Pharmacists in the United States encounter non-English-speaking patients. According to Arizona law, pharmacists must attempt to counsel patients on each medication. However, the quality of translation and interpretation can vary, and this can lead to errors in medication instructions. Inaccurate instructions can result in patients misunderstanding dosing and administration, which can increase medication errors and reduce patient adherence.

The purpose of this study was to validate the accuracy of RxLator, an iPhone English-to-Mandarin translator application, in improving the understanding and adherence to medication instructions. With the rise in biomedicine and behavioral science, there is a need for better translation and interpretation technologies. The study aimed to determine if the application could be used to improve patient understanding and adherence.

**Methods**
- Participants were pharmacy students at Arizona State University.
- 27 students were involved in the study.
- The translation application was used to translate medication instructions from English to Mandarin.
- Students listened to the translated instructions and were asked to feedback on their comprehension and adherence.

**Results**
- Of the 25 medication instructions played to a total of 27 students, six were played to an additional, fourth student.
- Students were able to understand all but six of the instructions simply by listening to them. For those six, they had to read the screen 50% of the time.
- Errors in translation and interpretation were noted. For example, the phrase "inhale puff" was translated as "spray dose".
- Students also commented on the ease of use. They were clear on the pronunciation and had no difficulty using the application.

**Conclusions**
- RxLator can be used to improve patient understanding and adherence to medication instructions.
- Further studies are needed to determine the generalizability of these results.

**Acknowledgments**
- The authors have nothing to declare.

**References**

**Disclaimer**
- The authors have nothing to declare.