chi-square to test the significance. Data cleaning was done and found that 17 questionnaires had missing data, so these were replaced with other 17 participants

Results

As mentioned above, according to four age groups :(65-74) - (75-84) - (85-94) – (95 +). The percentages of the elderly in these groups covered in the survey were 49.5%, 29.6%, 16% and 4.9% respectively. Regarding the gender composition, the survey showed that the males formed 52.3%, while females formed 47.7%. Data on the marital status showed that 58.5% were married, 4.4% were divorced, 32.7% were widowed, and 4.4% were not married.

Regarding the level of education, 50.5% of the elderly surveyed were illiterate, 26.8% could read and write, 12.4% had primary education, 9.8% had secondary education, and only 0.5% had university education.

The elderly in Gadarif had variety of occupations and sources of income. it is

noted that 6.7% were employees, 38.9% retired, 12.1% farmers, 15.7% businessmen (merchants), 26.5% house wives. The sources of income include: salary for 6.7% of the elderly persons, pension for 15.5%, rented building for 6.4%, business (commerce) for 11.1%. The children were form the source of income for more than 60% of the surveyed persons.

The majority of the surveyed old people (93.8%) had children while only 6.2% had no children. 85.8% of the participants' children were of the age above 20 years.

It was noted that 74% of the participants were living with their families, 17.5% were living with one of their children, 2.3% were living with relatives, 0.8 were living in a nursing home, and 5.4% were living alone.

Regarding social interaction, 96.9% of the surveyed said they received visits from their children, relatives, neighbor, friends and other community member. Only 3.1% did not have visitors. At the same time 0.8% said they were visited by formal organization.

With respect to availability of assistance for the elderly in El Gadarif, 70.1% of the participants found who helped them at home at all-times, 21.91% found who helped them when needed, while 7.99% reported that no one was there to help them at any time.

Table (1): Daily activities

Daily activities		Frequency	Percent%
Eating	Require Assistance	32	8.4
	By myself	356	91.6
Hygiene	Require Assistance	37	9.5
	By myself	351	90.5
Dressing	Require Assistance	3	8.8
	By myself	354	91.2
Shopping	Require Assistance	180	46.4
	By myself	208	53.6
Medication	Require Assistance	291	75
	By myself	97	25

Table (2):Method of recreation

Method of reaction	Frequency	Percent%
Watching T.V	176	45.6%
Listening Radio	172	44.6
Reading	57	14.8
Socialization with friends and relatives	187	48.4

Table (3): Relationship between taking medication and hypertension

		Hypertension			Total
		yes	no	NA	
Dependence	Count	71	112	94	277
	% within	25.6%	40.4%	33.9%	100.0%
Independence	Count	33	43	21	97
	% within	34.0%	44.3%	21.6%	100.0%
Total	Count	104	155	115	374
	% within	27.8%	41.4%	30.7%	100.0%

P Value 0.06, Not Significant

Table (4): Relationship between chronic disease and assistance on shopping

Chronic disease	Assistance on shopping			
	Require assistance		No By myself	
	N	%	N	%
Diabetes mellitus	83	46.1	0	0
Hypertension	97	53.9	10	32.3
Heart disease	0	0	21	67.7
Total	83	100	31	100

P value=0.000

Table (5): cross tabulation between Health status and Exercise Sports

Health status	Exercise Sports			
	Yes		No	
	N	%	N	%
Excellent	30	37.5	0	0
Good	50	62.5	78	25.3
Fair	0	0	202	65.6
Poor	0	0	28	9.1
Total	80	100	308	100

P value=0.000

Table (6): Relationship between Exercise Sports and sufficient sleep

		sufficient sleep			Total
		YES	NO		
	YES	Count	78	2	80
		% within	97.5%	2.5%	100.0%
	NO	Count	252	50	302
		% within	83.4%	16.6%	100.0%
Total		Count	330	52	382
		% within B20	86.4%	13.6%	100.0%

P Value: 0.0

DISCUSSION

Those of the age 65+formed 50.5% of the elderly and those who were 85+ form 20.9%in Gadarif Locality, the older persons in this locality seem to be aging. In comparison, we find that there have been substantial changes in the age composition of older people in the UK over the last 60 years or so. In 1951, those aged 65-74 represented 67 percent, and those aged 85 and over made up just 4 percent of the age(65 +) population. Today, these two age groups represent 51 percent and 14 percent respectively, (Rutherford, 2012) this means the community was aging.

Regarding the gender composition, the survey of El Gadarif Locality showed that the males formed52.3% of the elderly persons in this Locality, while females formed 47.7%. Although life expectancy at birth for (male: female) is 61:58 in Sudan(UNDAF, 2012) , the gender ratio has increased to 79 males per 100 females, (Rutherford, 2012). This divergence from aging profile has also been noted by other research studies which reported greater number for men than the number of women. Data on the marital status of Gadarif elderly people showed that 58.5% were married, 4.4% were divorced, 32.7%were widowed, and 4.4% were unmarried. In comparison, a study conducted in the United Arab Emirates(UAE)(Elkardasi, 2011), revealed that 41% were married,13% were divorced,42% were widowed, and 4% were

unmarried. This showed that there are more couples in the Sudan than in UAE.

Approximately half (50.5%) of the elderly surveyed in Gadarif were illiterate, 26.8% could read and write, 12.4%had primary education, 9.8%had secondary education, and only 0.5% had university education. In UAE in the above study (Elkardasi, 2011) 71% were illiterate,21% could read and write 5% had primary education, 1% had secondary education, and none had university education. Although the literacy rate seems to be better in Gadarif, in both cases (UAE and El Gadarif) the elderly had less opportunities for formal education.

