



Community Health Services: Impact on Geriatrics and Widows

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Authors' contributions

This work was carried out in collaboration among all authors. Author AIO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors AIO and ARUE managed the analyses of the study. Authors AIO, ARUE and BFF managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: Geriatrics and widows are neglected in the society. Geriatrics are seen as unproductive. Widows, on the other hand, are humiliated traditionally by their husbands' family members and community. They face surmounting problems which shadow their urge to seek medical attention.

Aim: To determine the burden of Ear, Nose and Throat (ENT) and medical diseases in Geriatrics and Widows through identification of common ENT and medical conditions in them.

Methods: This was a 7months prospective study from September, 2017 to April, 2018. The study centers were Dagomo foundation home for the elderly in Benin City and St. Benedict Catholic Church, Obijaja in Edo central. Total population sampling technique was used. All the elderly and widows who gave consent to the study constituted the sample size. Health talk was given; history taking, Ear, Nose, Throat and general body examinations were done. Data on the disease burden identified were recorded. Those that needed further evaluation and management were referred accordingly. Data was statistically analyzed with SPSS Version 20. P value < 0.05 was considered statistically significant.

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Result: 50 geriatrics and 67 widows participated. Age ranged 60 – 90 years (mean age of 69.50±7.78years) and 36 – 85years (mean age of 59.61±9.36) for Geriatrics and widows respectively. Geriatrics were 13 males and 37 females while widows were 67. Seventeen (17) different ENT diseases were identified in Geriatrics while 7 ENT conditions and 12 medical conditions were identified in the widows. Predominant ENT diseases were Otitis Media with Effusion (34.9%), Left Cerumen Auris and Otomycosis in similar proportion (20.9%) in Geriatrics. Right Cerumen Auris predominated in widows (65.6%) followed by Left Cerumen auris (50.0%) and Otitis Externa (28.1%). Osteoarthritis was the commonest medical condition (90.6%) in widows. Tests of association were not statistically significant.

Conclusion: There is significant burden of Ear, Nose, Throat and medical diseases in the Geriatrics and widows.

Recommendations: Government should plan specialist healthcare measures to improve the quality of life of geriatrics and widows.

Government should ensure an educational policy to develop age-appropriate training protocols for children and young adults on the challenges associated with aging.

Keywords: Community; service; ENT; medical; geriatrics; widows.

1. INTRODUCTION

Geriatrics and widows are group of people who are neglected in the society. [1, 2]. The geriatrics are the elderly individuals aged 60 years and above in the population. [2] They are seen as being unproductive because most of them have retired from government work and are on pension.[3] In Nigeria, they are low income earners with delayed or no pension. Hence, they need support financially, physically, psychologically and otherwise from their children, relatives, the society and the government.

Elders are seen as wise men, leaders in the family, communities, churches and most societal organizations.[4,5] They are highly respected and valued in the families and communities. Younger generations look up to them and cherish them to tap from their banks of knowledge and wisdom. [4,5] An adage goes that 'what an elder sees while sitting, the young does not see even while standing.'[4,5] They are seen as peacemakers and their speeches are enriched with proverbs and adages which also makes the aged admired by most youths especially traditional ones.[5] According to Chinua Achebe in the book "Things Fall Apart" proverbs are the palm-oil with which words are eaten.'[5] The written heritage of the elderly is usually kept in numerous proverbs with deep meaning. The young people, especially those brought up in western life style, may need interpretations of some of the proverbs of these elderly. [4,5].

Despite these attributes of the aged, most of them are neglected by their families and communities and so are not being presented for

health checks. This justifies this study neglect of the aged is a form of Elder Abuse which is a very important public health issue and violation of human rights [6,7,8].

Earlier studies noted that based on self reports from geriatrics' relatives and proxies, about 4.2% to 15.7% elderly individuals have experienced a form of abuse [6,7,9]. Elder abuse and neglect can tilt these individuals to emotional stress and depression. [9] Literature reports that 15% of the elderly suffer depression and may eventually die if not managed effectively [9,10]. Another group of individuals neglected in the society are widows [7,11].

