

Health Promotion Programme in the Private Workplaces in Singapore: A Prevalence Survey

L Chew, C Cheah, Y H Koh

ABSTRACT

A postal survey was conducted in 4,479 private companies with at least 50 employees in 1998 to determine the prevalence and the scope of workplace health promotion programme in these companies in Singapore.

The self-administered questionnaire mailed to the study population covered five areas viz, organisational details, workplace health policies, health promotion and related activities, workplace health facilities and the source of assistance for the programme. The overall response was 49.5%. Parkinson's definition of workplace health promotion was used in the analysis to determine the prevalence of the programme. The data was collated on DBase IV and analysed using SPSS computer programmes.

About one third of the respondents covering an estimated 26% of the private sector workforce had a comprehensive workplace health promotion programme as defined by Parkinson. This prevalence was a function of workforce size and industry type. Workplaces with larger workforce size ($p < 0.001$) and those from the manufacturing and human/health service sectors ($p < 0.001$) were more likely to have such programmes compared to their smaller counterparts and other industries respectively. The management remained the main driver behind these programmes. Many of the programmes were centred around health promoting policies and facilities with emphasis on occupational health/safety and smoking issues.

A significant proportion of workplaces surveyed had in place a comprehensive workplace health promotion programme. However, more could still be done to encourage its uptake such as training for facilitators, consultation, grant provision etc. Small workplaces remained an untapped market for such programmes.

Keywords: workplace health promotion, prevalence, private companies, Singapore

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INTRODUCTION

The health of the workers is a key factor in influencing their productivity. As the economy of Singapore is heavily dependent on its workforce, a healthy workforce will enhance the country's competitiveness in the increasing global market. With about 1.9 million or 65% of Singaporeans aged 15 years and more working⁽¹⁾, the workplace is an ideal setting for the development and delivery of health promotion programmes to the workers.

In 1984, the Ministry of Health set up a Workplace Health Education Unit to promote better health among employees from both the public and private sectors. Over the past fifteen years, the Unit has seen an increasing number of health promotion activities offered in the workplaces. Health promotion programmes were implemented in all public organisations, initially under the auspices of the Public Sector Workplace Health Promotion Programme in 1992 and since 1996 as part of the Public Service for the 21st century (PS21) initiative⁽²⁾.

In the private organisations, the activities in the early years were mainly at the initiation of the Ministry of Health and were aimed at creating awareness of the need to pursue a healthy lifestyle among employees. Subsequently, a few private companies began to implement their own workplace health promotion programmes with the Ministry's support. These were more sustained and holistic in that they were a combination of different environmental, organisational and educational activities to meet the needs of the workplace.

While it has been perceived that health promotion programme at the workplaces has gained popularity locally, no study has been carried out to ascertain either its prevalence or the types of health promotion activities in the private workplace settings.

PURPOSE

A survey of workplace health promotion programme in all private companies with 50 employees and more in Singapore was undertaken during March-July 1998 with the objectives to:

Health Promotion Board
3 Second Hospital Avenue
Singapore 168937

L Chew,
MBBS (S'pore),
MMed (Public Health)
Head (Health Screening)

Ministry of Health
Level 4 Health Promotion Board

C Cheah,
MBBS (S'pore),
MMed (Public Health)
Assistant Head
(Traditional & Complementary Medicine)

Tan Tock Seng Hospital
11 Jalan Tan Tock Seng
Singapore 308433

Y H Koh,
MBBS (S'pore),
MSc (Public Health)
Consultant
(Health Education & Promotion)

Correspondence to:
Dr L Chew
Tel: (65) 435 3819
Fax: (65) 538 8416
Email: chew_ling@hpb.gov.sg

Table I. Characteristics of companies with workplace health promotion programmes (WHPP).

