

博士論文 (要約)

Health literacy as a key to improving weight status among Palestinian adolescents living in chronic conflict conditions

(慢性的紛争下にあるパレスチナにおける思春期青年の体重改善
の鍵としてのヘルスリテラシー)

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Doctoral dissertation
(Summary)

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Introduction: Health literacy has emerged as a promising public health topic since its inception in the mid-1970s. It is now recognized as one of the important health determinants. Higher health literacy can assist adolescents in navigating the healthcare system and utilizing its resources. It also increases their participation in health-promoting activities and community health initiatives, making better use of preventative services.

Despite its importance, health literacy research with adolescents remains limited. In the Arab world, much research has examined health literacy with adults, and little is known about health literacy for adolescents using context-specific health literacy scales in Arabic language. In Palestine, only one qualitative study investigated how adolescents understood the concept of health and their perceptions towards health literacy. The same study proposed developing a health literacy scale specific to the Palestinian context to investigate the association between health literacy and the health outcomes of adolescents.

Because of the high exposure to violence and war-like situations, Palestinian adolescents are at an increased risk of health problems such as obesity and overweight. Health literacy may reduce the detrimental health effects of long-term violence exposure among adolescents. In Palestine, previous research has focused on the prevalence of overweight and obesity among adolescents, showing that the prevalence of overweight and obese individuals has increased in the past decade. However, only a handful of studies have investigated the risk factors of obesity and overweight individuals. The association between exposure to violence and weight status has not been addressed among Palestinian adolescents. Moreover, research regarding health literacy's effect on reducing the negative impact of exposure to violence remains lacking among adolescents. Evidence is also limited on how health literacy can help achieve a better weight status among Palestinian adolescents regardless of exposure to violence.

Objectives: This study aimed to 1) develop an Arabic version of the Health Literacy Assessment Scale for Adolescents (HAS-A) and culturally adapt it to the Palestinian context; 2) evaluate the psychometric properties of the newly adapted scale among Palestinian adolescents.

Methods: This study was conducted using a cross-sectional household survey in the Ramallah and al-Bireh district, Palestine. The district was divided into three strata by

locality type to sample the eligible households. A total of 1200 households were selected, consisting of 460 urban, 440 rural, and 300 refugee camp households. The eligible criteria were Palestinian households with adolescents who finished 6th to 9th grade in 2017 and living in the study district.

For the first objective of this study, the Arabic version of the HAS-A (HAS-A-AR) was derived through a forward-backward translation by multiple experts. The final translated version was conceptually equivalent to the original scale. The HAS-A-AR was piloted among 30 adolescents (15 boys and 15 girls) to assess the clarity and comprehensibility of the questions and measure interview duration. To adapt HAS-A to the Palestinian context, a sixth option was added to each item to reflect that health care professionals talk with parents about the adolescent health, not directly with the adolescent.

For the second objective, multiple methods were used to examine the psychometric properties of HAS-A-AR. First, face and content validity were evaluated during the translation process. Second, exploratory factor analysis (EFA) was performed to check the construct validity of the HAS-A-AR. Factors were retained based on the scree plot with an eigenvalue >1. Last, internal consistency was tested using Cronbach's alpha, MacDonald's omega, and the greatest lower bound (GLB) tests. The scale's average inter-item correlation was calculated.

Results: EFA showed that HAS-A-AR has a similar structure to the original HAS-A. It extracted three factors (communication, confusion and functional health literacy) whose eigenvalues were >1. Together they explained 57% of the total variance. Cronbach's alpha, MacDonald's omega and the GLB values for the three subscales were ≥ 0.77 .

The HAS-A-AR subscale results showed that 55%, 31% and 20% of adolescents had a low health literacy in the communication, confusion and functional subscales respectively. A high percentage (62.1%) of the adolescents were directly exposed to violence. Of those adolescents, 16.4% were exposed to political violence, while 56.6% were exposed only to domestic and school violence. The prevalence of obesity, overweight and underweight among adolescents was 6.3%, 16.7% and 2.2%, respectively.

Conclusions: The HAS-A was translated into the Arabic language (HAS-A-AR) in this study. The translated version was found to be clear, understandable and comprehensible for the adolescents. The HAS-A-AR was also culturally adapted to the Palestinian context by

adding an extra option to the questions reflecting adolescents' lack of active involvement with their health care management. HAS-A-AR is a valid and reliable scale to measure health literacy with appropriate psychometric properties. It is currently available for use among adolescents in Palestine and the surrounding Arab countries with similar language, culture, and political instability.