SHORT COMMUNICATION

Addressing health literacy in schools in the WHO European Region

Leena Paakkari¹, Jo Inchley², Anette Schulz³, Martin W Weber⁴, Orkan Okan⁵

- ¹ Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland
- ²MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, United Kingdom
- 3 Schools for Health in Europe Network Foundation and Research Centre for Health Promotion, University College South Denmark, Kolding, Denmark
- ⁴WHO Regional Office for Europe, Copenhagen, Denmark
- ⁵ Interdisciplinary Centre for Health Literacy Research, Faculty of Educational Science, Bielefeld University, Bielefeld, Germany

Corresponding author: Leena Paakkari (email: leena.paakkari@jyu.fi)

ABSTRACT

The education system as a whole and schools in particular are important settings for the development of health literacy among children. Any improvement in health literacy skills may benefit the health, growth and development of children, as well as their health in later life and the health of the broader society. This short communication presents some of the prerequisites for schools to become key settings for health literacy

development in school-aged children. Recent research and the current status of school health literacy policies in the WHO European Region will also be reviewed. We argue that health literacy must become a critical agenda item in education policies across the Region and, moreover, intersect with further sectoral strategies and policies on health literacy and public health across the political spectrum.

Keywords: HEALTH LITERACY, SCHOOLS, HEALTH PROMOTION AND EDUCATION, CHILDREN, EQUITY

INTRODUCTION

Health literacy is a key determinant of health (1). Several studies have reported a positive association between high levels of health literacy and better health outcomes in children (2-4). For example, the WHO collaborative Health Behaviour in School-aged Children (HBSC) survey found that health literacy is one of the main factors contributing to health differences and is associated with educational outcomes such as academic achievement and post-school aspirations (4). Health literacy is a useful phenomenon in the understanding and reduction of avoidable health disparities because it can be learned and developed (4-6). However, children's health literacy should not merely be seen as a risk factor for poor health, but also as an asset that supports the development of autonomy, empowerment and participation in promoting the common good (1, 5). According to WHO, health literacy consists of "the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health" (7). However, discussions about what

health literacy is should not only consider the ability to use and handle externally provided (e.g. taught) information; other abilities are equally important, such as understanding one's own wishes and preferences in health issues and being able to consider the ethical consequences of one's actions on others and the world.

Schools are an important setting in which to develop health literacy because they can reach almost all school-aged children over a long period. This also makes schools the perfect arena for sustainable action. Within the school context, health education (either as a standalone subject or a cross-cutting theme) provides a key opportunity to promote health literacy, that is, the ability to make sound health decisions and to identify and work on the factors that influence health. Classroom instruction can facilitate children's personal skill development and help to motivate and engage them in lifelong health learning across a broad range of health topics (8, 9). At education system level, the teaching of health literacy may also serve as a key component of a whole-school approach, such as the WHO's Health Promoting Schools framework (10–12), through its

integration into measures and actions related to organizational change, workforce development, intersectoral collaboration and networking, and education policy (13). In this context, health literacy should not be imported into the education sector by external forces but should instead be developed from within. The education sector should be seen as a key agent and the primary driver for developing health literacy approaches that are tailored to its curriculum, standards, techniques, classroom teaching and learning objectives and outcomes, as well as its core educational tasks, practices and goals.

All children have the right to receive quality education on health literacy in schools that enables them to attain high levels of health literacy (1). This article presents some of the prerequisites for schools to become key settings for health literacy development in school-aged children, with a particular focus on the WHO European Region. The current state of school health literacy policies within the Region will also be discussed. This article defines children as all persons aged 19 years or younger (14).

SCHOOLS ARE SUPPORTIVE SETTINGS FOR HEALTH LITERACY

The expansion of formal schooling is considered "the single most significant factor influencing the spread of literacy worldwide over the past two centuries" (15). Schools are therefore offer the same potential in relation to the health literacy of children, providing the single most important setting in which to develop health literacy in the current and future generations, and thus to enhance health literacy worldwide. However, schools vary in how much they encourage the development of health literacy. We suggest several important perspectives for schools to reach their potential (cf. 15):

Access to education. Schooling should be available to all, but there are striking inequalities in education provision across the different regions of the world. In 2016, 3.8% of primaryage children and 2.1% of lower-secondary-age children were out of school in Europe and North America; in contrast, the corresponding figures in sub-Saharan Africa were 20.8% and 36.6% (16). Access to education offers children the possibility to participate in all school-based health literacy learning that takes place in their school. Above all, it enables them to attain general literacy skills, which are a core human right and a solid base for active citizenship and safe health decisions (17).

