


**COMMUNITY
OTORHINOLARYNGOLOGICAL
SERVICE IN A GROUP OF
SCHOOLS IN SOUTH- SOUTH
OF NIGERIA**

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- ▶ **PAPER PRESENTATION**
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INTRODUCTION

- ▶ Community otorhinolaryngological service is essential in urban and rural communities as this becomes an avenue through which Otorhinolaryngological diseases can be detected.
 - ▶ Parents, guardians and individuals may be ignorant of these diseases.
 - ▶ Even when aware, may not know what to do, hence the benefit of community Otorhinolaryngological services
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AIM

- ▶ To determine the commonest otological disease among school children in a group of schools

METHOD

- ▶ A 4-month prospective cross sectional study
 - ▶ in Russell International Group of Schools,
 - ▶ Ethical clearance; permission from the school authority
 - ▶ Consent from the parents and guardians.
 - ▶ The staff, children, parents and guardians were educated on ear hygiene and the aim of the study.
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METHOD

- ▶ Stratified sampling technique was used to select the study population.
- ▶ Interviewer administered questionnaires were completed.
- ▶ Otoscopy was done, each ear being a separate entity.
- ▶ Those with otological diseases were referred to Ear, Nose and Throat department UBTH,
- ▶ Further evaluated and managed accordingly.
- ▶ Analysis –SPSS version 16; Results in tables and figures

TABLE 1

SOCIODEMOGRAPHICS

AGE (YEARS)	N (%)
1 – 5	47 (28.1)
6 – 10	65 (38.9)
11 – 15	48 (28.7)
16 – 18	7 (4.2)
TOTAL	167 (100)

Mean age = 8.99 ± 5.84

TABLE 2 : GENDER

Sex	N (%)
Male	91 (54.5)
Female	76 (45.5)
Total	167 (100)

TABLE 3: SYMPTOMS

Symptoms	N = 167 N* (%)
Ear pain	32(19.2)
Frequent ear tugging	14(8.4)
Poking fingers in ears	22(13.2)
Fever with ear problem	11(6.6)
Feeling of water in ear	25(14.9)
Screaming on touching the ear	12(7.2)
Ear Discharge	2(1.2)
Itching in the ear	19(11.4)
Presence of visible matter in ears	14(8.4)
Ear blockage	7(4.2)
Noise in the ear	33(19.8)

TABLE 3: OTOSCOPIC FINDINGS

N = 334

Variable	Right ear N (%)	Left ear N (%)	Total N (%)	Diagnosis
Intact ,shiny TM	67 (40.1)	73 (43.7)	140 (41.9)	Apparently normal
Wax	60 (35.9)	49 (29.3)	109 (32.6)	Cerumen Auris
Intact, dull TM	14 (8.4)	17 (10.2)	31 (9.3)	Otitis Media with Effusion
Intact, dull retracted TM	6 (3.6)	24 (14.4)	30 (9.0)	Eustachian Tube Dysfunction
Hyperemic TM	18 (10.8)	3 (1.8)	21 (6.3)	Otitis Media
TM Perforation*	2 (1.2)	1 (0.6)	3 (0.9)	CSOM
Fungal hyphae*	1 (0.6)	0 (0.0)	1 (0.3)	Otomycosis
Foreign body *	1 (0.6)	0 (0.0)	1 (0.3)	Foreign body

Multiple findings*

Otoscopic findings (cont'd)

- ▶ TM => Tympanic membrane
- ▶ CSOM => Chronic suppurative otitis media
- ▶ 2 (1.2%) right ear discharging pus



Bead

TABLE 4
PREVALENCE OF CERUMEN AURIS

Prevalence	N = 334	%
Unilateral		
Right	25	7.5
Left	14	4.2
Total	39	11.7
Bilateral	70	20.9
Total	109	32.6

ASSOCIATION OF AGE AND CERUMEN AURIS

Age (years)	Cerumen auris
	N (%)
<u>≤ 5</u>	54 (57.4)
6 – 10	41 (31.5)
11 – 15	12 (12.5)
16 – 18	2 (14.3)
Total	109 (32.6)

