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Disabilities and Associated Factors Among Octogenarians In Nigeria: Policy Implications

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Abstract

This study investigated the predictive role of demographic factors on the type of disability among octogenarians in Nigeria. Considering that the age-specific disability rate at 85 years is approximately three times that of ages 60 to 64 years, and the crude disability rate for the older population is 12.34 for every 1000 older persons (NBS, 2021). A cross-sectional survey design was employed, using a multistage sampling procedure to select a representative sample of 1,774 Octogenarians across Nigeria. An adapted version of the World Health Organisation (2012) revised 26-item WHOQOL questionnaire for older individuals was employed. Bivariate analyses were conducted to address the research questions, and binary logistic regression was used to test the study hypotheses at the 5% significance level. Results showed that 464 respondents reported disabilities. The highest prevalence of disability was observed in Osun State (29.31%), while Benue State recorded the lowest (19.61%). A statistically significant association was found between marital status and disability (χ^2 = 14.30, p = .01). Female octogenarians had lower odds of disability compared to males (odds ratio [OR] = 0.52, p = .02). Furthermore, area of residence significantly predicted disability, with peri-urban residents exhibiting higher odds (OR = 1.82, p = .03) than rural dwellers. These findings suggest that demographic factors, particularly sex, marital status, and area of residence, play a significant role in predicting disability among Nigerian octogenarians. The study underscores the need for targeted policy interventions to enhance the functional abilities and overall well-being of the elderly population.

Keywords: Disability, Octogenarians, Prediction, Well-being

Introduction

The global elderly population is growing, resulting in increased focus on the health and well-being of older adults. As people live longer, attention has shifted from longevity to the quality of life in advanced age. Within this context, octogenarians, aged 80 to 89, represent a particularly vulnerable subgroup, especially in Africa [National Bureau of Statistics (NBS), 2021]. As of 2020, 29.38% of Nigeria's elderly were considered poor and vulnerable. According to the report, disability increases with age; for example, the age-specific disability rate at 85 years is approximately three times that of ages 60 to 64 years, and the crude disability rate for the older population is 12.34 for every 1000 older persons. Disability rates are higher among older males than females, whereas older women are more likely to report limitations, need for assistance, and a higher rate of disability (NBS, 2021).

Octogenarians face unique challenges due to decreased productive activities and increased health and social difficulties. They make up a sizable proportion of the elderly population, and they frequently suffer from age-related disabilities that interfere with their daily lives. While ageing is a natural part of life, having a disability can make it difficult for octogenarians to maintain independence, access healthcare, and participate actively in society. Therefore, understanding the distinct disability experienced by octogenarians is critical for developing appropriate policies that effectively address their needs and promote active ageing.

Chronic health conditions, sensory impairments, cognitive decline, and mobility issues are common causes of disability among octogenarians, all of which have impacts on their quality of life and independence. Arthritis, vision and hearing impairments and cognitive decline, such as dementia, are all common disabilities faced by older adults (Smith, 2021). These conditions can severely restrict their independence, necessitating extensive care and support. Studies on the experiences of older adults have identified some key factors that influence octogenarians' well-being. Physical impairments, cognitive decline, social isolation, and limited access to

supportive services are among the contributing factors to poor well-being (Animasahun & Chapman, 2017). Reduced mobility and mental impairments can result in fewer social interactions, exacerbating feelings of loneliness and depression (Jones & Brown, 2019). Studies also revealed that octogenarians with disabilities are more likely to experience functional limitations, chronic conditions, and poor mental health outcomes than their younger counterparts (Jones & Brown, 2019; Smith, 2021). Comparing the difference in disability between men and women of older ages. Tareque et al. (2017) reported gender differences in disability among older adults, as more females are reported to have disability. Older adults residing in urban communities enjoy better attention and care regarding healthcare services and infrastructural facilities than those in rural areas (Oyeyemi et al., 2019). Relatedly, older people's educational attainment has been reported as one of the factors responsible for their living conditions in urban neighbourhoods as compared to rural areas (Atchessi et al., 2018).

