

Research Article

STUDY OF KNOWLEDGE, ATTITUDES AND PRACTICES REGARDING THE PROVISION OF HEALTH SERVICES AMONG THE HEALTH WORKERS AT ELDERLY RESIDENTS

¹Nuha Hamid Omer Bushara, ²Hatim Rahamtalla, ³*Mohamed Osman Elamin and Hatim Abdullah Natto

¹Al-zaiem AL-Azahari University, Sudan.

²University of Bahri, Sudan.

³Faculty of Public Health & Informatics, Umm-Al-Qura University, KSA.

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ABSTRACT

Elderly person is a person, whose age ranged from 65 years old or older. The elderly people are characterized by unique and varied entities, which require a variety of healthcare professionals to meet their healthcare needs. There is a growing demand for health professionals to demonstrate appropriate attitudes toward older people and to improve their knowledge and commitment to working with older people in diverse settings in the context of a rapidly ageing population. A cross sectional descriptive institutional base study was conducted at elderly residents in Khartoum state with the aim to assess knowledge, attitudes and practices towards the provision of health services among health workers. Data was collected by questionnaire and observational checklist. The collected data was analyzed by the computer software programme (SPSS) and chi square test was used to show the association between different variables. The results revealed that the overall 40.6%, of participants have excellent, 32.8% have good and 26.6% have poor knowledge. Concerning overall attitudes, the vast majority (90.6%) has favor attitudes and 9.4% have unfavourable attitudes towards provision of health services, while 50% have good practices concerning provision of health services. 65.6% of the participants were satisfied by their job while 34.4% were somewhat satisfied. Ministry of Social Development should ensure high quality provision of the health services.

Keywords: Elderly- Knowledge-Attitudes- practice.

INTRODUCTION

Background:

aging is the lifelong process of growing older at cellular, organ, or whole body level throughout the life span, (Naja *et al.*, 2017)¹. Most developed countries have accepted the chronological age of 65 years as a definition of 'elderly' individuals, (WHO, 2016)². Elderly age can be categorized into three different groups: young old (60-74 year), old (75-84 year), and oldest old (>85 years), (United Nations, 2013)³. In 2017 the global population aged 60 years or over numbered 962 million more, the number is expected to double again by 2050 to reach 2.1 billion, (United Nations, 2016)⁴. Health issues for elderly people tend to become more chronic and complex, and multi morbidity due to the presence of multiple chronic conditions at the same time becomes the norm rather than the exception. Physical, sensory and cognitive impairments become more prevalent and older people can develop complex health states, such as frailty, urinary incontinence and an increased risk of falling. These health states cannot be placed in discrete disease categories. They have risk of having multiple non-communicable diseases, (Carviho *et al.*, 2018)⁵. With advances in medicine and prolonged life expectancy, the proportion of older people will continue to rise worldwide (Khanagar *et al.*, 2014)⁶.

Justification:

there are service gaps in the provision of the health services in the elderly residents. As specific services are important for older people where there are multiple long-term conditions, significant disability

and frailty, which affect both their physical and mental health. Dementia affects the majority of residents in elderly residents to some degree, and depression is common, (BGS, 2016)⁷. Chronic diseases, multiple disabilities, high incidence of cognitive impairment characterize the elderly residents and, therefore therapeutic care is necessary to maintain the functional status of these frail elderly, (Iezzoni, 2010)⁸. Therefore, knowledge, attitude and practices of health workers are very important to provide adequate and high quality health service for elderly in the residents.

Problem a statement:

the number of people aged 60 years and over globally is expected to increase from 600 million to 2 billion between 2000 and 2050, (WHO, 2015)⁹. There is a growing demand for health professionals to demonstrate appropriate attitudes toward older people and to improve their knowledge and commitment to working with older people in diverse settings in the context of a rapidly ageing population. Action needs to be taken to raise awareness and to change negative attitudes toward ageing. Knowledge among health professionals will inform their practice to provide individualized care for older people, manage chronic diseases, prevent functional decline and promote independence, (Alamri and Xiao, 2017)¹⁰. In Sudan is a lack of specialized health care for the elderly as well as a clear national plan of action, despite efforts to develop a national policy for the elderly.

