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.
Utilisation of Health Care Services by Older Adults: A New Zealand Study

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

Michelle A. Millar

1996
ABSTRACT

This study uses data provided by 354 respondents aged 60 years and over from throughout New Zealand to test Andersen's behavioural model of health care utilisation incorporating expanded sets of indicators of predisposing, enabling, need, and health care utilisation constructs. When hierarchical multiple regression analysis was undertaken, 38% of the total variance relating to the number of visits to the GP was explained, representing a substantial increase compared with previous studies related to health utilisation behaviours of older adults. Other, less common measures of health care utilisation also provided higher $R^2$ values, with 41% of the variance in the number of prescription items used in the previous 12 months accounted for, and 25% of the variance of the number of other health professionals seen (other than the GP) over the previous 12 months explained by the predictors. While only 18% of the total variance was explained for the number of days spent in bed because of illness, this variable was considered suspect due to significant skewness. Unlike previous research, significant predictors were not predominantly need characteristics, with ethnicity and health worry proving to be consistent predictors of formal health care utilisation. These results suggest that using measures of health care which are more representative of the wide range of health services used by older adults, and using indicator sets more pertinent to the aged, increases the predictive power of the behavioural model.
Acknowledgments

The collection of the data reported in this thesis was supported by a grant from the New Zealand Accident Compensation Corporation. The assistance of Dr Carol MacDonald is gratefully acknowledged. Thanks also, to Dr Ross Flett for his forbearance and guidance.
# Table of Contents

ABSTRACT ........................................................................................................... i

ACKNOWLEDGMENTS .......................................................................................... ii

TABLE OF CONTENTS ............................................................................................... iii

LIST OF TABLES ......................................................................................................... v

LIST OF FIGURES ...................................................................................................... vi

1. INTRODUCTION .................................................................................................... 1
   1.1 THE CONCEPTUAL MODEL: ............................................................................ 2
   1.2 CONSTRUCT 1 - THE PREDISPONGING CHARACTERISTICS ......................... 3
      1.2.1 Demographics ....................................................................................... 3
      1.2.2 Social Structure .................................................................................... 5
      1.2.3 Health Beliefs ....................................................................................... 7
   1.3 CONSTRUCT 2 - ENABLING CHARACTERISTICS ........................................... 9
      1.3.1 Affordability .......................................................................................... 10
      1.3.2 Acceptability ........................................................................................ 12
      1.3.3 Accessibility ........................................................................................ 14
      1.3.4 Availability .......................................................................................... 15
      1.3.5 Accommodation .................................................................................... 16
   1.4 CONSTRUCT 3 - NEED CHARACTERISTICS .................................................. 18
      1.4.1 Professionally Evaluated Needs .............................................................. 19
      1.4.2 Individually Perceived Needs ................................................................. 20
   1.5 CONSTRUCT 4 - HEALTH CARE UTILISATION ........................................... 24
      1.5.1 Informal Health Care Utilisation ............................................................. 27
      1.5.2 Formal Health Care Utilisation ............................................................... 28
   1.6 SUMMARY AND RESEARCH GOALS ......................................................... 29
   1.7 THE PURPOSE OF THIS STUDY ................................................................. 35

2. METHOD .................................................................................................................. 36
   2.1 PARTICIPANTS .............................................................................................. 36
   2.2 PROCEDURE ................................................................................................. 37
   2.3 MEASURES ..................................................................................................... 38
      2.3.1 Predisposing Characteristics ................................................................ 38
      2.3.2 Enabling Characteristics ...................................................................... 40
      2.3.3 Need Characteristics ............................................................................. 41
List of Tables

Table 1: Geographic Distribution of Meshblocks ............................................................... 37
Table 2: Means, Standard Deviations and Coding Algorithms for Variables ............... 48
Table 3: Age Ranges for Male and Female Participants .............................................. 50
Table 4: Crosstabulation of Ethnicity by Highest Educational Qualifications ............ 52
Table 6: Number of Life Events Experienced by Participants ..................................... 55
Table 7: Intercorrelations Between Continuous Variables ......................................... 57
Table 8: Frequency Distribution of Degrees of Perceived Control Over Health ......... 58
Table 9: Frequency Distribution of Degrees of Health Worry .................................. 58
Table 10: Modes of Transportation Used to Visit Doctor ........................................... 60
Table 11: Frequency Distributions of the Number of Prescription Items .................... 65
Table 12: Hierarchical Multiple Regression of Need Characteristics, and Predisposing and Enabling Characteristics on Number of Visits to the Doctor, Showing Standardised Regression Coefficients, R, R² and Adjusted R² for All Participants (N = 354) ............................................. 69
Table 13: Hierarchical Multiple Regression of Need Characteristics, and Predisposing and Enabling Characteristics on Number of Other Health Professionals Seen, Showing Standardised Regression Coefficients, R, R² and Adjusted R² for All Participants (N = 354) ............................................. 72
Table 14: Hierarchical Multiple Regression of Need Characteristics, and Predisposing and Enabling Characteristics on Number of Prescription Items Used, Showing Standardised Regression Coefficients, R, R² and Adjusted R² for All Participants (N = 354) ............................................. 74
Table 15: Hierarchical Multiple Regression of Need Characteristics, and Predisposing and Enabling Characteristics on Number of Days Spent in Bed Because of Illness, Showing Standardised Regression Coefficients, R, R² and Adjusted R² for All Participants (N = 354) ............................................. 77
Table 16: Summary of Significant Variables for Each of the Measures of Health Care Utilisation on Steps 1 and 2 of the Hierarchical Multiple Regressions ......................... 79
Table 17: Comparison of the Ratings on Need Characteristics Between Participants Who Have Been Worried About Their Health and Participants Who Have Not Been Worried About Their Health ................................................................. 84
Table 18: Frequency Distributions of Groups Determined by Degree of Health Worry and Self-Rated Health ................................................................. 85
List of Figures

FIGURE 1: MEDIAN AGE IN NEW ZEALAND FROM 1985 WITH PROJECTIONS TO 2031......................... 1

FIGURE 2: GENDER DISTRIBUTION OF PARTICIPANTS LIVING ALONE OR COHABITING WITH OTHERS .................................................................................................................. 50

FIGURE 3: SOCIAL INDICATORS - POTENTIAL AND ACTUAL .......................................................................................................................... 53

FIGURE 4: FREQUENCY OF LIFE EVENTS .......................................................................................... 55

FIGURE 5: FREQUENCY DISTRIBUTION OF TYPES OF CHRONIC HEALTH CONDITIONS .................................................. 61

FIGURE 6: FREQUENCY DISTRIBUTION OF BODY FUNCTION LIMITATIONS .................................................. 62

FIGURE 7: FREQUENCY DISTRIBUTIONS OF DIFFICULTIES WITH ACTIVITIES OF DAILY LIVING ...... 64

FIGURE 8: NUMBER OF INDIVIDUALS CONSULTING WITH OTHER HEALTH CARE PROFESSIONALS ..... 66