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P143 -Ethnic minority disparities in progression and mortality of pre-dialysis chronic kidney disease: a scoping review

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Background

There are a growing number of studies on ethnic differences in progression and mortality for pre-dialysis chronic kidney disease (CKD), but this literature has yet to be synthesised, particularly for studies on mortality.

Methods

This scoping review synthesized existing literature on ethnic differences in progression and mortality for adults with pre-dialysis CKD, explored factors contributing to these differences, and identified gaps in the literature. A comprehensive search strategy using search terms for ethnicity and CKD was taken to identify potentially relevant studies. Nine databases were searched from 1992 to June 2017.

Results

8,059 articles were identified and screened, of which 50 (1 systematic review, 6 non-systematic reviews, and 43 individual studies) were included in this review. Most were US studies and compared African-American/Afro-Caribbean and Caucasian populations, and fewer studies assessed outcomes for Hispanics and Asians. Most studies (27/37) reported higher risk of CKD progression in Afro-Caribbean/African-Americans, Hispanics, and Asians, lower risk of mortality for Asians and Hispanics (10/11), and mixed findings on risk of mortality for Afro-Caribbean/African-Americans, compared to Caucasians. Biological factors such as hypertension, diabetes, and cardiovascular disease contributed to increased risk of progression for ethnic minorities, but did not increase risk of mortality in these groups.

Conclusions

Higher rates of renal replacement therapy among ethnic minorities may be partly due to faster progression and reduced mortality in these groups. The review highlights the need for updated systematic reviews on CKD progression and new systematic reviews for mortality to fully understand ethnic differences in CKD outcomes.