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Research Paper

Are Loss Of Independence And Increased Vulnerability A Recipe For Opportunistic Elder Abuse: Insights From Hospital Services Utilization Among Diabetic Older Adults During Covid-19 Pandemic And Yelutide.

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Abstract
Background
Diabetes mellitus, like other chronic diseases, increases health services utilization and caregiver burden. Older adults' dependence on caregivers for healthcare access may expose them to the risk of neglect. Previous studies have demonstrated elder neglect as the most common form of abuse among the study population.
Methods
This retrospective study was carried out among older adults using their hospital encounter records in a geriatric clinic over a 5-year period.
Results /discussion
The burden of diabetes mellitus is increasing. Reduced hospital services utilization was noticed during and after the last COVID-19 pandemic and the last month of the year throughout the study period. This latter finding raises suspicion of elder neglect which has earlier been demonstrated as the most common form of elder abuse among the study population
Conclusion
National policy on senior citizens and social security needed to be instituted to insulate older adults against abuse and ensure good health outcomes.
Key words: Increased vulnerability, loss of independence, opportunistic abuse, older adults, COVID-19

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I. BACKGROUND

The global increase in the population of older adults is associated with a concomitant increase in the prevalence of chronic, non-communicable diseases.[1, 2] Unlike acute infectious diseases, chronic diseases increase the burden on health services utilization because they require lifelong management [2].

Diabetes mellitus is an important chronic disease among older adults.[3, 4]The worldwide prevalence has increased and is expected to continue especially among the older adult population.[5 – 8] Its prevalence has grown with age. In the United States, one-third of people aged above 65 years have diabetes and a two- and four-fold increase among those aged 65-74 and above 75 years respectively have been projected.[9] In West Bengal, a prevalence of 6% and 19% were found among rural and urban populations of older people respectively while Fotouchi et al found a prevalence of 29.03% among people aged 60 years and above in Iran.[10,11] Self-reported prevalence of 8.7% and 9.25 were reported in China and South Africa respectively.[12, 13] In Nigeria, the prevalence of diabetes among older adults has not been given adequate research priority as demonstrated by the paucity of literature especially among the urban population. Chuhwak et al reported a prevalence of 4.6% among the rural older population in the North-central region.[14] In a systematic review of the prevalence of diabetes mellitus in Nigeria, the overall pooled prevalence of diabetes was 5.77%. Older age was one risk factor

for increased prevalence (6.6%, 95% CI 4.5 – 8.7).[15] In another meta-analysis by Adeloye et al, the pooled prevalence based on age was 6.8%, 6.4%, and 9.9% for ages 60 – 69, 70 – 79, and ≥ 80 years respectively.[16]

This increasing diabetic prevalence is expected to lead to a high and growing burden on health services utilization and caregivers. The caregivers' role is crucial to their quality of life and relief of suffering from the symptoms of chronic diseases. Age-related functional decline makes older adults dependent on caregivers or family members, and this makes them vulnerable to abuse whereby their healthcare needs are not of priority among competing demands.[17] Elder abuse refers to an act or absence of a proper act that will cause harm or suffering to an older person, and it happens in a relationship that normally requires trust, and may be performed only once or several times.[18,19] According to the World Health Organization (WHO), elder abuse is one of the least investigated types of violence and one of the least addressed in national plans to prevent violence.[18] The low level of attention this menace receives may be due to a lack of education and related factors by those in the position to intervene. In a study in Korea by Hee et al among nursing students, 88.5% of respondents said they could not intervene because they did not receive education on elder abuse.[20] Attention needs to be given to any research finding that raises suspicion of elder abuse to create awareness. Old age is associated with decreased homeostatic reserve and immunity, making older people more vulnerable to diseases and poorer outcomes. This was demonstrated during the last COVID-19 pandemic when older adults were more vulnerable and with poorer outcomes.

II. METHODS

This retrospective cross-sectional study was conducted using medical records of older adults aged 65 years and above who visited the geriatric clinic of Ekiti State University Teaching Hospital (EKSUTH), Ado Ekiti, over five consecutive years (2018 to 2022) from January 1 2018 to December 31 2022. This study uses the records of clinical encounters due to diabetes mellitus as an index of health services utilization.

