Matching instructional strategies with learning needs in the development of health literacy and numeracy skills
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With increasing awareness of health literacy as a public health priority healthcare professionals are adopting instructional strategies designed to mitigate the impact of low literacy and numeracy. Best practices include the use of plain language with clear and concise messaging, and the use of teach-back. Patients with a new diagnosis of a chronic condition must learn new terms, numbers, and rules to effectively manage their condition, and it is unclear how common instructional strategies are used to develop new self-management skills. Semi-structured interviews were conducted with 16 patients with a new diagnosis of cardiovascular disease or diabetes and 19 healthcare professionals that treat or educate these patients to gain insights into how the instructional strategies align with the learning needs of the patients. A qualitative methodology using grounded theory was used to generate the health literacy instructional model. Using theoretical sampling, patients that were diagnosed with heart disease, hypertension, heart failure, or diabetes within the past 12 months were invited to participate in the study. Healthcare professionals included physicians, nurses, physician assistants, nurse practitioners, pharmacists, dietitians, social workers, and health educators. Health literacy was assessed by healthcare professionals through conversation with the patient, including the choice of vocabulary and the types of questions asked. Improvement in health literacy skills were based on achievement of treatment goals. Healthcare professionals primarily rely on informal learning methods and use a quick delivery approach. Examples include discharge instructions and brief conversations in the hospital or exam room. Healthcare professionals were limited by time demands and lack of resources. To fill in the gaps, many healthcare professionals rely on digital tools and technology, including web sites, apps, and connected devices. The primary learning method used by patients was the undirected internet search. Patients used this approach to validate the information they received from the healthcare professional. Since patients with a new diagnosis lack personal experience with their condition they prefer to get information and hear stories from other patients. Using constant comparison, a key element in the development of health literacy skills was the support system of the patient. The support system included programs, such as cardiac rehabilitation, online groups, and care givers. The key theme is that patients are self-directed learners. While the healthcare professionals, starting with the physician are the most trusted source of information, many patients still have a healthy distrust of the information they receive from their healthcare professionals and seek to validate it with other information. Also, while the instructional strategies used by healthcare professionals are perceived to be effective for patients with proficient health literacy and numeracy skills, they are not effective for patients with low literacy and numeracy skills. Conclusions: Instructional strategies should be personalized, interactive, social, and relevant to the patients, focusing on the establishment of a support system, and leave no patients behind. Furthermore, an effective health literacy instructional strategy should address the emotional state of the patient, and the behavioral approach to engage and motivate the patient to adopt self-management behaviors.