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Aims and Scope

Obesity Reviews is a monthly journal publishing reviews on all disciplines related to obesity and its comorbidities. This includes basic and behavioral sciences, clinical treatment and outcomes, epidemiology, prevention and public health. The journal should, therefore, appeal to all professionals with an interest in obesity and its comorbidities. Review types may include systematic narrative reviews, quantitative meta-analyses and narrative reviews but all must offer new insights, critical or novel perspectives that will enhance the state of knowledge in the field. Prevalence studies that compare (review) trends across countries or regions or across ethnic groups or relevant subpopulations and provide novel insights and/or conclusions will be considered. The journal also invites short reviews presenting original or challenging theories, hypotheses or alternative interpretations of findings. Case reports presenting important and novel information and Letters to the Editor are also welcome. The journal will contribute to education and inter-professional developments by planning pro and con reviews on current controversies.

The editorial policy is to publish high quality peer-reviewed manuscripts that provide needed new insight into all aspects of obesity and its related comorbidities while minimizing the period between submission and publication.

Obesity Reviews is the official reviews journal of the International Association for the Study of Obesity (IASO). A special subscription rate is available for individuals who are members of their national associations under the umbrella of IASO.

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The journal is published on a monthly basis. The Editorial policy will be to minimise the period between submission and publication of reviews, while retaining high standards of quality exercised by peer review.

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Conclusions: This preventive program the fight against obesity has been started in 2012 and the first results show that it could be successful. Funding Research relating to this abstract was funded by "Long-term plan of development of organization 1011".

T7:S32.11

Are workplaces an appropriate setting for nutrition promotion? A systematic review

Cook, A¹; Teleni, L²; Allman-Farinelli, M¹

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Workplaces provide a platform for environmental and individual level change to support individuals' health and behaviour change. This review evaluates the effectiveness of workplace nutrition promotion to change dietary and anthropometric outcomes.

Five online databases were searched from January 1972 to December 2012 using terms related to workplace, diet and anthropometry. Inclusion criteria were: randomised controlled trial; intervention included a dietary component and dietary outcome; workplace setting; minimum one month duration; and neutral or positive methodologic quality assessed using a comprehensive tool. Forty-three publications (representing 37 studies) met criteria with 11 of positive quality. Positive effects at the individual level were reported for fruit and vegetable intake when measured together and saturated fat intake. Treatment effects for fruit and vegetables measured separately, fibre, energy intake, weight and body mass index were inconclusive. No evidence for reductions in total fat, added sugar related outcomes, waist circumference and body fat was found to be associated with workplace interventions.

Nutrition promotion demonstrated effectiveness for fruit and vegetables and saturated fat intake but does not appear successful for weight management. As the majority of studies were conducted in the USA (27 of 37 studies) applicability to the other populations needs to be determined.

None of the authors have conflicting interests or funding to declare.

T7:S32.12

Pilot study of information communication technology based weight loss program in workplace

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There is growing interest in use of information communication technology (ICT) for managing obesity. Although a weight loss program in workplace is known to be effective, there are few studies of ICT based intervention. The aim of this study is to develop a new ICT based weight loss program (Health-On) and to verify its effectiveness in workplace. Health-On is a combined program of Health-On app, workplace health check-up and off-line weight loss program in fitness center and cafeteria. We first developed a smartphone application, Health-On app. The app contains goal setting, self-monitoring of diet and physical activity and feedback. Monthly off-line intervention was given by well-trained nutritionists, nurses and sports curers. A sample of 30 obese white-collar volunteers (body mass index ≥ 25 kg/m²)

participated in 12-week Health-On program. We prospectively assessed them before and after intervention without a concurrent control group. The primary outcome was weight change and secondary outcomes were anthropometric measure, metabolic profiles, and fat CT measures. All of the 30 participants completed the study. The median body weight decreased from 81.3 kg (range 60.8–109.8) before intervention to 76.6 kg (range 54.1–93.0) after 12 weeks' intervention ($p < 0.001$). The various metabolic profiles and fat measures were also significantly improved after intervention (blood pressure, HbA1c, total cholesterol, triglyceride, HDL, LDL, ALT, visceral and subcutaneous adipose tissue areas; $p < 0.05$). These findings point that Health-On is an effective ICT based weight loss program that can be easily implemented in workplaces.