Access to age-appropriate school health education via a wholeschool approach and school curriculum. As demonstrated by the Schools for Health in Europe Network Foundation (18), the development of health skills, knowledge, behaviour and communication through classroom teaching and whole-school approaches is already a focus area within many national school systems in the WHO European Region, as well as internationally (19, 20). However, since health literacy is a relatively new theme in education, it is only explicitly embedded into schools' policies and practices in a few countries (9). Intentionally planned school-based health promotion programmes and health literacy curricula should be based on the principles of empowerment and engagement to ensure that children can gain and practice comprehensive health literacy in an age-appropriate manner. Offering health literacy as part of the national school curriculum may minimize health literacy differences within countries, but a more ambitious aim is to integrate health literacy education into all schools in order to reduce differences at global level. In the whole-school approach, health literacy curricula must be supported by a focus on the wider physical and social school environment, including health services and community links. The Schools for Health in Europe Network Foundation provides a framework for implementing health literacy programmes in schools and, as the Paris Declaration states, this approach should be expanded to make every school in the WHO European Region a setting that promotes health and well-being for all (21).

Opportunities for all children to develop the highest levels of health literacy. According to the Shanghai Declaration, "health literacy is founded on inclusive and equitable access to quality education" (1). Moreover, no child should be expected to learn or know less than any other. Undeniably, health literacy needs and challenges, as well as learning prerequisites, vary within and between countries, schools and children. However, all children should be able to pursue their full potential regardless of who they are and where they live, although the paths to achieving that goal might be different. This is a moral imperative and enshrined in the United Nations Convention on the Rights of the Child (22).

Opportunities to develop lifelong learning skills. The development of strong health literacy skills requires equitable access to lifelong learning (1). At school, children should gain competencies and abilities that enable them to respond to and manage changing health challenges throughout their lifespan. Addressing health literacy in a comprehensive manner reinforces several competencies that are often developed through existing curricula and which

correspond well with lifelong learning skills, such as critical thinking, collaboration and communication skills, decision-making and digital literacy. Such skills provide an essential foundation for the development of health literacy throughout the life course (1), but similarly health literacy promotes and supports the attainment of lifelong learning skills.

Access to free exchange health information and information technology. The availability of literature and information technology differs among families, as well as among schools (15). Therefore, well-resourced schools have the potential to equalize the societal differences in health literacy caused by out-of-school settings with poor health literacy. However, the current wide variations in school resources are widening these differences. Improvements in education quality require having access to a wide range of learning and instructional materials (15). The equal and adequate distribution of resources is therefore essential to enable children to receive the full benefits of an optimal learning environment.

Accomplishing these goals requires commitment from the education sector. Moreover, as health literacy needs to be embedded within education policies, it is critical that health literacy researchers learn the language of the education sector (13).

HOW HEALTH LITERACY POLICIES ADDRESS THE EDUCATION SECTOR

A recent review that mapped health literacy policy activities in the WHO European Region identified 46 policies at national, regional or local level (23). Most of these have been developed by health ministries and health experts and, as such, are mainly rooted in health disciplines such as public health, health promotion, health care and mental health. The policies and suggested activities may therefore be less attractive to the education sector if they fail to address key educational goals or use educational language. However, the policies also include recommendations and policy instruments addressing children, the education sector and schools.

Despite health literacy in children being a focus of recent policy developments, a recent project identified only a few education sector policies on health literacy (24). Education policies identified in Australia (25), Finland (26), Portugal (27)

and the United States of America (28, 29) addressed health literacy through the school curriculum, either as a standalone health education curriculum (e.g. in the United States) or incorporated into different subjects within the general curriculum (e.g. in in Finland as part of the subject 'health education'). Although all of the policies defined health literacy, the definitions were not consistent. The specific goals were based on standards adapted to different school grades and highlighted the skills, knowledge, capabilities and actions to be learned that are associated with certain health literacy tasks and health behaviour.

Besides these specific education policies, the policies launched by health ministries, departments, agencies and experts all recommended that health literacy should be addressed from primary school onwards, and some also included preschool settings. These (health) policies typically understand health literacy to be a relational concept and highlight the importance of training for education professionals to teach health literacy in the classroom. However, the existence of a health literacy policy enacted by the health ministry does not automatically mean that other sectors, such as education, must adhere to the recommendations of the policy. To ensure that the education sector can make health literacy a priority target, such policies must be developed together with agents from within the education sector and include precisely defined goals and actions for workforce development and integration of health literacy into educational thinking, concepts and core tasks.