Widows are women, young or old, whose husbands are dead. [7, 8] They are most times humiliated traditionally by their husbands' family members and community. [8,12] They face surmounting problems. As a preparatory burial ritual, some of the widows are kept to sleep in the rooms where their husbands are being embalmed. [8,12] Some are made to drink the water used to bath the body of their late husband's on the burial day. [8] Some are asked to jump over the corpse of their husband to exonerate themselves from being the cause of their husbands' death even when it is clearly known that the man died of chronic illness, cancer or road traffic accident. [8,12,13] After their husbands' burial, some suffer advances from their husbands' brothers, relatives and other men for sexual pleasures. [8,12,14] Some widows suffer loss of their husband's property to their husband's relative due to absence of their husband's will. [8,14] This causes poor relationship between the widows and their in-

laws. These surmounting problems cause unbearable stress to them in addition to the depression of widowhood. [15] Consequently, most widows become withdrawn from the society and social interactions. [16].

Elderly widows, in some cultures where there is inferior social status for women, are at higher risk of neglect. Their properties are seized in addition causing financial abuse. [6] These problems shadow the urge of these widows to seek medical attention when they are ill [15,16]. They therefore prefer to use whatever money that is left in the family to cater for their children [15]. Hence, these widows need support from the general public, well meaning individuals and government for their medical care and family welfare.

There is great need to accord these women equal opportunity for medical care in the society. [14] Ageing, as a process on its own, can cause atrophy of body tissues. This process in the ears causes atrophy of the hearing apparatus including the skeletal muscles in the ears. It also leads to thinning down of the eardrum. The resultant effect of this atrophy is reduced hearing or deafness due to ageing known as Presbycusis. [17,18] This may necessitate use of hearing aids in these elderly. Hearing aids are very expensive especially when compared to the economic income of these retired elderly individuals and the widows who are struggling to make ends meet. [19] Hence, the elderly need support from their children, relatives, government, charitable organizations, well meaning individuals and corporate bodies. Likewise, the widows need support, especially young widows whose children are not yet of age.

Apart from ageing, poor hygiene in the elderly due to lack of external support and assistance in their day to day domestic and physical activities can cause otorhinolaryngological diseases such as otitis externa, otitis media, otitis media with effusion and chronic suppurative otitis media.

In addition to the fore mentioned, due to lack of domestic assistant, some of the geriatrics keep long and sharp nails. Those long nails are potential risk in the nose and the ears. As a habit, the aged indulges in poking of fingers into the ears which may lacerate the ear canal with resultant bleeding from the ear. [20] This exposed lacerated skin of the outer ear forms a nidus for infection. [20] It may cause a localized bag of pus called a 'boil' or diffuse inflammation of

the skin of the ear canal with its associated excruciating pain. This may disrupt their day to day activities including chewing due to involvement of the temporomandibular joint (TMJ) which regulates mouth opening. The entire spectrum of ear conditions from poking of finger into the ears may eventually lead to hearing loss. [20].

The long sharp nails can further rupture the ear drum, leaving this perforated tympanic membrane at the risk of chronic suppurative otitis media. This suppurative infection can be complicated by brain abscess which is very fatal.

Studies have shown habitual ear cleaning as an act in the elderly. They are less busy and spend time cleaning their ears [20]. Some of the materials they use in cleaning the ears are bird feathers, match stick, broom sticks, tip of car keys, house keys and cotton buds. [21] These sharp pointed objects also perforate the ear drums with resultant suppurative otitis media which may be acute or chronic. [22] This suppurative ear condition may be complicated with meningitis and brain abscess. [20].

The ears are self cleansing and so do not need external cleaning. Avoidance of insertion of any foreign body, long objects, pointed or sharp objects into the ears will help to prevent otological diseases in the geriatrics and widows. Hence, justifies this study.

Ear cleaning also sends signal to the brain to produce more oil of the ear called cerumen. This oily cerumen in the ear keeps accumulating in the canal and gets impacted forming impacted cerumen auris. [21] This blocks the ear and causes hearing loss or deafness. Thus, leaves the geriatrics at the mercy of road traffic accidents. This impacted wax can absorb water, swells up and impinge on the nerve endings in the canal causing infection of the outer ear called otitis externa. This may progressively cause pressure necrosis, eats up the skin of the canal and may spread to involve bones of the ear causing the infection known as osteitis and osteomyelitis.

These long sharp nails, when used to pick the nose may lacerate the mucous membrane of the nose, rupture their blood vessels and cause bleeding from the nose, medically referred to as Epistaxis. This can cause numerous life threatening complications including shock, loss of consciousness and renal failure.

