

A hyperkalaemia educational animation for people with kidney disease: An acceptability study

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Background and Aims: Hyperkalaemia is a potentially life-threatening emergency and a common complication in patients with renal impairment [1]. Patients are inundated with information from renal healthcare professionals (HCP) regarding a wide range of issues including blood pressure control, fluid balance, diabetes, anaemia, dietary restrictions, dialysis, transplantation and the control of biochemical parameters like potassium, bicarbonate, calcium and phosphate. The magnitude and multiplicity of medication often prescribed in renal disease can also be confusing for patients. Effective communication and education is therefore essential to optimise patient care.

Many high-quality local and national patient information resources are available to renal patients; predominantly information leaflets. Multimedia education resources are proposed to enhance health literacy [2].

We have created a hyperkalaemia patient educational animation and have explored the views of renal patients to refine the animation before making it available to our wider patient population.

Method: The first version of the animation (V1) was shown to a focus group of representatives from the Paul Popham renal support charity. Opinions were gathered which informed the development of a data collection tool, which would be used during one-to-one interviews with haemodialysis (HD) patients.

Audio-recorded one-to-one semi-structured interviews were conducted with HD patients in Carmarthen Dialysis Unit, South West Wales, following stratified random sampling. Interviews were transcribed verbatim and thematically analysed.

Results: The animation (V1) (Figure 1) was shown to 12 HD patients. One-to-one interviews followed. 50% of interviewees were men (n=6), mean (SD) age 65.3 (16.5) years old. Four main themes (with further sub-themes) were identified following patient interviews: the requirement for patient education, the utility of the animation, ways of learning and the animation's impact on the patient. A selection of themes and patient responses are presented in Table 1.

Discussion: Multimedia interventions have been shown to positively impact on learning [2]. Our focus group and one-to-one interviews identified a need for hyperkalaemia education for renal patients. The animation was well received by all patients, including its design, simplicity and narration. Versions 2 and 3 (Figure 2) of the animation were created following patient feedback.

The animation will soon be available in English and Welsh language to renal patients in South West Wales, before being rolled-out across Wales. The animation will be available on HD TV screens and outpatient waiting room areas. It will be accessible through our renal patient website and via Quick Response (QR) codes in clinic rooms, dialysis units and on renal prescription bags. A paper-based 'comic book' version of the animation will also be created.

Further work will include exploring the impact of the animation on serum potassium levels in our patient population and creating new animations, including 'understanding dialysis', 'blood pressure and fluid balance' and 'CKD-mineral and bone disorder'.

Conclusion: Our hyperkalaemia educational animation was well received by patients in this acceptability study. Valuable feedback was obtained and will continue to be requested. We believe that this, and subsequent animations will improve patient understanding of kidney disease and positively impact on patient health and wellbeing.