Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
Ngā Ara Whaiora: He Whakaaro Noa.

A study of Māori Health Care Use: An Evaluation of the Andersen Model.

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Psychology at Massey University.

Turitea Campus, Palmerston North, New Zealand.

Paul Ryan Hirini

2004
ABSTRACT

Using interview data the present study applied a leading health care use explanatory model (the Anderson model) to a sample of 502 community-dwelling New Zealand Māori adults. To date the Andersen model has been applied extensively in overseas (principally U.S.) research, yet not specifically to an indigenous population such as the New Zealand Māori. The Andersen model proposes that health service use is a function of three components: predisposing, enabling and need characteristics. Using hierarchical multiple regression analyses three overarching research goals concerning the model were investigated:

(1) To test the efficacy of the Andersen model in the prediction of Māori health care utilisation; (2) to extend the model by considering the role of life events as a predictor of Māori health service utilisation; and (3) to extend the model by considering the role of psychological distress as a predictor of Māori health service utilisation. As a further extension on previous work, the present study also sought to: (4) Extend the model by considering the role of traumatic experience in the prediction of Māori health service utilisation.

The Andersen model was found to explain between 8.5% and 26% of variability in the sample’s use of six types of health care, finding need characteristics to be the major determinants of health care use. Life events was not a significant contributor to explaining use, and psychological distress was effective only in predicting mental health service use. Findings suggest that using aggregate measures of traumatic experience is not a particularly helpful strategy for predicting subsequent health care use by Māori. On reflection of findings and implications the present study concludes with discussion concerning: (1) A need to advance conceptualisations of what constitutes health services for Māori; (2) suggestions for future examination of trauma and Māori health care use; (3) the role of culture in influencing health beliefs and behaviour; and (4) potential barriers to health care access by Māori.
Acknowledgements

He tika kia tuku atu ngā mihi ki a rātou kua hāere ki te po.
Ōku koroua, Ōku kuia, me te tini kua takahi nei te ara taki mano.
Hāere, hāere, e moe.

Ki te hunga ora, me pehea tākū mihi ki a koutou ngā whanaunga,
ngā kāranga-tanga māha e āwhi nei i ahau i roto i ngā mahi.
I ngā wā taumaha ko koutou ngā kaiwhakaora i te hinengaro me te wairua.
Kāore au i te mohio ki ngā kupu tika maku, otira he pono pea te kōrero ā ngā tipuna:

"Kāore nei au i te toa takitahi, engari i te toa takitini!"

No reira, ka nui te mihi, ka nui te aroha.

First and foremost, I must thank Dr Ross Flett, without whom I could not possibly have started,
continued or completed this dissertation. As primary supervisor Ross offered wisdom, humour and
encouragement, generously gave professional and personal support, and was patient beyond belief.
He is indeed a gifted teacher to whom I remain indebted.

I express my immense gratitude to Professor Mason Durie as secondary supervisor, for his patient
guidance and generous support during drafting, particularly at times when I felt unable to continue
with this prolonged exercise.

Thanks to Professor Nigel Long for his earnest encouragement and support throughout, particularly
during the early stages of the thesis. The assistance of Dr Carol MacDonald and Dr Michelle Miller
is also gratefully acknowledged. Thanks to Professor Ian Evans for his forbearance in allowing me
to complete this work, especially as it took longer than anticipated. Warm thanks to Natasha
Tassell for proof reading the final draft.

Loving thanks to friends and whānau for putting up with me over the ‘PhD years’, and for
eventually ceasing to ask me how ‘it’ was going. Much love to my daughter Isabella, a promise of
hope in my life. A very special thanks to my mother Sheryl, sister Tina and my father Ted, to
whom I dedicate this work...“No trouble to the Daddy!”

Finally, thanks go to the Māori participants who shared their experiences, and made this research
exercise possible. The support of the New Zealand Accident Compensation Corporation (ACC) is
also duly acknowledged.
**TABLE OF CONTENTS**

Chapter 1: Andersen’s behavioural model of health service utilisation - An overview ........................................... 1  
The model’s purpose ................................................................................................................................. 1  
A background to Māori health ......................................................................................................... 2  
Description of the Andersen behavioural model of health service use .............................................. 4  

Chapter 2: Ethnicity and health care use .......................................................................................... 16  
A review of research findings: The international context and Māori .................................................. 16  

Chapter 3: Traumatic experience, life events, psychological distress and health care use ............ 33  
Psychological distress and health service use ..................................................................................... 33  
Life events and health service use ........................................................................................................ 35  
Trauma and health care use .................................................................................................................. 36  

Chapter 4: Research Goals ............................................................................................................. 47  

Chapter 5: Methods ............................................................................................................................ 49  
Procedure ............................................................................................................................................. 49  
Sampling .............................................................................................................................................. 50  
Measures .............................................................................................................................................. 52  

Chapter 6: Results – Andersen’s model and health care use ........................................................... 62  
Demographic variables: Descriptive statistics .................................................................................... 63  
Predisposing variables described statistically ...................................................................................... 66  
Enabling variables described statistically ............................................................................................ 71  
Need variables described statistically .................................................................................................. 76  
Health care use variables described statistically ............................................................................... 80  
Scoring and creation of composite health care use variables ............................................................ 83  
Application of Andersen’s model: Inferential analyses ................................................................... 85  
Multivariate data analyses .................................................................................................................. 86  
Hierarchical multiple regression analyses: Health care use ............................................................. 88  

Chapter 7: Results - Trauma and health care use .......................................................................... 107  
Traumatic experiences described statistically .................................................................................... 108  
Traumatic experiences and health care use: An “aggregate” approach ........................................ 112  
The temporal experiences of trauma – analyses modelled on Norris (1992) .................................. 113  
Impact of traumatic events on health care use ................................................................................ 121  
Characteristics of Traumatic events and health care use ................................................................. 121  

Chapter 8: Discussion - Findings and implications ..................................................................... 127  
Thesis goal 1: Application of the Andersen model to Māori health care use ................................... 128  
Thesis goals 2 & 3: The role of life events and psychological distress in health care utilisation ...... 141  
Thesis goal 4: The role of traumatic experience in health care utilisation ...................................... 146  
Limitations and future research directions ......................................................................................... 149  

References ........................................................................................................................................... 158  

Appendix 1: Correlation data ........................................................................................................... 195  
Appendix 2: Interview Instrument ..................................................................................................... 196
Table 21: Multiple regression of trauma characteristics variables on General Practitioner Visits and All Health Care Use for SECONDARY TRAUMA victims showing standardised regression coefficients, $R$, $R^2$, adjusted $R^2$, and $R^2$ change for all respondents

Table 22: Summary of Significant Predictor Variables of Health Care Use

Table 23: Comparison of recent study findings: Percentages of participants reporting different types of trauma

Table 24: Intercorrelations between independent and dependent variables

'LIST' OF FIGURES

Figure 1: The original Andersen (1968) behavioural model