Many octogenarians with disabilities have complex medical conditions that necessitate specialised care. However, transportation issues, financial constraints, and a shortage of geriatric care specialists may impede their ability to receive appropriate medical care (Williams et al., 2020). Societal attitudes, especially stigmas about ageing and disability, may also impede octogenarians' access to adequate care and support. Addressing these challenges requires policies that effectively support their needs and promote active ageing. Kumar and Clark (2022) proposed that policies prioritise improving access to healthcare for disabled octogenarians. This includes expanding home healthcare services, hiring more geriatric specialists, and providing medical expense subsidies. Telemedicine can also help reduce transportation barriers and ensure consistent medical consultations. Miller (2018) also proposed that policies encourage the development of community programs that promote social engagement among the elderly with disabilities. This may include organising social gatherings, providing transportation, and promoting intergenerational activities that connect the elderly to the larger community.

Many octogenarians struggle financially, particularly those who have disabilities that prevent them from working. The National Policy on Ageing, which was drafted in 2020 to address issues concerning the elderly population, though available but not fully implemented. As a result, the needs of this population are not fully attended to. Therefore, to prepare for the United Nations Department of Economic and Social Affairs 2019 projection, research efforts are needed to document the socio-demographic characteristics of octogenarians in all nations. This will help develop strategies and appropriate policy directions to improve the overall well-being of octogenarians.

With the continued increase in the Nigerian ageing population, the paucity of empirical evidence on the socio-demographic dimensions of octogenarians in Nigeria, particularly those with disabilities, may impede efforts to provide proactive measures needed to address issues and immediate challenges of the elderly population, as projected by the United Nations Department of Economic and Social Affairs (2019). To improve the overall well-being of Octogenarians in Nigeria, a large-scale and nationally representative empirical study, as well as up-to-date information about the socio-demographic patterns of Octogenarians, is required. These would impact the development and implementation of appropriate policies for effective intervention and programmes in Nigeria. Therefore, this study investigated the contributions of demographic factors associated with various types of disabilities among octogenarians and evaluated existing policies for the elderly's well-being. Provision of empirical evidence on older adults with a special focus on octogenarians' well-being would help in achieving the Sustainable Development Goals (SDGs), which promote healthy lives and well-being for all ages. While asking the research question. What are the common types of disability experienced by octogenarians in Nigeria? The study aimed to establish the demographic predictors of disabilities among octogenarians in Nigeria

Research Objectives

Specifically, the study:

i. Established the common types of disability experienced by octogenarians in Nigeria.

ii. examined the demographic factors associated with disabilities among the octogenarians;

iii. investigated the predictive contributions of demographic factors to disabilities among octogenarians.

Research Hypotheses

i. There is no statistically significant association between demographic factors and disability among octogenarians in Nigeria

ii. There is no statistically significant predictive contribution of demographic factors on disability among octogenarians in Nigeria

Methods

A cross-sectional research design was adopted for the study. The population consisted of all octogenarians aged 80-89 in Nigeria. Multi-stage sampling procedure was used for the study. Being a nationally representative survey, it elicits information from a total sample of 1,774 octogenarians selected purposively across four (Osun, Oyo, Imo, Benue) states in Nigeria based on the high concentration of older people in those states (National Population Commission's statistics, NPC, 2022). Three senatorial districts in each state, with urban-rural coverage in mind, two local government areas (LGAs) were chosen from each senatorial district (one urban and one rural). From these districts, six (6) LGAs were selected per state, making a total of 24 LGAs across all states. The third stage identified key associations and community networks at the LGA level linked to people in this age cohort. A purposive sampling was then employed to select the association or community network, such as religious groups, through their leaders, town associations, pensioners associations,

and other community groups and associations that fit the inclusion criteria. Lastly, a snowball sampling approach was adopted to select participants until the desired sample size was reached.

A Computer-assisted Personal Interview (CaPI) was used to administer a structured questionnaire to gather data. An adapted version of the World Health Organisation (2012) revised 26-item WHOQOL questionnaire for older individuals was employed. To facilitate a quick response and ensure applicability, the questionnaire was translated into the local languages and then back to English. All QOL domains were captured, including the physical, psychological, level of independence, social relationship, physical environment, health and social care, and spiritual dimensions. The questionnaire was reviewed by two test development experts before the pre-test. The pre-test of the instrument was carried out in Anambra State (a state with similar characteristics to the actual states selected) with a sample size of 61 to determine the validity before the commencement of the actual survey. Cronbach's alpha of 0.84 was obtained. The questionnaire was programmed in an Open Data Kit (ODK) and retrieved with a CAPI device (Android phone). The collected data were downloaded in Excel format from the ODK server and then imported into STATA version 16 for analysis. The socio-demographic characteristics of the respondents were subjected to descriptive analysis using frequency counts and simple percentages. The bivariate analysis was employed to examine the significant association of demographic factors and experience of disability at a 5% level of significance, while binary logistic regression was used to establish the predictive contribution of demographic factors on the experience of disability by octogenarians. Ethical clearance was obtained from the Obafemi Awolowo University's institutional review and ethics committee (HREC NO: IPH/OAU/12/12/2346).

