

Assessment of Mothers' Knowledge and Practice towards Caring for their Children with Ear Problems

Thesis

*Submitted in partial fulfillment of the Master Degree
in Nursing Sciences (Pediatric Nursing)*

By

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2015

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2015



First thanks to *ALLAH* to whom I relate any success in achieving any work in my life.

Special thanks are due *Assist. Prof. Dr. Zeinab Fathy Elsayed*, Assistant Professor of Pediatric, Faculty of Nursing - Ain Shams University, for her sincere efforts and fruitful encouragement.

Last but not least, I thank all patients and subjects participated in this work

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Glossary of Abbreviations and Acronyms

AAFP/AAP	American Academy of Family Physicians, American Academy of Pediatrics
AIED	Autoimmune inner ear disease
ANDS	Auditory neuropathy spectrum disorder
AOM	Acute Otitis Media
AOMwiP.....	Acute otitis Media with Perforation
AOMwoP	Acute Otitis Media without Perforation
ASHA	American Speech Language and Hearing Association
CHL	Conductive Hearing Loss
CSOM	Chronic Suppurative Otitis Media
dB	Decibels
EHDI.....	Early Hearing Detection and Intervention programs
ENT	Ear, Nose and Throat
ET	The Eustachian tube
FB	Foreign Body
HI	Hearing impairment
HL	Hearing Loss
IAV	Influenza A virus
LAIV	Live attenuated influenza vaccine
MEF	Middle Ear Fluid
MOH	Ministry of health
NHCA	National Hearing Conservation Association
OM	Otitis Media
OME	Otitis Media with Effusion
ORL	Otorhinolaryngology
PCV-7.....	Seven-valent pneumococcal conjugate vaccines

Glossary of Abbreviations and Acronyms (Cont...)

PE	Placed eardrum tube
RAOM	Recurrent Acute Otitis Media
RR	Risk ratio
RSV	Respiratory syncytial virus
SNHL	Sensorineural Hearing Loss
TIV	Trivalent inactivated influenza vaccine
UGT	Uridinediphospho gluconurateglucuronosyl transferase
URI	Upper Respiratory Infections
VRT	Vestibular rehabilitation therapy
WHO	World Health Organisation

Glossary of Scientific Terms

Acute otitis media Acute infection of the middle ear with rapid onset of signs and symptoms; middle ear effusion present.

Autoimmune inner ear disease is an inflammatory condition of the inner ear. It occurs when the body's immune system attacks cells in the inner ear that are mistaken for a virus or bacteria.

Cholesteatoma Abnormal collections of squamous epithelium and keratin debris that usually involves the middle ear and mastoid, and can be congenital or acquired.

Cochlea Snail-shaped structure in the inner ear that contains the organ of hearing.

Corti a structure in the cochlea of the ear consisting of hair cells that serve as receptors for sound waves.

Decibel The unit used to indicate the relative magnitude of sound pressure level and other acoustical quantities, abbreviated as 'dB'.

Eardrum (Tympanic Membrane) Thin, cone-shaped and flexible structure that separates the external ear from the middle ear and transmits sound from outside the body to inside the ear.

Ear wax A yellowish sticky substance produced in the ear canal. It protects the skin of the ear canal, assists in cleaning and also provides protection from bacteria, fungi, insects and water.

Eustachian Tube A small passageway on either side of the head that connects the upper part of the throat to the middle ear. It supplies fresh air, drains fluid, and keeps air pressure between the nose and the ear at a steady level.

FOREIGN BODY IN THE EAR A foreign object in the external ear canal. Foreign objects are often placed in the ear by young children or by accident while trying to clean or scratch the ear. There is often an accompanying external ear infection.

Grommet A small tube surgically placed across the eardrum to re-establish ventilation of the middle ear. It is also called a ventilation tube, a PE tube (pressure equalisation tube), or a tympanostomy tube.

Labyrinth (Vestibular System) Organ of balance located in the inner ear. The labyrinth consists of three semicircular canals and the vestibule.

Middle ear effusion Fluid in the middle ear, regardless of etiology, pathogenesis, pathology, or duration. Can be serous, mucoid, or purulent, or a combination of these.

Otalgia ear pain

Otorrhea Discharge from the ear.

Tinnitus Is the name given to the subjective experience of hearing sounds in the ear or head that have no basis to reality in the environment

Tympanoplasty Is a surgical procedure for correcting damage to the eardrum.