The elderly in Gadarif had variety of occupations and sources of income. Regarding occupation, it is noted that 6.7% were employees, 38.9% retired, 12.1% farmers, 15.7%businessmen (merchants), 26.5% house wives. These results indicate that the aging persons in El Gadarif were generally active and directly involved in different types of jobs.

The sources of income include: salary for 6.7% of the elderly persons, pension for 15.5%, rented building for 6.4%, business (commerce) for11.1% and children were the source of income for more than 60% of the surveyed persons sources. In comparison with the results of the survey conducted in Singapore; it was observed that 64% of the elderly had their main source of income from their(Kang Soon Hock al, 2013) (see table 1).

The results of El Gadarif survey presented two important indicators. The first is that 93.8% had children while only 6.2% had no children. The second indicator is that the age of 85.8% of the participants' children was above 20 years. This may explain the result mentioned above that the children were from the source of income for more than 60% of the participants as well as the importance of the extended family bond in caring for the older people in this region.

Regarding living situation the results on this element are typically a reflection of the effect of family bond and extended family values. According to the survey, 74% of the participants were living with their families, 17.5% were living with one of their children, 2.3% were living with their relatives, 0.8% were living in a nursing home, and 5.4% were living alone. These results indicate that the role of social organizations is very minimal, nearly absent. However, as there were some elderly living alone, even if their number is small, activation of the role of social organizations becomes very crucial to provide suitable care for these people.

Social interaction is very essential, at least psychologically, for the wellbeing and healthy life of the elderly. This interaction is best demonstrated by the frequent visits by relatives, neighbor, friends etc... Needless to say those visits create to the elderly a sense of life, importance, affection and love. In this regard, 96.9% of the surveyed said they received visits from their children, relatives, neighbor, friends and other community member. Only 3.1% did not have visitors. At the same time 0.8% stated that they were visited by social organization..

Compared to other countries, the case of those who live in nursing home is similar to middle east culture (A. ABYAD, 2004), but it is different from other countries like Denmark where 20% of senior citizens over

65 years of age receive home health visits/care.

Most of the surveyed elderly people reported the presence of persons helping them at home. In this respect, 70.1% of these elderly found who helped them at home at all-times, 21.91% found who helped them when needed, while 7.99% reported that no one was there to help them at any time. This result is to some extent compatible with the fact that 4.4% of the surveyed were not married (had no children), and that 5.4% were living alone. The presence of assistance is better in comparison with Canadian population 37% of all seniors provided some sort of household or personal assistance to others (Brian Christopher Misiaszek, 2008).

Physical activity at all ages is important in improving the health and wellbeing of the elderly, reducing the likelihood of obesity, delaying functional decline and escaping chronic diseases (WHO, 2015). The survey results seem to ascertain this notion. These results showed that 20.6% of the surveyed elderly persons practice some sort of physical exercise such as sports, soccer, cycling and walking, 90.5% of them do their daily living activities such as bathing (hygiene), 91.2% do their dressing (grooming), 46.8% do their shopping. They reported that they do all these activities by themselves as a regular exercise. 25% were independent for all living activities those are considered to be excellent, 28.6% perform 4 to 3 activities those considered to be good, 36.9% perform 2-1 activities those classified as moderate and 9.5% were total dependence those classified as poor in study in home care center in Brazil 24.2% independent for all activities and on the other side 42.4% – total dependence (Helena Meika Uesugui, 2011) in Gadarif the total dependence for all activities is less this difference may be due to difference on study population.

On the other hand, 8.4% of the surveyed required assistance on eating, 9.5% required assistance on bathing, 8.8% required assistance on dressing, 46.4% required assistance on shopping, and while 75% required assistance on taking medication. The relatively high rate reported for shopping may be due to more physical efforts needed in shopping. Regarding medication, the high rate of those who require assistance may be attributed to their illness and also to high illiteracy rate noted among the elderly surveyed in Gadarif Region.

Recreation is a very important part of what the elderly people need to enhance their old age life and elevate boredom and worries. Many methods of recreation were radio, 48.4% having interpersonal communication and 14.8% reading. Some the surveyed used more than one recreational method. In comparison, in Malaysia, the elderly people find recreation in conversations (78.7%), watching television (74.6%), reading (63.4%) as well as many other recreation activities including playing cards, playing music (H Minhat, 2012).

Physical activity, good eating habits, social relations and a meaningful life are the four pillars of good health among older people (Berleem, 2004). By using chi-square test for testing significant and relationship between taking medication by themselves (as exercise) and hypertension (as one from the chronic diseases) P Value 0.06. This is not significant because medication need less effort, and on cross tabulation chronic disease (diabetes, hypertension, heart diseases) and assistance on shopping (as physical activity) P value=0.000, also between health status and exercise sports p-value 0.000 those were significant because they need efforts' and between Exercise Sports and sufficient sleep Value: 0.0 this also significant this show that exercise endues relaxation and sleeping

The study reflected the very crucial role of the family in general, and children in particular, in supporting and providing social and health care to the elderly in Gadarif region, which in itself is a representative of the Sudanese community. This may have been related to social, cultural and religious factors coupled with the extended family norms and values prevalence in this country.

The role of the formal organizations is still meager or almost absent. For those who have no children and those whose relatives – including the children- cannot support them for any reason, such organization should be found and play a wider and more positive role in this respect.

The main recommendations of this study include encouragement of more community interaction and provision of recreation programme for the old age in addition to enhance the role of relevant organizations and family support initiatives.

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