	Industry									Total
	Manufacturing	Human/Health Services	Hotels/ Restaurants	Wholesale/ Retail Trade	Finance/ Business	Construction	Transport/ Storage/ Comms	Others	Unknown	
Study population (MOM's data, 1997)	(29)	Included in "others"	(4.3)	(13.6)	(15.7)	(25.1)	(6.3)	(5.9)	–	(100)
All Respondents	719 (32.4)	113 (5.1)	96 (4.3)	215 (10)	214 (9.7)	476 (21.4)	161 (7.3)	180 (8.1)	43 (1.9)	2,217 (100)
Respondents with WHPP (Parkinson's criteria)	320 (44.3)	48 (6.6)	28 (3.9)	59 (8.2)	54 (7.5)	119 (16.5)	38 (5.3)	53 (7.3)	3 (0.4)	722 (100)
<i>Size of Workforce</i>										
<100	92	15	8	26	20	61	8	23	0	253
100-199	85	18	3	12	8	23	13	10	1	173
200-499	63	7	11	8	14	12	6	11	1	133
≥500	55	5	4	7	10	2	7	7	0	97
Unknown	25	3	2	6	2	21	4	2	1	66
<i>Shift Work</i>										
Yes	213	30	26	28	14	6	27	21	0	365
No	106	18	1	31	40	13	11	30	30	380
Unknown	1	0	1	0	0	0	0	0	0	2
<i>Biggest Age Group</i>										
<20 years	3	0	0	1	0	0	0	0	0	4
20-39 years	254	37	23	45	45	100	30	37	2	573
40-59 years	42	10	3	9	6	15	5	13	0	103
≥60 years	8	1	1	2	0	3	0	2	0	17
Unknown	13	0	1	2	3	1	3	1	1	25

Key: () – percentage

- i) determine the prevalence of workplace health promotion programme among private companies; and
- ii) define the scope of these workplace health promotion programmes.

The purpose of this paper is to present the findings of this survey and explore how these findings could help in strategising the uptake of health promotion programmes in the private workplaces in Singapore.

METHODS

Sample

The survey population comprised all private companies, factories, offices and workshops with 50 employees and more registered with the Ministry of Manpower in March 1998.

Procedure

The survey was carried out over a four-month period from mid-March to mid-July 1998 utilising a self-administered questionnaire that was mailed to the management of the survey population. The completed questionnaires were returned by post or fax. To boost the response rate, reminder letters were sent to all non-respondents midway through the survey period.

The questionnaire contained 13 multiple response questions covering five main areas of interest viz, organisational details, workplace health policies, health promotion and related activities, workplace health facilities and the source of assistance for workplace health promotion programme. The information sought

covered health promoting activities carried out in the previous five years. The questionnaire was pre-tested with 50 private companies that had existing workplace health promotion programme. Their feedback and comments were incorporated in the final questionnaire.

Data Analysis

The data was collated on DBase IV and analysed using SPSS computer programmes. Chi-square test was used to test for significance where applicable.

Parkinson's⁽³⁾ definition of workplace health promotion programme was used for the purpose of the analysis, i.e., "workplace health promotion is a combination of educational, organisational and environmental activities designed to support behaviour conducive to the health of employees and their families". The prevalence of workplace health promotion was determined using this definition.

As we were unable to collect information on the non-respondents, no analysis on non-respondents was carried out. However, we compared some of the characteristics of the respondents with the statistics from the Ministry of Manpower⁽⁴⁾ (MOM) to have a relative indication of the profile of the non-respondents.

RESULTS

Two thousand two hundred and seventeen of the 4,479 private workplaces participated in the survey, giving a response rate of 49.5%. In terms of industry sector, the relative proportion of the manufacturing

Fig. 1 Prevalence of workplace health promotion programme by industry.

