

Community Health Screening by the Diabetes Awareness Programme: A Retrospective Study

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Introduction : Health screenings enable the public to be aware of the possible medical conditions they may have and seek early intervention. Tan Tock Seng Hospital (TTSH) Diabetes Awareness Programme conducts these health screens in different community populations throughout the year. This study aims to identify the prevalence of asymptomatic Diabetes Mellitus (DM) amongst the participants of health screenings. A retrospective analysis was performed on data collected from our different health-screening exercises.

Methods : The participants attended health screening at community centres in Sengkang and Hougang, TTSH and St. Andrew Cathedral Church. The data collected was in year 2006 and includes the participant's demographics, comorbid conditions, family medical history and Blood Pressures (BP). Analysed with Stata 9.0, all statistical tests were conducted at 5% level of significance.

Results : One thousand two hundreds forty participants aged 18 and above were included in the analysis. 79.1% were Chinese, 6.9% Malays and 8.5% Indians. 7.4% reported they had DM, and 17.3% had a family history with DM. In addition, 1.5% suffered from cardiac diseases. The average systolic and diastolic blood pressure were 127.2 mmHg and 78.8 mmHg, respectively. The average random Blood Glucose (BG) was 6.5 mmol/L, and Total Blood Cholesterol (TBC) was 5.0 mmol/L. The participants who attended screening at TTSH and Hougang were significantly older ($p < 0.001$), with significantly higher BP, BG and TBC. 3.1% of the participants (who had no prior diagnosis of DM) had glucose levels ≥ 11.0 mmol/l which is highly suggestive of undiagnosed diabetes.

Conclusion : The programme facilitated possible early diagnosis of asymptomatic diabetes of the participants which may have enabled early intervention and treatment.