Main objective:

To assess knowledge, attitudes and practices concerning the provision of health services among the health workers at elderly residents in Khartoum State.

*Corresponding Author: Mohamed Osman Elamin,

³Faculty of Public Health & Informatics, Umm-Al-Qura University, KSA

Specific objective

- To define knowledge, concerning the provision of health services among the health workers at elderly residents in Khartoum State. Sudan
- To identify attitudes towards the provision of health services among the health workers at elderly residents in Khartoum State
- To determine the practices concerning the provision of health services among the health workers at elderly residents in Khartoum State.
- To examine degree of satisfaction of the residents towards the provision of health services
- To determine the degree of satisfaction of health services providers

LITERATURE REVIEW

studies have shown that many caregivers do not have enough skills and knowledge to care for the people they assist adequately, performing it based on experiences, observations, orientations from professionals or close people, based mainly on intuition and beliefs, (Moreno-Cámara *et al.*, 2016¹¹).

Elderly Diseases:

Age-related diseases as diseases with incidence rates increasing quadratic ally with age among the adult population. The elderly are likely to develop problems related to constipation because of the poor diet, lack of adequate fluids in diet, lack of exercise, the use of certain drugs to treat other medical conditions, and poor bowel habits. Bed sore are common among patients aged 75 and above. Poor physical activity can cause heart disease, or diabetes benefit from regular exercise. Older people may not get enough sleep at night because of feeling sick or being in pain can make it hard to sleep, some medicines can keep the older awake, where insomnia can last for days, months, and even years. There is clinical manifestation of anxiety in the elderly reflected in condition of excessive feeling of fear, concern, terror, nervousness, and irritability, inability to concentrate and to pay attention as well as sleep disorder. There is a high prevalence of depression in the elderly. Dementia is characterized by a decline in memory, language, problem-solving and other thinking skills that affect a person's ability to perform everyday activities. Alzheimer causes large numbers of nerve cells in the brain to die. This affects a person's ability to remember things and think clearly. The common health problems faced elderly in Sudan were found to be endemic and epidemic diseases (e.g. Malaria), as well as chronic illnesses (e.g. Hypertension and diabetes mellitus) and their complications. Activities of daily living revealed that a majority of the respondents were unable to care for themselves within a limited environment, (Eltinay *et al.*, 2007)¹².

Elderly disease at residents:

Chronic respiratory disease represents a wide array of serious diseases, constituting a serious public health problem for millions of affected older people worldwide. The most common mental and neurological disorders among people aged 60 and older are dementia and depression, which affect approximately 5 and 7 percent of the world's older population, respectively. Anxiety disorders affect approximately 3.8 percent of seniors worldwide, (Carol, 2020)¹³.

Health services at elderly residents:

residents are an accepted strategy worldwide for a cost-effective approach that leads to patient satisfaction. It is important that elderly

feel that they have choices, freedom, feel useful and valued, respect for possessions and individualized care. In the physical well-being, the elderly require meaningful activities and a supportive physical environment that is clean and safe. In their social well-being Nurse-client interaction and interpersonal relationships with family and fellow clients is important, (Kariuki, 2019)¹⁴. People over age 50 may need more of some vitamins, minerals, calcium works with vitamin D, Vitamin B6 is needed to form red blood cells; Vitamin B12 helps keep red blood cells and nerves healthy, (NIA, 2017)¹⁵. The quality of life for older people can be reduced by debilitating and disabling conditions, such as arthritis, stroke or dementia. Services that address quality of life can help older people with long-term conditions to live at home for longer, therefore, delaying the need for admission to long-term care with onsite nursing (nursing home) or without onsite nursing (residential home), (Kydd and Wild, 2013)¹⁶. 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)¹⁷

