Truckies and the Australian transport industry: Managers' perspectives about enablers and inhibitors to workplace health promotion

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Abstract.

BACKGROUND: There is little published research about managers' views on implementing and embedding workplace health promotion interventions.

OBJECTIVE: To shed light on research-to-practice challenges in implementing workplace health promotion interventions in the Australian road transport industry.

METHODS: In this Participatory Action Research project, managers from small-to-mid-sized companies in the Australian road transport industry were asked their views about enablers and barriers to implementing nutrition and physical activity interventions in their workplace.

RESULTS: Managers identified practical assistance with resources, ideas, and staffing as being key enablers to implementation. Barriers included time restraints, worker age and lack of interest, and workplace issues relating to costs and resources.

CONCLUSION: Manager perspectives add new insights about successful implementation of workplace health promotion. A Participatory Action Research approach allows managers to develop their own ideas for adapting interventions to suit their workplace. These findings add to a small body of knowledge of managers' views about implementing workplace health promotion in small-to-mid-sized road transport companies - a relatively unexplored group. Managers highlight the importance of time constraints and worker availability when designing interventions for the road transport industry. Managers require a good understanding of the workplaces' socio-cultural context for successful health promotion and health behaviour change.

Keywords: Participatory action research, management, implementation, interventions, truck drivers

1. Introduction

Many people spend a significant amount of time, estimated at up to 60% of waking hours, in their place of work [1–3]. This makes the workplace an ideal environment to promote and support healthy behaviour change [4–8]. For truck drivers, their truck

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is their workplace. In Australia, many truck drivers are middle-aged and older males, with a high Body Mass Index, poor nutritional habits [9, 10] and an increased risk of chronic disease [11–13]. The physical demands of the job, the stress of meeting tight deadlines, financial pressures, long sedentary periods spent confined to their vehicle, and a restricted opportunity to access nutritious foods all contribute to an increased health risk [12, 14]. The workplace environment itself, including the systems, structures, policies and culture, may have a direct impact on truck drivers' health and may play a key role in enabling or preventing them from making better health choices [15–17].

Workplace health promotion interventions, particularly those which use a Participatory Action Research (PAR) approach, focus on the effect of the physical and psychosocial work environment on individual behaviour change. An advantage of workplace health promotion is that multiple interventions can be applied at different levels. This means it is possible to address organisational and environmental/policy issues and factors at the individual level [18]. Workplace health promotion has the potential to reduce health risk behaviours and improve employee health [19–22]. Few Australian workplaces, particularly small-to-medium sized companies, have implemented workplace health promotion strategies [23]. In the road transport industry, limited efforts to implement workplace health promotion have generally been inadequate and unsuccessful [24]. To understand why, it is necessary to understand the factors affecting workplace health promotion participation and implementation from multiple levels within the workplace [23].

Workplace managers and other high-level decision makers have direct influence over health promotion in their workplace [25] but may be overlooked in the process of designing and implementation interventions. Middle managers serve as a bridge between workers and upper management and can encourage motivation and uptake in their workers. Previous research suggests managers may be one of the key factors in the success of health promotion projects [25–28]. Despite this, there has been little published research about managers' views about implementing and embedding workplace health promotion interventions [19, 25], particularly in the Australian transport industry.

To address this gap, this project will explore managers' views about the enablers and barriers to implementing health promotion interventions in their

workplace, as part of a larger workplace health promotion initiative in the Australian road transport industry.

2. Methods

The Queensland Transport Industry Workplace Health Intervention project was an applied mixed-methods, settings-based health promotion research project conducted with six diverse transport industry workplaces employing between 20 and 300 truck drivers in south-east Queensland [29]. This project used a collaborative Participatory Action Research (PAR) approach to identify contextualised and relevant health promotion interventions for each workplace to support truck drivers to improve their diet and levels of physical activity. The project is described in detail elsewhere [10, 29].

Six workplace managers and 30 truck drivers from six transport companies were engaged collaboratively to develop nutrition and/or physical activity health promotion interventions for truck drivers at their workplace. Seven interventions, for example, the provision of free fruit, brief 'toolbox' health talks, self-monitoring of physical activity, and a health awareness social media page, were developed by the workplaces and the project team. Each workplace manager was supported by the project team to implement and evaluate three or more of these interventions. Participatory Action Research methods such as interviews, surveys and focus groups, and focussed observation were used to evaluate the interventions. Workplace managers and truck drivers were asked their opinion about engagement and satisfaction with the intervention. Qualitative and quantitative data were collected, analysed and reported. Ethical approval was obtained from the Queensland University of Technology Human Research Ethics Committee (approval number 1300000412).

This paper reports the qualitative findings of semi-structured interviews conducted with six (five male, one female) workplace managers immediately after completion of the three-month workplace 'intervention phase' and at a six month post-intervention follow-up. Managers were identified when workplaces were recruited to the project and volunteered to participate in semi-interviews. Interviews were conducted to gain an understanding of the enablers and barriers to the sustainability of interventions. Interviews were conducted by a member of the project team at a time and place convenient for the manager,

such as in their office or the tearoom, and took between 20 and 70 minutes. As part of a larger structured interview about the interventions, managers were asked five open-ended questions about their involvement in implementing the interventions, the challenges and enablers of implementation, and their intention to continue implementing the interventions. The specific questions were: ‘Can you describe how management (yourself or others) got involved and supported the workplace health and wellbeing initiative?’, ‘What factors made it difficult for you to implement any of the strategies?’, ‘What factors made it easy for you to implement any of the strategies?’, and ‘In terms of implementing the strategies, what would you do differently in the future’, ‘Does management intend to continue to run, or re-run, any of the strategies?’.