Some individuals, including elderly and widows, use their long sharp nails to pick out objects impacted in between their teeth. The sharp nails may injure the gums leading to a condition called gingivitis with its consequent complications. These long nails harbour infective organisms which are introduced into the mouth while picking the teeth. The organisms may cause oral infections called Tonsillitis with its accompanying sore throat, difficulty with swallowing, painful swallowing and pooling of saliva in the mouth. The accompanying symptoms may progressively worsen, affecting their quality of life, thus necessitating surgical intervention. This throat condition can as well be complicated with kidney failure through a medical condition known as Glomerulonephritis. Proper and good personal hygiene would have prevented all these menace. Due to a property the tonsil shares with the heart, this infection can as well be complicated with heart failure medically referred to as Infective Endocarditis [23]. All the aforementioned ear, nose and throat diseases are both preventable and treatable, thus, re-emphasizing the justification for this study.

1.1 Aim

The aim of this study was to determine the burden of Ear, Nose and Throat (ENT) and medical diseases in Geriatrics and Widows through identification of common ENT and medical conditions in them.

2. METHODS

This research study was a 7months prospective study carried out after obtaining ethical clearance from hope hospital, Benin City and permissions from the study centres. Two communities, picked at random were the study centers. They were Dagomo foundation, a non residential home for care of the elderly in Benin City and St. Benedict Catholic Church, Obiaja in Edo central senatorial zone. Total population sampling technique was used. All the elderly and widows who gave consent to the study constituted the sample size. Study commenced from 14th September, 2017 to 28th April, 2018 after obtaining due consent from participants. The activities performed for the study were health talk to the general study population, history taking and examination of the Ear, the Nose, the Throat and the general body. Blood pressure measurements, Malaria parasite test and Random blood sugar tests were done for the widows. Each ear was regarded as a separate entity. Soft wax and foreign bodies in the ear were removed. Suppurative ears were

toileted and ear swabs taken for microscopy, culture and sensitivity (MCS). Ear dressing with ciprofloxacin, a broad spectrum antibiotic ear drop, was commenced for the suppurating ears. Those that needed further evaluation and management were referred accordingly. Data on the disease burden identified were recorded and statistically analyzed with SPSS Version 20. P value < 0.05 was considered statistically significant.

2.1 Exclusion Criteria

During the entire course of this study, a total of 98 Geriatrics and 120 Widows participated during the health talks.

All those who did not give consent for the medical and otorhinolaryngological examinations were excluded from the study. Five women initially gave consent but left midway due to other competing priorities and were thus excluded.

2.2 Inclusion Criteria

All participants who gave consent for the medical and otorhinolaryngological examinations were included for the study.

3. RESULT

50 geriatrics and 67 widows participated. Age ranged 60 – 90 years with a mean age of 69.50 ± 7.78 years for the geriatrics and 36 – 85 years with a mean age of 59.61 ± 9.36 for the widows. The Geriatrics were 13 males and 37 females while the widows were 67. Seventeen (17) different Ear, Nose and Throat diseases were identified in Geriatrics while 6 ENT conditions and 12 medical conditions were identified in the widows. Predominant ENT diseases were Otitis Media with Effusion (34.9%), Left Cerumen Auris and Otomycosis in similar proportion of 20.9% in the Geriatrics. Right Cerumen Auris predominated in widows (65.6%) followed by Left Cerumen auris (50.0%) and Otitis Externa (28.1%). Osteoarthritis was the commonest medical condition (90.6%) in the widows. Tests of association were not statistically significant.

4. DISCUSSION

4.1 Disease Burden

Seventeen different ENT diseases were identified in the geriatrics, six ENT diseases and twelve medical conditions in the widows. Management of each poses a great burden to the subjects and their family.