Health worker knowledge, attitudes and practices at elderly residents

Staffs health services providers need support and training from health professionals to identify, understand and respond to the everyday impacts of providing essential care. This includes providing the right types of food and drink, preserving skin integrity and preventing contractures to be able to deal with disability from late stage conditions which are complicated. (BGS, 2016)⁷. Knowledge of the health services providers about oral health and oral hygiene, use of fluorides, denture care and denture hygiene practices, management of dry mouth and importance of regular dental check-ups, monitoring of sugar intake and routine oral examinations is the important, (Khanagar, 2014)⁶. Knowing the correct knowledge about ageing is beneficial for caregivers to develop an optimistic attitude towards elderly people, (Pan *et al.*, 2017)¹⁸. Many factors have influence health services providers' attitudes towards older people, including age, gender, education, exposure to well older people area of practice, and professional socialization. The knowledge and attitudes will serve in understanding how the health and social care workforce can be equipped to provide high quality care to older people, (Burger *et al.*, 2018)¹⁹.

Health workers satisfaction at elderly residents:

Satisfaction is one of the indicators for assessing the quality of health provision, and satisfying clients. More satisfaction, increases sense of security and relaxation significantly, which is it-self the cause of patient's continuous recovery, (You *et al.*, 2013)²⁰. Healthcare providers have been highly satisfied with qualified provision of health services and they valued their relationships with older people and demonstrated understanding of generational experiences that define the human experience and the impact of this uniqueness on the nursing care profession (Eaton 2015²¹, Reitmaier *et al.*, 2015²²).

Previous studies:

A study conducted in Saudia Arabia showed that knowledge about the ageing process and the care of older people was examined in 4 studies, all of which indicated that the participants had poor knowledge of ageing, (Yang *et al.*, 2015).²³ Number of studies has reported that participants with higher levels of education were more

likely to report more positive attitudes than those who had lower levels, indicating the importance of educational strategies which focus on meeting older people's needs and encouraging healthcare workers to consider a career working with older people (Liu *et al.*, 2015²⁴, Alamri, and Xiao, 2017¹⁰). A descriptive cross-sectional design conducted among fifty-six Ugandan registered practicing nurses. A study showed that the health workers had limited knowledge about critical parameters of pressure ulcers, (Mwebaza *et al.*, 2014)²⁵. A study examined lifetime experiences, rather than first experiences, tend to report higher prevalence rates of police involvement in pathways to psychiatric care, (Brink *et al.*, 2011)²⁶. A statement about satisfaction is expressed by Parker, *et al.*, 2011, which explained that the 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)²⁷

METHODOLOGY

Study design:

This is a cross sectional descriptive institutional base study.

Study area:

There are nine elderly residents in Sudan distribution in seven states. In Khartoum state, there are two residents one in Khartoum 2 for the men near AL Gorashi Park and the other in (Khartoum North), south Sad Geshra Market for the women.

Study population:

The study populations included 64 health workers in elderly residents. Their age was between 23 and 60 years old with different educational level and socioeconomic status and most of them where female. The staff of elderly resident for men consists of (2 administrators, 7 physicians, 4 nurses, 4 nutritionists, 1 physiotherapist, 6 psychologist, 2 social workers, 2 chiefs, 12 clean workers, 1 drivers and 3 supervisors). While the staff of elderly resident for women consists of (2 administrators, 1 nurses, 4 nutritionists, 5 psychologist, 2 social workers, 2 chiefs, 11 clean workers, 2 supervisor and 3 security).

The total coverage is use for the study:

which includes all health care workers (doctors– nutritionists – nurses – social workers –physiotherapist - psychologists – chief – other workers) in the two elderly residents.

Data collection:

structured, coded, pretested questionnaire was adapted targeting health services provisions, observation checklist was fill from both elderly men and women residents.

Data analysis:

Data was enter and analyzed by SPSS computer program and Chi-square test is use to show the association between the independent and dependent variable, the results were present in texts, tables and figures.

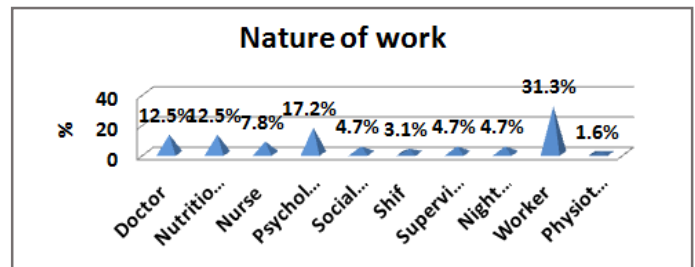
Ethical considerations:

approval was taken from AL – Zaiem AL- Azhari University, approval was taken from the State Ministry of Social Development, approval was taken from the Administrations of the two elderly residents (men and women) and verbal consent was taken from all participants.

