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Diabetic Kidney Disease: Exploring Factors that Impede Early Detection and Intervention in the Primary Care Setting

A thesis presented in partial fulfilment of the requirements for the degree of Master of Philosophy in Nursing at Massey University, Wellington, New Zealand.

Miranda Walker
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ABSTRACT

This thesis describes a study which aimed to identify factors which impede early detection and treatment of diabetic kidney disease (DKD) in primary care.

Diabetic kidney disease is a common, harmful, and costly chronic healthcare condition. Despite long-established and evidence-based guidelines recommending early detection and treatment as the optimal management strategy, significant numbers of people continue to be either undetected or undertreated.

Using a qualitative descriptive methodology, focus groups for primary care healthcare practitioners and semi-structured interviews with patients were conducted. Participants’ knowledge about DKD, its risk factors and management, and their perceptions about progression of the disease was collected. Content analysis extracted patterns of ideas from the data and then grouped them into key themes which were then interpreted from the perspective of Wagner’s Chronic Care Model. Two themes emerged from patient interviews: locating health within one’s lifestyle and motivators to change the priority of that position. Focus groups with health care practitioners revealed four themes: knowledge of best practice, screening and recall, models of primary care delivery, and factors which affect patients’ engagement with healthcare services.

This study identified several factors which were found to impede the early detection and treatment of DKD in primary health. This thesis discusses those factors, placing them in the context of current literature on the topic, and from the perspective of effective provision of chronic care. Recommendations for possible improvements are offered, along with suggested directions for future research.
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LIST OF ABBREVIATIONS

ACE  Angiotensin converting enzyme
ARB  Angiotensin II receptor blocker
CAKS Council of American Kidney Societies
CCM  Chronic Care Model
CKD  Chronic kidney disease
CVD  Cardiovascular disease
DKD  Diabetic kidney disease
eGFR Estimated glomerular filtration rate
ESKD End stage kidney disease
GFR  Glomerular filtration rate
GP  General practitioner
HbA1c Glycated haemoglobin
HCP Healthcare practitioner
HQOL Health-related quality of life
KDIGO Kidney Disease: Improving Global Outcomes
KDOQI Kidney Disease Outcomes Quality Initiative
QD Qualitative description
RRT Renal replacement therapy
T1DM Type one diabetes mellitus
T2DM Type two diabetes mellitus
UKPDS United Kingdom Prospective Diabetes Study