

WHOOSH: Working Hard on Optimising Staff Health

Abstract

Staff health programs are an effective strategy to address workforce issues including an ageing workforce, staff shortages and poor morale. The WHOOSH program aims to create a workplace environment that increases the capacity of staff to enhance and protect their health.

In 2005, a district-wide needs assessment survey of QEII Hospital HSD staff identified key areas for action. After a two-year intervention period, an evaluation survey found broad ranging and significant improvements in 15 of 20 key health behaviour indicators common to both surveys.

The project's success has resulted in People Plan funding in 2008 to develop a staff wellness section on QHEPS. This will allow sharing of project strategies and extend the reach and scope of the intervention.

Aim

The project aimed to create a workplace environment that increases the capacity of staff to enhance and protect their health and wellbeing.

Nature of the problem

The Queensland Government Submission to the Productivity Commission Study of the Health Workforce (2005) and the Health Systems Review Final Report (2005) identified retention and productivity of staff as major issues for Queensland Health. Elsewhere, staff health programs have been demonstrated to be effective in addressing these workforce issues. To date, staff health programs in Queensland Health have been infrequent, not integrated in business planning and lacking in documentation and evaluation. A comprehensive literature review on staff health programs demonstrated major benefits, including reduced staff turnover, absenteeism, frequency of accidents/injuries, recruitment costs and improved productivity and corporate image.

Extent of the problem

In 2005, the WHOOSH Committee held staff focus groups and implemented a survey of all QEII Hospital Health Service District staff to determine their health-related lifestyle behaviours, participation in early detection activities, expectations of their employer regarding support for their health, and suggestions for effective staff health interventions. The survey's 414 participants identified major priorities for action. Some key findings included:

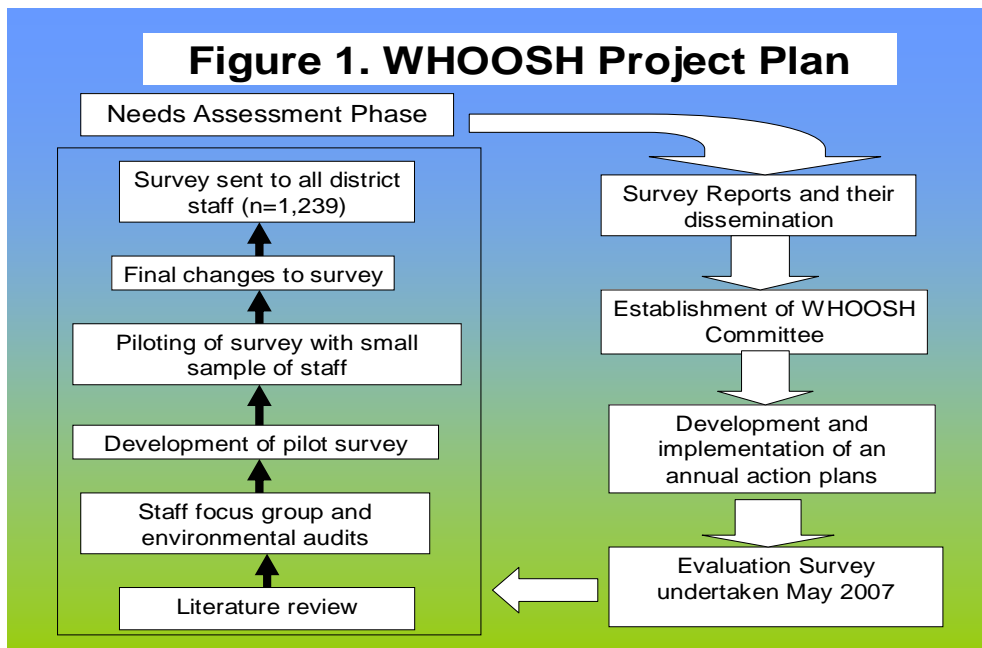
- 24% of female staff reported not participating in regular cervical screening, while 33% of eligible women did not undertake regular breast screening
- 47% of staff received Flu vaccinations annually
- 42% of respondents stated that stress management was an area of their lifestyle they would like to change
- 21% of respondents reported bleeding gums in the last four weeks while only 59% reported regularly visiting a dentist.