Future health literacy policy-making must be evidence informed; however, little is currently known about the Regional status of health literacy among children and adolescents. Monitoring health literacy within the school-aged population is essential for both assessing the impact of existing policies and programmes and their future development. Existing studies such as the HBSC survey provide a unique opportunity to gather cross-nationally comparable data for surveillance, international benchmarking and research purposes. Health literacy has been a focus area within the HBSC survey for five years, and a 10-item scale, the health literacy measure for school-aged children, has been developed and validated for use in the adolescent age group (30, 31). Twelve countries included this scale in the most recent, 2017-2018, survey and future surveys offer the potential for its wider adoption. This would enable a better understanding of the patterns in health literacy across the Region and its role in promoting health and wellbeing among the school-aged population.

CONCLUSIONS

Health literacy is an important education and public health issue. As such, it must be prioritized within education policies across the WHO European Region. Schools provide a critical setting for health literacy development owing to their near-universal reach, but the extent to which health literacy is recognized and prioritized within the education sector varies considerably across countries. Incorporating health literacy into the school curriculum, supported by a whole-school approach, is the most promising strategy to ensure that all children can gain the necessary knowledge and skills to support their health and well-being across the life-course. To achieve this, the health and education sectors need to work together.

Acknowledgements: None.

Sources of funding: This work was funded by the German Federal Ministry of Education and Research (BMBF): Health Literacy in Childhood and Adolescence (funding code 01EL1824A; Orkan Okan) and the Juho Vainio Foundation (Leena Paakkari).

Conflicts of interest: None declared.

Disclaimer: The authors alone are responsible for the views expressed in this publication and they do not necessarily represent the decisions or policies of the World Health Organization.

REFERENCES¹

- Shanghai Declaration on promoting health in the 2030 Agenda for Sustainable Development. Geneva: WHO; 2016 (http:// www.who.int/entity/healthpromotion/ conferences/9gchp/ shanghai-declaration.pdf).
- 2. Fleary SA, Joseph P, Pappagianopoulos JE. Adolescent health literacy and health behaviors: a systematic review. J Adolesc. 2018;62:116–27. doi: https://doi:10.1016/j. adolescence.2017.11.010.
- Shih SF, Liu CH, Liao LL, Osborne RH. Health literacy and the determinants of obesity: a population-based survey of sixth grade school children in Taiwan. BMC Public Health. 2016;16:280. doi: https://doi:10.1186/s12889-016-2879-2.

- Paakkari LT, Torppa MP, Paakkari OP, Välimaa RS, Ojala KS, Tynjälä JA. Does health literacy explain the link between structural stratifiers and adolescent health? Eur J Public Health. 2019 (Epub ahead of print, PMID: 30753409) doi: https://doi:10.1093/eurpub/ckz011.
- 5. Nutbeam D. Health literacy as a public goal: a challenge for contemporary health education and communication strategies into the 21st century. Health Prom Int. 2000;15(3):259–67. doi: https://doi.org/10.1093/heapro/15.3.259.
- IUHPE Position statement on health literacy: a practical vision for a health literate world. International Union for Health Promotion and Education. Paris: International Union for Health Promotion and Education; 2018 (https://www.iuhpe.org/images/IUHPE/Advocacy/IUHPEHealth_ Literacy_2018.pdf).
- 7. Nutbeam D. Health promotion glossary. Health Prom Int. 1998;13:349–64.
- 8. Paakkari L. Three approaches to school health education as a means to higher levels of health literacy. In: Simovska V, McNamara PM, editors. Schools for health and sustainability: theory, research and practice. Dordrecht: Springer Science+Business Media; 2015:275–90.
- Okan O. From Saranac Lake to Shanghai: a brief history of health literacy. In Okan O, Bauer U, Pinheiro P, Levin-Zamir D, Sørensen K, editors. International handbook of health literacy: research, practice and policy across the lifespan. Bristol: Policy Press; 2019.
- 10. Leger LS, Nutbeam D. A model for mapping linkages between health and education agencies to improve school health. J Sch Health. 2000;70(2):45–50. doi: https://doi.org/10.1111/j.1746-1561.2000.tb07239.x.
- 11. St Leger L. Schools, health literacy and public health: possibilities and challenges. Health PromInt. 2001;16(2):197–205. doi: https://doi.org/10.1093/heapro/16.2.197.
- 12. Lee A. Health-promoting schools. Evidence for a holistic approach to promoting health and improving health literacy. Appl Health Econ Health Policy. 2009;7(1):11–17. doi: https://doi.org/10.1007/BF03256138.
- 13. Paakkari L, Okan O. Health literacy talking the language of (school) education. Health Literacy Research and Practice. Bristol: Policy Press; 2019 (in press).
- 14. Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach, second edition. Geneva: World Health Organization; 2013 (https://www.who.int/hiv/pub/guidelines/arv2013/en/).

