Workplace Health Promotion in Different Sizes of Enterprises in South<mark>ern Taiwan in 2016</mark>

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Introduction

In Taiwan, Health Promotion Administration (HPA) of Ministry of Health and Welfare established 6 Workplace Hygiene and Healthcare Centers in 2001 to promote Workplace health promotion (WHP). In 2003, to advocate smok-free workplaces, the HPA established Worksite Tobacco Control Consulting Centers. The two centers were integrated in 2006 and then Regional Coaching Centers for Workplace Healthy Promotion (CWHP) in northern, central and southern Taiwan were established for WHP. The related researches showed that the implementations and resources of WHP differed in sizes of enterprises. This study aims to present the current issues in personal health resources of WHP in the different sizes of enterprises which voluntarily cooperated with the CWHP in southern

Taiwan in 2016.

Materials and Methods

In 2016, the CWHP in South Taiwan funded by the HPA has proposed to recruit at least 50 enterprises to offer free tutoring. The application for the enterprises contained the self-assessment questionnaire which collected basic data, such as numbers of employee, and the issues of nine personal health resources, including tobacco and betel nut hazards prevention, staff cafeteria calorie labeling, regular exercise, healthy weight management , cancer screening, adult health screening, chronic diseases management, strengthening women's health promotion in workplace, and psychological counseling. The health resources were compared among different sizes of enterprises.

Results

There were total 51 enterprises participated the study. Table 1 revealed that there were 54.9% with employee more than 300 (large) and 25.5% with employee between 100 to 299 (medium). 78.43% enterprises have implemented WHP (table 2). 92.9% the highest proportion was those with more than 300 employees. Table 3 showed that all the nine issues in the larger enterprises showed significantly higher coverages than the smaller ones. The highest coverages are tobacco and betel nut hazards prevention (100%), adult health screening (100%), and chronic diseases management (100%) in large enterprises; tobacco and betel nut hazards prevention (100%) and adult health screening (100%) in medium enterprises; and tobacco and betel nut hazards prevention (80%) in small enterprises. The lowest coverages are psychological counseling (64.3%) in large enterprises; psychological counseling (38.5%) in medium enterprises; and chronic diseases management (20%), strengthening women's health promotion in workplace (20%), and psychological counseling (20%) in small enterprises.

Table 1. Enterprises Sizes

Enterprises Sizes ^a		Number (%)			
Small		10 (19.6)			
Medium		13 (25.5)			
Large		28 (54.9)			
^a Enterprises Sizes: small = ≤ 99 employees; medium = 100-299 employees; large = ≥ 300 employees Table 2. Health promotion in different sizes of enterprises					
Enterprises Sizes	Small (n=10)	Medium (n=13)	Large (n=28)	Total (n=51)	
Have implemented	4 (40.0)	10 (76.9)	26 (92.9)	40 (78.4)	

Discussion

According to the national surveys in workplace tobacco control and health promotion in 2007, 2010 and 2013, the large firms increased their implements of WHP and their proportion was higher than that of medium and small firms. However, less change was shown in small firms. This study also found that the proportion of the WHP implement in large firms was higher than that in medium and small firms. The phenomenon was related to the requirements for the Occupational Safety and Health Act, which regulate firms to hire medical staff to provide WHP for employees. The coverages of tobacco and betel nut hazards prevention were the highest in all firms, the large and the medium were both 100%, and the small 80%. The factors might be the promotions of smoke-free workplace by HPA in 2003 and the implement of Tobacco Hazards Prevention Act in 2009. For the regulation of the Labor Health Protection Rules, the firms usually execute the items of screening adult health and cancer when the labor regular health check-ups. The study showed the WHP issues with lower coverages such as strengthening women's health promotion in workplace and psychological counseling, enterprises whose employees less than 300 and resource shortage, which might be warranted further resource and support.

Table 3. Personal health resources in different sizes of enterprises

	Enterprises Sizes		
Personal Health Resources	Small	Medium	Large
	(n=10)	(n=13)	(n=28)
Tobacco and betel nut	8	13	28
hazards prevention*	(80.0)	(100.0)	(100.0)
Staff cafeteria calorie	4	10	25
labeling ^{**}	(40.0)	(76.9)	(89.3)
Regular exercise	5	8	24
	(50.0)	(61.5)	(85.7)
Healthy weight management ^{**}	3	10	25
	(30.0)	(76.9)	(89.3)
Cancer screening***	4	11	27
	(40.0)	(84.6)	(96.4)
Adult health screening***	5	13	28
	(50.0)	(100.0)	(100.0)
Chronic diseases	2	8	28
management ^{***}	(20.0)	(61.5)	(100.0)
Strengthening women's health promotion in workplace ^{**}	2 (20.0)	6 (46.2)	23 (82.1)
Psychological counseling*	2	5	18
	(20.0)	(38.5)	(64.3)

*Significant difference among small-, medium-, large-scale enterprises (χ^2 test, p < .05) **Significant difference among small-, medium-, large-scale enterprises (χ^2 test, p < .01) ***Significant difference among small-, medium-, large-scale enterprises (χ^2 test, p < .001)

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