The survey verified that the district's workforce was aging, with 44% of respondents aged more than 45 years.

Strategic importance

The program was created in response to Queensland Health's Strategic Plan 2004-2010 that listed 'Healthier Staff' as one of its strategic intents. It aligns with key strategic priorities of the People Plan: attracting and retaining people and creating a positive workforce culture.

Criterion 6 of the *Safer and Healthier Workplaces Strategy 2007-2012* requires all government departments to have a Healthy Lifestyles Program for their staff. These activities will be externally audited. The WHOOSH program is supported locally by the District Health Promotion Committee and at state level by Queensland Health's Occupational Health and Workplace Safety Unit.



The District WHOOSH Committee was formed as a subcommittee of the District Health Promotion Committee. The role of the committee was to determine staff health priority areas based on the needs assessment survey results, to oversee WHOOSH strategies, to advocate for environmental strategies and to play a co-ordinating role in professional development. To facilitate this, summaries of the initial WHOOSH Survey were developed for each service area, including suggested activities. Relevant health programs were encouraged to write articles for the district newsletter, attach information to payslips and be involved in major staff health events by providing sessions or information stalls. The committee also worked on organisational change, advocating for staff to be viewed as one of the target groups to include in annual business planning.

Communication with staff has been two-way, with WHOOSH survey report summaries being published in the district newsletter, staff feedback sessions and the full report available on QHEPS.

In response to survey results, the WHOOSH program has focused on health education and promotion and environmental strategies such as:

- ⇒ piloting a work-based fruit and vegetable co-operative and healthy cooking classes
- ⇒ health information attached to payslips and through emails
- ⇒ a staff health forum and a staff health week addressing the major lifestyle issues identified in the survey
- ⇒ the creation of a "Healthier Staff" page in the district health service's newsletter
- ⇒ the development and implementation of a policy to encourage staff to attend BreastScreen services within work hours
- ⇒ business plans for additional sun shelters and undercover bicycle racks within the hospital grounds.

A list of all activities is shown in Appendix 1.

Partnerships with non-governmental organisations have also been developed with representatives from a number of health organisations providing information to attach to payslips or providing sessions at staff health forums.

Outcomes and evaluation

An evaluation survey (n = 1222, response rate = 49%) found significant reductions in reported stress and increases in reported participation in some forms of incidental activity. There were broad ranging and significant improvements over the WHOOSH intervention period in 15 of the 20 key health behaviour indicators common to both surveys (Sign Test; p=0.041, two-sided).

When staff health event participants were compared to non-participants for the evaluation survey, the participant group had more favourable results for 26 of the 27 health behaviour and attitude indicators. Forty-five percent of the final survey respondents reported they had participated in at least one staff health activity over the last two years.

To further evaluate the program, the results of the statewide Better Workplaces Staff Opinion Surveys for our district were compared with those of adjacent districts. For 2007, QEII Hospital HSD reported higher scores on quality of work life, individual morale, workplace morale, respect for people and workplace health and safety than the Logan-Beaudesert and Bayside HSD. Improvements were also seen between the 2006 and 2007 surveys for our district for quality of worklife, individual morale and workplace morale.

Sustaining change

Change will be sustained through:

- the governance of the program at district level, with a co-ordinating staff health committee and existing health programs/units incorporating staff health activities into their annual business planning
- the development of a staff wellness section on QHEPS to disseminate our learnings, provide health information, allow sharing of staff health activities between districts, and provide a framework to co-ordinate state staff health activities
- incorporation of our work within the broader context of the (state) Queensland Health Healthier Lifestyle Program using established partnerships with Occupational Health and Workplace Safety Unit and the Human Resource Unit.