EKSUTH is affiliated to the Ekiti State University College of Medicine and is a center for training medical students, resident doctors, nurses, and other allied healthcare personnel. Ado Ekiti is the capital city of Ekiti State, southwestern part of Nigeria. It is a major healthcare provider for the people of Ekiti State and receives referrals from the neighboring Osun and Kogi States. The geriatric clinic therefore receives patients from the states mentioned above. Information sought from the records of each older adult includes date, age, sex, and diagnoses.

STUDY POPULATION

Older adults aged 65 years who were managed for diabetes mellitus at the geriatric clinic within the study period.

SAMPLING

All patients who fell within the age range were selected for the study.

STUDY INSTRUMENT

A proforma was developed de novo for this study. Information extracted from the medical records included patients' age, sex, and diagnoses. The inclusion of diabetes mellitus as part of the reasons for the encounter was recorded for diabetes as a reason for the health services utilization irrespective of other co-morbidities

ETHICAL CONSIDERATION

Ethical clearance for the study was obtained from the Research and Ethics Committee of EKSUTH with protocol number EKSUTH/A67/2024/11/035. Confidentiality of patient information was ensured by the removal of possible identifiers from the completed proforma

III. RESULTS

The proportional share of diabetes mellitus in health services utilization in the geriatric clinic of Ekiti State University shows an increase between 2018 and 2022 except for a small dip in the year 2020. The proportional share of diabetes in overall clinical encounters was markedly reduced in 2020 and only marginally increased in 2021. (figure1). There were more females and the 65 -74 year age range constitutes the largest proportion. (Figure 2 and Table 1). There was no record of health services utilization between March and July 2020 with low level of encounters recorded for the rest of the year and most of 2021. A consistent fall in the number of encounters in the last month of the year is noticeable throughout the study period. (Figure 3).

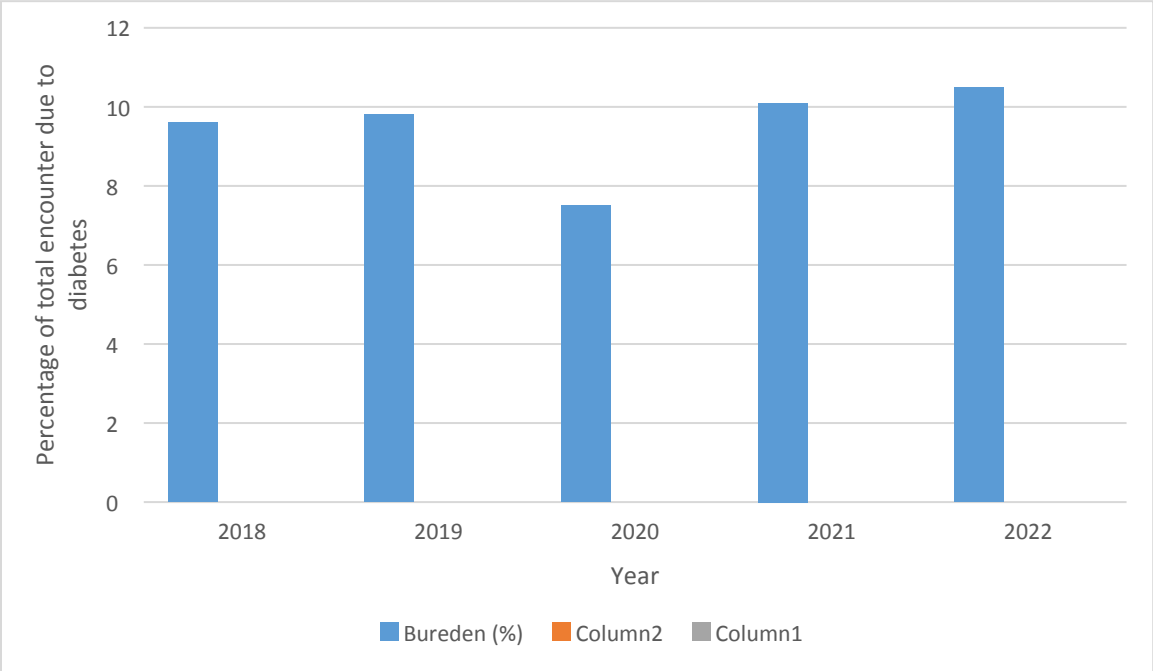

Figure 1: Yearly proportion of clinical encounters due to diabetes mellitus (%)

