## Using Crowdsourcing to Evaluate Lay-friendliness of BabelDr

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## **Abstract**

Due to the current European refugee crisis, hospitals, emergencies, and immigrant health service departments are more frequently obliged to deal with patients who have no language in common with the staff, and may fail to share the same culture. To address this problem, BabelDr translation application, a speech-enabled phraselator, was developed in a collaboration of the Geneva University Hospitals (HUG) and the Faculty of Translation and Interpreting of Geneva University. BabelDr supports translation from French to Arabic, Spanish, Tigrinya, Farsi, Dari, Swiss French Sign Language (LSF-CH). To enable patients act accordingly, the target language (TL) utterances must be easy to understand i.e. lav-friendly. The present study intended to use crowdsourcing to evaluate the lay-friendliness of the Farsi translation of the system. To achieve the objectives of the study, Telegram, a freely available cloud-based mobile and desktop messaging app, which has 200 million users worldwide and around 40 million users in Iran i.e. half of the country's population was used as a crowdsourcing platform. 30 Farsi sentences were selected based on defined criteria including syntax complexity, lexical complexity, and terminological complexity. Telegram Bots were designed to enable Farsi speakers (the crowd) to submit their evaluation of the lay-friendliness of each sentence based on a defined scale: a 7-point scale (not lay-friendly, very difficult, difficult, average, easy, very easy, and completely lay-friendly). The study reported on the crowd's evaluation of the lay-friendliness of the Farsi translation of BabelDr and the implemented crowdsourcing workflow.