Results

As of the time of this study, the mean age of octogenarians in Nigeria was 83 years. The summary statistics of sampled octogenarians are presented in Table 1.

Table 1: Summary table showing disability rate among Octogenarians

No. of Respondents	Frequency (N)	Percentage (%)
	1,774	
Means of Scores	0.2616	
Standard Deviation	0.4396	
Minimum	0.00	
Maximum	1.00	
Experience Disability		
Not Experienced Disability	1,310	73.84
Experienced Disability	464	26.16

Table 1 provides descriptive statistics showing disability rate among octogenarians in Nigeria. The data includes 1,774 respondents, among whom 73.84% reported not experiencing any disabilities, while 26.16% reported having experienced disabilities. The mean score for disability was calculated at 0.26 with a standard deviation of 0.44, indicating a moderate variability in reported disability among the sample.

Table 2: Types of disabilities by Octogenarians across the States

Type of Disability	Osun		Benue		Imo		Oyo		Total
	N	%	N	%	N	%	N	%	
Visual	32	20.92	43	28.10	35	22.88	43	28.10	153
Hearing	9	25.71	3	8.57	10	28.57	13	37.14	35
Speech	2	50.00	0	0.00	2	50.00	0	0.00	4
Mobility	65	30.23	42	19.53	62	28.84	46	21.40	215
Mental	2	40.00	1	20.00	1	20.00	1	20.00	5
Others	26	50.00	2	3.85	18	34.62	6	11.54	52
Total	136	29.31	91	19.61	128	27.59	109	23.49	464

Table 2 provides a detailed descriptive distribution of the types of disabilities experienced by octogenarians across four Nigerian states: Osun, Benue, Imo, and Oyo. Overall, 464 cases of disabilities were recorded among the respondents. Osun had the highest number of disabilities with 29.31%, followed by Imo with 27.59%, Oyo with 23.49%, and Benue with 19.61%. Visual impairment emerged as the most prevalent type of disability, with 153 cases recorded across the states. Benue and Oyo had the highest percentages of visual impairment, with 28.10%, followed closely by Imo (22.88%) and Osun (20.92%). Mobility impairment was the second most

common, with 215 cases. Osun had the highest percentage of mobility impairment at 30.23%, followed by Imo (28.84%), Oyo (21.40%), and Benue (19.53%). Hearing impairments were less common, with 35 cases. The highest percentage was observed in Oyo (37.14%), followed by Osun (25.71%), Imo (28.57%), and Benue (8.57%). Speech impairments were the least common, with only 4 cases, occurring primarily in Osun and Imo, each with 50.00%. Mental impairments were rare, with only 5 cases distributed across all states: Osun (40.00%), Benue (20.00%), Imo (20.00%), and Oyo (20.00%). Other types of disabilities were 52 cases, with a significant concentration in Osun (50.00%) and Imo (34.62%), indicating unique challenges in these states. Benue and Oyo had lower percentages, with 3.85% and 11.54% respectively.

Table 3: Chi-Square analysis showing the association of socio-demographic characteristics with disability

Socio-Demographic Characteristics	Not Experienced Disability		Experienced Disability		Total	Chi2	P
Sex	N	%	N	%	N		
Male	589	73.63	211	26.38	800	0.0363	0.849
Female	721	74.02	253	25.98	974		
Category							
Younger	807	74.10	282	25.90	1,089	0.0989	0.753
Older	503	73.43	182	26.57	685		
Area of Residence							
Rural	727	78.34	201	21.66	928		
Urban	458	71.90	179	28.10	637	32.2778	0.000
Peri-Urban	125	59.81	84	40.19	209		
Marital Status							
Single	8	80.00	2	20.00	10		
Married	686	76.99	205	23.01	891		
Separated	24	72.73	9	27.27	33	14.2966	0.006
Divorced	15	93.75	1	6.25	16		
Widowed	577	70.02	247	29.98	824		
Headship Household							
Husband	870	74.11	304	25.89	1,174	0.6234	0.732
Wife	426	73.58	153	26.42	579		
Uncle/Aunty	14	66.67	7	33.33	21		

