KNOWLEDGE AND AWARENESS OF DEMENTIA CARE IN RURAL AND URAN AREAS OF OSUN STATE

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 Abstract: Dementia is a global public health priority {WHO, 2012}. The number of persons with dementia (PWD) is increasing globally, and persons with dementia receive suboptimal care and use health services more than older patients without dementia {Prince, et al., 201}, {Bronskill, et al., 2020}, higher long-term care admissions and mortality. Dementia is a public health concern and a leading cause of disability and dependency among people of old age worldwide. Globally, about 10 million people develop dementia each year, and nearly 60% of these estimates reside in low- and middle-income countries (LMICs). About 2.13 million people are estimated to be living with dementia in Sub-Saharan Africa (SSA), with the majority contributed by Alzheimer's disease (AD) (WHO, 2020). The objectives of the study are: to assess the knowledge and awareness of dementia among healthcare professionals, caregivers, and community dwellers, to identify the challenges and barriers faced by individuals with dementia, caregivers, and healthcare providers and to provide potential solutions and interventions to improve dementia care in rural areas. The methodology, a simple random sampling technique was used in selecting four hundred (400) subjects residing in rural and urban areas of Osun State were used for this study. A well-structured, self-administered questionnaire to collect information from the students. The statistical package for social sciences (SPSS) version 23 was used in analysing and calculating the simple percentage. Results and Discussion: The results of the study reviewed that the awareness of community people with dementia in rural and urban very high 7.5%, 41.3% &. low or poor 54.2%, 15.4%, respectively, rating of adequate facilities in rural and urban, excellent 15.9%, 32.3% very poor 44.8%, 7.5% respectively training of health care professional, extensively 9.0%, 12.4% in both communities. In conclusion Awareness, training of health care providers and also to assess to the facilities are very poor.

Key words: Awareness, Dementia, Knowledge, Rural and Urban.

1. Introduction

Dementia is a global public health priority (WHO, 2017). It was estimated that the number of people with dementia would increase from 57·4 (95% uncertainty interval 50·4–65·1) million cases globally in 2019 to 152·8 (130·8–175·9) million cases in 2050 (Lanc. Despite large increases in the projected number of people living with dementia, age-standardised both-sex prevalence remained stable between 2019 and 2050 The number of persons with dementia (PWD) is increasing globally, and persons with dementia receive suboptimal care and use health services more than older patients without dementia. PWD have more emergency department (ED) visits and hospitalizations [Prince, et al., 2016], longer stays (Bronskill, et al., 2020), higher long-term care admissions and mortality. Dementia is a public health concern and a leading cause of disability and dependency among people of old age worldwide. Globally, about 10 million people develop dementia each year, and nearly 60% of these estimates reside in low- and middle-income countries (LMICs). About 2.13 million people are estimated to be living with dementia in Sub-Saharan Africa (SSA), with the majority contributed by Alzheimer's disease (AD) (WHO, 2020). Dementia in SSA is projected to surpass 3.48 million by 2030. The elderly population in Uganda is projected to reach 5,420,000 by 2050 (Guerchet, 2017).

 Dementia can be overwhelming, not only for the patients but also their caregivers and immediate families. Often, there is a lack of awareness and limited understanding of dementia, resulting in stigmatization, discrimination, social exclusion, barriers to diagnosis and care with the associated physical, psychological, social, and economic burden on caregivers, family, and society (Mubangizi, et al., 2020).

The poor knowledge and attitudes towards dementia may be leading to delayed health-seeking behaviors and lifestyle changes that might impact the condition progression (Afolabi, et al., 2018). Presently, no study in Osun State has assessed the knowledge and attitude of the general population towards dementia. Students form part of the

general population and play an important role in information dissemination and provision of care to dementia patients within communities (Baral, et al., 2020).

Literature points to less desirable outcomes for older adults in rural regions (e.g.,higher ED visits), especially if adjacent to urban centers (Ramalho, et al., 2019). However, mirroring the primary studies, reviews of this literature are focused on one or two quality-of-care domains (e.g., Access, Integration) (Higgins, et al., 2019).

Educating healthcare workers in dementia and other mental health issues is crucial in improving assessment, diagnosis, and management of persons with dementia (Liu et al., 2016). In Sub Saharan Africa, there is a dearth of studies on knowledge of dementia among health workers. Two of the articles which were found indicated poor knowledge due to lack of training in pre or post medical education and this made some health workers feel less confident and more uncomfortable whenever they encounter people living with dementia or other cognitive impairments (Cettomai et al., 2011; Kamoga et al., 2019).