Future scope

The WHOOSH Program has developed a raft of evaluated and practical interventions to support staff health at district level.

The Staff Wellness section of QHEPS will:

- provide staff with high quality health information and resources to support their health
- provide a platform for staff health promotion activities at district and state levels and help to expand the reach of these activities
- be owned by staff, who will help to determine the content and direction of the web intervention.

In tandem, both district and state staff health strategies will continue to support Queensland Health staff into the future.

WHOOOSH

Working Hard on Optimising Staff Health

Executive Summary 2005 to 2007

August, 2007



Report written by the staff of the Community Nutrition Unit
on behalf of the District Health Promotion Committee



Executive Summary 2005 to 2007

Background

Workplaces are ideal settings for health promotion due to their existing organisational structure and captive audience.¹ Since full-time employees spend a significant proportion of their waking hours at work and there is increasing evidence to suggest that work does affect health, employers can play a significant role in optimising the health of their employees through workplace health interventions.²

There are benefits to be gained by both the employer and the employee from implementing workplace health promotion interventions. Research into workplace health promotion programs suggests that the main economic benefits for industry include reduced staff turnover, reduced absenteeism, reduced frequency of accidents/injuries, reduced recruitment costs, improved productivity and improved corporate image. These financial gains are often the ultimate goal of companies implementing workplace health promotion interventions, with health gains incurred by workers seen as secondary to improvements in spending and productivity. One study found that a conservative return of \$1.75 - \$3.25 for every dollar spent on workplace health programs.² Other intangible benefits include higher morale, better staff relations and improved organisational culture.³

Both the *Queensland Government Submission to the Productivity Commission Study of the Health Workforce* (2005) and the *Health Systems Review Final Report* (2005) identified the retention and productivity of staff as a major issue and future priority of Queensland Health.^{4,5} The need for workplace health promotion interventions to support employees was identified by the District Health Promotion Committee (DHPC) and senior management within the QEII Hospital Health Service District. The conception of the WHOOSH project coincided with the release of Queensland Health's Strategic Plan 2004-2010, which listed *Healthier Staff* as one of its five strategic intents.

Methods

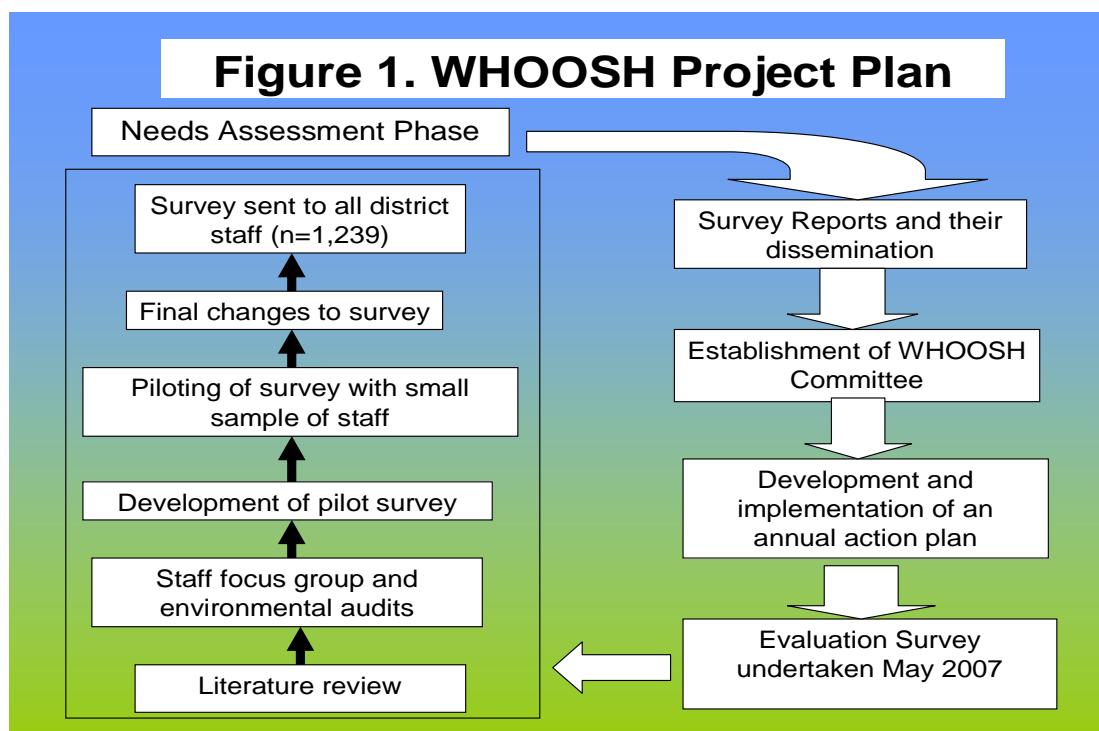
A summary of the WHOOSH Program to date is shown in Figure 1. The program was implemented in three phases; the comprehensive needs assessment, implementation and evaluation phases.

