



Changes of physical activity among healthcare workers after HEAL@work intervention program in selected government hospitals, Kuala Lumpur



Wan Sahida WZ¹, Chin YS¹, Rosita J² and Hazrina G³

¹ Department of Nutrition, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia

² Department of Dietetics, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia

³ Department of Food Service and Management, Faculty of Food Science and Technology, Universiti Putra Malaysia

Introduction

- Obesity has been recognized as a global problem occurred recently due to lack of physical activity and sedentary lifestyle.
- Obesity is generally the result of imbalance between energy intake and energy expenditure.
- Physical inactivity is the fourth the fourth leading cause of death in the world.
- Therefore, the worksite is one of a promising setting for physical activity promotion because, it shows that the occupational population spend more than 1/3 of their time at worksite.

The study aim:

- Determine the changes of physical activity levels among healthcare workers after HEAL@work intervention program for

Methodology

- This study was carried out at selected government hospitals in Kuala Lumpur.
- The intervention program-HEAL@work was a quasi-experimental pre-intervention and post-intervention study among healthcare workers in two selected government hospitals in Kuala Lumpur.
- A total of 33 healthcare workers from the intervention group participated in the 3-month HEAL@work intervention program, while another 34 healthcare workers from another government hospital was assigned as control group without receiving any intervention program.
- HEAL@work program consist of exercise and aerobic session.
- The changes level of physical activity for both groups were assessed by using the Global Physical Activity questionnaire (GPAQ).

Exclusion and Inclusion Criteria for participants

Inclusion Criteria	Exclusion Criteria
Malaysian (18 years-59 years)	Participants with chronic diseases
Male and female overweight/obese workers	Participants with history of surgery
Administrative worker	Pregnant/lactating women

Results and Discussion

Table 1: Socio-demographic characteristic of participants

Characteristics	Intervention Group N=33 (%)	Control Group N=34 (%)	Total N= 67
Gender			
Males	4(12.1)	13(38.2)	17(25.4)
Females	29(87.9)	21(61.8)	50(74.6)
Age (years)	35 ± 6.44	35.56±7.66	
Marital status			
Singlen/Non-married	7(21.2)	8(23.4)	15 (22.4)
Married	26(78.8)	26(76.5)	52(77.6)
Education level			
Secondary	4(12.1)	10(29.4)	14(20.9)
University	29(87.9)	24(70.6)	53(79.1)
Ethnicity			
Malay	32(97)	32 (94.1)	64(95.5)
Non-Malay	1(3)	2 (5.9)	3(4.5)
Monthly income (RM)			
< RM 2500 - B40	22(66.7)	30(88.2)	52(77.6)
RM 4,851-5,880 - M40	10(30.3)	4(11.8)	14(20.9)
RM 10,971 - 15,040 -T20	1(3.0)	0 (0)	1(1.5)

- At baseline, majority of the respondents in the control group (64.8%) was reported to have high physical activity level, but about half of the respondents in the intervention group (45.5%) was classified as having low physical level ($p < 0.005$).
- After completing 3 months of HEAL@work intervention program, there was a significant changes in physical activity levels among intervention group whereby two of the respondents at low physical activity level (6.1%) have changed to moderate physical activity level (Pre-intervention: 45.5%; Post-intervention: 39.4%) and the number of respondents who reported to have high physical activity level have increased from 30.3% at pre-intervention to 48.5% at post-intervention.
- At post-intervention, those who were in the high physical activity level in the control group was found to have decreased in physical activity level, from 64.7% decreased to 58.8%.

Table 2: Baseline Physical Activity Level

Variables	Intervention Group (n=33) (n) %	Control Group (n=34) (n) %
Physical activity level		
Low	15 (45.5)	6(17.6)
Moderate	8(24.2)	6(17.6)
High	10(30.3)	22(64.8)

Table 3: Physical Activity changes pre- and post- intervention

Physical Activity Level		Intervention Group N=33 n(%)	Control Group N=34 n(%)
Low	Pre	15(45.5%)	6(17.5%)
	Post	13(39.4%)	6(17.6%)
Moderate	Pre	8(24.2%)	6(17.6%)
	Post	4(12.1%)	8(23.5%)
High	Pre	10(30.3%)	22(64.7%)
	Post	16(48.5%)	20(58.8%)

Conclusion

- In conclusion, the findings from this study showed that the HEAL@work program improved physical activity of the healthcare workers in government hospital.

References

- Dishman R.K. et al. (1998). Worksite physical activity interventions. Am J Prev Med. 15(4):344-61
- Kohl HR, et al. (2012). The pandemic of physical inactivity: global action for public health. Lancet. 380:294-305
- World Health Organization (WHO). Obesity and overweight. (2016). Retrieved from www.who.int/mediacentre/factsheets/fs311/en