2. Materials and Methods

2.1 Study area

The study was conducted in selected rural and urban areas of Osun state South West Region of Nigeria.

2.2 Study Design

A cross-sectional design adopted for data collection at a specific point in time to gather information about the current state of dementia care in the rural and urban population.

2.3 Study Area. The study is conducted within selected rural and urban areas of Osun State, Nigeria.

2.3.1 Inclusion Criteria

Inclusions are rural and Urban areas within Osun State, Nigeria. Participants involved in dementia care, including, healthcare professionals, caregivers, and individuals with dementia within the ages of 65 years and above. Studies focusing on the challenges, barriers, and strategies related to dementia care in rural and urban areas.

2.4 Population of the Study

The population of interest includes individuals with dementia, those above 65 years, caregivers, and healthcare professionals involved in dementia care within the selected rural and urban areas of Osun State, and it is going to be put at 400 participants.

2.5 Sample Size and Sampling Techniques

The sample size was determined with this formula: N= Z2pq/d2

The sample size was estimated using the Leslie Kish formula and a minimum sample of 200. participants were used, based on a precision of 0.05 and a prevalence of 16% from a study by Shirani et al. (2016). This total includes an additional 10% dropout rate, which will be added on to anticipate the withdrawal of participation. The sampling technique used depends on the target population considered.

2.6 Data Collection Procedure

Data were collected through a combination of methods, including questionnaires, interviews, and observations. The data collection process involved approaching potential participants, explaining the purpose of the study, obtaining informed consent, and administering the data

2.6.1 Collection instruments.

Researchers ensure privacy, confidentiality, and ethical considerations throughout the data collection process.

2.6.2 Questionnaire Development

Questionnaires were developed based on existing validated scales and relevant literature on dementia care. The questionnaires included sections related to demographics, knowledge of dementia care, challenges faced, access to resources, and strategies employed in rural and urban areas.

2.7 Statistical Analysis

The collected data was analyzed using appropriate statistical methods of SPSS (version 26.0). Descriptive statistics (e.g., means, frequencies) were used to summarise demographic characteristics and key variables. Inferential statistics, such as chi-square tests or t-tests were used.

3.   Results of findings

Table 1: Socio-Demographic Characteristics of the respondents

Variable	Rural area		Urban area	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Age				
20-30yrs	119	59.2	100	49.7
31-40yrs	62	30.8	78	38.8
41-50	9	4.5	10	5.0
51yrs and above	10	5.0	12	6.0
Missing	1	0.5	1	0.5
Occupation				
Care giver	15	7.5	30	14.9
Civil servant	38	18.9	60	29.9
Trader	143	71.1	85	42.3
Vocational work	4	2.0	25	12.4
Missing	1	0.5	1	0.5
Level of Education				
Informal	61	30.3	27	13.4
Primary	40	19.9	20	10.0
Secondary	80	39.8	68	33.8
Tertiary	19	9.5	85	42.3
Missing	1	0.5	1	0.5

Table 2: Rating facility and Professionals

Variable	Rural area Frequency	Percentage	Urban area Frequency	Percentage
Rating level of awareness				
Very high	15	7.5	83	41.3
High	25	12.4	43	21.4
Moderate	51	25.4	43	21.4
Low	109	54.2	31	15.4
Missing	1	0.5	1	0.5
Rating of adequate dementia care resources (Facility)				
Excellent	32	15.9	65	32.3
Good	25	12.4	67	33.3
Average	53	26.4	53	26.4
Very poor	90	44.8	15	7.5
Missing	1	0.5	1	0.5
Training of health care professionals				
Yes extensive	18	9.0	25	12.4
Yes to some extent	141	70.1	150	74.6
No	41	20.4	25	12.4
Missing	1	0.5	1	0.5
The challenges faced by health care givers				
Lack of support sources	41	20.4	40	19.9
Limited care optional	80	39.8	70	34.8
Emotional & Physical strain	52	25.9	40	19.9
Lack knowledge about dementia care	20	10.0	35	17.4
Financial burden	7	3.5	15	7.4
Missing	1	.0.5	1	0.5

Table 3 Knowledge and Awareness

	Rural			Urban		t	p*
	M	SD		M	SD		
Knowledge & Awareness	1.89	1.25	3.63		0.80	32.38	0.000

Table 4: Correlation

	Sig. (2-tailed)	Sig. (2-tailed)
Occupation & Knowledge	0.022	0.415
Education level & Awareness	0.000	0.019

Discussion of findings

The study findings are highly significant in the level of education among the urban respondents, which could potentially contribute to a better understanding and implementation of dementia care practices in the urban area. However, the low level of dementia care responsibilities can disrupt traders' livelihoods. Flexible income generation support may help (Adebiyi et al., 2018). In terms of education levels, about half had some post-secondary education.