a) Needs assessment and the collection of baseline data

The first phase of the program included a literature review of workplace health interventions and a staff focus group exploring issues relating to the health of employees; their perceptions of the role of employers in promoting health, and their suggestions regarding strategies to improve their health. A written staff health survey was then piloted on staff from two worksites. Environmental audits of two work sites were completed, investigating the promotion and opportunities for physical activity and the nutritional quality of food sold.

The final written survey tool was attached to staff pay slips of all 1,239 staff in the QEII Hospital Health Service District. The confidential survey included questions on nutrition, physical activity, body weight, stress levels, oral health, alcohol and tobacco use, sun protection, cervical screening, breast screening, attendance to general health checks, flu vaccination, and staff suggestions on potential employer strategies to improve their health. Where possible, questions were taken from previous surveys so that comparisons of results could be made. Participation was encouraged

using district email messages, posters in workplaces and the promotion of the survey by senior managers at various health service events as well as entering a prize draw as an incentive.



Frequencies of responses were calculated using SPSS (Version 11.0, SPSS Inc. New Jersey, Prentice Hall; 2001). Open question responses were collated in a Microsoft Office Word document. The results were disseminated to senior managers at District Executive meetings and to staff using email messages, articles in the district newsletter and a number of oral presentations.

b) the intervention phase

The District WHOOSH Committee was formed as a subcommittee of the District Health Promotion Committee. The role of the committee was to determine staff health priority areas based on the baseline survey results, to oversee WHOOSH strategies, to advocate for environmental strategies and to play a co-ordinating role in professional development. To facilitate this, summaries of the initial WHOOSH Survey were developed for each of service areas, including suggested activities. Relevant health programs were encouraged to write articles for the district newsletter, attach information to payslips and be involved in major staff health events by providing sessions or information stalls. Figure 2 provides a summary of staff health activities competed over the two year implementation phase.

c) Evaluation

An evaluation survey based on the baseline survey was distributed in May 2007 to all 1,222 staff attached to payslips. Those who responded were provided a vegetable peeler as a reward for participation. Email reminders and promotion of the survey at various functions and worksites was completed. Frequencies of response and cross tabulations between baseline and evaluation survey results, and those who participated in WHOOSH events and those who did not, were calculated using SPSS (Version 14.0, SPSS Inc. New Jersey, Prentice Hall; 2005).



