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Emphasizing the child in child health literacy research

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Abstract

Child health literacy is a 'hot topic' of late, as researchers and practitioners work to attain an equitable and healthy future. Health literacy emphasizes the wide range of skills that people need to access, understand, evaluate and use health information to promote good health. In light of the recognition that health literacy is an important determinant of health for adults, addressing child health literacy early on is essential to maximize future health outcomes. Meeting children's specific needs arguably includes the delivery of information that can be easily accessed and understood by younger age groups. While much academic discourse pertains to the importance of building parental health literacy, there is less literature that explicitly focuses on *child-centred* health literacy. On the premise that health literacy is an asset, this paper provides an argument for investing in children's health literacy by working *with* children to encourage meaningful contributions in research and practice.

Keywords

Adolescent health, child centred, child health, health literacy, health promotion

Introduction

Chronic illnesses that threaten the health and development of children are well documented on a global scale. Conditions such as obesity and type 2 diabetes are becoming more common which emphasizes the importance of preventative efforts across the life course (World Health Organization, 2012). Although subject to various conceptualizations, health literacy is acknowledged as a key determinant of health that can serve to reduce health inequalities (Beauchamp et al., 2015). The World Health Organization (2015) defines health literacy as 'the personal characteristics and

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social resources needed for individuals and communities to access, understand, appraise and use information and services to make decisions about health'. However, what constitutes health literacy has been consistently contested within the literature and the last decade has seen many debates around how it can be best measured, hence studies vary considerably depending upon the definition employed (Squiers et al., 2012). In traditional terms, health literacy research focused on reading, writing and comprehension skills in medical contexts. Over time, however, the nature and scope of health literacy has widened to encompass broader social skills, which reflects a health promotion perspective (Pleasant and Kuruvilla, 2008).

Nutbeam (2008) notes that health literacy has simultaneously evolved from two schools of thought; one that emphasizes clinical research correlations between poor literacy skills and poor health outcomes (i.e. where health literacy is framed as a problem) and one that recognizes health literacy as an asset and solution. From a clinical perspective, literature has focused on the correlation between low health literacy and self-management of health conditions. For example, a systematic review of 96 relevant studies indicates that lower health literacy is associated with a range of outcome variables including higher hospitalization rates, more health service use, less use of preventative health care, poorer understanding of health messages, poor adherence to medications and higher mortality amongst particular groups such as the elderly (Berkman et al., 2011). Other research has investigated barriers to health literacy. For example, being older, growing up in a household with limited literacy, having lower educational attainment, migrating from a non-English-speaking country, and not having full citizenship, all constitute potentially limiting factors (Adams et al., 2009; Beauchamp et al., 2015; Howard et al., 2006; Kreps and Sparks, 2008). By contrast, conceptualizing health literacy as a solution recognizes empowerment that extends beyond the acquisition of basic health knowledge. This idea is reflected in Nutbeam's classification of health literacy, which outlines the importance of achieving health literacy at the functional, interactive and critical levels (Nutbeam, 2000). Beyond functional reading and writing skills, Nutbeam prompts consideration of one's ability to understand and use information for prevention and self-management, which he terms interactive health literacy. At the highest level, critical health literacy relates to individual and community capacity for social action to address barriers to good health.

As a significant area of policy, it is important to understand how to promote and evaluate best practice in health literacy (Pleasant et al., 2015). Such thinking should extend to different population groups and settings, including children, yet there is limited literature that explores child health literacy through a child-centred lens. This article illuminates the significance of child health literacy by drawing together current work in the field. By advocating children's empowerment and participatory rights, we provide a case for investing in child health literacy and provide recommendations for research and practice.

A case for child health literacy

The significance of child health literacy is espoused by various researchers who highlight the importance of addressing health literacy skills at an early age (Abrams et al., 2009; Borzekowski, 2009; Manganello, 2008). Meeting children's specific health literacy needs, including the delivery of information that is easily accessible and understood by younger age groups, is likely to play a role in shaping subsequent attitudes and behaviours that typically endure into adulthood. Paakkari and Paakkari (2012: 136) offer one perspective on children's health literacy that comprises the 'broad range of knowledge and competencies that [students] seek to encompass, evaluate,

construct, and use … [including] theoretical knowledge, practical knowledge, critical thinking, self-awareness, and citizenship'. Upon conceptualizing child health literacy, one can begin to reflect on the ways in which children make sense of health messages and navigate contemporary health information. From a clinical perspective, health literacy skills reasonably encompass self-management of childhood conditions, for example, type 2 diabetes, asthma or epilepsy. However, with the exception of some children who are involved in managing a health condition, specific skills associated with health system navigation and medication adherence are irrelevant for many young people. By contrast, a health promotion perspective points to broader health-related activities and information seeking in everyday life. For example, we might consider how health literacy information seeking is influenced by the proliferation of media messages that convey sociocultural norms throughout the childhood years, or digitalized, individualized 'health promotion' technologies. We could also contemplate the tiering of health literacy competencies across developmental stages. For example, the increased independence that marks the progression into adolescence lends itself to more unsupervised decision-making around food choice, physical activity participation, sleep patterns and sexual expression, so these factors warrant consideration when examining health literacy throughout the transitional years.

