

## **Abstract**

**Background:** Patient information leaflets, or PILs, are crucial resources for informing patients about medications. However, the ability of PILs to communicate intricate medical information is under investigation to determine effectiveness. The purpose of this study is to assess patient comprehension and preferences between infographic and existing PIL formats to improve patient involvement and drug safety.

**Method:** The study involved participants randomly chosen from Medicate Pharmacy. Patients were randomized to receive PILs in two forms: existing or infographic. Participants in control (ePILs) and intervention (iPILs) groups were randomly assigned to 1 of 4 PILs (atorvastatin, lisinopril, metformin, and sertraline), and then answered 6 medication information questions. Following the medication information questions, participants were given both versions of the PILs and asked a series of questions to compare preferences and collect demographics data. The data was then transferred from the printed survey into Qualtrics for data analysis.

**Result:** Participants preferred infographic PILs over standard formats, with higher understanding rates. There was a statistically significant difference in the medication information scores between the existing patient information leaflets (ePILs) and the infographic patient information leaflets (iPILs) forms. However, the results showed that age, education, and health literacy did not significantly correlate with preferences for either PIL form.

**Conclusion:** Infographic PILs improve patient understanding and participation, promoting drug safety. These results highlight the value of customized communication approaches in fostering patient engagement and medication safety.

*Keywords:* patient information leaflets, infographic, medical information, communication.