Figure 2. Staff Health Activities 2005-2007

Intervention	Description of Activity
Nutrition	<ul style="list-style-type: none"> • A fruit and vegetable co-op was piloted to increase fruit and vegetable consumption • Go for 2 and 5 Cooking demonstrations • Articles in the district's newsletter encouraging healthy eating (2) • Celebratory foods cooking demonstrations (5 sessions) • District-wide distribution and display of Go for 2 and 5 fruit and vegetable promotion posters and merchandise
Breastfeeding Promotion	<ul style="list-style-type: none"> • Article in district's newsletter regarding the Queensland Health Work and Breastfeeding Policy • Display of posters associated with the above policy
Physical Activity	<ul style="list-style-type: none"> • Development and local piloting of staff short walking trails • Support of 10,000 steps staff challenge, with 10 teams of eight to 12 participants across the district • Advocacy for lockable undercover bike facilities and shower facilities for staff • Regular Lunch time Tai chi and/or yoga classes at two sites • Exercise sessions during the 2006 Community Staff Development Forum and the 2007 Staff Health Week Sessions including pilates, yoga, tai chi, lunch time walk, therabands, boot camp and a balance and exercise session
Healthy Weight	<ul style="list-style-type: none"> • Access to two Weight Watchers at Work programs • Promotion of the 'Lighten Up' program for staff
Stress	<ul style="list-style-type: none"> • Massage at work organised during the 2006 Community Health Staff Development Forum and 2007 Staff Health Week. Ongoing at two worksites • Regular Lunch time Tai chi and/or yoga classes at QEII Hospital • Various Stress and relaxation presentations during the Community Health Staff Development Forums (2) and 2007 Staff Health Week • Article in district newsletter on attitudes to stress and tips to overcome challenges • Advocacy for flexible work hours
Cancer Screening and protection	<ul style="list-style-type: none"> • Development, implementation and promotion of the policy to allow breast screening during work hours, including posters in work areas • 'Breast Cancer Awareness Month' district newsletter article • Sessions promoting BreastScreen, cervical cancer and prostate health at 2006 Community Staff Development Forum • Sessions on BreastScreen and Bowel Cancer Screening at the 2007 Staff Health Week • Pap Screening promotion posters displayed in staff common areas • Sun safe session at the 2006 Community Staff Development Forum Sun safe presentation. Free sun screen samples. • Advocacy, including the development of a business case for the provision of additional shade structures at QEII Hospital
Oral Health	<ul style="list-style-type: none"> • Oral hygiene brochure distributed with payslips • Oral Health stall at the 2006 Community Staff Development Forum • Oral Health Article in the Link Article regarding Dental Erosion and public health recommendations
Smoking, Drugs and Alcohol	<ul style="list-style-type: none"> • District newsletters on smoking cessation, the staff QUIT Program and the new non-smoking laws • Smoking cessation sessions during Staff Health Week 2007 at two venues • QUIT promotion posters in staff common areas across the district • Stall at 2006 Community Staff Development Forum • District Christmas email re responsible drinking

Results and discussion

The key results of the baseline and evaluation surveys are shown in Figure 3.