T7:S32.13

Effect of physical activity education by pharmacists on reducing the risk of cardiovascular disease in men with obesity: before-after study

Aditama, L^{*}; Parfati, P; Rahmawati, R

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There were 27.1% of overweight and obesity in Indonesia population aged over 18 years, and elevated in higher educated community groups as well as working as employee. The study aims to analyze the effect of physical activity education by pharmacist on reducing the risk of cardiovascular disease in men with obesity, using "Pocket Activity" Education Module. This study using before-after study conducted to 23 male employees who are obese at the University of Surabaya. Patients are educated orally using the module "Pocket Activity" which contains the role of physical activity on reducing risk of cardiovascular disease. This study will be measured on knowledge, behavior changes, and decreased risk of cardiovascular disease. There were significant differences before and after education at the level of knowledge ($p = 0.00$), stage of change in exercise behavior ($p = 0.00$) and a decreased risk of cardiovascular disease based on body mass index and lipid profile ($2.10 \% \pm 0.01$ and $.78 \% \pm 0.02$ $p = 0.00$). Providing "Pocket Activity" Education Module can be used as an educational tool for patients who are obese in reducing risk of cardiovascular disease. **Keywords:** Pocket Activity Education Module, knowledge, behavior change, cardiovascular disease risk.

T7:S32.14

Weight loss intervention for professional truck drivers

Vash, P^{*}; Graff, C

Lindora Clinic

Background: Obesity is a major medical problem, yet a large segment of the obese working population, professional truck drivers, are an underserved, untreated group because of limited access to care, unhealthy food options and severe schedule constraints. Their sedentary, stressful jobs create increased risks for chronic diseases, loss of employment and danger to themselves and other motorists. The driving industry suffers increased fatality rates compared to many other industries. Due to stricter Department of Transportation health exam guidelines for the industry and concerns about obesity related diseases, Lindora Clinic established a partnership with a national trucking association to promote weight loss through an innovative coaching program.

Effect of Physical Activity Education by Pharmacist on Reducing The Risk of Cardiovascular Disease in Men with Obesity: Before-After Study

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Abstract

There were 27.1% of overweight and obesity in Indonesia population aged over 18 years , and elevated in higher educated community groups as well as working as employee. The study aims to analyze the effect of physical activity education by pharmacist on reducing the risk of cardiovascular disease in men with obesity, using "Pocket Activity " Education Module.

This study using before-after study conducted to 23 male employees who are obese at the University of Surabaya . Patients are educated orally using the module " Pocket Activity " which contains the role of physical activity on reducing risk of cardiovascular disease . This study will be measured on knowledge , behavior changes , and decreased risk of cardiovascular disease.

There were significant differences before and after education at the level of knowledge ($p = 0.00$) , stage of change in exercise behavior ($p = 0.00$) and a decreased risk of cardiovascular disease based on body mass index and lipid profile ($2.10 \% \pm 0.01$ and $1.78 \% \pm 0.02$ $p = 0,00$).

Providing " Pocket Activity " Education Module can be used as an educational tool for patients who are obese in reducing risk of cardiovascular disease.

Keywords: Pocket Activity Education Module , knowledge , behavior changes, cardiovascular disease risk .

Background

The magnitude impact of obesity would require attempts for the prevention and management of obesity. Many components are involved, such as psychosocial, lifestyle, and their own individual needs. Combating obesity certainly can not be done with the cessation of food intake only because it is also very necessary for the body. Management of obesity might do with lifestyle modification education which contain educational materials to overcome obesity as diet, weight loss and physical activity programs.

