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## **ABSTRACT**

Title of Abstract : Non-communicable diseases, especially Diabetes Mellitus, in

Umrah/Hajj pilgrims: community prevention and management efforts

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Background: Non-communicable diseases (NCDs), especially Diabetes Mellitus (DM), pose a major health risk for Umrah and Hajj pilgrims. This population often comprises elderly individuals with pre-existing comorbidities. The physically demanding and crowded environment of pilgrimage increases the likelihood of severe complications, such as cardiovascular events and diabetic foot ulcers.

Objective: This narrative review aims to synthesize evidence on the prevalence, contributing factors, and behavioral interventions addressing DM among pilgrims.

Research Methods/ Implementation Methods: A synthesis of 34 articles published between 2010 and 2024 from PubMed and Google Scholar revealed that up to 58.2% of pilgrims have NCDs, with 87.9% categorized as high-risk. The primary determinants of morbidity and mortality include older age, hypertension, DM, and obesity. DM-related complications are frequent, with hypoglycemia reported in 37% of cases and foot wounds in 31%.

Results: Interventions based on the Health Belief Model (HBM) effectively improved diabetes self-care behaviors. Among HBM constructs, self-efficacy and perceived benefits were the strongest predictors of treatment adherence and proper disease management.

Conclusion/Lesson Learned: NCDs remain a critical health concern among Umrah and Hajj pilgrims. Comprehensive screening and predictive models are essential to identify high-risk individuals before departure. In addition, structured behavioral education that enhances self-efficacy should be prioritized to strengthen chronic disease management throughout the pilgrimage.

Keyword : Diabetes Mellitus (DM); Non-Communicable Diseases (NCDs); Umrah/Hajj Pilgrims; Risk Screening; Health Belief Model (HBM); Compliance.