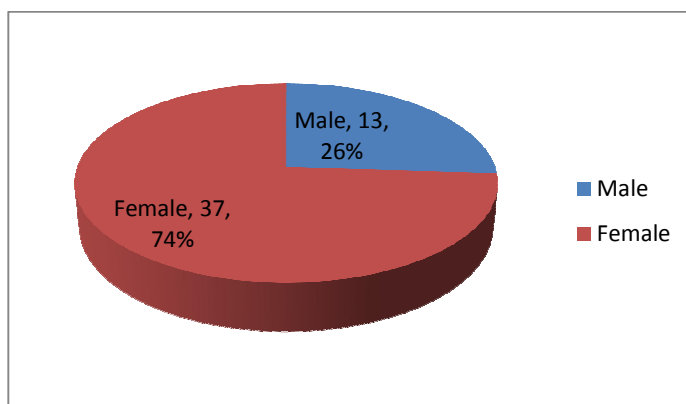


Fig. 1. Gender of geriatrics

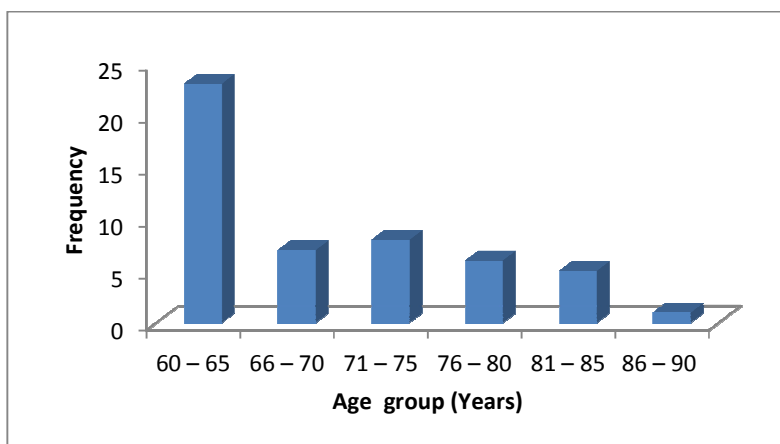


Fig. 2. Age group of geriatrics
Mean age for geriatrics 69.50±7.781 years

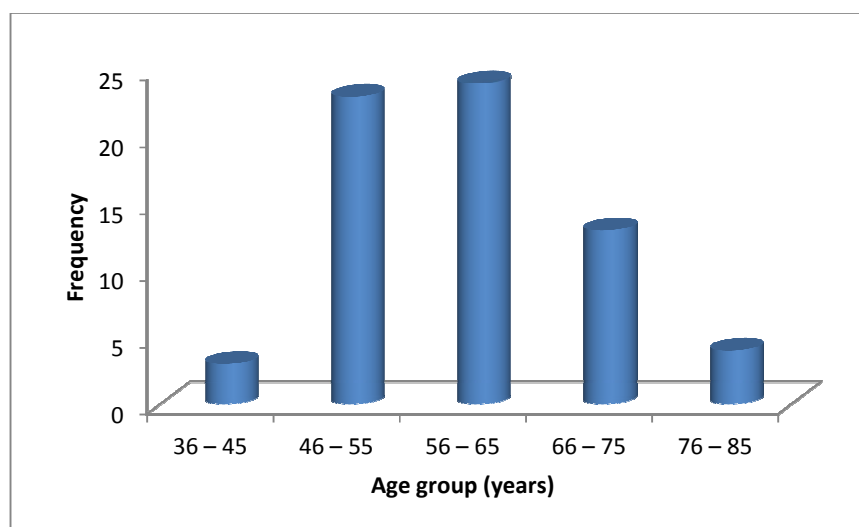


Fig. 3. Age group of widows
Mean age for widows 59.61±9.36 years

Table 1. Ear nose and throat conditions in the geriatrics and the widows

Conditions	Geriatrics (n = 43)		Widows (n = 32)	
	Frequency	%	Frequency	%
Acute tonsillitis	1	2.3	0	0.0
Allergic Rhinosinusitis	5	11.6	0	0.0
Cerumen Auris (Left ear)	9	20.9	16	50.0
Cerumen Auris (Right ear)	7	16.3	21	65.6
Chronic Rhinosinusitis	2	4.7	1	3.1
Chronic suppurative otitis media	5	11.6	0	0.0
Chronic tonsillitis	3	7.0	2	6.3
Ear drum perforation	1	2.3	0	0.0
Eustachian tube dysfunction	2	4.7	0	0.0
OSA	1	2.3	0	0.0
Otitis Externa	2	4.7	9	28.1
Otitis Media with effusion	15	34.9	0	0.0
Otitis media	2	4.7	0	0.0
Otomycosis	9	20.9	1	3.1
Pharyngeal trauma	1	2.3	0	0.0
Presbycusis	3	7.0	0	0.0
Trauma to the head and ear	1	2.3	0	0.0