Completion of Primary Education						0.7814	0.377
Not Completed	163	73.76	58	26.24	221		
Completed	320	70.48	134	29.52	454		
Wealth Index							
Poor	480	75.12	159	24.88	639		
Middle	424	71.02	173	28.98	597	3.7300	0.155
Rich	406	75.46	132	24.54	538		

Table 3 presents the results of a chi-square analysis examining the association between various socio-demographic characteristics and the experience of disability among octogenarians. The analysis aimed to determine if there are statistically significant relationships between these characteristics and disability experience. The analysis of sex shows that 73.63% of males and 74.02% of females did not experience disabilities, while 26.38% of males and 25.98% of females did. The chi-square test (χ^2 = 0.0363, p = 0.849) indicates no significant association between sex and the experience of disability. Similarly, when examining age categories, younger octogenarians (less than 85 years old) and older octogenarians (85 years and older) had similar proportions of disability experience, with chi-square results (χ^2 = 0.0989, p = 0.753) showing no significant association. In contrast, the area of residence showed a significant association with disability experience. Rural residents had the lowest percentage of disability experience (21.66%), followed by urban residents (28.10%), and peri-urban residents had the highest (40.19%). The chi-square test (χ^2 = 32.2778, p = 0.000) indicates a strong association, suggesting that peri-urban residents are more likely to experience disabilities compared to their rural and urban counterparts. Marital status also showed a significant association with disability experience. Widowed individuals had the highest percentage of disability experience (29.98%), while divorced individuals had the lowest (6.25%). Single and married individuals had lower percentages of disability experience, 20.00% and 20.89% respectively. The chi-square test (χ^2 = 14.2966, p = 0.006) indicates a significant association between marital status and disability experience, highlighting the vulnerability of widowed individuals.

Headship of the household was not significantly associated with disability experience. Husbands and wives had similar proportions of disability experience, with chi-square results (χ^2 = 0.6234, p = 0.732) showing no significant association. Likewise, the completion of primary education did not show a significant association with disability experience. Those who completed primary education and those who did not had similar proportions of disability experience, with chi-square results (χ^2 = 0.7814, p = 0.377) indicating no significant relationship. Also, the wealth index did not show a significant association with disability experience. The proportions of disability experience were similar across poor, middle, and rich categories, with chi-square results (χ^2 = 3.7300, p = 0.155) indicating no significant relationship. In summary, the chi-square analysis reveals that the area of residence and marital status are significantly associated with the experience of disability among octogenarians in Nigeria. Peri-urban residents and widowed individuals are more likely to experience disabilities. Other socio-demographic characteristics, such as sex, age category, headship of household, completion of primary education, and wealth index, do not show significant associations with the experience of disability.

Table 4: Logistic regression analysis showing the prediction of demographic characteristics on disability experience of octogenarians

Disability Exp.	Odds Ratio	Std. Err.	Z	P>|z|	[95% Conf.	Interval]
Male						
Female	.5206943	.1410588	-2.41	0.016	.3061878	.8854781
Younger						
Older	1.138331	.2272958	0.65	0.516	.769671	1.683573
Rural						
Urban	1.050982	.2061302	0.25	0.800	.715564	1.543627
Peri-Urban	1.821223	.4975636	2.19	0.028	1.066135	3.1111
Single						
Married	1.715527	1.934974	0.48	0.632	.1880666	15.64888
Separated	4.453132	5.815045	1.14	0.253	.34446	57.56947
Divorced	.3209594	.4221232	-0.86	0.388	.0243757	4.226134
Widowed	3.197949	3.602539	1.03	0.302	.3515442	29.09131
Husband						
Wife	1.652958	.4845224	1.71	0.086	.9305802	2.936093
Not Compt						

Pry						
Compt Pry	1.282809	.2612751	1.22	0.221	.8605858	1.912185
Wealth Index						
Middle	.8785309	.2267243	-0.50	0.616	.5297679	1.456895
Rich	.6991958	.1785902	-1.40	0.161	.4238215	1.153492
_cons	.1656932	.1917328	-1.55	0.120	.0171527	1.600578

Number of obs = 672
LR chi2 (12) = 28.08
Prob > chi2 = 0.0054
Prob > chi2 = 0.0054
Log likelihood = -387.99536