The age groups are mostly 20-30 years; younger adults are reported in both rural and urban areas. The study shows a significant difference between the knowledge and awareness of people towards dementia in urban areas. The reason being that they are more exposed to information than those living in rural areas. This study is in line with the study done by Susilowati et al. (2021) between Indonesian workers in rural and urban areas that found a significant difference. Asbroeck et al. (2021) also found that knowledge influences awareness; he emphasised that the most common barrier to behaviour change is due to lack of knowledge; this indicated that knowledge is power. Khonje et al. (2015) also showed that knowledge concerning dementia was very low among isiXhosa-speaking people of South Africa.

The study identified a significant association between level of education and awareness among the respondents in rural and urban areas. The study revealed low levels of awareness among community members, indicating a need for enhanced educational efforts to improve knowledge about dementia in rural areas. The level of awareness is low in rural areas; this may be as a result of ignorance or educational level. Education plays a significant role in so many areas of human life in which awareness of every piece of information or communication is inclusive, and this may be in the form of signs, reading, e.g., magazines, journals, and media, to mention but a few.

The study revealed that civil servants are significantly higher in urban areas than in the rural areas of the state. There is always a flow of people, especially young people, from rural to urban areas in search of white-collar jobs, most especially those with higher degrees; this may likely contribute to an increase in the level of awareness in urban areas.

Regarding the availability of specialised dementia care facilities in urban areas, the study found a higher significance of urban rating to the rural, this indicating a positive perception of the availability of such facilities. suggesting that a significant proportion considered the availability to be satisfactory in urban areas. However, 7.5% of respondents rated it as very poor, indicating a perceived lack of specialised dementia care facilities in urban areas. Similar findings indicate a clear need to expand dedicated dementia care options outside major cities. (Adebiyi et al., 2018).

Trained health professionals in dementia are significantly higher in urban areas than in rural areas of the state. Patients with dementia prefer going to secondary facilities rather than using the primary health care system for numerous reasons, such as limited care options and a lack of professionals that can handle dementia cases. The study also investigated whether healthcare professionals in rural areas received specific training or education on dementia care. The findings revealed low training of dementia health professionals in primary health facilities of rural areas. This is in agreement with a study by Rasmussen et al. (2023) focused on the level of knowledge and awareness among caregivers of individuals with dementia in rural communities; the findings revealed that a significant proportion of caregivers in rural areas had limited knowledge about dementia and its care. It also revealed potential gaps in knowledge among some healthcare professionals in rural areas, a previous study also indicated the low level of knowledge and awareness of dementia among caregivers, (Smith and Brown, 2021).

The study identified a lot of challenges rural people with dementia are facing, like stigma surrounding dementia and caregiving in rural communities, which can lead to underreporting of symptoms or not reporting and reluctance to seek help; lack of specialised health care professionals; limited access to health care services; lack of support; emotional and physical strain; and lack of adequate knowledge of dementia. Rural populations often live in geographically isolated areas, which may not enable access to healthcare facilities or support services, such as financial constraints, making it difficult for the majority of them to set aside a sufficient amount of resources for dementia care, and due to lower population density and fewer healthcare facilities, rural areas often have lower levels of public funding allocated for dementia care, which exacerbates existing challenges and makes many social programs more difficult. Families may have to travel long distances to visit specialised care centres or consult healthcare providers. The findings provide insights into the current state of dementia care infrastructure and resources in the specific context of the rural area.

Recommendation

Regular and targeted awareness campaigns should be adopted in order to improve knowledge and understanding of dementia among healthcare professionals, carers, and the community. Establishing support groups and services specifically tailored for individuals with dementia and their caregivers in rural areas, addressing their unique needs and challenges, is also necessary for policymakers and stakeholders to develop strategies and interventions to address the challenges and improve dementia care in rural areas.

There is a need to address the limited access to healthcare services by increasing the availability and affordability of dementia care facilities and expanding the reach of healthcare providers in rural areas. There is a need to foster collaboration among healthcare providers, government agencies, non-profit organisations, and community stakeholders to develop and implement comprehensive strategies for improving dementia care in rural areas.

Conclusion

Efforts to provide training and education for dementia health professionals should be encouraged, and the government should also address the challenges faced by individuals with dementia and healthcare providers. The involvement of the local community and the implementation of specialised dementia care services were considered important. Continuous awareness using the available media is encouraged to improve knowledge not only in this population but also in the general population. Further research into dementia care is equally encouraged.

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