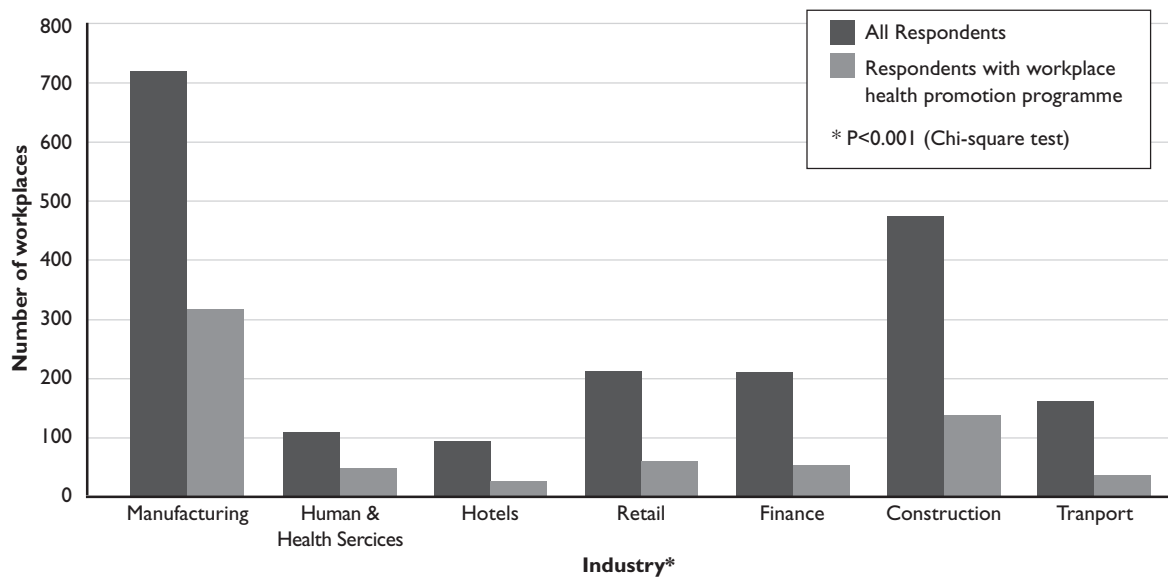
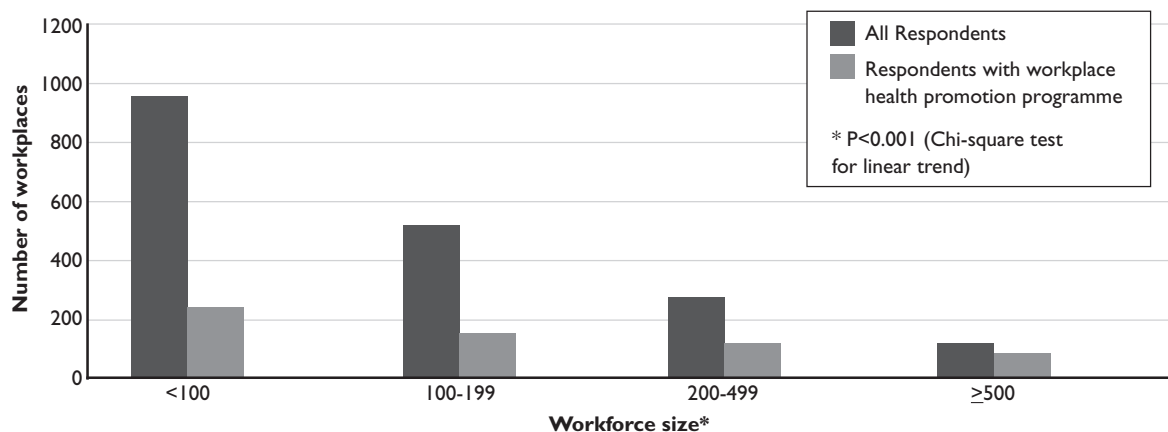


Fig. 2 Prevalence of workplace health promotion programme by workforce size.



sector of the respondents (32.4%) was higher compared to the statistics from MOM (29%) while those of the retail (10%), financial (9.7%) and construction (21.4%) sectors were lower (13.6%, 15.7%, 25.1% respectively). Where workforce size was concerned, the proportion of workplaces with larger workforce size responding to the survey was the same compared to the smaller workplaces. From these observations, we inferred that the non-respondents were mainly from the retail/financial/construction sectors and workplaces with smaller workforce size. Table I describes the characteristics of the workplaces with health promotion programme amongst the respondents.

Workplaces with Health Promotion Programmes

Prevalence

Of the 2,217 survey respondents, 463 (20.9%) stated that they offered workplace health promotion programmes. However, only 363 (78.3%) of these fit the Parkinson's criteria. Interestingly, 346 (20%) of

the 1,696 who reported not having workplace health promotion programme, had such programmes according to the criteria used. All in all, 722 (32.6%) of the 2,217 respondent companies with an estimated 26% of the private sector workforce, had a comprehensive workplace health promotion programme using the defined criteria.

Workplace Characteristics

Of the 722 workplaces with workplace health promotion programmes, the majority were from the manufacturing (320, 44.3%), followed by the construction (119, 16.5%) and the trading (59, 8.2%) sectors. When compared within industry, workplaces in the manufacturing (44.5%) and the human and health services (42.5) industries ($p < 0.001$) were more likely to have a comprehensive workplace health promotion programme compared to hotels/restaurants (29.2%), retail (27.4%), financial (25.2%) and construction (25.0%) industries (Fig. 1).

