



## Health literacy: Contradicting 50 years of research?

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In the previous issue, an article on health literacy (Rüegg and Abel 2019) raises the provocative question of how much health literacy is confounded by socio-psychological and material factors. The authors hypothesize that the association between health literacy and health can be decomposed into individual health determinants and thus is not a determinant in its own right. Contradicting 50 years of research?

The concept of health literacy was first brought up in the 1970ies and has since evolved to a multilevel concept. While in these early days health literacy was considered the competency of “handling words and numbers in a medical context” (Sorensen et al. 2012), it is now considered to measure the competencies to “access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease, prevention and health promotion” (Sorensen et al. 2012). In the era of digital health, the concept must also incorporate new health information resources and technologies and the competencies required to access, understand and appraise them. Methodological approaches to measure digital health literacy range from measuring scales [eHeals (Norman and Skinner 2006)], to Internet-based performance tests (Quinn et al. 2017). However, the literature is still inconclusive on the correlation between digital skills and health literacy (Quinn et al. 2017). Health literacy has also moved from focusing on individual patient skills to populations’ skills, and health professions’, health systems’ and organizations’ competencies in providing information and communicating about health. The latter indicates the potential of change that the original idea of health literacy has evoked. In fact, “public health literacy” has been introduced to accentuate social and civic

responsibilities and move from the original individual-level construct to health literacy competencies that benefit communities (Freedman et al. 2009). A large number of health literacy questionnaires developed indicate the need for different approaches to health literacy depending on the purpose and population addressed. We know roughly 250 questionnaires from very specific topics and diseases, target or age groups to general populations (Pelikan and Ganahl 2017), with slightly different conceptual models supporting them.

While it is uncontroversial that health literacy is associated with socioeconomic and demographic factors, authors will consider these factors either as antecedents (Sorensen et al. 2012), mediators (Marmot et al. 1998; Burkert et al. 2013) or confounders (Rüegg and Abel 2019). The term confounding implies that health literacy is not an independent health determinant for health outcomes. Rüegg and Abel (2019) present a model, which visualizes the indirect, via health literacy, and direct effects of socio-psychological and material factors on health behaviors and health. The authors tested their theoretical model empirically with data from the Young Adult Survey Switzerland (YASS) conducted in 2010 and 2011 in Switzerland, a large population-based sample of army recruits. The results indeed yield that in this sample of young, mainly healthy men, three out of six health outcomes investigated can be fully explained by the investigated confounders. The other three models support the confounding hypothesis at least partially. Thus, they put in question the recent accentuation on health literacy in the aim to reach a reduction of health inequalities and disease. Health literacy alone will not suffice, if the underlying causes are not considered by policy makers and the public health community.

The paper by Rüegg and Abel (2019) gives methodologically sound food for thought and points to a potential risk underlying the current focus on health literacy as “one of the most important social determinants for health” (Duong et al. 2017), and is therefore a noteworthy addition to the literature. The results do not disqualify the concept of health literacy, however. First, the results are not widely generalizable due to the all-male young study population.

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Second, certain factors investigated may be life phase specific (Manganello 2008). Third, one would demand additional studies looking into objective outcomes and other measures of material confounders to support the conclusion. Further, having shown how health literacy is composed of various highly relevant determinants of health, it may actually strengthen the measure as a good proxy indicator of complex psycho-social and material factors. In conclusion, albeit 8578 papers on “health literacy” up to date, the concept, pathways, different contexts and expectations require more research to improve our understanding of the limitations and potential of health literacy.

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