e-Health Literacy among medical students

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Background:
The struggle against fake medical news, nowadays widely spread by web sources, is a main issue in public health especially in a pandemic period. Even among medical students, there is a lack of eHealth literacy (eHL) skills to solve medical problems. The Italian Medical Doctors Federation (FNOMCeO) promoted a Web source as a first-aid communication kit for basic notions in health hot-topics named ''dottoremaeveroche'' (DMVEC). This study aims to evaluate its effectiveness in improving eHL.
Methods:
Between April and November 2019, medical students from the University of Firenze (Italy) joined a cross-sectional web-based survey before and after accessing the DMVEC Web source. The 8-item self-assessment tool (IT-eHEALS) was used to examine subject's eHL, in addition to questions on source's features and its quality. All responses were rated on a 5-points Likert scale. Changing of abilities' perception was assessed using Wilcoxon test.
Results:
A total of 329 joined the survey, 42% male, mean age of 20.6±2.1. Participants felt moderately confident in eHL, in fact the initial eHEALS overall mean score was 3.6± 0.7. Students had a good perception on how to find helpful health resources (mean score 3.9±0.8) and how to use the Internet to answer health questions (mean score 3.8±0.9), but their ability in using this information to make health decisions was low (mean score 2.9±1.1). All items improved after the use of DMVEC, with overall mean score of IT-eHEALS increasing to 4.3±0.6 ($p < 0.0001$). Regarding source's quality, mean score related to transparency of sources, an aspect underestimated at first, increased from 3.5±1.2 to 4.7±0.7 ($p < 0.0001$).
Conclusions:
Low levels of eHL can damage public health efforts, as seen during COVID19 pandemic. DMVEC effectiveness in medical students demonstrated that the scaling up to the general population of online educational interventions, with further implementation, could help in tackling infodemic and fake news spreading.
Key messages:
- Moderate levels of eHL among medical students could reflect lower levels in general population, highlighting this as critical issue in public health.
- Educational programs addressed to Health professionals could be adapted and empowered considering general population as target.