Table II. Workplace health promotion activities by industry and workforce size (n=2,217).

	Category of Workplace Health Promotion Activities							
	Organisational Policies		Environmental Facilities		Educational Activities		All 3 categories of Activities	
	n	%	n	%	n	%	n	%
Industry								
Manufacturing	467	65.0	516	71.8	398	55.4	320	44.5
Human/Health etc service	71	62.8	83	73.5	64	56.6	48	42.5
Hotel/Restaurants	43	44.8	54	56.3	37	38.5	28	29.2
Wholesale/Retail Trade	99	46.0	112	52.1	90	41.9	59	27.4
Finance/Real Estate/Business	97	45.3	114	53.3	99	46.3	54	25.2
Construction	203	42.6	231	48.5	176	37.0	119	25.0
Transport/Storage/Communications	73	45.3	90	55.9	64	39.8	38	23.6
Others	83	46.1	96	53.3	78	43.3	53	29.4
Unknown	5	11.6	7	16.3	5	11.6	3	7.0
Workforce Size								
<100	460	47.2*	514	52.8*	382	39.2*	253	26.0*
100-199	291	54.4	333	62.2	253	47.3	173	32.3
200-499	171	60.0	209	73.3	167	58.6	133	46.7
≥500	108	81.2	114	85.7	111	83.5	97	72.9
Unknown	111	38.3	133	45.9	98	33.8	66	22.8
Total	1,141	51.5	1,303	58.8	1,011	45.6	722	32.6

% – As a percentage of number of companies in each industry/workforce size.

* – P<0.001 (Chi square test for linear trend).

Workplaces with larger workforce were more likely to have workplace health promotion programmes overall and within industry groups ($p<0.001$). Of the 133 workplaces with 500 and more employees, 72.9% had workplace health promotion programmes compared to 46.7% workplaces with 200 - 499 employees, 32.3% workplaces with 100 - 199 employees and 25.9% workplaces with less than 100 employees (Fig. 2).

Consistent with the profile of all respondents, workplaces with health promotion programmes in Singapore were more likely to have most of the employees in the 20 - 39 years age group (34.2%), followed by those with most of the employees in the 40 - 59 years of age group.

More workplaces with shift work (365, 44%) had health promotion programmes compared to workplaces without shift work (386, 28.2%). This was true for all industry types in the survey.

Programme Drivers and Administrators

In the majority of the workplaces with comprehensive health promotion programmes, the management (336, 46.5%) was identified as the main driving force of the programme, followed by the employees themselves (109, 15.1%). Only three (0.4%) workplaces cited the union as the main driving force.

In about half of these workplaces (364, 50.4%), the human resource and personnel staff administered the health promotion programme. The next largest group of workplace health facilitators comprised the company doctors/nurses (26.3%), safety officers (21.2%) social/

recreational club members (18.7%) and administrative staff (16.5%).