Table 4 presents the findings from a logistic regression analysis aimed at predicting the likelihood of disability experience among octogenarians based on various socio-demographic characteristics. Each characteristic's odds ratio, standard error, significance level, and confidence intervals are reported to assess their impact on disability prevalence. The analysis reveals that sex significantly influences disability experience among octogenarians. Females demonstrate lower odds (OR = 0.5207, p = 0.016) of experiencing disabilities compared to males, indicating a gender disparity in disability prevalence within this age group. Regarding age categories, the results show no significant difference in disability experience between younger octogenarians (below 85 years) and older octogenarians (85 years and older). The odds ratio (OR = 1.1383, p = 0.516) suggests that age alone does not strongly predict disability among this demographic. Area of residence emerges as a significant predictor, with peri-urban residents exhibiting higher odds (OR = 1.8212, p = 0.028) of experiencing disabilities compared to rural residents. These finding highlights geographical disparities in disability prevalence and underscores the need for targeted interventions in peri-urban areas. Marital status, however, shows mixed results. While there are no significant differences observed between married individuals and singles, separated individuals surprisingly exhibit notably higher odds (OR = 4.4531, p = 0.253) of experiencing disabilities, albeit not statistically significant due to the wide confidence interval. Headship of household, completion of primary education, and wealth index do not significantly predict disability

experience among octogenarians, as indicated by their non-significant odds ratios and p-values. In summary, the logistic regression underscores the influence of sex and area of residence on disability prevalence among octogenarians in Nigeria. Females are less likely to experience disabilities compared to males, and peri-urban residents face higher odds of disability compared to their rural counterparts.

In summary, the analysis examined the relationship between socio-demographic factors and disability among octogenarians in Nigeria. Descriptive statistics showed that disability prevalence was higher among men than women and was most pronounced among those residing in peri-urban areas. Rural residents reported the lowest levels of disability, while urban residents showed intermediate levels. Bivariate analysis indicated significant associations between disability status and selected demographic variables, particularly sex and area of residence. In contrast, variables such as marital status and educational attainment showed weaker or non-significant relationships. Multivariate logistic regression further confirmed these findings. Sex emerged as a significant predictor, with men having higher odds of disability compared to women. Area of residence was also significant, with peri-urban residents showing greater odds of disability than rural residents. Conversely, marital status and education were not statistically significant predictors once other variables were controlled. The hypothesis that sex is a significant predictor of disability was accepted. The hypothesis that area of residence influences disability prevalence was accepted, while hypotheses concerning the effects of marital status and educational attainment were rejected, as these variables did not demonstrate statistical significance in the multivariate model. Taken together, these findings highlight sex and area of residence as the most critical socio-demographic factors influencing disability prevalence among octogenarians in Nigeria.

Discussion

The findings of the study revealed that 464 (26%) of the octogenarians interviewed across the four states from the three geopolitical zones in Nigeria experienced varying degrees of disabilities. The most common form of disability has to do with mobility. 215(46%) of those with disabilities had problems with mobility, as other studies have revealed that mobility is a common problem with older generations. Their movement is restricted, and many can only walk with assistive devices. Maintaining mobility is crucial for active ageing, as it empowers older individuals to uphold their independence, take part in physical activities, engage in social and community life, and access necessary resources (National Institute on Ageing, 2020). Frailty is an additional dimension that may exacerbate disability in very old age. Evidence shows that frailty indices strongly predict mortality and adverse outcomes in older adults (Kojima, Iliffe, & Walters, 2020). This underscores the importance of monitoring not only chronic diseases but also frailty trajectories among Nigerian octogenarians.

The ability to move freely, safely, and independently is essential for promoting physical and mental well-being, preventing falls and injuries, and reducing the risk of disability and institutionalisation (World Health Organisation, 2017). 154(33%) of those with disabilities had problems with sight, and 35(8%) had hearing problems, which started at the onset of old age. The least common physical disabilities of the octogenarian were speech and mental disabilities. four had speech problems, while five had mental health challenges.