RESULTS

the Study showed that 66.8% of the participants were females, most (40.6%) of participants' age is between 31-<40, 28.1% between 40-<50 and 21.9% between 20 and <30 years old. From the result

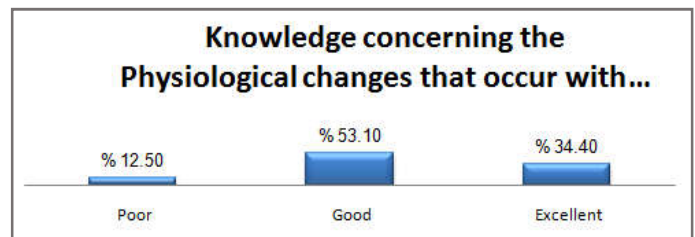
34.4% of the participants were graduated, 21.9% were post graduated. The majority (97.2%) of participants live in urban. 9.4% of the participants income was less than 500, 20.30% were 500 and less than 1000, 9.40% were 1000 and less than 1500, 10.9% were 1500 and less than 2000, 10.9% were 2000 and less than 2500, 29.70% were 2500 and less than 3000 and 9.40% were above 3000 SDGs. The result also showed that:



n=64

Fig.4.1. Distribution of the participants according to their occupation

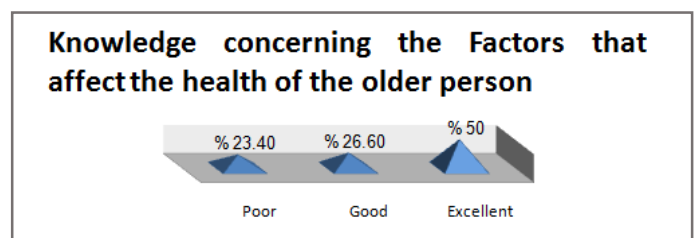
Nearly one third (31.3%) of the participants were workers, 17.2% were psychologists, 12.5% were physicians and 12.5% were nutritionists



n=64

Fig.4.2 Knowledge concerning the physiological changes that occur with age

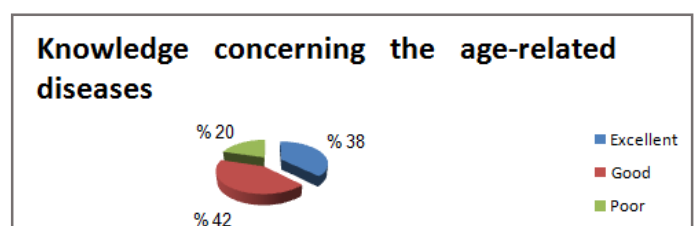
More than one third (34.4%) of the participants have excellent knowledge 53.1% have good knowledge and 12.5% have poor knowledge concerning the physiological changes that occur with age.



n=64

Fig.4.3 Knowledge concerning the factors that affect the health of the older

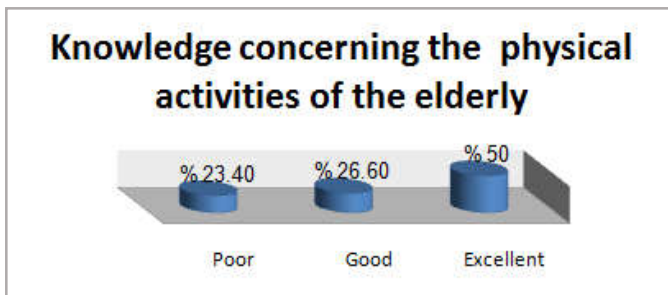
Half (50%) of the participants have excellent knowledge, 26.6% have good knowledge and 23.4% have poor knowledge concerning the factors that affect the health of the older person.