Obesity problem that occurred in Indonesia conducted with the lifestyle modifications that can help overcome obesity and prevent cardiovascular events. Researchers intend to analyze the effect of physical activity education by pharmacist on knowledge of obesity, cardiovascular risk factors and physical activity, behavior change in exercise in men with obesity, using "Pocket Activity " Education Module.

Selected populations in this study are employees of the University of Surabaya who are obese, because the data showed that there has been an increase in the number of employees who are obese and experiencing cardiovascular events. Given this research, a pilot

project is expected to be a lifestyle modification education on obesity-related cardiovascular risk factors and can be applied to other areas.

Methods

This study design was experimental before-after study. The study was divided into two phases: the first is the screening of cardiovascular risk factors using the Framingham Scoring to determine the potential for cardiovascular disease held in the next ten years. The second phase of this study is to provide lifestyle modification education, and want to see the effect of the intervention on knowledge of obesity, cardiovascular risk factors and physical activity, behavior change in exercise before and after administration of education. Obese patients were used as the sample is a patient with a BMI ≥ 30 kg/m². Sample size is the total study population is obese male employees who are willing to follow the physical education activity that is counted 23 people.

Results

Knowledge of obesity, cardiovascular risk factors and physical activity, behavior change in exercise, and Scoring Framingham cardiovascular risk factors in participants is influenced by many factors such as age, sex, level of education, the social history of drinking coffee, exercising social history, history of disease family, and drugs consumed the past three months. These results can be seen in Table 1.

Table 1. Demographics of study subjects

Demographics	Study subjects (n= 23)
Age (mean \pm SD)	44,56 \pm 6,49
Body Mass Index (BMI) (mean \pm SD)	31,97 \pm 2,59
Smoking behavior:	
a. Non smoker	18 (78,26%)
b. Smoker	5 (21,74%)
Social History of Drinking Coffee:	
a. No drinking coffee	9 (39,13%)
b. ≤ 1 cup/day	1 (4,35%)
c. 1-3 cup/day	12 (53,17%)
d. ≥ 4 cup/day	1 (4,35%)
Social History of Exercise:	
a. No exercise	8 (34,78%)
b. ≤ 1 x/ week	4 (17,39%)
c. 1-3 x/ week	3 (13,04%)
d. ≥ 4 x/ week	8 (34,78%)
Family history of disease:	
a. Coronary disease	5 (21,74%)
b. Diabetes	3 (13,04%)
c. Hipertension	5 (21,74%)
d. Dyslipidemia	3 (21,72%)
e. Kidney disease	1 (4,35%)
f. Gout arthritis	1 (4,35%)
g. Osteoarthritis	1 (4,35%)
Level of education:	
a. Lower education	7 (30,43%)

b. Higher education	16 (69,56%)
Drugs consumed last 3 months:	
a. Lipid control	1 (4,35%)
b. Anti-Hipertension	3 (13,04%)
c. Cortikosteroids	0 (0%)
d. Others	3 (13,04%)

Comparative Analysis of Participants Before and After Education:

Shapiro-Wilk normality test showed that the data obtained for the normal distribution so that the analysis of this data using paired t-test test. These results can be seen in Table 2.

