



Optimizing In-Clinic Conversations using Data Science and AI to Promote Medication Adherence



Kaira S¹, Mallabadi R²

¹Department of Endocrinology, Bharti Hospital, Karnal, India. ²Medical Affairs, SigmaMozak Solutions, Hyderabad, India

Introduction and Objective

Limited time for meaningful conversations between the healthcare providers (HCP) and persons with diabetes (PWD) results in non-adherence to prescribed treatment in 60% of the cases. We intend to deploy an artificial intelligence (AI)-based model/tool that suggests positive words/ language to promote biopsychosocial wellbeing of PWD and thus improve medication adherence.

Methods

The AI model has been developed using psychologically safe words as a base. The front end of the tool is a simple interface that acts as an in-clinic companion for HCPs and can be integrated into the existing electronic health record platforms.

Results

The proof of concept suggested appropriate conversation cues for a pilot of 25 PWD. The most impactful words in the context of improving medication adherence were “vigilant,” “thrive,” “nourishing,” “conquer” and “transform.” The least impactful words included “uncontrolled,” “avoid,” “negligent,” “sedentary” and “compromise.” The game changing conversational sentence was “Your vigilance is helping you thrive in this transformative journey.” All 25 PWD agreed that a good conversation with their HCP motivated them to focus on self-care more actively.

Conclusion

Using data science and AI to optimize in-clinic conversations has the potential to solve a pressing problem in diabetes care—that of using the right language for the right PWD. The proposed AI tool has multi-lingual capabilities, is convenient and simple to use and could prove to be a significant addition to the in-clinic armamentarium for HCPs. The tool may also help in easing cognitive burden for care providers.