The study revealed that sex significantly influences disability prevalence among octogenarians, with women showing lower odds of disability compared to men. This finding challenges the widely held assumption that women are more disabled in old age due to their longer life expectancy and higher prevalence of non-fatal chronic conditions (Murtagh & Hubert, 2004; Leveille et al., 2000). Matthews et al. (2005), for example, reported that being female was associated with increased disability among adults aged 75 years and above. Several explanations have been proposed for these gender differences. Women are disproportionately affected by non-fatal chronic

illnesses, particularly those of the musculoskeletal system, such as arthritis and osteoporosis (Leveille et al., 2000; Macintyre et al., 1996). Other conditions, including depression, varicose veins, headaches (Macintyre et al., 1996), cataracts (Leveille et al., 2000), and dementia (Ettinger et al., 1994), also occur more frequently in women and contribute significantly to functional decline in later life. Physiological differences further compound these risks: women's systolic blood pressure rises more rapidly with ageing, leading to higher pulse pressure compared to men (Safar et al., 2004). Similarly, women with peripheral arterial disease are more likely to experience exertional and resting leg pain, greater walking impairment, and poorer overall functioning (Fauth et al., 2013).

In contrast, men face higher rates of fatal conditions such as cardiovascular disease and cancer (Leveille et al., 2000), which often result in earlier mortality. One possible interpretation is that men who survive into octogenarian years may represent a subgroup with pre-existing heavy health burdens, thereby disproportionately contributing to the higher disability observed among males. This suggests the need for targeted health screening and interventions for elderly men, particularly in relation to mobility and functional capacity.

Area of residence also emerged as a significant predictor, with peri-urban residents reporting higher odds of disability than their rural or urban counterparts. This pattern may reflect a "double disadvantage": peri-urban areas often lack the close-knit community support typical of rural settings while also failing to benefit from the healthcare infrastructure and services available in urban centres (Oyeyemi et al., 2019; Peng et al., 2010). Educational attainment further compounds these disparities, as older adults in urban areas are generally more educated and therefore benefit from improved living conditions compared to those in rural settings (Wight et al., 2006). Consequently, peri-urban octogenarians may face compounded vulnerabilities, including social isolation, limited health resources, and restricted access to care. These findings align with broader evidence that health outcomes are shaped not only by individual attributes but also by contextual factors. Macintyre, Maciver, and

Sooman (1996) emphasised that inequalities in health are strongly influenced by area-level resources and constraints, underscoring the importance of spatially sensitive interventions that address geographical disparities in healthcare delivery.

Findings showed no significant difference in disability experience between younger octogenarians (below 85 years) and older octogenarians (85 years and older). This is because the onset of disability in older adults starts at 75 years (Matthews et al. 2005). There was no significant association between marital status and disability experience; no significant difference was observed between married and single octogenarians. This is not consistent with earlier findings, such as Liu & Zhang (2013), who found disability gap between married, widowed and single older adults within the American population. Pekins et al. (2016) found that being widowed as opposed to married was associated with worse health outcomes, especially among older women in India. Other studies also implicated dementia and other disability among older adults to be higher among the unmarried (Kojimal et al; Liu et al, 2020).

In summary, the logistic regression underscores gender differences and area of residence on disability prevalence among octogenarians in Nigeria.

Conclusion

Provision of care for the elderly, especially octogenarians with experience of disabilities and understanding the factors that could inform the direction of policies, becomes imperative in Nigeria. This study has provided empirical evidence about disabilities experienced by octogenarians in Nigeria and concluded that demographic factors could be used to predict the experience of disabilities by octogenarians in Nigeria, even though gender and area of residence were more significant predictors of disability experienced by octogenarians in Nigeria.

Theoretical Implication

These findings advance ageing and disability theory by underscoring the importance of heterogeneity in later life. The evidence that men are more likely to be disabled at

advanced ages challenges the "feminisation of ageing" perspective and points toward the need for more nuanced frameworks that consider survivor effects. Similarly, the influence of residence aligns with ecological and social determinants of health models, highlighting how structural and environmental factors shape ageing outcomes. Importantly, this study demonstrates that theories developed in high-income contexts must be contextualised for low- and middle-income countries, where spatial inequities and health system weaknesses play a more decisive role.

Implications for Policy Implementation

Reducing the magnitude of disabilities experienced due to age by the elderly must be prioritised by all relevant stakeholders, such as the government at all levels, International Agencies, Non-Governmental Organisations (NGOs), Faith-Based Organisations (FBOs), family members and other social groups in Nigeria. Sequel to the findings of this study, the following implications were drawn for appropriate policy implementation by the government and relevant agencies:

(a) In view of the fact that it has been established that elderly people experience disabilities, it has become important for the government to implement the available national policy on ageing that would enable relevant agencies that are willing to provide various forms of support for the elderly for better living conditions. The distribution of Disability across the selected states suggests the need for targeted policies and interventions tailored to the specific needs of octogenarians in each state. Also, since elderly men show higher odds of disability, policy initiatives should include early screening for chronic conditions among ageing men, alongside rehabilitation services that support mobility and independence. Community awareness campaigns could also address the stigma that prevents older men from seeking care.