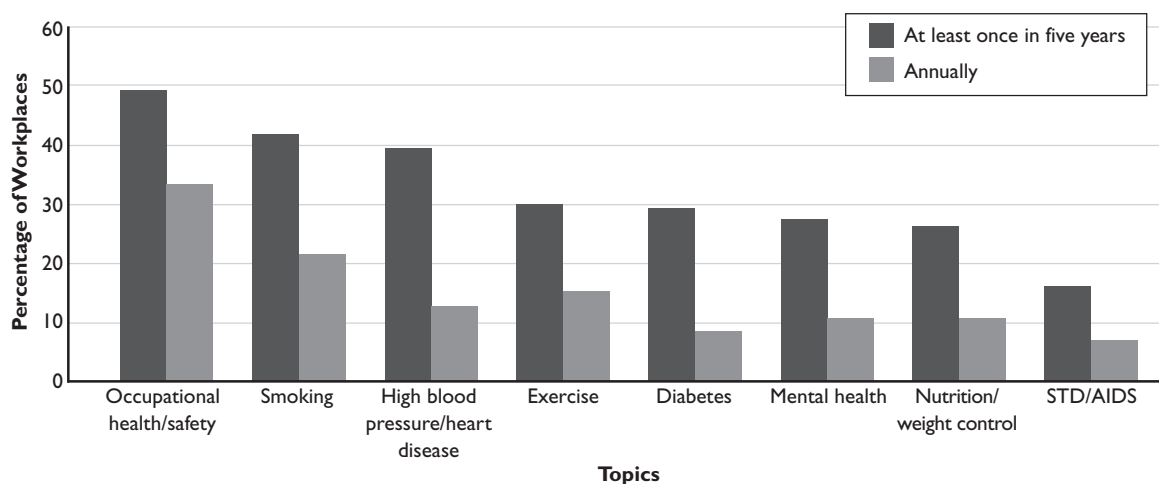
Health Promoting Activities

Scope

Of the three categories of health promoting activities, health promoting environmental facilities were the most frequently reported by the respondents (1,303, 58.8%) (Table II). The most common facilities provided were water coolers (57.2%), shower/changing facilities (40.9%), staff common rooms for relaxation (33.1%), notice board/e-mails/newsletters for health updates (29.9%) and cooking/food storage facilities (24.8%) (Table III).

Slightly more than half (1,141, 51.5%) of all the respondents reported that they had at least one health promoting organisational policy in their workplaces (Table II). The most frequently cited was non smoking policy in the non air-conditioned work areas (68.7%), followed by healthy canteens or food catering policy (19.4%), designated budget for health programmes (18.3%) and an exercise policy (17.3%). One-fifth of the workplaces also reported management's participation in the activities, an indirect indicator of management's support for the organisation's policy of health promotion programme (Table III).

A wide range of health educational activities were conducted among the 1,011 (45.6%) respondents that reported organising at least one health educational activity in their workplaces over the past five years (Table II). Health screening was the most popular

Fig. 3 Frequency of health promotion topics (n=722).

activity (64.4%) followed by health talks/workshops/seminars (48.1%), distribution of health education materials (29.4%), screening of health videos (18%) and holding exhibitions on health matters (13.7%) (Table III).

In all the three categories of health promoting activities, workplaces from the manufacturing and health and human service sectors were more likely to have health promoting activities from either one of these categories compared to the rest (Table II).

Topics

Occupational safety and environmental health (355, 49.2%) and smoking control activities (302, 41.8%), were the most common topics covered in workplaces which had ever organised activities over the past five years. These were also more likely to be conducted annually by the companies. Other popular topics covered included heart disease prevention (39.8%), exercise/physical fitness (30.1%) and diabetes education (29.4%) (Fig. 3).

Sources of Support for Activities

Two hundred and ninety two (40.4%) workplaces with comprehensive health promotion programme sought support from the Ministry of Health for their programme. A comparable 235 (32.3%) also approached private organisations for assistance.

DISCUSSION

This study was prompted by the lack of local information about workplace health promotion programme in the private sector and the increasing interest of Ministry of Health in using the workplace as a setting for health promotion activities. Although, there are many such studies from the US and Europe⁽⁵⁻⁷⁾, it was not totally accurate to extrapolate their findings to the local

situation. Published studies in the US have shown that the prevalence of workplace health promotion programme in the American private workplaces had grown since 1985⁽⁸⁾ from 66% to 80% in 1992⁽⁹⁾.

The Singapore Sports Council had conducted several surveys on “wellness” programmes in workplaces⁽¹⁰⁾. However, these surveys were largely to gauge the level of sports and fitness programmes available to employees in the workplaces. The surveys were also mostly confined to workplaces with large workforce size and the respondents were left to interpret what constituted a company “wellness” programme when completing the survey.

This survey was not without its limitations. Because of the voluntary nature of the survey, response bias could not be ruled out. Respondents to the survey could have done so because they felt that they had health promoting activities in one form or another. Similarly, those who did not respond could be because they felt survey completion was not necessary as they had no such activities. Although, the response rate was slightly less than 50%, it compared favourably with mail-administered survey response rates (<20%) reported in the literature⁽¹¹⁾.

Another limitation is the reporting bias consequent to the self-reporting nature of the survey instrument. Respondents may not have answered all the questions posed because they believed the information to be confidential, and/or were uncertain.

Despite the limitations, the survey revealed three important findings about health promotion programmes in the private companies in Singapore viz:

- i. The prevalence of the workplace health promotion programme was a function of workforce size and industry type. Larger companies ($p < 0.001$) were more likely to offer activities than their counterparts with a smaller workforce. Manufacturing and

Table III. Health Promotion Activities in Workplaces with Health Promotion Programmes based on Parkinson's criteria (n=722).

