



# PREVALENCE OF NON-COMMUNICABLE DISEASE RISK FACTORS AMONG HEALTHCARE WORKERS IN THE KOSPEN WOW PROGRAM IN KEDAH



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## INTRODUCTION

The Non-Communicable Diseases Progress Report by WHO reported that NCDs kill 41 million people each year (1). Meanwhile, National Health and Morbidity Survey (NHMS) in Malaysia reported prevalence of diabetes mellitus increased from 11.2% in 2011 to 18.3% in 2019 (2). The survey also highlighted the prevalence of hypertension was 30% and obesity was 50%. Recognizing the impact of NCD on workers, the Ministry of Health Malaysia introduced the KOSPEN WOW program (Healthy Community Builds the Nation –Wellness of Workers ) to reduce the occurrence of NCDs as well as related risk factors and to increase healthy behaviours of targeted workers at the workplace (3).

## OBJECTIVE

This study aims to determine the prevalence of NCD Risk factors among HCWs in health facilities that implemented the KOSPEN WOW Programme.

## RESULTS

The result shows a rising trend of overweight and obesity from 45.4% in 2020 to 48.6% in 2022 (Figure 1). The study also found a rising trend of raised capillary blood sugar from 15.5% in 2020 to 19.4% in 2022.

## METHODOLOGY

This is a retrospective descriptive study of cumulative reporting of NCD risk factors among HCWs from the KOSPEN WOW Ministry of health facilities in the Kedah State Health Department. Secondary data was obtained from the KOSPEN WOW Programme database from the year 2020 to 2022. In this study, three main measures of NCD risk factors were reported among HCWs which include raised random capillary blood glucose, raised blood pressure, and body mass index (BMI)  $\geq 25$  kg/m<sup>2</sup>

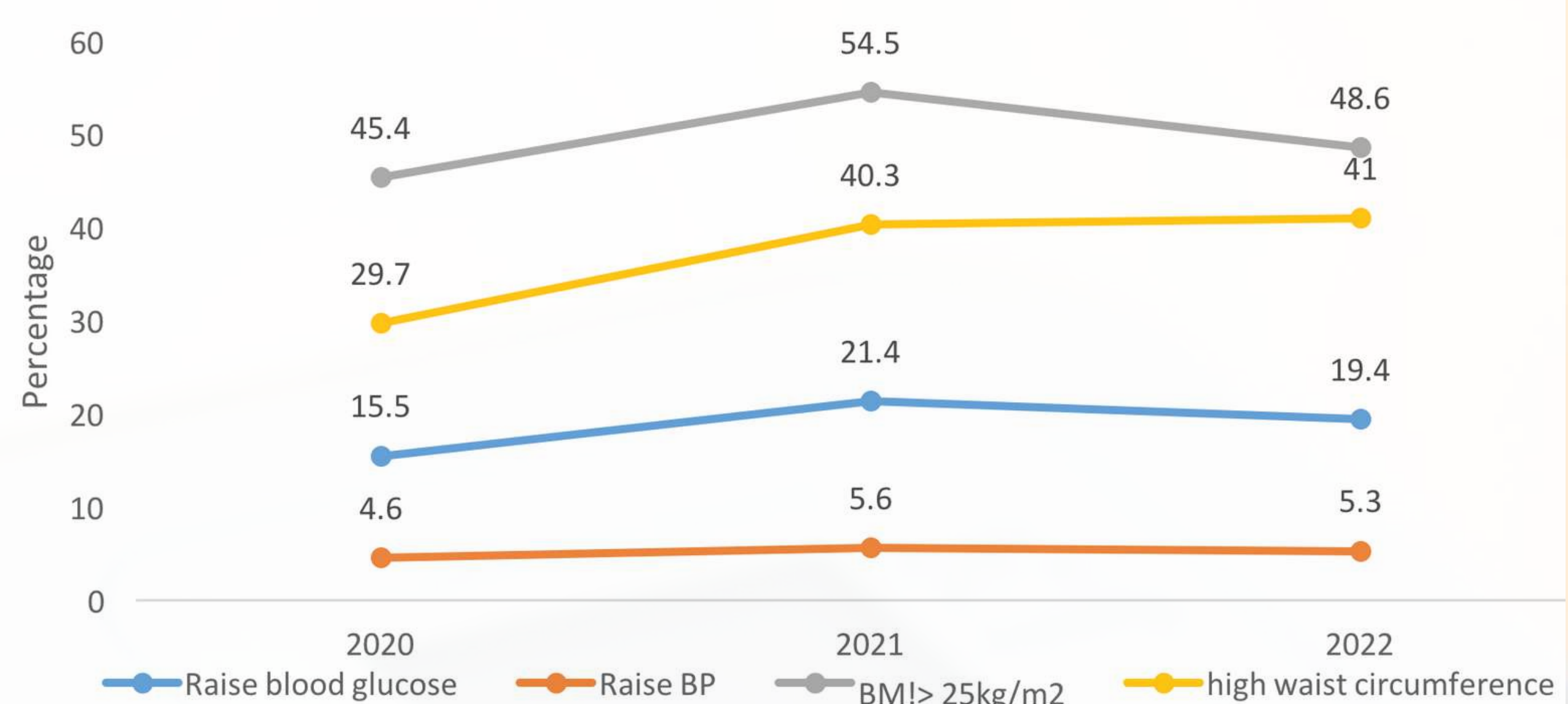


Figure 1: Prevalence of raised random capillary blood glucose levels, raised blood pressure, BMI  $\geq 25$  kg/m<sup>2</sup>, and high waist circumference among HCWs in MOH facilities from the year 2020 to 2022.

## DISCUSSION

The results show almost 50% of participants were overweight and obese and are consistent with findings from Malaysia's National Health Morbidity Survey (NHMS) in 2019 that reported 50% of the Malaysian adult population found to be overweight and obese (2). Supramanian et al who conducted a study on KOSPEN plus programme among employees in Malaysia also reported a prevalence of overweight 53.4%-57.4% in 2018-2020 (6). The study also found a raising trend of capillary blood sugar from 15.5% in 2020 to 19.4% in 2022 which was similar prevalence reported by NHMS about 19% in 2019 (2). Unhealthy dietary practices and physical inactivity have been recognised as key risk factors in rising NCDs in developing countries (5)

## RECOMMENDATIONS:

- KOSPEN WOW is a good platform for early screening of NCD risk factors and the program should be sustained
- To reduce the NCD risk factors we should encourage physical activities among workers such as creating healthy workplace include wellness hubs, schedule physical activities such as 10 000 steps per day, and participate in sport event physically or virtually.
- To promote healthy eating some interventions can be implemented such as healthy food, and calorie tag during departmental meetings, the use of a food diary and using mobile applications to record calorie intake .

## CONCLUSION

This study described NCD risk factors among HCWs in Kedah. Obesity, and raised blood sugar are the major problems identified. KOSPEN WOW is a good platform for early screening of NCD risk factors and the program should be sustained. Workplace interventions to reduce the NCD risk factors are vital to ensure the wellness of the workers.

## ACKNOWLEDGEMENT

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