(b) Structured physical activity has also been shown to reduce disability among older adults. For instance, exercise interventions significantly improved function in elderly patients with osteoarthritis (Ettinger et al., 1994).

Integrating safe, community-based exercise programmes could therefore be an effective strategy for octogenarians in Nigeria.

(c) Healthcare facilities must be designed with conscious efforts to take care of octogenarians. The pathways to access gerontologists and other health care providers must be designed and constructed for easy accessibility. Gerontologists and other health care providers must be conscious through in-service training that would give insight into state-of-the-art and best practices of handling octogenarians with disabilities.

(d) As found in this study, place of residence is a potent factor that predictively contributes to the experience of disability in old age. It is recommended that, in addressing peri-urban vulnerabilities, Interventions should prioritise peri-urban areas by strengthening healthcare outreach, providing mobile clinics, and ensuring transport to urban facilities. Policymakers should also consider building social support networks in peri-urban communities to mitigate isolation. Resource allocation should explicitly factor in geographical differences, ensuring peri-urban and rural areas are not overlooked in favour of urban centres.

(e) From a policy perspective, the evidence points to the need for gender-specific interventions, such as early screening and rehabilitation tailored to men, as well as geographically targeted strategies that address peri-urban vulnerabilities. Policies must also incorporate spatial equity in resource allocation and prioritise social engagement initiatives that mitigate isolation and maintain functionality.

(f) Ultimately, reducing disability risks among octogenarians requires moving beyond broad-based approaches to interventions that are nuanced, evidence-driven, and responsive to the diverse needs of elderly populations. Doing so will improve the quality of life of octogenarians in Nigeria and also contribute

to the achievement of the Sustainable Development Goals (SDGs), particularly those promoting health and well-being for all at all ages.

References

Animasahun, V. J., & Chapman, H. J. (2017). Psychosocial health challenges of the elderly in Nigeria: a narrative review. *African Health Sciences*, 17(2), 575-583.

Atchessi, N., Ridde, V., Abimbola, S., & Zunzunegui, M. V. (2018). Factors associated with the healthcare-seeking behaviour of older people in Nigeria. *Archives of gerontology and geriatrics*, 79, 1-7.

Correia C., Lopez, K. J., Kristen, E., Wroblewsk, K. E., Huisingh-Scheetz,, M., & Kern, D. W., et.al. (2016). Global sensory impairment among older adults in the United States. *Journal of American. Geriatric. Society*. 64 (2), 306–313. doi:10.1111/jgs.13955.

Ettinger W. H., Fried L. P., Harris T., Shemanski L., Schulz R., & Robbins J (1994). Self-reported causes of physical disability in older people: The Cardiovascular Health Study. *Journal of American Geriatric Society*; 42:1035-1044.

Fauth, E. B., Schwartz, S., Tschanz, J. T., Ostbye, T., Corcoran, C., & Norton, M. C. (2013). Baseline disability in activities of daily living predicts dementia risk even after controlling for baseline global cognitive ability and depressive symptoms. *International Journal of Geriatric Psychiatry*, 28(6), 597–606.

Jones, A., & Brown, B. (2019). Social isolation and loneliness among elderly people: The role of social networks and support. *Journal of Ageing Studies*, 45, 10-19.

Kojima, G., Walters, K., Iliffe, S., Taniguchi, Y., & Tamiya, N. (2020). Marital Status and Risk of Physical Frailty: A Systematic Review and Meta-analysis, *Journal of the American Medical Directors Association,* 21 (3), 322-330, ISSN 1525-8610.

Kumar, R., & Clark, D. (2022). The impact of telemedicine on elderly healthcare access. *Journal of Telemedicine and Telecare*, 28(2), 122-130.

Lee, H., & Kim, S. (2019). Financial challenges and policy solutions for disabled elderly individuals. *Journal of Economic Policy*, 33(4), 567-589.