Table 2. Medical conditions in widows

Conditions	Frequency (n = 32)	Percentage
Allergy	1	3.1
Chronic headache	6	18.8
Chronic leg ulcer	1	3.1
Diabetes mellitus	2	6.3
Helminthiasis (Worm)	1	3.1
Insomnia	1	3.1
Malaria	21	65.6
Osteoarthritis	29	90.6
Peptic ulcer	5	15.6
Poor vision	7	21.9
Uncontrolled hypertension	7	21.9
Upper respiratory tract infection	3	9.4

Of note is the novel finding of high blood pressure level of 180/110mmHg and 250/100mmHg in two widows in this study. This can lead to a cardiovascular accident (CVA) popularly called 'stroke'. It can as well cause a sudden death through a cardiac arrest. These patients can as well experience sudden fall during active activity with imminent head injury and its consequent complications. Yet, these widows were walking about with such high blood pressures, reflecting the attitude of some widows towards their health. A similar study by Perkins et al in 2016 noted high blood pressure in widows which was more in those who lost their husbands before 4 years of marriage. [24] This can be attributed to stress of losing a loved one very early in marriage, stress of burial and emotional imbalance from problems of widowhood.

Each of these identified ailments in this study, if left untreated, will progress to fatal complications. Hence the need for specialist cares and regular medical check up on the widows.

4.2 Family Stress

Most young families are undergoing considerable stress for their family upkeep. The burden of their elderly multiplies the stress. So endowment insurance needs to be expanded [25]. Of great note is that during the period of study, pre clinical interview of these elderly in the society showed that at the extreme, some of the geriatrics, instead of being loved, supported and cared for, they were being seen as witches and wizards causing all the problems and stress in their family and society, retarding the growth and progress of

their children, relatives and their community. Following this trend, these elderly were abandoned and neglected by their children, relatives, their community and the society. These

aged hence, resort to their own fate for financial commitments, daily activities, medical and surgical care, emotional and psychological problems.

Table 3. Association between age group and ENT conditions for geriatrics

ENT conditions	Age group Frequency (%)					
	60-65	66-70	71-75	76-80	81-85	86-90
None	3(50.0)	1(16.7)	2(33.3)	0(0.0)	0(0.0)	
Acute Otitis Media	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Acute Tonsillitis	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Allergic Rhinosinusitis	1(50.0)	0(0.0)	0(0.0)	1(50.0)	0(0.0)	0(0.0)
Right Cerumen Auris	0(0.0)	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)
Chronic Tonsillitis	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Left Cerumen Auris	5(62.5)	0(0.0)	0(0.0)	1(12.5)	2(25.0)	0(0.0)
Bilateral Cerumen Auris	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Bilateral CSOM	4(57.1)	0(0.0)	2(28.6)	0(0.0)	1(14.3)	0(0.0)
Bilateral ETD	0(0.0)	0(0.0)	1(33.3)	0(0.0)	1(33.3)	1(33.3)
Bilateral OME	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Bilateral otomycosis	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Right otomycosis	0(0.0)	0(0.0)	1(50.0)	1(50.0)	0(0.0)	0(0.0)
Chronic pharyngitis	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Chronic Rhinosinusitis	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Left otomycosis	0(0.0)	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)
Left ear drum perforation,	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Right otitis externa						
Left Otitis Media with Effusion	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Left Otitis externa	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Obstructive Sleep Apnea	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Pharyngeal Trauma	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Presbycusis	1(50.0)	1(50.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Right Otitis Media with Effusion	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Right CSOM	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Right ear drum perforation	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Trauma to the head and ear	1(100.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
Total	23(46.0)	7(14.0)	8(16.0)	6(12.0)	5(10.0)	1(2.0)