Figure 3. Key survey results

Question	2005 Survey	2007 Survey
Demographics:		
Number of respondents	414 (33% Response)	505 (41% Response)
Age (% of participants over 45 years)	43.7%*	52.9%*
Nature of employment (% full-time)	70.9%	71.2%
Responses by sector	43.3% for hospital*	33.3% for hospital*
Percentage of staff who recalled participating in any staff health activities over the last two years	n/a	44.8%
- for hospital		34.9%
- for other staff		50.0%
Reported levels of stress:		
- percentage of staff who reported they were somewhat to extremely stressed	72.4%*	62.8%*
Diet: Percentage of participants who reported:		
- decreased saturated fat intake		53.9%
- increased water consumption		58.4%
- increased fruit and vegetable intake		56.0%
Physical activity:		
- percentage of staff who reported doing aerobic exercise \geq 3 times/week often (75%) to almost always (90%)	51.3%	46.2%
- percentage who reported using stairs rather than lifts	71.2	68.9
- percentage who reported parking further away	29.5	34.5
- percentage who reported getting off or on a bus stop/train stop earlier	1.5*	5.7*
- percentage of staff who reported walking down the hall to talk to a colleague rather than emailing or phoning	55.9*	62.6*
Smoking:		
- percentage of staff who reported they smoke	11.2%	11.5%
- percentage of smokers who reported smoking > 10 cigarettes/day	66.7%	53.4%
Oral health:		
- percentage of staff who reported bleeding gums in the last 4 weeks	21.8%	18.3%
Sun protection:		
- percentage of staff who reported they were very concerned about getting skin cancer	33.7%	39.0%
- percentage of staff who reported they had been screened for skin cancer by a health professional	50.1%	56.0%
- percentage of staff who reported that they <u>almost never</u> wear a hat when exposed to the sun	13.3%	9.8%
Screening for cervical cancer:		
- percentage of relevant staff who reported they regularly (every 2 years or more often) have a Pap Smear)	74.7%	72.8%
Breastscreening:		
- percentage of relevant staff who reported they participate in breast screening every 2 years or more	67.0%	69.7%
- percentage of staff reported they were aware that breasts screening is offered during work hours	n/a	74.0%
Flu vaccination:		
- percentage of staff who reported having a flu vaccination every year or so	45.9%	52.2%
Check up by GP:		
- percentage of staff who reported annual check ups	38.0%	42.0%

Results showing a positive behaviour or attitude change are shown in GREEN

* statistical differences, $p < 0.05$, (χ^2 , 2-sided)

a) Significant improvement in the health behaviours and attitudes of district staff

Significantly lower levels of reported stress and increases in reported participation in some forms of incidental activity were found after the WHOOSH intervention. When the baseline and evaluation surveys results were compared for the 20 key health behaviour indicators common to both surveys, the direction of change was positive for 15 of these indicators. Using the nonparametric Sign Test, there was a significant difference between the response profile of both surveys ($p=0.041$, two-sided). This indicates a general broad ranging improvement has occurred in the health behaviour and attitudes of district staff during the WHOOSH intervention period. In areas where greater investment in terms of the number and reach of interventions, the results were more impressive. For example, investment in nutrition interventions was high and this was associated with more than half of respondents reporting decreased saturated fat intake, increased water consumption and increased fruit and vegetable intake.

b) WHOOSH participants had more positive health behaviours and attitudes than non-participants

When staff health event participants were compared to non-participants for the evaluation survey, the participant group had more favourable results for 26 of the 27 health behaviour and attitude indicators. Using the Sign Test, there was a significant difference between the response profile of both surveys ($p<0.001$, two-sided). This may be due to the intervention or because participants were intrinsically more interested in their health and thus more likely to attend WHOOSH activities as well as undertaking positive action relating to their health.

Figure 4. Reported health behaviours and attitudes relating to WHOOSH participation* (2007 survey)

Question	% of event participants	% of non-participants	P-value (χ^2 , 2-sided)
Diet:			
- reported confidence in recognising healthy food choices in different situations	98.2%	94.9%	0.05
- reported increase in fruit and vegetable intake	61.8%	50.9%	0.015
Physical activity:			
- reported used of stairs rather than lifts	73.3%	65.3%	0.05
- reported parking further away	40.4%	29.7%	0.012
- reported use of toilets that are further away	13.8%	5.4%	0.001
- walk down the hall to talk to a colleague rather than emailing or phoning reported	72.0%	55.2%	<0.001
Smoking:			
- percentage of smokers who report smoking > 10 cigarettes/day	33.3%	63.2%	0.028
Breast screening:			
- reported regularly (every 2 years or more often)	75.6%	64.2%	0.023
- participation in Breast screening for women over 40 years-	82.0%	66.3%	0.001
- Awareness that breast screening can take place during work hours			
Reported annual GP check ups	46.6%	38.0%	0.05

* statistically significant results only reported ($p<0.05$)

c) An aging workforce

When comparing the survey populations, significant differences were shown for the percentage of participants over 45 years, this increased by 9.2%. This is consistent with a rapidly ageing health workforce reported in other documents, with the aging workforce identified as a major workforce challenges for the near future.^{6,7}

d) Comparing the health behaviours and attitudes of full-time and part-time staff

As shown in Figure 5, for almost all positive health behaviours and attitudes, and particularly those relating to screening and prevention activities, part-time staff reported greater participation. This was also found for the baseline survey and resulted in advocacy for more flexible hours for staff.