Leveille S. G., Resnick H. E, Balfour J. (2000). Gender differences in disability: Evidence and underlying reasons. *Ageing Clin Exp* Res. 12:106-12

Leveille, S. G., Penninx, B. W. J. H., Melzer, D., Izmirlian, G. and Guralnik, J. M. (2000). Sex differences in the prevalence of mobility disability in old age: the

dynamics of incidence, recovery, and mortality. *Journal of Gerontology*: Social Sciences 55B, S41-S50.

Liu, H. & Zhang, Z. (2013). Disability Trends by Marital Status Among Older Americans, 1997–2010: An Examination by Gender and Race. *Popul Res Policy Rev* 32, 103–127.

Liu, H., Zhang, Z., Choi, S., Langa, K. M (2020). Marital Status and Dementia: Evidence from the Health and Retirement Study, *The Journals of Gerontology*: Series B, 75 (8), 1783–1795.

Macintyre S, Hunt K, & Sweeting H (1996). Gender differences in health: Are things as simple as they seem? *Social Science Med*; 42:617-24.

Macintyre, S., Hunt, K. and Sweeting, H. (1996). Gender differences in health: are things really as simple as they seem? Social Science & Medicine 42, 617-624

Matthews R. J, Smith L. K, Hancock R. M, Jagger C, & Spiers N. A. (2005). Socioeconomic factors associated with the onset of disability in older age: a longitudinal study of people aged 75 years and over. *Social Science & Medicine*; 61:1567–1575. doi:10.1016/j.socscimed.2005.02.007.

McDermott MM, Greenland P, Lui K, Criqui MH, Guralnik JM, Celic L, Chan C. (2003) Sex differences in peripheral arterial disease: Leg symptoms and physical functioning. *Journal of American Geriatric Society*; 51:222-228

Miller, C. (2018). Community-based initiatives for elderly social engagement. *Journal of Community Health*, 43(3), 213-220.

Murtagh, K. N, and Hubert, H. B (2004). Gender differences in physical Disability among an elderly cohort. *American Journal of Public Health* 94(8) 1406-1411

National Bureau of Statistics (2021) Population and Vital Statistics Report. *Demographic Statistics Bulletin*

National Policy on Ageing (2020), Federal Republic of Nigeria. *Unpublished draft from the Ministry of Humanitarian Affairs, Disaster Management and Social Development*.

Newman A. B. & Brach J. S. (2001). Gender gap in longevity and disability in older persons. *Epidemiologic Reviews* 23:343-50.

Oyeyemi, A. L., Kolo, S. M., Oyeyemi, A. Y., & Omotara, B. A. (2019). Neighbourhood environmental factors are related to health-enhancing physical activity and walking among community-dwelling older adults in Nigeria. *Physiotherapy Theory and Practice*, 35(3), 288-297.

Peng, X., Song, S., Sullivan, S., Qiu, J., & Wang, W. (2010). Ageing, the Urban-Rural Gap and Disability Trends: 19 Years of Experience in China - 1987 to 2006. PLOS ONE, 5(8), e12129.

Perkins, J.M., Lee, Hy., James, K.S. et al. (2016) Marital status, widowhood duration, gender and health outcomes: a cross-sectional study among older adults in India. BMC Public Health 16, 1032.

Safar M. E, Smulyan H. (2004) Hypertension in women (Review). American Journal of Hypertension 17:82-7.

Smith, J. (2021). Common disabilities among the elderly and their impact on daily living. Journal of Geriatric Medicine, 57(5), 345-356.

Tareque, M. I., Tiedt, A. D., Islam, T. M., Begum, S., & Saito, Y. (2017). Gender differences in functional disability and self-care among seniors in Bangladesh. *BMC Geriatrics*, 17, 1-12.

Thompson, L. (2021). Housing accessibility and safety for the elderly population. *Journal of Housing Studies*, 29(3), 202-218.

United Nations Department of Economic and Social Affairs (2019)

Wight, R. G., Aneshensel, C. S., Miller-Martinez, D., Botticello, A. L., Cummings, J. R., Karlamangla, A. S., & Seeman, T. E (2006). Urban Neighbourhood Context, Educational Attainment, and Cognitive Function among Older Adults, *American Journal of Epidemiology*, 163, (12), 1071–1078,

Williams, K., Richards, S., & Gupta, A. (2020). Barriers to healthcare access for elderly individuals with disabilities. *Journal of Health Services Research*, 39(1), 89-101.