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# THE EFFECT OF OTITIS MEDIA WITH EFFUSION (OME) ON EMERGING LITERACY

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#### **ABSTRACT**

Otitis Media with Effusion (OME), commonly referred to as glue ear, is one of the most common illnesses of early childhood. It is difficult to detect as OME is frequently symptom free and usually clears spontaneously. It can be detected by tympanometry, a simple painless non intrusive test, which can be easily performed by trained operators. In New Zealand all children have this hearing test on school entry. Research has shown links between OME and educational under achievement, possibly due to the intermittent deafness which accompanies this condition. As OME mostly occurs during early childhood, a time when the basis of language is being established, it may cause delays in learning which will not be seen until later in life.

This research was designed to examine the possible effect of OME on emerging literacy in 120 children from a large urban area of New Zealand. The aural history of the children was established from a questionnaire and the results of the hearing tests on school entry. Measures of their reading ability were obtained from their scores on the Diagnostic Reading Survey. This survey, usually referred to as the six year old net test, is taken by most children in New Zealand. The childrens' scores on the reading test were examined to see if there was any correlation between these and evidence of OME.

Although no conclusive proof was found that children with OME were reading at a lower age than their peers, statistically significant differences were found between the scores of the Dictation section of the test. The Dictation section is designed to measure how well children are distinguishing and recording individual sounds in words. The findings suggest that OME affects auditory discrimination so that incorrect symbols are ascribed to sounds. This effect will hinder a child when learning to read and may cause delays in other aspects of learning.

No evidence of increased incidence of OME amongst Maori or Pacific Island students was found, however, the number of these students in the sample was very small. Maori and Pacific Island students however did have significantly lower scores than their peers in all aspects of the reading test.

#### **ACKNOWLEDGEMENTS**

The completion of this thesis is due to input from a large group of people. I am indebted to all those who gave generously of their time to help me in preparation of this work.

My interest in glue ear and its effects on academic achievement began after reading a paper by Dr Peter Allen, a general practitioner from Whangarei who has developed expertise in this area. As well as instigating programmes for the early detection and treatment of glue ear he has produced books and a video to educate parents and health professionals. I wish to record my appreciation for the assistance and information he provided during the initial stages of this thesis.

I would like to thank my supervisors Clive Harper and Lois Wilkinson for their help and guidance during the conception and writing of this thesis. I am especially grateful to Lois who has always been there with new ideas and resources to aid me in the completion of this project and has spent much of her free time assisting me. Many thanks also to Sue Watson for her help with the statistical analysis of the results, and who has responded to my requests for "just one more test" with unfailing good humour and patience.

My gratitude goes also to the principals and staff, teaching and secretarial, of the participating schools, for the distribution and collection of questionnaires and making available the results when permission was granted for me to access these.

I record my thanks to the staff of the Vision and Hearing Service at the Public Health Service for their courtesy in dealing with my requests for information.

I am especially grateful to Glenda Llewellyn, who acted as my 'teacher sounding board' for ideas and feedback, and to Robin Hill, for her explanation of the reading recovery system and interpretation of the reading test results.

There are always people who while not directly concerned with the content of the thesis aid and help in other ways. Thanks to my work colleagues for seeing me through this whole exercise, especially Ursula Egan for her suggestions in the writing up process and Rachel Tough for her assistance in the formatting of the final document.

Finally this thesis is dedicated to my friend Gaye Ashton, who has been behind me every step of the way encouraging and supporting me through the good and bad times, and to my sons who have always believed in me even when meals are late or non existent.

Thank you all.

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