$P < 0.001$

ASSOCIATION OF SEX AND CERUMEN AURIS

N=334

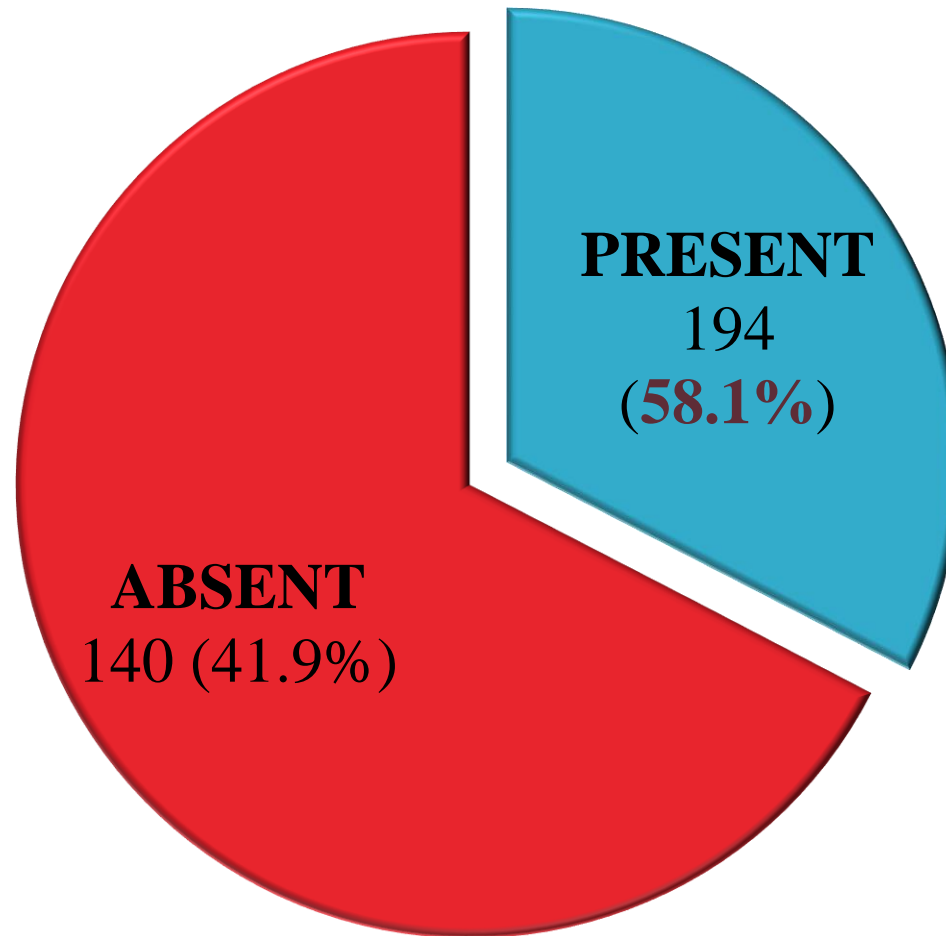
Sex	Cerumen auris N (%)
Male	52 (28.6)
Female	57 (37.5)
Total	109 (32.6)

M : F = 1 : 1.3

P = 0.084

FIGURE 1

PREVALENCE OF OTOLOGIC DISEASE



ASSOCIATION OF AGE AND OTOLOGIC DISEASE

N=334

Age (years)	Otologic disease
	N (%)
≤ 5	66 (19.8)
6 – 10	79 (23.7)
11 – 15	47 (14.1)
16 – 18	2 (0.6)
Total	194 (58.1)

P < 0.000

FIGURE 2

RISK FACTORS FOR OTOLOGIC DISEASE

Risk factors	N =167	N* (%)
Cleaning with cotton bud		32(19.2)
Scratching with keys, match stick, broom stick		26(15.6)
Poking fingers in ears		22(13.2)
Recurrent nasal discharge		19(11.4)
Use of ear phones / audio devices		16(9.6)
Previous use of ear drops		14(8.4)
Allergy / excessive sneezing		11(6.6)
Previous use of quinine, chloroquin, gentamycin		10(6.0)
Swimming		6(3.6)
Exposure to excessive noise		4(2.4)
		1(0.6)

DISCUSSION

Prevalence of Otologic diseases

- ▶ **58.1%.....Index study**
- ▶ 56.3%.....Salisu A, 2010
- ▶ 20.85%.....Ibekwe et al, 2011
- ▶ 3.32%.Yang et al 2011
- ▶ 75.7%.....Adhikari P,2008
- ▶ 81.6%..... { Adhikari P, 2009

Commonest Otologic diseases

- ▶ **Wax32.6%.....index study**
- ▶ Wax.....46.7%..... {Eziyi, Amusa, Nwawolo,Ezeanolue, 2011}
- ▶ Wax52.6%..... {Olusanya BO, Okolo AA,Ijaduola GT, 2000}
- ▶ Wax60.6%.... { Adhikari P, 2008}
- ▶ Wax.....62.0%..... { Adhikari P, 2009}

DISCUSSION

- ▶ **Association of Sex and cerumen auris**
- ▶ The **M: F (wax)....1 : 1.3....index study**
- ▶ (p= 0.305).

- ▶ The **M: F (wax)....1.2:1**
- ▶ { Eziyi, Amusa, Nwawolo,Ezeanolue, 2011 }

DISCUSSION

- ▶ **Index study** **Eziyi, Amusa, Nwawolo, Ezeanolue, 2011**
- ▶ 20.9 bilateral 52.0% bilateral
- ▶ 11.7 unilateral 48.0% unilateral
- ▶ More in right ear More in right ear

- ▶ **Csom 33.9%.....Akinpelu and Amusa, 2006**
- ▶ **otitis externa 21.28%....Ibekwe et al, 2011**
- ▶ **chronic otitis media.....25.4%.....Salisu 2010**

***least was foreign body; 11.0% in india**

CONCLUSION

- ▶ Otolological diseases are common among school children
- ▶ Cerumen auris is the predominant otological disease among school children

RECOMMENDATION

- ▶ Otorhinolaryngologists and auxiliary health workers should be more involved in community health services which will help in screening and detection of ear diseases.
- ▶ Consequences of wax impaction should be made known to parents, guardians and school authorities to improve school performance and prevent hearing loss.
- ▶ Pre-school entrance otological examination should be made mandatory to reduce the prevalence of ear diseases

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THANKS FOR LISTENING!