Health Promoting Activities	Number	%
Organisational Policies		
No smoking policy in non aircon work areas	496	68.7
Management participation in health programme	156	21.6
Healthy Canteen/Food catering policy	140	19.4
Designated health budget for health programme	132	18.3
Exercise Policy	125	17.3
Use of office time for health programmes	94	13.0
Incentives schemes to keep healthy	70	9.7
Wellness Committee	51	7.1
Environmental Facilities		
Water Coolers	413	57.2
Shower/Changing facilities	295	40.9
Staff/Common room for relaxation	239	33.2
Notice board/E-mails/Newsletter for health updates	216	29.9
Cooking/Food Storage Facilities	179	24.8
Exercise facility e.g. games court, club house etc	175	24.3
Health information corner/health pamphlet display corner	149	20.7
Healthier food choices at office canteen	140	19.4
Educational Activities		
Health screenings	465	64.4
Talks/Workshops/Seminars	347	48.1
Print material distribution	212	29.4
Exhibitions/Displays	152	21.1
Screening of health videos	130	18.0
Contests/Quizzes	99	13.7
Demonstrations of healthy activities e.g. cooking etc	80	11.1

human and service sectors have the highest prevalence of health promotion programme ($p < 0.001$) compared to the rest.

- ii. Management remained the main driver behind these programmes. A substantial proportion of workplaces (>20%) with comprehensive programmes had management's commitment in terms of resource for the programmes e.g. people/committee overseeing the programme, designated budget for, and management's participation in the programme.
- iii. The scope of many of the programmes was centred on health promoting policies and facilities with emphasis on occupational health/safety and smoking issues.

These findings were comparable to those in the Western countries⁽¹²⁻¹⁴⁾.

How do these findings help to strategise the uptake of workplace health promotion in the private sector? One proposed strategy is to have in place guidelines on how to organise an effective workplace health promotion programme and generic models of workplace health promotion programme for workplaces of different workforce and industry sector to adopt⁽¹⁵⁾. While such a "cookbook" approach is abhorred by some, this approach when complemented by training of health facilitators has a place in increasing the uptake particularly among new companies embracing the programme. Training of the facilitators would equip them with knowledge and skills of implementing workplace health promotion programme in a holistic manner.

A critical factor to consider as part of the strategies to increase the uptake of the workplace health

promotion programme is to secure the support of the company's management. Marketing the benefits of such programmes should be targeted at the management to get their "buy-in". This approach should be complemented by the provision of adequate support to the administrators or health facilitators of the programme as discussed above since a significant proportion of the facilitators was of non-healthcare background.

In addition, since the scope of many current workplace health promotion programme centred around policies and facilities with emphasis on occupational health and safety issue, it is also vital to expand the local scope of occupational health and safety to include the promotion of workers' health through health living. Besides this, financial assistance in the form of grant would be of value to jumpstart health promotion programme, particularly for small workplaces.

With more workplaces turning towards private providers for assistance in workplace health promotion programme, it was also in the interest of the advocating body to ensure that the providers offer quality service. Accreditation of the organisations providing health promotion consultancy and training by the relevant authority might eventually be the way to do so. The government can play a key role in spearheading these strategies.

CONCLUSION

The study has provided a valuable insight into the health promotion situation in the private workplaces in Singapore. It has shown that although a significant proportion of workplaces surveyed had in place a comprehensive workplace health promotion programme, there are still many areas which require further support from the relevant parties. Small workplaces remained an untapped market for health promotion programmes.

The trend in prevalence of workplace health promotion programme in the private sector in Singapore should continue to be documented given the rapid changing work practices. Such surveys conducted at regular intervals can assist policy makers and programme planners in "fine-tuning" the strategies to encourage workplace health promotion. Future studies

should also investigate the factors underlying the high uptake of such programmes in some types of workplaces, the barriers preventing workplaces particularly the smaller ones from embracing health promotion programmes as well as cost-benefits of such programmes in local companies. Parkinson's definition of workplace health promotion had provided an objective and easy set of criteria for determining the prevalence of workplace health promotion programme. This definition could be used in future surveys and research on workplace health promotion in Singapore.

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