All references were accessed 10 July 2019.

- Education for all: literacy for life: EFA global monitoring report, 2006. Paris: United Nations Educational, Scientific and Cultural Organization; 2005 (https://unesdoc.unesco. org/ark:/48223/pf0000141639, accessed 15 March 2019).
- 16. One in five children, adolescents and youth is out of school. Paris: United Nations Educational, Scientific and Cultural Organization; 2018 (UIS Fact Sheet No. 48; http://uis.unesco. org/sites/default/files/documents/fs48-one-five-children-adolescents-youth-out-school-2018-en.pdf).
- 17. Education for all 2000–2015: achievements and challenges. EFA global monitoring report. Paris: United Nations Educational, Scientific and Cultural Organization; 2015 (https://unesdoc.unesco.org/ark:/48223/pf0000232205).
- 18. Literature & links. In: Schools for Health in Europe Network Foundation [website]. Haderslev: Schools for Health in Europe Network Foundation; 2019 (https://www.schoolsforhealth.org/resources/literature-links).
- Langford R, Bonell C, Jones H, Pouliou T, Murphy S, Waters E et al. The World Health Organization's Health Promoting Schools framework: a Cochrane systematic review and meta-analysis. BMC Public Health. 2015;15:130. doi: https://doi:10.1186/s12889-015-1360-y.
- 20. McDaid D. Investing in health literacy: what do we know about the co-benefits to the education sector of actions targeted at children and young people? Copenhagen: WHO Regional Office for Europe; 2016 (Policy brief 19; http://www.euro.who.int/_data/assets/pdf_file/0006/315852/Policy-Brief-19-Investing-health-literacy.pdf).
- 21. Declaration: partnerships for the health and well-being of our young and future generations. Promoting intersectoral and interagency action for health and well-being in the WHO European Region. Outcome document of the high-level conference, 7–8 December 2016, Paris, France. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0019/325180/Paris_Declaration_ENG.pdf?ua=1).
- 22. Convention on the rights of the child. New York: United Nations General Assembly, Treaty Series 1989;1577:3 (https://www.refworld.org/docid/3ae6b38f0.html).

- 23. Rowlands G, Russell S, O'Donnell A, Kaner E, Trezona A, Rademakers J et al. What is the evidence on existing policies and linked activities and their effectiveness for improving health literacy at national, regional and organizational levels in the WHO European Region? Copenhagen: WHO Regional Office for Europe; 2018 (Health Evidence Network (HEN) synthesis report 57; http://www.euro.who.int/_data/assets/pdf_file/0006/373614/Health-evidence-network-synthesis-WHO-HEN-Report-57.pdf?ua=1).
- 24. Okan O, Sørensen K, Pinheiro P, Bauer U. Health literacy policy-making for effective child and adolescent health promotion and prevention strategies. Eur J Public Health. 2018;28(suppl 4):cky213.834. doi: https://doi.org/10.1093/eurpub/cky213.834.
- 25. Shape of the Australian curriculum: health and physical education. Sydney: Australian Curriculum, Assessment and Reporting Authority; 2012.
- 26. National core curriculum for basic education 2014. Helsinki: Finnish National Agency for Education; 2014.
- 27. National health education standards: achieving health literacy. New York: American Cancer Society; 1995.
- 28. National health education standards: achieving excellence. New York: American Cancer Society; 2007.
- 29. Programa nacional de saúde escolar [National school health programme]. Lisbon: Ministry of Health; 2015 (in Portuguese; https://observatorio-lisboa.eapn.pt/ficheiro/Programa-Nacional-de-Saúde-Escolar-2015.pdf).
- 30. Paakkari O, Torppa M, Kannas L, Paakkari L. Subjective health literacy: Development of a brief instrument for schoolaged children. Scand J Public Health. 2016;44(8):751–7. doi: https://doi.org/10.1177/1403494816669639.
- 31. Paakkari O, Torppa M, Boberova Z, Välimaa R, Maier G, Mazur J et al. The cross-national measurement invariance of the health literacy for school-aged children (HLSAC) instrument. Eur J Public Health. 2018;29(3):432−6. doi: https://doi:10.1093/eurpub/cky229. ■