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**Recognising Women's Responses to Heart Disease  
Symptoms: Different Groups Respond in  
Different Ways**

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A thesis presented in fulfilment of the requirements for the degree of Doctor of  
Philosophy in Social and Community Health at the School of Population Health,  
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## **ABSTRACT**

### **Recognising Women's Responses to Heart Disease Symptoms: Different Groups Respond in Different Ways**

This study explored the recognition and understanding of angina or heart attack symptoms and the reasons for delay in seeking appropriate care with particular reference to women and Maori. The study population consisted of European and Maori people aged between 45 and 85 years either diagnosed as being at high risk of having a heart attack, experiencing angina, or requiring admission to hospital with their first heart attack. The study methodology is a qualitative analysis of 30 individual interviews (nine European women, nine European men, five Maori women and seven Maori men) conducted using grounded theory. A semi-structured interview schedule followed the sequence of events that led to seeking medical care. Interviews were audio taped, transcribed and coded using a computer software programme. The data analysis included collaboration with Maori.

Delay times from symptom onset to hospital admission were: five participants delayed less than two hours (range 1 hour to 1 hour 30 minutes), and six participants delayed more than 2 hours (range 2 hours 30 minutes to 10 hours). Delay times from symptom onset until attending a medical clinic were: four participants delayed less than 2 hours (range 1-2 hours) and fourteen participants delayed more than 2 hours (range 4-24 hours). Reasons for delay, common to both European and Maori were: difficulties recognising their symptoms, self treatment, obtaining reassurance, differences in symptom descriptions between the participants and doctors, and several participants' symptoms were initially misdiagnosed. In the European group specific reasons related to delay were: a lack of knowledge, and consultations with general practitioners. European women reported that uncommon symptoms were disregarded in the pre-diagnosis period. For Maori, specific reasons for delay were: a greater emphasis on consulting family and minimising the symptoms. Participants had a codified set of rules within the self-

regulatory model that determined their actions that became the emergent theme in the overarching category – ‘Recognising Women’s Responses to Heart Disease Symptoms: Different groups respond in different ways’. The fact that people have different perceptions about symptoms, endure symptoms in different ways, obtain reassurance in different ways, and take action in different ways formed the categories that made up the theoretical concept. The rules differed according to gender and culture. The study findings will contribute to the understanding of gender and cultural differences in care seeking for heart disease symptoms.

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## DEDICATION

*This work is dedicated to Diane Margaret Wakefield who has taught me so much about women's experiences of heart disease and to Algie Edwin Moore (Uncle Tookie) who does not hesitate to call the ambulance.*

*For my great, great grandmothers Sarah Ann Bryant, Florence Snelgar and Maria Robinson, my grandmothers Olive Mary Robinson and Minnie Mary MacIntyre-Campbell, my mother Irene Maria Campbell, my aunts Violet Florence Moore, Josephine Mary Godfrey and Joan Ellenor Russ, my sister Debra Marie Campbell, my cousin Sandra Dawn Lock and my cherished daughters Caryn Marie Delarue and Rochelle Anne Bright.*

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## LIST OF ABBREVIATIONS

<b>AMI</b>	Acute Myocardial Infarction
<b>ARCOS</b>	Auckland Regional Coronary and Stroke Study
<b>CCU</b>	Coronary Care Unit
<b>CHD</b>	Coronary Heart Disease
<b>CPR</b>	Cardiopulmonary Resuscitation
<b>CVD</b>	Cardiovascular Disease
<b>ECG</b>	Electrocardiogram
<b>GP</b>	General Practitioner
<b>GUSTO</b>	Global Utilisation of Streptokinase and Tissue Plasminogen Activator for Occluded Arteries
<b>IHD</b>	Ischaemic Heart Disease
<b>S-T EMI</b>	The portion of the segment between the end of the S wave and the beginning of the T wave on the electrocardiogram, Elevation Myocardial Infarction
<b>WHO</b>	World Health Organisation