Health literacy of fourth grade students: preliminary findings from a classroom survey

Torsten Michael Bollweg

**Background**
Health literacy (HL) is considered a critical determinant of health. While the importance of HL in early life phases is emphasised, there is little evidence on the HL of primary school children and its determinants. This is the first European study to assess HL in 4th grade students, and to investigate predictors of HL in this age group.

**Methods**
A self-report, paper-and-pencil HL questionnaire was developed based on the European Health Literacy Survey Questionnaire (HLS-EU-Q). Since Nov 2016, an instrument validation study is being conducted in a non-representative sample of n = 1000 4th grade students in n = 40 schools in North Rhine-Westphalia, Germany. In a preliminary analysis of n = 519 cases, multiple regression was applied to explain variance in HL.

**Results**
81.7% of the participants stated that it was “rather easy” or “very easy” for them to access, understand, appraise, and apply health information. Due to the “subjective” form of measurement used, however, the high overall level of HL does not directly translate to high levels of competence, but rather to a high perceived manageability of tasks related to health information. Important predictors of HL were interest in health (β = .245, p < .000), indicators of self-efficacy (β = .136-.163, p < .01), and family affluence (β = .139, p < .01). In this regression model (R²corr. = .274), neither age, sex, functional literacy (measured by performance test), parental attitudes, nor the language spoken at home (a proxy variable for migration background) were significant predictors of HL.

**Conclusions**
Our preliminary findings point to the importance of individual attributes for the HL of 4th grade students. Family affluence being a significant predictor suggests the presence of a social gradient in 4th grade students’ HL. Thus, school-based interventions could be fruitful to prevent disparities in HL. Still, further research is necessary to validate these findings and to rule out self-report bias in the measurement of HL.