n=64

Fig.4.4 Knowledge concerning the age-related diseases

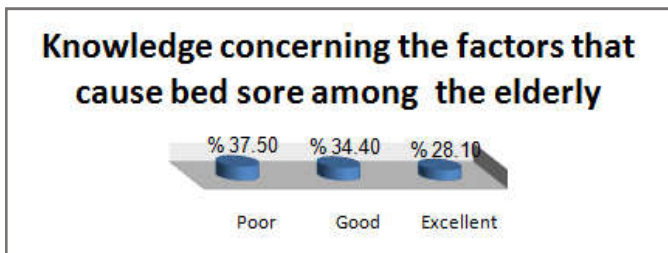
More than one third (38%) of the participants have excellent knowledge, 42% have good knowledge and 20% have poor knowledge concerning the age-related diseases.



n=64

Fig.4.5 Knowledge concerning the physical activities of the elderly

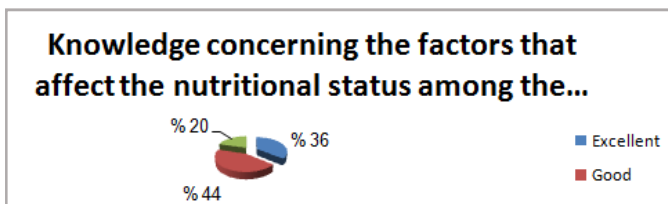
Half (50%) of the participants have excellent knowledge, 26.6% have good knowledge and 23.4% have poor knowledge concerning the physical activities of the elderly.



n=64

Fig.4.6 Knowledge concerning the factors that cause bedsores among the elderly

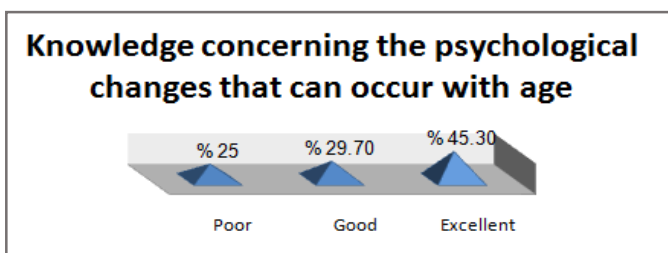
28.1% of the participants have excellent knowledge, 34.4% have good knowledge and 37.5% have poor knowledge concerning the factors that cause bedsores among the elderly.



n=64

Fig.4.7 Knowledge concerning the factors that affect the nutritional status among older person

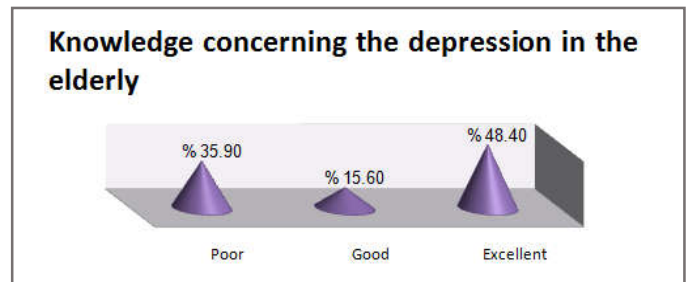
36% of the participants have excellent knowledge, 44% have good knowledge and 20% have poor knowledge concerning the factors that affect the nutritional status among the older person.



n=64

Fig.4.8 Knowledge concerning the psychological changes that occur with age

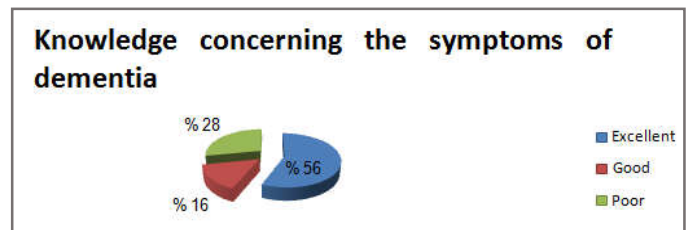
45.3% of the participants have excellent knowledge, 29.7% have good knowledge and 25% have poor knowledge concerning the psychological changes that can occur with age.