Table 1: Age Distribution of clinical encounters due to diabetes mellitus

Age (Year)	2018	2019	2020	2021	2022
65 - 74	216 (80'6)	247 (83.5)	45 (60.0)	151 (75.9)	187 (55.3)
75 - 84	46 (17.2)	44 (14.9)	25 (33.3)	40 (20.1)	133 (39.4)
85 - 94	6 (2.2)	4 (1.3)	5 (6.7)	8 (4.0)	18 (5.3)
≥ 95	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)
Total	268	296	75	199	338

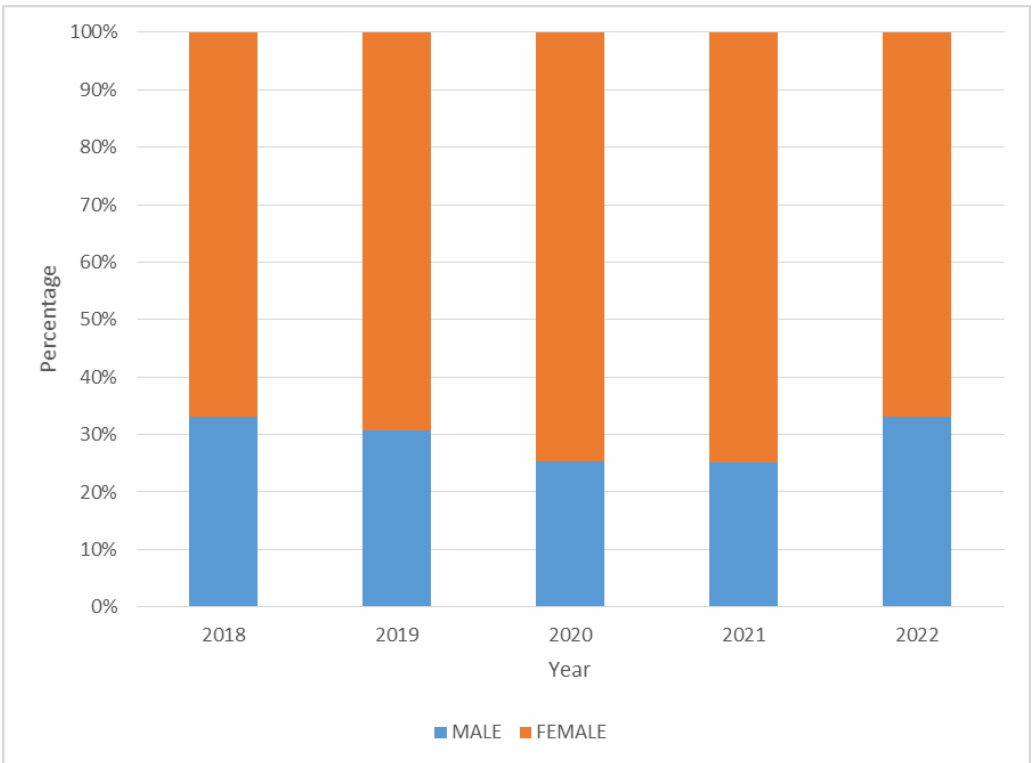

Figure 2: Sex Distribution of clinical encounters due to diabetes mellitus

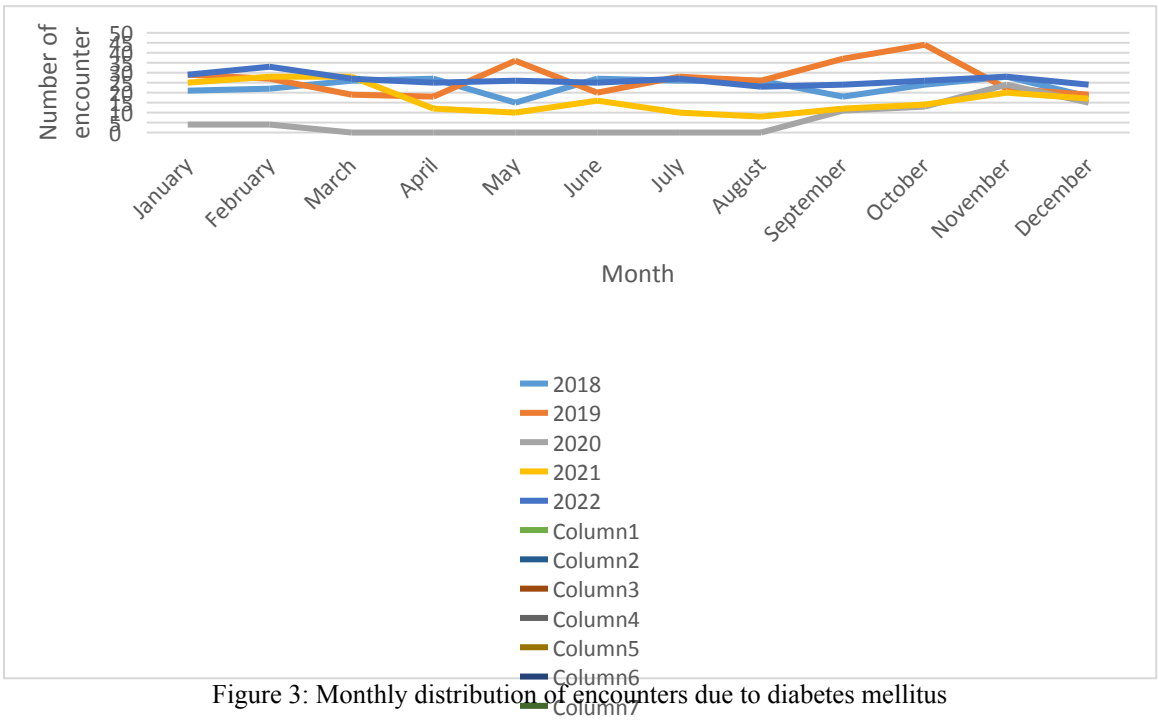

Figure 3: Monthly distribution of encounters due to diabetes mellitus

IV. DISCUSSION

This study has demonstrated the contribution of diabetes mellitus to health services utilization at the geriatric clinic of Ekiti state University Teaching Hospital, Ado Ekiti, south-west Nigeria. An annual increase in the burden of diabetes was demonstrated. This is an important finding because the relatively low prevalence of Diabetes Mellitus in Nigeria compared to many other countries may make it of less priority.[10 -13]This calls for government, administrators, and practitioners to institute measures to stem the tide. This will require adequate attention to diabetes education, management, and provision of infrastructure.

Findings from the encounter record show that there was a reduced hospital service utilization due to diabetes in 2020. Diabetes mellitus is a chronic disease, more attention might be given to acute illnesses that might present as emergencies considering the prevailing COVID-19 pandemic.

The absence of encounter records over some months in 2020 was due to the effect of COVID-19 when there was a knockdown for 6 months (March to July). Even after the knockdown, hospital utilization was low for another year. This may be because of caregivers' reluctance to bring older adults to the hospital due to their increased vulnerability to infection during the pandemic. However, the same reason might not justify low hospital visits for another