In an effort to improve children's health outcomes, many preventative research projects and interventions are targeted towards parents and educators, given their fundamental roles in shaping children's health-related attitudes and behaviours. In order to gain a holistic understanding of children's health, we argue that it is essential to include the child's perspective alongside this valuable work being conducted with caregivers. Söderbäck et al. (2011) insightfully describe the difference between *a child perspective* and *the child's perspective* in healthcare contexts. Whilst the child perspective emphasizes adults' views of children's health, a child's perspective is characterized by the child's own viewpoint on his or her health-related attitudes, behaviours and experiences. Tapping into the child's perspective is irrefutably valuable, in the sense that children's own unique social worlds, experiences, opinions and understandings are acknowledged and respected, which can inform supportive healthcare practices and meaningful health promotion interventions. Indeed, research shows that young children are health conscious and able to recognize basic health concepts, conveyed by means of familiar icons and images (Onyango Ouma et al., 2004; Piko and Bak, 2006). Children are also able to identify healthy foods, articulate basic health concepts and reflect on facilitators and barriers to health behaviours (Protudjer et al., 2010).

Despite the potential for children to make meaningful contributions to research, many projects continue to displace children on the basis of inferiority, dependence and vulnerability. The need to separate children from an 'adult' world is reflected in health research, where many ethical guidelines mandate parental consent on the basis that children cannot provide legal informed consent before the age of 18 (Nixon, 2013). Accordingly, research about children's health has largely been overshadowed by adult accounts and studies conducted *on* children (Darbyshire et al., 2005). This is similarly reflected in the literature around child health literacy, where parents and caregivers have remained the focus of research by acting as proxies for children. Many studies to date have focused on the impact of parental literacy and health literacy on child health outcomes related to chronic illness management. A systematic review conducted by DeWalt and Hink (2009) indicates that low parental literacy is generally related to poor health outcomes in young children. Low parental health literacy is specifically associated with increased incidence of emergency department visits, hospitalizations and days missed from school for children with asthma (DeWalt et al., 2007) and less parental knowledge about asthma (Shone et al., 2009). Other research shows associations between low parental health literacy and difficulty in understanding medication labels

(Yin et al., 2009), certain obesogenic attitudes and childcare behaviours (Liechty et al., 2015; Yin et al., 2014) and poor glycaemic control for diabetic children (Pulgarón et al., 2014). The assessment of variability in children's health according to parental health literacy is clearly valuable, but it does not account for children's perceived needs and experiences.

Fewer health literacy studies have included child participants. In examining the literature base, several studies advocate screening measures that can be used to identify low health literacy in clinical settings for use with children aged 7–10 onwards (e.g. Chari et al., 2014; Driessnack et al., 2014; Sharif and Blank, 2010; Warsh et al., 2014). These studies importantly seek to elucidate aspects of child health literacy by including children in their research design, but the methodological tools employed remain limited in their ability to comprehensively measure health literacy. This is largely due to the close-ended questioning, task-performance orientation and a focus on numeracy/reading comprehension that particularly neglects the interactive and critical health literacy domains (Abel, 2008). Other research has focused on examining child health literacy through self-report measures. Brown et al. (2007) used a self-reporting survey method to determine the ways in which 1178 children aged 9–13 access, understand, take interest in and apply valid health information. Eight original survey questions were developed and based on a literature review and prior surveys. Health literacy was defined by the researchers as 'the ability to understand health information and to understand that actions taken in youth affect health later in life, combined with the ability to access valid health information' (Brown et al., 2007: 13). Findings highlight the importance of preadolescents understanding the consequences of their health-related behaviours and comprehending tailored health messages. Paek et al. (2011) also measured a form of self-reported health literacy with seventh-grade children, drawing attention to the role of friends, family, school and media influences in shaping health literacy competencies. More work is being conducted with older adolescents, based on the recognition that teenagers begin to exercise independence through increased decision-making. Some studies have employed validated quantitative screening tools such as the eHEALS (Noman and Skinner, 2006) and Newest Vital Sign test (Weiss et al., 2005) to measure adolescent health literacy (e.g. Ghaddar et al., 2012; Sanders et al., 2009) and other work has proposed expanded measurement tools that capture additional health literacy skills (e.g. Massey et al., 2013). Other researchers have focused on the barriers and facilitators surrounding adolescent health literacy. These studies collectively indicate that a range of information sources influence adolescent health literacy, including friends, family, school, professionals and other media forms (Begoray et al., 2009; Gray et al., 2005; Levin-Zamir et al., 2011; Massey et al., 2012; Wharf Higgins et al., 2009). The field is moving in the right direction but more work is warranted to expand our understanding of how to support health literacy across the developmental stages, including middle childhood and preadolescence. It is also important to explore the specific skills and competencies that are relevant to children living within diverse socio-economic environments. In order to answer such questions the field must accommodate more child-centred research.

