Prompting and Encouraging Community Hydration through Education: A Realist Review and Evaluation Exploring Hydration in a Population at Risk of Frailty

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Abstract: Background: Frailty is increasingly recognized as a public health problem within an aging population. It is often characterized as an accumulation of clinical symptoms with progressive decline. We contend that dehydration is potentially the missing link driving the cycle of frailty; it contributes to malnutrition and cognitive decline and is a risk factor for other conditions. Frailty may also impact on fluid intake in cognitively intact older adults, indicating the cyclical nature of dehydration contributing to increasing frailty. Aim: To examine the relationships between fluid, hydration, and frailty in older adults in order to determine what works, for whom, how, why, and in what circumstances. Methods: A Realist Synthesis was first undertaken with n=50 studies, leading to the development of a Refined Programme Theory (RPT) articulating what hydration interventions work, for whom, to what degree, in what contexts, and how & why. Within the subsequent evaluation, the RPT was further confirmed/refuted/refined following semi-structured interviews with n=8 participants (healthcare professionals and patients). The RAMESES Quality Standards were followed throughout the study. Results: The Refined Programme Theory (RPT) highlighted three factors that result in optimized hydration for frail older people, i.e., Developing an Understanding Around Hydration, Empowering Participation, and System Reconfiguration. Our RPT indicates that hydration interventions work by developing an understanding of the importance of hydration, mitigating physical & cognitive barriers, increasing the agency of the patient, using a prompting process to reinforce drinking behavior, and routinizing hydration as a dimension of overall care. Conclusion: The study indicates that a greater understanding of the importance of hydration is required for all parties. Patients also require physical and psychological support if they are to be active agents in meeting their hydration needs. At a wider 'system' level, organizations must work in an integrated manner introducing processes that enable continuing professional development (CPD), encourage ongoing holistic assessment, and routinize hydration support.

Keywords: frailty, dehydration, older adults, realist review, realist evaluation

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