year. This prolonged hospital avoidance cannot be in the interest of older people who might develop preventable diabetic complications. This raises suspicion of elder neglect using COVID-19 as an excuse. We regarded this as opportunistic elder abuse, a new concept that we defined as an act or omission that constitutes elder abuse but which the abuser believes can be rationalized. The effect of this on health outcomes could be enormous in a country like Nigeria where there is no national policy for the care of older adults and no social security that might serve as a safety net.

The consistent decline in hospital utilization over the last month of the year throughout the study period is seen as a red flag, also raising suspicion of elder neglect. The study population is in Ekiti State, mainly Christians who usually elaborately celebrate Christmas. Resources may be channeled towards Christmas celebrations rather than taking care of the health of older people. A study by Esan et al among older persons in a rural community in Ekiti State, 80% of respondents were Christians.[21] In a household survey carried out in Ado Ekiti among older persons aged 60 years and older as respondents, 51.8 were Christians, 85.4% were currently being abused, and abandonment/neglect constituted 60.9% of reported abuse.[22] Previous studies in Nigeria have documented elder neglect as the most common form of abuse among older adults.[23, 24]

V. CONCLUSION

The burden of diabetes mellitus on health services utilization among older adults is gradually increasing. The periods of low service utilization observed in this study are seen as a red flag for possible elder neglect. Healthcare policy and social security should be instituted for older adults to create a safety nest and

insulate them from abuse. The attending physicians should investigate cases of clinic default and screen them for evidence of abuse during clinical encounters.

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