Community Based Screening for High Blood Pressure and Diabetes among Albaraha Residents, Khartoum Sudan 2022.

Mustafa Sabir¹, Khanssa Mohammed Elamin Osman², Authors Rasheeda Abdulbagi¹, Ola Emad Abdelrahim¹, Ola Mohammed Awadelkarim¹, Fatin Mohammed Ezzaldin², Ibrahim Awad Osman¹, and Mohammed Fadlelmola Abdalla Mohamednour¹

¹Al-Neelain University Faculty of Medicine
²University of Khartoum Faculty of Medicine

April 05, 2024

Abstract

Background: Diabetes Mellitus (DM) and Hypertension (HTN) constitutes a huge burden for low-income countries, so a screening program for identifying those at risk or at the early stages can be beneficial. The aim of the study is to screen Albaraha residents for DM and high blood pressure. Methods: A cross sectional community based study, which was conducted at Albaraha locality. A screening campaign was carried out for DM and HTN. A snowball sampling method was used. Blood pressure of >130/90 was regarded as HTN and a Fasting blood glucose of >126 mg/dl with a positive risk factor was considered to be DM. An interview was conducted to assess for risk factors. The collected data were entered into an Excel form, processed then analyzed using Statistical Package for Social Science (SPSS) version 23. Results: A total of 385 individuals were included. Most of them 47.8% aged 18-39. (57.9%) had University degree and 46.7% were currently employed. Only 54 of them had high fasting blood glucose and 182 had high blood pressure. 60% of the participant had a family member with a history of Diabetes. People who had a positive family history of diabetes had twice the risk (95% CI 0.6-11.9) of having high fasting blood glucose levels. Conclusion: This study demonstrated the feasibility and effectiveness of implementing community-based screening for high blood pressure and high fasting blood glucose levels. It successfully identified previously undiagnosed individuals with diabetes and hypertension. A national survey with a larger sample size is recommended.

Hosted file