

Workplace-based Nutrition Intervention towards Nutrition for All

Occupational health and nutrition are closely related. Nutrition in the workplace plays an essential role in supporting workers' health through a balanced nutrition approach. Reciprocally Occupational health is an approach to solving nutritional problems in workers, which in turn impacts the nutrition and health of families and communities. The workplace-based nutrition promotion is one of the pillars of the occupational health approach to solving health problems among workers. The workers' health related to nutrition is still a big challenge; on the other hand, the workplace is a potential setting for solving workers' and community health and nutrition problems.

Currently, the Southeast Asian Region has been facing multiple burdens of the workers/productive age nutrition problem. The problem of nutritional deficiency, especially iron and other nutrients deficiency anemia dominate in women workers, especially pregnant women. The prevalence of anemia in working women is high in some Asian countries such as Bangladesh, Cambodia, India, Indonesia, Maldives, Myanmar, Nepal, and Timor Leste. The prevalence of anemia in women of productive age in these countries ranges from 22.7% to more than 50%.¹ Meanwhile, other nutritional deficiencies such as folic acid and zinc also add to the magnitude of the calorie and protein deficiency problem in this population.

Along with the problem of nutritional deficiency, Southeast Asian countries are also facing obesity and the risk of non-communicable diseases related to diets, such as hypertension and cardiovascular disease. It was noted that the prevalence of obesity in workers reached 49.8% among males and 50.2% among females.² Work and work environment are significant risk factors for obesity among workers. Social stressors, psychosocial work factors, working hours, sleep and night shift work, and sedentary behavior are associated with obesity among workers.³

In addition, food contamination due to the environment, including work environment, increases health risks in the workplace.⁴ This situation is certainly threatening because it is also a determinant variable of presenteeism and reduces productivity. Many programs have been carried out to prevent and control these health and nutrition problems, including health and nutrition promotion, supplementation of iron tablets, and food fortification. The program's success will undoubtedly be improved by making the workplace a setting for activities towards a healthy workplace.

World Health Organization⁵ defined *"a healthy workplace is one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of all workers and the sustainability of the workplace"*. The principles of approach to workplace health promotion are addressed at the underlying causes of ill health, combining diverse methods of interventions. Workplace health promotion is aimed at effective worker participation and is not partially based on medical activities but should be part of the work organization and working conditions. These approaches are in line and build a synergy with the goals of the occupational health services that are devoted to the prevention and management of occupational and environmental injury, illness and disability, and the promotion of health and productivity of workers, their families, and communities. In practice, the goals of the occupational health service are to protect the workers against any occupational hazard, to contribute towards harmonious human-machine relationships and to establish and maintain the workers' physical and mental well-being.⁶

The bottom line of workplace-based health and nutrition intervention is the worker's healthy behavior and balanced nutrition practices. Workplace health promotion should be done by implementing health promotion strategies focusing on the individual and their lifestyle behavior change and creating healthy work organizations and environments. In the case of nutritional deficiencies, improving diets may be more appropriate, and workplaces are an excellent setting to improve the nutritional quality of diets. Nutrition promotion is the basis of the strategic approach to address nutrient deficiency anemia. Workplaces appear as the main entry point: workers are generally healthy and productive, and nutrition activities may also reach the workers' families. Mansyur⁷ proposed integrating nutrition education, factory canteen and health services improvements. Workplace-based nutrition education effectively improves female workers' knowledge and practices of balanced nutrition and healthy habits. The service of the company canteen plays an important role in providing nourishing meals and compensating for family food shortages due to financial constraints and cultural barriers. In addition, factory health services strengthen their activities with health promotion and preventive approach via workplace hazard prevention and control, and minimizing the risk of occupational and environmental food contaminants.

Muchtaruddin Mansyur, MD, MSc, PhD

South East Asian Ministers of Education Organization
Regional Center for Food and Nutrition
Department of Community Medicine, Faculty of Medicine,
Universitas Indonesia
Jakarta, Indonesia

REFERENCES

1. Aziz Ali S, Abbasi Z, Feroz A, Hambidge KM, Krebs NF, Westcott JE, et al. Factors associated with anemia among women of the reproductive age group in Thatta district: study protocol. *Reprod Health*. 2019 Mar;16(1):34. doi: 10.1186/s12978-019-0688-7.
2. Ni Ketut Putri SM, Meo CM, Saverinus S, Halimatunnisa M, Susanti I. Factors associated with obesity in adults in South East Asia. *Int J Psych Rehab*. 2020 Jul; 24(7):7599 -7607.
3. Yarborough CM, Brethauer S, Burton WN, Fabius RJ, Hymel P, Kothari S, et al. Obesity in the workplace: Impact, outcomes, and recommendations. *J Occup Environ Med*. 2018 Jan; 60(1):97-107. doi:10.1097/JOM.0000000000001220
4. Ross P, Kemerer S, Taylor L. Food safety in the workplace: a practical approach. *AAOHN J*. 2006 Dec; 54(12): 521-530. doi: 10.1177/216507990605401203.
5. Burton J. WHO Healthy Workplace Framework and Model: Background and Supporting Literature and Practices [Internet]. Geneva, World Health Organization. 2010 Feb [cited 2022 Jan 9]. Available from: https://www.who.int/occupational_health/healthy_workplace_framework.pdf.
6. World Health Organization. Workers' health: global plan of action. In: Sixtieth World Health Assembly Agenda. [Internet]. Geneva: World Health Organization. 2007 May 23 [cited 2022 Jan 9]. Available from: https://www.who.int/occupational_health/WHO_health_assembly_en_web.pdf.
7. Mansyur M, Khoe LC, Karman MM, Ilyas M. Improving workplace-based intervention in Indonesia to prevent and control anemia. *J Prim Care Community Health*. 2019 Jan-Dec; 10: 2150132719854917. doi:10.1177/2150132719854917