n=64

Fig.4.9 Knowledge concerning the depression in the elderly

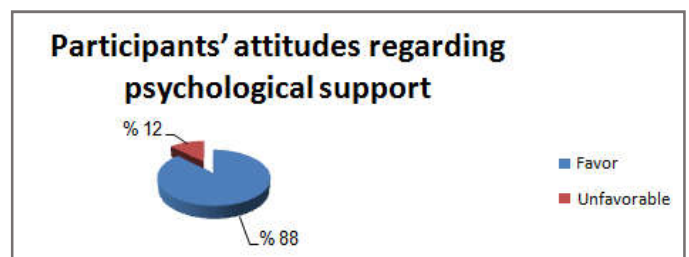
48.4% of the participants have excellent knowledge, 15.6% have good knowledge and 35.9% have poor knowledge concerning the depression in the elderly.



n=64

Fig.4.10 Knowledge concerning the symptoms of dementia

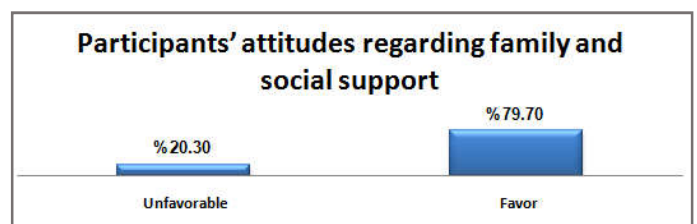
56% of the participants have excellent knowledge, 16% have good knowledge and 28% have poor knowledge concerning the symptoms of dementia.



n=64

Fig.4.11 Participants' attitudes regarding psychological support

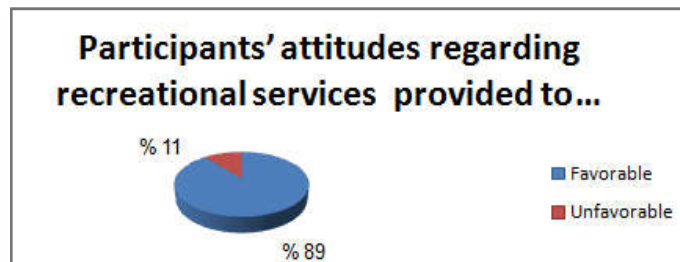
87% of the participants have favorable attitudes towards the psychological support and 13% have unfavorable attitudes.



n=64

Fig.4.12 Participants' attitudes regarding family and social support

79.7% of the participants have favorable attitudes towards the family and social support and 20.3% have unfavorable attitudes.



n=64

Fig.4.13 Participants' attitudes regarding recreational services provided to the elderly

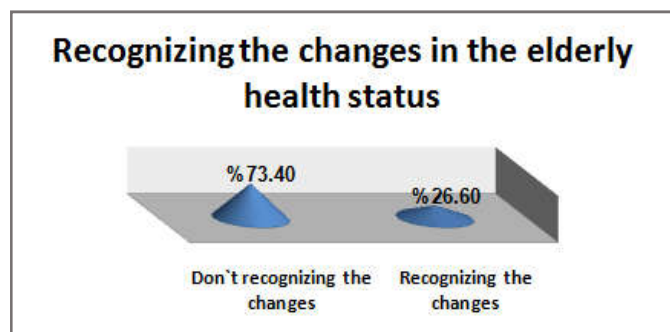
89.1% of the participants have favorable attitudes towards recreational services provided to the elderly and 10.9% have unfavorable attitudes.



n=64

Fig.4.14 Participants receiving training appropriate to their job

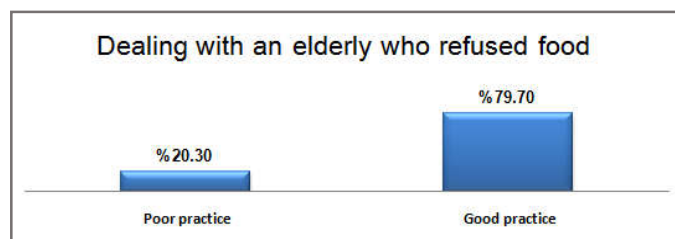
Only 12% of the participants receive appropriate training to their job.