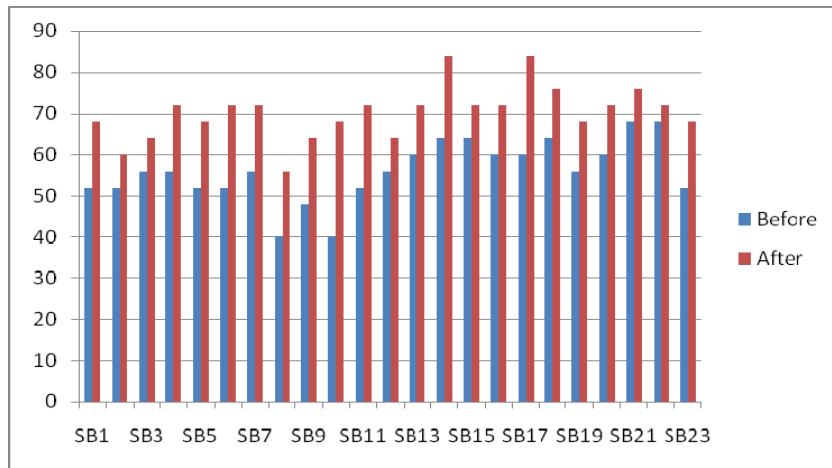


Figure 1. The Value of participants knowledge before and after education

Table 2. The results of the analysis of the value of knowledge scores of participants before and after the educational method of Paired t-test

	N	Mean±SD	Difference mean±SD	Sig 0,05%	P
Score value of knowledge before education	23	56,00±7,43	14,26±5,76	11,76-16,75	0.00
Score value of knowledge after education	23	70,26±6,47			

Comparative Analysis of Participants Behavior Change Before and After Education

Analysis of behavior change in exercise in this study using the interval measurement scale statistical tests performed were nonparametric statistical tests are planned using Wilcoxon signed rank test. These results can be seen in Table 3.

Table 3. The analysis of behavior changes of the participants before and after the exercise education using Wilcoxon signed rank test

		Behavior change after education						Total
		PNB	PB	C	Pre	A	M	
Behavior change before education	PNB	0	0	0	0	0	0	0
	P	0	0	2	0	1	0	3
	C	0	0	6	8	2	2	18
	Pre	0	0	0	1	1	0	2
	A	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
Total		0	0	8	9	4	2	23

Based on the Wilcoxon signed rank test showed a significance value of p value=0,00 (p <0,05).

Table 4. Comparison of behavior changes before and after the exercise education

Behavior changes	Behavior change before education	Behavior change after education
PNB	0	0
PB	3	0
C	18	8
Pre	2	9
A	0	4
M	0	2
Total	23	23

Note:

PNB: *Precontemplation non believers in excersice*
 PB: *Precontemplation believers in excersice*
 C: *Contemplation*

Pre: *Preparation*
 A : *Action*
 M: *Maintenance*

Comparative analysis of the Framingham Cardiovascular Risk Factor Scoring of Participants Before and After the Education

Shapiro-Wilk normality test showed that the data obtained are not normally distributed so that the analysis can be done for these data is the Wilcoxon signed rank test. These results can be seen in Table 5 and 6.

Table 5. Analysis of the Framingham cardiovascular risk factors Scoring is based on the lipid profile of participants before and after the education with the Wilcoxon signed rank test method

	N	Mean rank	Median (minimum-maksimum)	P
Cardiovascular risk factors based on the lipid profile before education	23	13,90	12,10 (2,30 - 30,00)	0.00
Cardiovascular risk factors based on the lipid profile after education	23	11,80	10,40 (2,00 -27,00)	

Based on the Wilcoxon signed rank test significance value of $p = 0.00$ with an average reduction in cardiovascular risk of $2.10\% \pm 0.01$ which is the value of $p < 0.05$.

Table 6. Analysis of the Framingham cardiovascular risk factors Scoring is based on the lipid profile of participants before and after the education with the Wilcoxon signed rank test method

	N	Mean rank	Median (minimum-maksimum)	P
Cardiovascular risk factors based on the lipid profile before education	23	11,96	10,60 (1,70 – 29,90)	0.00
Cardiovascular risk factors based on the lipid profile after education	23	10,12	8,90 (1,60 -25,90)	

Based on the Wilcoxon signed rank test significance value of $p = 0.00$ with an average reduction in cardiovascular risk of $1.78\% \pm 0.02$ which is the value of $p < 0.05$.

Conclusion

Effect of education on lifestyle modifications (focus on physical activity and exercise) on cardiovascular risk factors obesity a significant impact on increasing knowledge, behavior change and reduced risk of cardiovascular disease.