PATTERN OF HEARING IMPAIRMENT AMONG PATIENTS WITH HEARING LOSS ATTENDING AT THE ORL DEPARTMENT OF MUHIMBILI NATIONAL HOSPITAL.

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Mmed (Otorhinolaryngology) Dissertation

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By Rachel Ernest Mkumbo, MD

A Dissertation submitted in (partial) fulfillment of the requirement for the Degree of Master of Medicine (Otorhinolaryngology) of Muhimbili University of Health and Allied Sciences.

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CERTIFICATION.

The undersigned certifies that he has read and hereby recommends for acceptance of the dissertation entitled **Pattern of hearing impairment among patients with hearing loss attending at the Orl Department of Muhimbili National Hospital,** in fulfillment of the requirements for the degree of Master of Medicine (ORL) of the Muhimbili University of Health and Allied Sciences.

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DECLARATION AND COPYRIGHT

I, Dr Rachel Ernest Mkumbo, declare that this dissertation is my own original work and
that it has not been presented and will not be presented to any other university for a
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Signature: Date:

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DEDICATION.

I dedicate this work to my husband John Bosco, my sons Nicodemus, Benedicto and Meric for their love, understanding, encouragement and endurance throughout my studies.

ABSTRACT

Introduction: Hearing loss is a world health problem with significant physical and psychosocial repercussions. Although there is no cure for certain forms of hearing loss, many patients can be helped, especially when the problem is recognized early. It has been estimated that at least 50 percent of the burden of hearing loss could be prevented by primary, secondary and tertiary preventive measures.

Aim: To determine the pattern of hearing impairment among patients with hearing loss attending the ORL department at Muhimbili National Hospital, Dar es Salaam, Tanzania. The study was an analytical cross-sectional hospital based, conducted at MNH, the largest referral hospital in Tanzania which serves the largest number of Tanzanian population. It is also the referral hospital for all patients from Tanzania Mainland and Zanzibar. The MNH also serves as the teaching hospital for Muhimbili University of Health and Allied Sciences.

Materials and methods: In this study, 187 patients with hearing loss were recruited from ORL department (including the wards and clinic). Information was collected by using data collection forms and was filled by the researcher. Otological examination was done by the researcher, tympanometry and audiometry tests were done by an audiologist to assess hearing disorders. The data was analyzed using the SPSS program.

Results: Out of 187 patients with hearing loss, 51.9% were males and 48.1% were females. The majority of patients (32.6%) were concentrated in the age group of 19-36 years and the age group of 0-18 years (26.2%). Results also show the majority of patients (85%) had bilateral hearing loss and 15% had unilateral hearing loss, where as 8% had hearing loss of right ear and 7% the left ear. The sensorineural type of hearing loss was prevalent in 79.3%, followed by the conductive hearing loss (14.1%) and mixed

hearing loss type found in 6.6% of patients. 15.9% had unilateral mild hearing loss, also unilateral moderate severe had 15.9% and only 4.4% had bilateral profound hearing loss.

Conclusion: In overall the pattern of hearing loss as seen at MNH, most of the patients have bilateral hearing loss with mild to moderate severity. Sensorineural was the dominating type of hearing loss seen, followed by conductive and mixed.

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ABBREVIATIONS

Db (decibel) – a unit used in measuring sound pressure levels in acoustics.

MNH – Muhimbili National Hospital

HL- Hearing loss

OM – Otitis Media

PTA – Pure Tone Average

WHO - World Health Organisation

MUHAS – Muhimbili University Of Health and Allied Sciences

ORL – Otorhinolaryngology

ENT – Ear, Nose and Throat

NIHL – Noise induced hearing loss

OE- Otitis externa

Rt -Right

Lt -Left

TM -Tympanic membrane

FB -Foreign body

US – United States of America

SPSS - Statistical Package for Social Sciences