

RUJUKAN

BAHAGIAN PENYELIDIKAN & PEMBANGUNAN
CANSELORI
UNIVERSITI SAINS MALAYSIA

Laporan Akhir Projek Penyelidikan Jangka Pendek

1) Nama Penyelidik: Dr. Mohamad Hamzah
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Nama Penyelidik-Penyelidik
Lain (Jika berkaitan) : Prof. Madya Dr. Lokman Md. Noh.....
Dr. Hashim Hassan
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2) Pusat Pengajian/Pusat/Unit : Jabatan Otorinolaringologi.....
Pusat Pengajian Sains Perubatan, USM.....

3) Tajuk Projek: Prevalens Effusi Telinga Tengah Di Kalangan.....
Kanak-kanak Tadika Di Kota Bharu
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Boleh diterima

PROF. MADYA DR. MAFAUZY MOHAMED
Pemangku Dekan
Pusat Pengajian Sains Perubatan
Universiti Sains Malaysia
16150 Kubang Kerian
Kelantan

(b) **Senaraikan Kata Kunci yang digunakan di dalam abstrak:**

<u>Bahasa Malaysia</u>	<u>Bahasa Inggeris</u>
Prevalens Effusi Telinga Tengah Kanak-kanak Tadika	Prevalance Otitis Media with Effusion Kindergarten Children.
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5) **Output Dan Faedah Projek**

(a) **Penerbitan (termasuk laporan/kertas seminar)**

(Sila nyatakan jenis, tajuk, pengarang, tahun terbitan dan di mana telah diterbit/dibentangkan).

1. A profile of ENT Disease Among Kindergarten children in Kota Bharu.
5th Scientific Meeting of Society of ORL-HN Surgeons of Malaysia,
10th Dec 1994, Kuala Lumpur.
2. Otitis Media With Effusion In the Tropics.
Symposia On Ear Problems In Childhood. 4th International Congress
of Tropical Paediatrics. 8-11 July 1996. Kuala Lumpur.

(Information from this research has been used)

- (b) **Faedah-Faedah Lain Seperti Perkembangan Produk, Prospek Komersialisasi Dan Pendaftaran Paten.**
(Jika ada dan jika perlu, sila gunakan kertas berasingan)

Prospek Komersialisasi:

Penjagaan kesihatan telinga dan pendengaran kanak-kanak tadika boleh dilakukan secara berkala dengan menggunakan bayaran tertentu daripada ibubapa/tadika.

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- (c) **Latihan Gunatenaga Manusia**

i) **Pelajar Siswazah**

ii) **Pelajar Prasiswa:** Seorang penolong penyelidik sekarang telah diambil berkhidmat oleh sebuah syarikat farmasi international.

iii) **Lain-Lain :** ...Guru-guru tadika telah diajar prinsip-prinsip kanak-kanak kurang pendengaran.

The Prevalence Of Otitis Media With
Effusion Among Kindergarten Children In
Kota Bharu.

Final report.

Principal Investigator:
Mohamad Hamzah

Co-Investigators:
Lokman Mohd Noh
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The Prevalence of Otitis Media With Effusion Among Kindergarten Children In Kota Bharu.

Introduction.

Otitis Media With Effusion (OME) is a very common medical condition in temperate countries like America and Europe. In the United Kingdom the incidence among a group of children aged 5 to 7 years was 50% (1). In America OME is the most common cause of hearing loss among children. More than 30% of children will have 1 to 3 episodes of OME before the age of two years (2). In Denmark the incidence is 26% among a group of children aged 7 years (3). In these countries OME is a major health problem among children. Myringotomy was the most commonly performed operation among children in England and Wales in the seventies and was the main reason for admission to hospitals (4).

Clinical experience denotes that this condition is not common in the tropics, including Malaysia. However, reports on incidence or prevalence of OME in this region has been very scarce. Being a relatively asymptomatic condition with a self-limiting natural history OME could easily be under-diagnosed and under-treated. Having detrimental sequelae such as hearing loss (conductive and even sensorineural) and middle ear pathologies such as tympanic membrane atrophy, tympanosclerosis, perforations and cholesteatomas; it is very important to document the prevalence of OME in our country and to investigate for possible risk factors.

Research Aims.

1. To know the prevalence of OME among kindergarten children in Kota Bharu.
2. To investigate possible (risk) factors that can be associated with OME such as upper respiratory tract illness, socioeconomic conditions and breastfeeding.

Material and Method.

A few kindergarten schools were randomly selected from Kota Bharu. Permission was obtained from relevant authorities and the parents to include their children in the study. The parents were also requested to complete a questionnaire study. The children then underwent a general physical examination and a complete ENT examination in the kindergarten. A diagnosis of OME was made based on pneumatic otoscopy and tympanometric evaluation using an Amplaid A 740 tympanometer with programmed stimuli for ipsilateral acoustic reflex.

Results.

Three hundred and seventy seven children were finally analysable from seven kindergarten schools. The mean age was 67.58 months (S.D=6.73). There were 195 males (50.4%) and 192 females (49.6%). Three hundred seventy two were Malays (96.1%), 14 were Chinese (3.6%) and 1 was Indian (0.3%).

Twenty one children (5.4%) had OME. Based on ears, 30 had OME (7.7%). Eight were in left ears, 4 in right ears and 9 children had both ears involved.

Sex, race, prematurity, allergy, asthma, breastfeeding as compared bottle feeding, duration of breastfeeding were not significant risk factors based on O.R and R.R. Neither did rhinitis, tonsillitis, pharyngitis nor URTI.

It was noted that history of otalgia , frequency of otalgia, history of hearing loss and parents' report of detecting decreased hearing in their children had significant correlations with OME.

Note: Detailed tables for O.R and R.R will be given in the final drafts. It is expected that at least two papers can be published from this work.