Recommendations

Albeit seemingly obvious, child health literacy research should be specific to children by taking into account their experiences. The question still remains around what components and learning objectives should be regarded as constituent parts of child health literacy, and there is no clear definition of what exactly should be measured independent of parental health literacy. Sharif and Blank (2010) emphasize the need for a measurement tool that accounts for children's cultural

context and developmental differences throughout childhood and adolescence. In conjunction with the use of validated screening tools, which are inherently limited in capturing broad sociocultural factors (Nutbeam, 2008), future work should focus on understanding children's needs by including children as active participants in research and intervention design. With the goal of understanding how children construe their social worlds and experiences, child-centred practice emphasizes the importance of working *with* children. Whilst children have often been excluded from research based on the view that they are unable to provide valid, reliable data (Morgan et al., 2002), a growing body of research advocating children's empowerment and participatory rights has generated interest in accessing and representing children's perspectives through child-centred qualitative research (Darbyshire et al., 2005). Researching *with* children reflects the understanding that childhood is a unique phase in the human experience that should not be compared to adulthood (Warming, 2011). Children, as citizens in their own right, are the best informants to provide such information on matters that affect them (United Nations General Assembly, 1989). As Mishna et al., explain (2004: 450) listening to children's voices through qualitative interviewing allows researchers to 'step outside the bounds of adult thinking and discover unexpected differences in the perceptions of adults and children'. Policymakers need to understand health literacy capacities across diverse communities and talking to young people about their needs, interests and preferences plays an integral part in supporting meaningful practice. Accordingly, children should be regarded as research partners who are worthy of study in their own right and whose perceptions can make a valuable contribution to health literacy programs and policies.

Longitudinal research is needed to explore factors that shape health literacy over the life course. This will enable researchers to map out a comprehensive health literacy continuum, which outlines the competencies that are relevant to different age groups. Future work should also uncover key factors that influence children's interactions with health information and resources in the contemporary sociocultural environment. Today children need to become informed and discerned consumers who are capable of navigating health information in a number of formats, as they progressively engage with a constantly evolving media landscape (Wharf Higgins and Begoray, 2012). In their discussion of young people's use of health information websites, Franck and Noble (2007) emphasize the importance of 'asking the users' to ensure that websites meet young people's needs. In this vein, further studies should be conducted to thoroughly investigate processes of health information seeking. In addition to navigating various technologies and platforms, young people need to be equipped with the skills to critically appraise contemporary forms of health communication (Wharf Higgins and Begoray, 2012). From a health literacy perspective, the proliferation of social networking sites laden with advertisements and the dissemination of conflicting health messages via popular public profiles endorsing products and behaviours within a 'health' discourse, presents many challenges. When examining the interface between technology and health literacy, such challenges should be closely considered alongside the potential benefits of emergent digital health technologies, given their ubiquity in contemporary society.

Schools evidently play a fundamental role in developing children's capacity to become health literate (Wharf Higgins et al., 2009). In an Australian context, developing child health literacy through school-based health education is advocated through the revised national curriculum (Australian Curriculum, Assessment and Reporting Authority, 2012), yet the question still remains as to how teachers will address health literacy competencies in the classroom. From an educator's standpoint, health literacy should be at the forefront of the school agenda, through curriculum development and a whole school approach (Kilgour et al., 2013). Learning how to develop and adapt educational materials and messages for children with different levels of health literacy skills

is an important competency for teachers. Beyond the delivery of health information, we must explore creative ways to foster interactive and critical health literacy skills. Contemporary conceptualizations of health literacy also highlight the importance of empowering young people to improve broader sociocultural conditions that influence the health of their communities (Kickbusch, 2009). At a time where increasing emphasis is placed on freedom and individual choice, the field needs to shift its focus to encompass a social determinants perspective. Building children's understanding of fairness, inequality and social justice could be considered one of the first steps. In addition to school-based health literacy, families, communities, universities, researchers and policymakers need to work together to develop, implement and evaluate integrated strategies. Pleasant et al. (2015) aptly call for the next phase of research to move beyond measurement by considering the outcomes of health promotion interventions grounded in 'best practice' health literacy principles (Pleasant et al., 2015). Only then can we effusively celebrate the promise of health literacy as a practical solution for child health disparities.

The field of child health literacy is gradually evolving but much more can be accomplished. Key questions remain unanswered and children should be afforded the possibility to be heard in relation to matters that affect them. Child-centred research will provide practitioners with exciting opportunities to understand children's interactions with contemporary health information and resources. Acknowledging these factors will pave the way for the design, implementation and evaluation of more meaningful health literacy interventions in the future.

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