
A Comparative Transnational Study in Health Literacy between Austria and Portugal

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ABSTRACT:

Health literacy (HL) is the ability to understand and use basic health information. We used a validated standard assessment tool for HL and added individual factors in order to investigate the English HL between non-native students from Health Science studies of Austria and Portugal.

1 INTRODUCTION

Health literacy involves the knowledge, competence and skills to understand and use basic health information in order to promote health in society. It has been shown, that a person with an adequate level of HL has the ability to be responsible for his/ her own health and his/ her families health. Limited health literacy is associated with lower health outcomes, higher costs and can also lead to impaired student success. Validated health literacy assessment tools are in use to determine the health literacy levels of patients and are of major interest in correlation with the patient's compliance for medical therapies.

2 AIM

The study aimed at gaining knowledge about the English HL of non-native students from Health Science studies, to assess their comprehension of medical related information and instructions. For this purpose, an ERASMUS joint research project was initiated to analyse and compare the HL of students from two non-native English speaking countries: Austria, University of Applied Sciences, Salzburg (FHS) and Portugal, ESTeSC-Coimbra Health School. Furthermore, we wanted to investigate, if the HL questionnaire can be used as a reliable and additional assessment tool in application procedures for international student's exchange programs (e.g. Erasmus mobility) as well as for the European Joint Master Degree in Biomedical Laboratory Sciences (MARBLE).

3 MATERIAL & METHODS

A validated health literacy standard assessment tool (Pfizer, The Newest Vital Sign) including 6 items was used. In addition, a questionnaire was added to determine the life style of each student in order to find out if there are any correlations between life style factors and health literacy. The study was performed in January 2014 among 185 students of health sciences, Bachelor study degree program Biomedical Sciences in Austria and Portugal. The validation process included factor analysis and study of association with other individual factors, such as English education and lifestyle.

4 RESULTS & DISCUSSION

Statistics was performed with IBM SPSS Version 20 and 21 by using descriptive statistics, t-test, Anova and Kruskal-Wallis-Test.

A total of 140 students completed the questionnaire. The level of English HL was defined as a score, with a maximum score of 6. Reliability was acceptable with Cronbach's alpha 0.656 for the total of 6 items. FHS students showed an average score of 5.18 and ESTESC students an average score of 3.45. This difference was significant ($T=6.68$; $df=111$; $p<0.001$). Better life style habits, such as a healthy diet, physical activity, no use of tobacco and low use of alcohol, were related with higher HL scores. There is an intermediate correlation between HL score and English education ($\rho=0.37$, $p<0.001$) – the longer the English education, the higher the HL score. Approximately 25 % of the students did have at least 1 year of additional voluntary English education, but this makes no difference at all in the HL score. Male students have a significant higher level of HL (5.09) when compared to female students ($T=2.1$; $df=135$; $p=0.04$). There is a significant correlation between fathers education and HL score - the higher the father's education, the higher the student's HL score ($X=17.32$; $df=5$; $p<0.01$). The results of the questionnaire showed that 2 different dimensions of skills were verified: 4 questions verified mainly mathematic and analytical-logical skills and 2 questions verified the understanding and interpretation of text information regarding health issues. The majority of students (up to 86 %) were capable of understanding and interpreting a text containing information about health issues correctly, but only up to 50 % were capable to resolve right all mathematic and analytical-logical tasks. Furthermore, for the students from Salzburg we estimate that students with lower cognitive abilities and performance as indicated by median grades showed a lower HL score.

5 CONCLUSION

The questionnaire is a valid tool to investigate 2 different skills of students. The questionnaire can be used as a reliable and additional assessment tool in application procedures for international student's exchange programs and for the European Joint Master Degree in Biomedical Laboratory Sciences. To further investigate these conclusions the study will be extended and compared with other students of Health Sciences, which require other skills and abilities than those from the Bachelor degree program of Biomedical Sciences. Furthermore, data will be collected to investigate whether there are differences between Health Science and Non-Health Science studies. Especially in Portugal, a Portuguese version of the questionnaire will be implemented as an instrument in the fields of health education, health promotion, health behavior and national accident prevention in patient treatment for optimized and individualized physiotherapy.

We acknowledge Prof. Margarida Pocinho, Sandra Antunes and Verónica Mendonça from ESTeSC-Coimbra Health School for their help with obtaining the data used in this study.

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