




Placing the child into the center of self-care: reflections about cognitive development and health literacy in childhood

Posicionando a criança no centro do seu cuidado: reflexões sobre o desenvolvimento cognitivo e o letramento em saúde infantil

Posicionar a los niños en el centro de su cuidado: reflexiones sobre el desarrollo cognitivo y la alfabetización en salud infantil

 Rebecca Ortiz La Banca, PhD¹

 Lucila Castanheira Nascimento, PhD²

¹ Post-doctoral researcher at Joslin Diabetes Center, Harvard Medical School, Boston, Massachusetts, United States of America.

² Associated Professor, University of Sao Paulo, Ribeirão Preto College of Nursing, Child-Maternal Nursing Department and Public Health, Ribeirão Preto, São Paulo, Brazil.

How to cite this article:

Ortiz La Banca R, Nascimento LC. Placing the child into the center of self-care: reflections about cognitive development and health literacy in childhood [editorial]. *Rev Esc Enferm USP*. 2019;53:e03533. DOI: <http://dx.doi.org/10.1590/S1980-220X2019ed0303533>

Child centered care, discussed in nursing since 1960, has highlighted the importance of addressing pediatric population needs, especially those perceived by the youth perspectives. In communication technologies and the internet era, acknowledging that youth younger than 18 years old are capable of seeking, evaluating, and utilizing health information is paramount. In this sense, health literacy (HL) emerges as a construct responsible for relationships among cognition, education, and self-care. When HL is adequately developed in childhood, children and adolescents may actively care of their own health.

The HL development is given through a dynamic process, influenced by personal, situational, societal and environmental factors⁽¹⁾. Within the pediatric context, HL dimensions may be varied and overlap with each other, which is better explained in three core HL categories: cognitive; behavioral/operational and affective/conative⁽²⁾.

The cognitive category is comprised of mental functions and actions related to thinking, learning, and processing information. This category also includes one's abilities regarding his/her knowledge, comprehension, analysis, evaluation, and critical appraisal. The behavioral/operational category consists of all actions that take place beyond the individual thinking, reflecting a behavioral attribute. In this category abilities to seek and access health information are developed, as well as abilities related to using the information obtained, communicating, the interpersonal interactions and citizenship. Finally, the affective/conative category embrace the HL dimensions that evolve over feelings or emotions, and may explain personality traits and mental stages responsible for how youth strive towards action and direct their efforts. This category includes the abilities of self-awareness, self-control, self-regulation, self-efficacy, interest, and motivation⁽²⁾.

Within the child developmental stages, Piaget e Vygotsky highlight the cognitive aspects which also contribute to comprehend the HL in childhood and how it might be influenced by cultural factors and social interactions. According to Piaget⁽³⁾, there are four stages of cognitive development in line with age groups: sensorimotor stage (from birth to 24 months of age), preoperational stage (ages 2 to 7 years), concrete operational stage (ages 7 to 12 years), and formal operational stage (older than 12 years). Three main cognitive processes occur within these stages: assimilation, accommodation, and adaptation. In each stage the child achieves a level of mental organization, or equilibration, that allows him/her to deal with the reality. The equilibration will be modified as far as the child acquires

new abilities of understanding and acting upon the reality. When in adolescence, he/she will strike the final stage of the cognitive development, identical to adult reasoning.

Vygotsky⁽⁴⁾ theory states the concept about the zone of proximal development, defined as the difference between what the child is able to accomplish with help of others and what the child is able to perform alone. Vygotsky refers to a dynamic assessment, including both intelligence and the child's individual skills, as well as the support given by peers and family to their self-care. Thus, health care professionals in the pediatric field must analyze the child HL abilities considering the care provided by the child's support network.

Evaluating the child's HL within the developmental context may aid age-appropriate materials and educational programs. When health concepts and behaviors become culturally and socially relevant to the child, youth can comprehend them even earlier than expected for their age⁽⁵⁾. Therefore, the continuing promotion of HL categories allow children and adolescents to turn into individuals with critical thinking.

In the past 20 years nurses concerns about their empowerment to adequately communicate with the pediatric population was evident. A nurse capable of efficiently communicating with children may embrace them into their own health care and obtain the child informed consent to decision making⁽⁶⁾. Currently in the pediatric nursing field, the HL has been consolidated and surfaces the development of interventions aiming to empower children to self-care. Youth with adequate HL acquire skills that may influence health outcomes and well-being over their life course⁽²⁾. In this sense, the assessment of the HL construct in childhood must be incorporated in nursing care and research, assuring the children's rights of being listened to and placed into the center of their self-care.

REFERENCES

1. Sorensen K, Pleasant A. Understanding the conceptual importance of the differences among health literacy definitions. *Stud Health Technol Inform*. 2017;240:3-14.
2. Broder J, Okan O, Bauer U, Bruland D, Schlupp S, Bollweg TM, et al. Health literacy in childhood and youth: a systematic review of definitions and models. *BMC Public Health*. 2017;17(1):361. DOI: 10.1186/s12889-017-4267-y
3. Piaget J. The relation of affectivity to intelligence in the mental development of the child. *Bull Menninger Clin*. 1962;26:129-37.
4. Vygotsky LS. *Mind in society: the development of high mental process*. Cambridge, MA: Harvard University Press; 1979.
5. Borzekowski DL. Considering children and health literacy: a theoretical approach. *Pediatrics*. 2009;124 Suppl 3:S282-8. DOI: 10.1542/peds.2009-1162D
6. Kitching D. The empowerment of children: who decides? *Accid Emerg Nurs*. 1998;6(1):11-4.