Pearson chi square value = 116.792^a, df = 125, p > 0.05

Table 4. Association between age and ENT conditions in widows

ENT conditions	Age group Frequency (%)				
	36-45	46-55	56-65	66-75	76-85
None	0(0.0)	14(37.8)	13(35.1)	7(18.9)	3(8.1)
Bilateral cerumen	1(9.1)	4(36.4)	4(36.4)	2(18.2)	0(0.0)
Chronic Rhinosinusitis	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Chronic tonsillitis	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Allergic Rhinosinusitis	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Left Cerumen Auris	0(0.0)	1(50.0)	1(50.0)	0(0.0)	0(0.0)
Otitis externa	2(33.3)	1(16.7)	0(0.0)	2(33.3)	1(16.7)
Otomycosis	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Right Cerumen Auris	0(0.0)	3(42.9)	2(28.6)	2(28.6)	0(0.0)
Total	3(4.5)	23(34.3)	24(35.8)	13(19.4)	4(6.0)

Chi square value 28.191^a, df = 32, p > 0.05 (not significant)

Table 5. Association between age and medical conditions in the widows

Medical Conditions	Age group Frequency (%)				
	36-45	46-55	56-65	66-75	76-85
Chronic Leg ulcer	2(25.0)	2(25.0)	4(50.0)	0(0.0)	0(0.0)
Diabetes	0(0.0)	0(0.0)	0(0.0)	1(0.0)	0(0.0)
Insomnia	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Malaria	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)
Malaria, uncontrolled hypertension	1(8.3)	6(50.0)	5(41.7)	0(0.0)	0(0.0)
Malaria and URTI	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Osteoarthritis	0(0.0)	0(0.0)	1(50.0)	1(50.0)	0(0.0)
Osteoarthritis and malaria	0(0.0)	3(23.1)	5(38.5)	4(30.8)	1(7.7)
Osteoarthritis and poor vision	0(0.0)	2(28.6)	1(14.3)	3(42.9)	1(14.3)
Osteoarthritis and uncontrolled hypertension	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Osteoarthritis and URTI	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Peptic ulcer	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)
Peptic ulcer, Helminthiasis	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Peptic ulcer, malaria	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Peptic ulcer and osteoarthritis	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Poor vision	0(0.0)	1(25.0)	2(50.0)	1(25.0)	0(0.0)
Poor vision, allergies, osteoarthritis	0(0.0)	0(0.0)	0(0.0)	0(0.0)	1(100.0)
Poor vision and malaria	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Poor vision and osteoarthritis	0(0.0)	1(33.3)	1(33.3)	0(0.0)	1(33.3)
Uncontrolled hypertension	1(33.3)	2(66.7)	0(0.0)	0(0.0)	0(0.0)
Uncontrolled hypertension and osteoarthritis	0(0.0)	0(0.0)	1(100.0)	0(0.0)	0(0.0)
Uncontrolled hypertension and peptic ulcer	0(0.0)	1(100.0)	0(0.0)	0(0.0)	0(0.0)
Total	3(4.5)	23(34.3)	24(35.8)	13(19.4)	4(6.0)

Pearson chi-square value = 80.813^a, df = 88, p > 0.05

Health workers especially mental health specialists are therefore encouraged to intensify health education in the communities to strike a balance between the elderly and their family members. This will help to prevent and reduce psychological and family stress both in the aged and their family members. [10,26,27,28,29] .

4.3 Common Otological Diseases

Otitis media with effusion (OME), Cerumen auris, Otomycolosis and Otitis externa were the commonest otological diseases in this study. These disease conditions are preventable and treatable. If left untreated, they will progress to life threatening complications.

Ear diseases predominated in the geriatrics in this study. In a recent study in Saudi Arabia, ear diseases were recorded in 49.3 % of the elderly with the commonest being hearing loss. This agrees with the finding of Otitis media with effusion, Cerumen auris, Otomycolosis and Otitis externa as the common ENT diseases in this study which can confer some degree of conductive hearing loss. [30]

Most of the Cerumen auris were asymptomatic and have lingered for long periods both in the geriatrics and in the widows. It is worthy of note that most of the participants echoed their words of testimony, (**this is a miracle**), upon syringing out the impacted cerumen which blocked their ears. They had instant better hearing. This reflects the need for regular otorhinolaryngological checkups in this group of individuals and further emphasizes the need for research studies to be solution-oriented.