Figure 5. Comparison of full-time and part-time staff (2007 survey)

Question	Full-time staff	Part-time staff	P-value (χ^2 , 2-sided)
Reported levels of stress: - percentage of staff who reported they were somewhat to extremely stressed	68.3%	63.3%*	0.154
Diet: Percentage of participants who reported: - perceived intake of a healthy diet	71.4%	78.3%	0.035*
Physical activity: - percentage of staff who reported doing aerobic exercise \geq 3 times/week often (75%) to almost always (90%)	47.7%	50.0%	0.536
Smoking: - percentage of staff who reported they smoke	13.6%	6.6%	0.003*
Oral health: - percentage of staff who reported regular dentist visits (every 6-24 months)	57.2%	66.0%	0.015*
Sun protection: - percentage of staff who reported they were very concerned about getting skin cancer - percentage of staff who reported they had been screened for skin cancer by a health professional	34.6% 50.0%	42.1% 61.6%	0.036* 0.002*
Screening for cervical cancer: - percentage of relevant staff who reported they regularly (every 2 years or more often) have a Pap Smear)	71.5%	78.2%	0.056
Breast screening: - percentage of relevant staff who reported participation in breast screening every 2 years or more often - percentage of staff reported they were aware that breast screening s offered during work hours	66.4% 79.2%	72.4% 65.7%	0.156 0.010*
Flu vaccination: - percentage of staff who reported having a flu vaccination every year or so	52.8%	41.7%	0.003*
Check up by GP: - percentage of staff who reported annual check ups	39.7%	40.1%	0.914

* statistical differences, $p < 0.05$, (χ^2 , 2-sided)

e) The reach of WHOOSH activities

Forty-five percent of the final survey respondents reported they had participated in at least one staff health activity over the last two years. A significantly greater percentage of participants were working full time (82% vs 64%; $p < 0.001$) and were employed in non-hospital positions (65% vs 35%, $p = 0.002$) when compared to non participants. There is a need to better communicate and customise staff activities to these sections of the workforce to extend its reach. There is also a need to gain the support of line managers to release staff for WHOOSH activities.

f) Limitations of research

The response rates for both surveys were generally low (33%, 41% respectively). However, considering that greater than 15% of staff are on some form of leave or secondment at any given time the real response rate was much higher (ie in excess of 39%, 49% respectively). The high level of staff turnover in some areas must also be considered. When compared to past district staff surveys, both survey response rates are exceptionally high. It must be acknowledged that those who were more interested in their health were likely to have participated in both surveys. However, this bias does not explain the documented improvements in health behaviour and attitude profiles or the increase in response rate

between the two surveys. For these reasons, it is likely that the trends of improved health behaviours and attitudes are real and may be explained by the WHOOSH intervention.

Conclusion

The WHOOSH program has promoted positive health behaviours and attitudes in staff of the QEII Hospital Health Service District and its evaluation has demonstrated significant positive changes in these areas, particularly for those participating in WHOOSH events. The major challenges to the effectiveness of the WHOOSH Program are the need to expand its reach to all staff, to develop an effective structure for staff health activities (particularly in the context of district consolidation), and for adequate human and financial resources for its activities.

Recommendations

The following recommendations are made:

- to develop an effective structure for the delivery of staff health interventions for the consolidated district
- to advocate for dedicated funding and human resources for staff health interventions
- to disseminate the results of the WHOOSH Program to promote staff health interventions in other settings.
- to better communicate and engage the support of line managers regarding staff health policies and events.

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