n=64

Fig.4.15 Participants recognizing the changes in the elderly health status

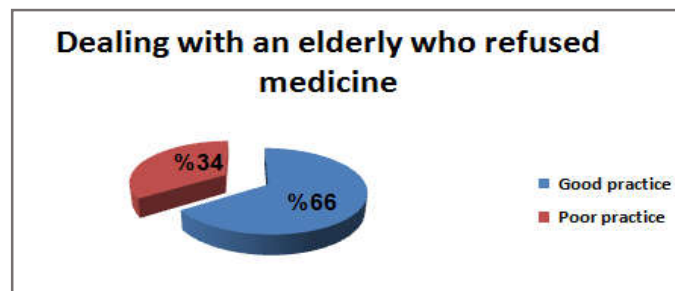
Only 26.6% of the participants recognize the changes in the elderly health status.



n=64

Fig.4.16 Dealing with an elderly, who refused food

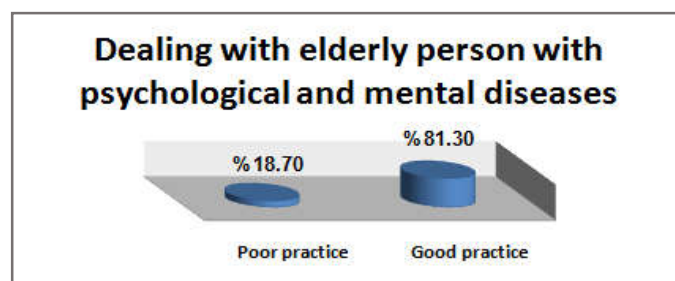
The majority (79.7%) of the participants have good practices in dealing with an elderly, who refused food.



n=64

Fig.4.17 Dealing with an elderly, who refused medicine

Two-thirds (66%) of the participants have good practices in dealing with an elderly, who refused medicine.



n=64

Fig.4.18 Dealing with elderly person with psychological and mental diseases

The majority (81.3%) of the participants have good practices in dealing with an elderly person with psychological and mental diseases.



n=64

Fig.4.19 Satisfaction of health workers with their job in elderly residents

Nearly two-thirds (65.6%) of the participants were well satisfied with their job in elderly residents.

Table 4.1 Association between overall knowledge and overall attitudes of the participants regarding health services provided to elderly in residents

Overall knowledge	Overall attitudes		Total
	Favor	Un favorable	
Excellent	26 (44.8%)	0 (0.0%)	26 (40.6%)
Good	21 (36.2%)	0 (0.0%)	21(32.8%)
Poor	11 (19%)	6 (100%)	17 (26.6%)
Total	58 (100%)	6 (100%)	64 (100%)

There is a significant association between overall knowledge and overall attitudes at χ^2 test = 18.304, df = 2, p = .000.

Table 4.2 Association between overall knowledge and overall practice of the participants regarding health services provided to elderly in residents

Overall knowledge	Overall practice		Total
	Good Practices	Poor Practices	
Excellent	26 (81.3%)	0 (0.0%)	26 (94.0%)
Good	6 (18.8%)	15 (46.9%)	21 (32.8%)
Poor	0 (0.0%)	17 (53.1%)	17 (26.6%)
Total	32 (100%)	32 (100%)	64 (100%)

There is a significant association between overall knowledge and overall practice at χ^2 test = 46.857, df = 2, p = .000.

Table 4.3 Association between overall attitudes and overall practice of the participants regarding health services provided to elderly in residents

Overall attitudes	Overall practice		Total
	Good Practices	Poor Practices	
Favor	32 (100%)	26 (81.3%)	58 (90.6%)
Un favorable	0 (0.0%)	6 (18.8%)	6 (9.4%)
Total	32 (100%)	32 (100%)	64 (100%)

There is a significant association between overall knowledge and overall practice at χ^2 test = 6.621, df = q, p = .012.

