Do health literacy interventions improve health literacy? This is the key question we set out to answer in our systematic review published this month in the BMC Journal of Public Health (available open access here: https://rdcu.be/b5kYt).

The focus of my PhD is on cardiac rehabilitation in the Highlands region, and how we can help patients better engage with the service to manage their cardiovascular health. There are many possible reasons why patients may not engage with cardiac rehab including health literacy. It is known that people with long term conditions may have challenges with health literacy, and that those with cardiovascular disease often struggle the most. Those with weaker health literacy skills have been shown to have more trouble managing their health, they often have poorer self-assessed health and greater levels of morbidity and mortality.

This PhD is mapping the levels of health literacy within cardiac patients in the Highlands to establish if this is an area that would benefit from targeted interventions. Whilst the data collection was underway, we needed to establish the evidence base for health literacy interventions. Although there have been a lot of systematic reviews examining various aspects of health literacy, we were unable to find any that answered our specific questions regarding interventions.

We conducted a systematic review which searched for controlled trial health literacy interventions in adults, using a pre and post measure of health literacy. The review considered three questions; do the interventions improve health literacy? Do they improve health behaviours? Have any interventions been effective with cardiac patients?

We screened over 2,000 papers which gave us 22 full text studies for inclusion. The interventions were conducted in 9 countries, with 10,997 people. Intervention methods were varied and included animation, text or social media messaging, one to one education and small group education. 15 out of 22 interventions improved health literacy. Eight studies included a behavioural outcome (e.g. smoking, physical activity, nutrition) and all but one of these interventions improved health behaviours. Only two studies focused on cardiac patients and both were effective at improving health literacy. In addition, the patients reported increased self-efficacy and self-care behaviours allowing them to better manage their condition.

The results of this review will allow us to better determine effective interventions, should the results of our survey (currently being analysed) show a need for them here in NHS Highland cardiac rehab patients.

[Ronie Walters (PhD student, Dept. Nursing and Midwifery, UHI), Professor Stephen Leslie (consultant cardiologist, NHS Highlands), Rob Polson (specialist librarian, Highland Health Service Library), Professor Trish Gorely (Professor, Physical Activity for Health, Dept. of Nursing and Midwifery, UHI)]

Ronie Walters, July 2020