Tissue Spear Primary health procedure using tissue (or toilet) paper to mop up active pus and discharge from ear canal and middle ear (if perforated). Important to use best practice in order to effectively remove blockage of discharge to assist hearing levels and to allow any prescribed ear drops to penetrate deep into ear canal and middle ear.

ABSTRACT

Ear problems are one of the most common ailments encountered among children especially in developing countries. Ear problems have profound effects on children in the end lead to hearing loss that damages development of speech. **Aim:** The aim of the study was to assess mothers' knowledge and practice towards the caring of their children with ear problems. **Sample:** A Purposive subject of 80 mothers accompanying their children with ear problems was selected from outpatient clinic in El-Demerdash Hospital and Nasser Institute hospital. **Tools:** tool for data collection were, an Arabic interview questionnaire to assess mothers characteristics and their knowledge about caring of their children with ear problems. Standardized observation check list to assess mother practice toward caring their child with ear problems. **Results:** Nearly one third of mothers had secondary education. More than three fifth of studied mothers had unsatisfactory total knowledge about ear problems. More than half of mothers had inadequate total reported practice about ear problems. **Conclusion:** Majority of studied subject had unsatisfactory knowledge and reported inadequate reported practice about ear problems. In addition, there is highly statistically significant relation between mother's knowledge about their children ear problems and their practice. **Recommendations:** Establishing an intervention program to meet mothers needs and help them to cope effectively way towards caring children with ear problems

Key words: Ear problems - Knowledge – Practice-mothers - Children

Introduction

Ear problems are one of the most common ailments encountered among children especially in developing countries. Acute otitis media, hearing loss are common diseases in early childhood and adolescence (**Burns and Thomson., 2013**).

Ear problems have profound effects on children in the life, lead to hearing loss that damages development of speech and language in children especially, if commencing at birth or during infancy, and later slows progress in school. It also causes difficulty in obtaining, performing and keeping a job a later on as well, it produces social isolation and stigmatisation at all ages. These effects are magnified in developing countries (**American Speech-Language-Hearing Association (ASHA), 2006**).

As regarding to the incidence of ear problems it was found 360 million people worldwide have disabling hearing loss and 50% of them are preventable. This is approximately 5.3% of the world population. While, 32 million of these are children less than 15 years (**Mortality and Burden of Diseases, WHO, 2011**).

The incidence rates are high in both developed and developing countries (**Morris et al., 2005**). A total of 555 children (6–12 years of age) from a rural and an urban school in the Shebin El-Kom District of Egypt were screened for hearing

impairment at their schools. The prevalence of confirmed HI was 20.9% (**Taha et al., 2010**).

Other indicators of an ear infection can include difficulty sleeping, diminished appetite, vomiting, or diarrhea. child doesn't hear well, fluid or pus draining from child's ear. This can signal a perforated eardrum (**American Academy of Pediatrics and American Academy of Family Physicians, 2013**).

Even when treatment are prescribed by health professionals, antibiotics are very often used to treat ear infections, the latest thinking is that otolaryngology needn't immediately with out their prescription pads. In some cases, a watch and wait approach may be appropriate. "The science is now showing us that 80 percent of the time, children will get better without an antibiotic. That's because one-third of ear infections are caused by viruses, which don't respond to antibiotics. Also some of the infections caused by bacteria will improve on their own (**Pai and Parikh, 2012**).

Mothers must prevent of ear infection will be achieved through prevention of viral Upper Respiratory Infections (URI) and specific early treatment of viral URI when possible (**Marchisio et al., 2010**).

Mothers must continue breastfeeding for at least 6 months to reduce the risk of ear infection, and the upright position is recommended. Exposure children to smoking increases a child's

susceptibility to ear infections. putting a child at risk for repeated infections (**Jacoby et al., 2008**). Mothers should be increase breastfeeding according to child need and should be protect their children by Seven-valent pneumococcal conjugate vaccines (PCV-7) protection against influenza-associated ear problems (**Black et al., 2007**).

Moreover, the parents should be instructed in how to provide a high level of language stimulation to babies and toddlers, and to encourage early speaking, and reading and writing. Parents should also know early detection of ear problems (**Burrow et al., 2005**).

Significance of the study

Mothers' lack of knowledge, and/or faulty practices may lead to serious consequences. Therefore, the identification of the levels of knowledge and awareness of the mothers regarding ear problems in their children is the first step towards improvement and mitigation of the potential ominous outcomes .Diseases of ear problems often have serious consequences including hearing impairment, and emotional strain, social problems, problems at school. In addition communications difficulties as behavioural problems that lower the quality of life of childrens.