Abstract

Health literacy (HL) means much more than just the ability to read health-related information or make clinic or hospital appointments. For patients with chronic illness, like chronic kidney disease (CKD), HL is a personal attribute which relates to the achievement of a level of knowledge that can help to prevent the development of health-related problems and protect health. In 2022, the focus of World Kidney Day will be '*Bridge the knowledge gap to better kidney care*', emphasizing the importance of information needs and HL in CKD.

Globally, CKD is becoming increasingly common because of the growing prevalence of diabetes mellitus, hypertension, obesity, and ageing. Left untreated, CKD is likely to progress to end-stage kidney disease, with higher risk of mortality. Fundamentally, it is the patient who is tasked with understanding, implementing, and maintaining the medical recommendations for CKD self-management. As such, HL is of great relevance in vulnerable patient groups, like immunocompromised patients with CKD. Currently it is estimated that over a quarter of CKD patients have limited HL, however the full extent of the problem remains unknown in Hong Kong.

Increasingly CKD management involves self-management activities, therefore, as well as HL it is crucial that patients have good levels of self-efficacy so that they can gain access to, understand, and utilize health-related information. Inadequate levels of HL constitute a risk factor for low health outcomes and poor treatment compliance. In addition, limited health literacy is associated with poor control of disease, greater risk of cardiovascular disease, more missed treatment appointments and higher rates of hospitalization. The current situation is made even more challenging for those with CKD due to COVID-19 related issues.

In face of these clinical challenges, HL-sensitive forms of communication and educational support packages may play an important role in successful disease management, slowing down the progression of this chronic disease.

It is proposed that greater understanding of information needs, and HL could increase local patients' ability to self-manage their disease more successfully and slow down the progression of their chronic condition. Despite the proposed influence of HL, research into this important ability remains lacking in Hong Kong.

In this three-phase mixed method study, we aim to address this issue. From a quantitative perspective we plan to explore levels of general, COVID-19 related health literacy and levels of self-efficacy in individuals with CKD who attend one renal self-help group in Hong Kong with validated questionnaires, to address adequacy of levels of HL. Then from a qualitative viewpoint, focus groups will be used to identify information priorities and needs to ascertain barriers to understanding and acting on health-related information in this patient's group. Based on the information gained in the second phase of our study, a tailormade online health literacy support package for CKD patients will be developed in the third phase.

In this study we hope to address an important current knowledge gap, reducing potential inequalities of care and having a positive impact upon the health of CKD patients in Hong

Kong and beyond. Ultimately, improving levels of HL in CKD patients may help to slow down disease progression, promoting more effective levels of self-efficacy, self- management, and optimal health outcomes.