4.5 Hearing Loss

Due to ageing, the elderly are at risk of hearing loss due to ageing process called presbycusis, which was seen in 7.0% of the geriatrics in this study. This can be managed and rehabilitated. Its rehabilitation includes the use of hearing aids for assistive listening. Cost of one hearing aid is in hundreds of thousand which is a great burden to the individual and the family. This condition, if neglected, can cause hearing loss (deafness). A similar study reported hearing loss in 63.1% of their subjects [17]. This finding is high when compared singularly to the 7.0% Presbycusis in this study. However, all the identified ear

Table 6. Association between gender and ent conditions for geriatrics

ENT conditions	Gender	
	Male	Female
None	2(33.3)	4(66.7)
Acute Otitis Media	0(0.0)	1(100.0)
Acute Tonsillitis	0(0.0)	1(100.0)
Allergic Rhinosinusitis	1(50.0)	1(50.0)
Right Cerumen Auris	0(0.0)	1(100.0)
Chronic Tonsillitis	0(0.0)	1(100.0)
Left Cerumen Auris	0(0.0)	1(100.0)
Bilateral Cerumen Auris	1(12.5)	7(87.5)
Bilateral CSOM	0(0.0)	2(100.0)
Bilateral ETD	1(100.0)	0(0.0)
Bilateral OME	2(28.6)	5(71.4)
Bilateral otomycosis	1(33.3)	2(66.7)
Right otomycosis	0(0.0)	1(100.0)
Chronic pharyngitis	0(0.0)	1(100.0)
Chronic Rhinosinusitis	0(0.0)	2(100.0)
Left otomycosis	1(100.0)	0(0.0)
Left ear drum perforation,	0(0.0)	1(100.0)
Right otitis externa	0(0.0)	1(100.0)
Left Otitis media with effusion	1(100.0)	0(0.0)
Obstructive Sleep Apnea	0(0.0)	1(100.0)
Pharyngeal Trauma	0(0.0)	1(100.0)
Presbycusis	1(50.0)	1(50.0)
Right Otitis Media with Effusion	1(100.0)	0(0.0)
Right Chronic Suppurative Otitis Media	1(100.0)	0(0.0)
Right ear drum perforation	0(0.0)	1(100.0)
Trauma to the head and ear	0(0.0)	1(100.0)
Total	13(26.0)	37(74.0)

Pearson Chi-square value = 22.435^a, df = 25, p > 0.05 no significant relationship

pathologies in this index study can cause conductive, sensorineural or mixed hearing loss which can be objectively confirmed with Impedance Audiometric test (Tympanometry and Acoustic response) and Pure Tone Audiometry (PTA). Hearing loss, if not treated, leaves the elderly at the risk of both home and road traffic accidents.

4.6 Commonest Medical Burden

Osteoarthritis, Malaria and Chronic headache were the commonest medical diseases in the widows. Arthritis was predominant in a similar study by Perkins et al [24]. This finding was more in the older widows which conforms with the highest record of 38.5% in widows 56 to 65years in this study. The result was in women who lost their husbands after ten years of marriage or more but this index study was not rated according to duration of widowhood.

Malaria and other chronic ill health were similarly noted. [24] Untreated Osteoarthritis can cause a fall with resultant head injury and its consequent complications. Widows need good specialist attention to be physically and psychologically fit to manage their homes and be more productive to the society.

5. CONCLUSION

There is significant burden of Ear, Nose, Throat and medical diseases in the Geriatrics and widows.

6. RECOMMENDATIONS

We therefore recommend that Government should plan specialist healthcare measures to improve the quality of life of geriatrics and widows. This can be achieved by the government forming public-private-partnership with the government providing basic and specific equipments for specialist care. The government should ensure a mandatory policy to encourage widows to go for regular specialist checkups irrespective of their mood. Specific health insurance package should be created for widows and their family members. Women should be empowered by promoting female education through scholarship awards and prizes.

Lastly, government should ensure an educational policy to develop age-appropriate training protocols for children, adolescents and young adults on challenges associated with the

processes of ageing. They should be encouraged to prepare mentally and financially for their retirement and realities of old age through savings, investments and insurance schemes to reduce the burden of diseases at old age. All schools and business establishments should incorporate and highlight in their schemes and workshops the topic "Old age, Challenges and management" this will stimulate all to prepare for old age.

Individuals should therefore prepare for their old age during their active working years.

CONSENT

All the elderly and widows who gave consent to the study constituted the sample size.

ETHICAL APPROVAL

This research study was a 7months prospective study carried out after obtaining ethical clearance from hope hospital, Benin City and permissions from the study centres.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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