The observation checklist findings:

Table 4.4 Observation checklist results for men and women elderly residents

Statement	Assessment rating	
	Men residents	Women residents
Cleanliness of the Rooms	Good	Very good
Rooms Ventilation	Excellent	Poor
Rooms lighting	Good	Acceptable
Beds cleaning with the tight bed sheets	Very good	Good
Changing the elderly position and moving him	Poor	Poor
The existence of insects and rodents	Good	Acceptable
The existence of cats	Excellent	Excellent
The cleaning of cups and drinking utensils	Acceptable	Acceptable
Personal hygiene	Acceptable	Acceptable
Hand washing	Acceptable	Acceptable
Waste disposal	Excellent	Poor
Food covering	Good	Acceptable
Type and food quality	Good	Good
The elderly health care	Good	Good
The elderly nutrition	Good	Good
Caring for the elderly psychological condition	Acceptable	Poor
The existence of the entertaining programme	Very good	Very good
Helping the elderly to do his duties	Very good	Very good
Good treatment with the elderly people	Good	Acceptable
Good co-operation among health services providers	Very good	Acceptable

DISCUSSION:

This study showed that 67% of the participants have excellent knowledge regarding aging affects on the health of the elderly and 53.1% have good knowledge regarding physiological changes that occur with age. The excellent and good knowledge of participants is due to level of education, as the level of education of the participants is very high 93.7% from primary to post graduate. These findings disagree with 4 studies, which showed that the participants had poor knowledge of ageing. (Alamri and Xiao, 2017)¹⁰. The finding showed that half and 45.3% of the participants had excellent knowledge regarding age-related diseases and symptoms of bed sore respectively. This finding disagreed with study, which showed that health workers had limited knowledge about bed sore, (Mwebaza *et al.*, 2014)²⁵. The study showed that 45.3% of the participants have excellent knowledge regarding psychological changes that occur with age. This is due to high level of education. This disagreed with the study, which showed that GPs had poor knowledge of ageing, particularly the mental and social aspects (Yang *et al.*, 2017)²³. This study showed that the majority (87.5%) of participants has favorable attitudes regarding psychological support and psychological counseling towards the elderly. The favor attitudes in the current study are due to the level of education and an excellent knowledge as shown in the significant association between knowledge and attitudes. This agreed with the study, which revealed that the participants with higher levels of education were more likely to report more positive attitudes, indicating the importance of educational strategies which focus on meeting older people's needs and encouraging healthcare workers to consider a career working with older people, (Liu *et al.*, 2015²⁴, Alamri, and Xiao, 2017¹⁰). This study showed that 73.4% of the participants has poor practice regarding recognizing the changes in the elderly health status. This due to the fact that 87.5% of the participants don't receive appropriate training to their job but 81.3% had good practice regarding dealing with an elderly person with psychological and mental diseases. This lifetime experiences, rather than training programmes. This study found that 65.6% of the participants were satisfied with their job in elderly residents. This finding in line with the statement that 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)²⁷. In addition, more satisfaction, increases sense of security and relaxation significantly, which is it-self contributes in the of patient's continuous recovery.

CONCLUSION

the study conclude that although 67.2%, 50%, 50%, 48.4%, 56% of the participants have excellent knowledge regarding; the effect of ageing, the factors that affect the health of the elderly, the physical activity of the elderly, the depression in the elderly, the symptoms of dementia, respectively and 87%, 79.7% and 89.1% of the participants have favorable attitudes towards the psychological support, the family and social support and recreational services provided to the elderly, respectively. Only 26.6% of the participants recognizes the changes in the elderly health status and only 12% of the participants receive appropriate training to their job. Moreover 79.7%, 66% and 81.3% and of the participants have good practices in dealing with an elderly, who refused food, in dealing with an elderly, who refused medicine in dealing with an elderly person with psychological and mental diseases, respectively. Nearly two-thirds (65.6%) of the participants were well satisfied with their job in elderly residents. The study revealed that there were associations between participants knowledge and attitudes (χ^2 test = 18.304, df = 2, p = .000);

knowledge and practice (χ^2 test = 46.857, df = 2, p = .000) and attitudes and practice (χ^2 test = 6.621, df = q, p = .012).

Recommendations:

The Ministry of Social Development should hold more training programmes for healthcare workers to raise the knowledge and improve their skills regarding health services provision. The Ministry of Social Development should encourage coordination between the residents and NGOs to ensure the sustainable fund. Further studies on health services and health status of the elderly in the Sudanese residents near future are highly needed.

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