Each interview was digitally recorded with consent and transcribed verbatim. A rigorous process of open and axial coding-and-theming was used to analyse the data [26]. Firstly, significant statements made were identified in context, read several times, assigned a code and organised into a group by a member of the project team. This process was repeated until the groups settled to represent a theme. Next, other members of the project team read and re-read the full transcripts and discussed the themes critically to reach agreement. The themes represent the key aspects of workplace managers’ thoughts about the enablers and barriers to implementing selected health promotion interventions in their workplace. Quotations were extracted to represent typical views and themes.

3. Findings

Road transport industry workplace managers perceive several factors which enable and inhibit the implementation of health promotion interventions in their workplaces. These factors, which fall into three themes, are presented here:

3.1. Theme 1: Assistance as an enabler: “It would be something you wouldn’t be able to do without [support]” (WP4)

This theme represents workplace managers’ perspective about assistance as enabler to implement health promotion interventions. The workplace managers feel assistance is needed in three ways – from the project team, company administration, and government.

Most workplace managers reflected on the pivotal role of the project team in enabling the implementation of the interventions. The managers suggest the project team was helpful in providing ideas about the types of workplace health promotion interventions which may be implemented, and knowledge and resources necessary for implementation:

“[We] probably wouldn’t have thought of going down the poster path if you hadn’t provided them” (WP1).

Workplace managers suggest company administrative assistance from others such as office staff is an enabler to implement interventions. When asked about the intervention involving the delivery of health messages to truck drivers – for example, by printing these messages on drivers’ payslips – one workplace manager explained:

“I just got the girls in the office to do that” (WP4).

Another mentioned:

“[I would’ve] tried to get someone else a little bit more involved to help do it. Being a manager, it’s difficult” (GBFF)

Workplace managers feel an enabler to implement interventions would be assistance from government. One workplace manager considered the input of government organisations into industry health and wellbeing programs to be valuable:

“It’s only a matter of the government getting behind you” (WP4).

3.2. Theme 2: Truck drivers as a barrier:

“There’s no time when everyone’s here at once” (WP4)

This theme represents workplace managers’ perspective about issues related to the truck drivers as a barrier to implement health promotion interventions. The workplace managers feel access to, and the age of the truck drivers, is problematic.

All workplace managers mentioned the difficulties in accessing their workers due to the mobile and sometimes unpredictable nature of their work. One workplace manager said:

“It’s very difficult. I might see twenty drivers in a day but it’s all at different times” (WP1).

This idea was explained further by another workplace manager:

“[Local drivers’] hours are so different. You could have one starting at 2am in the morning and finishing at 9am, you could have one start at 7 and finish at 5...” (WP5).

Another workplace manager agreed:

“You try and get people together, to get them to stop, you’ve nearly got to do it individually” (WP4).

Workplace managers with drivers completing line-haul had additional challenges:

“They’re [the drivers] all over the place. You’re lucky to see these guys once a week, once a month” (WP2).

“You have a captive audience, they couldn’t avoid getting the sermon when they’re here in the morning. They have to be here at the meeting and they have to sign the toolbox sheets at the end of the toolbox [session] to say they were there” (WP1).

A number of the workplace managers perceived the age of the participating truck drivers to be a barrier. One of the workplace managers explained this idea:

“You’ve got to aim it to an age-group that can change and that will change” (WP1).

Another driver put it similarly:

“My drivers are the wrong age-group in most cases; they’re not young enough for it... it’s technology they don’t use” (BTP)

3.3. Theme 3: Resources as a barrier:

“Anything that has to be purchased... I’m not going to get that authorised” (WP1)

This theme represents workplace managers’ perspective about issues related resources as barrier to implement health promotion interventions. The workplace managers feel the cost of interventions and availability of resources is challenging. Workplace managers feel interventions which require the purchase of materials – such as the free fruit intervention (requiring the regular purchase of fruit by the workplace), and the ten thousand steps challenge (requiring the one-off purchase of pedometers by the truck drivers) difficult because of the cost. These quotes reflect views expressed by most workplace managers:

“I don’t think they [the truck drivers] were interested in paying for a step-counter themselves [though] they would have been interested in partaking in the study to see if they were actually doing ten thousand steps... There was a missed opportunity there” (WP1).

And:

“The ten thousand steps was a cost one as well. The directors knocked that one back and the free fruit supply was just along the lines of ‘Well, if we’re not going to supply biscuits then... if it’s a cost thing, why go out and purchase something else for the same cost” (WFL)

And more bluntly:

“The money rang a few bells for the accountant” (BTP)

One workplace manager provided insight into the reasons why their company did not implement a particular intervention.

“We couldn’t do that with our software program. We could do individual text messages, but not group ones... We didn’t do any printouts because we’re pretty huge about saving costs on printing here so we didn’t find it viable to do lots of printing of personal messages” (WP5).

4. Discussion

This project sought the views of six transport industry managers about the enablers and barriers to implementing health promotion interventions in their workplace. Participants were mainly operating managers with limited knowledge of prevention and workplace health promotion, however they were receptive to the interventions and to workplace health promotion in general. The PAR approach allowed managers to develop their own ideas about how their interventions could be adapted to suit their unique workplace context. Managers were open and willing to discuss their perceptions of nutrition and physical activity issues in their workplace and provide feedback about the process of implementation of their selected interventions. We found they described more barriers rather than enablers to implementation, with three key themes emerging: 1) assistance as an enabler, 2) truck drivers as a barrier, and 3) resources as a barrier.

4.1. Enabler: Workplaces need assistance

We identified factors internal and external to workplaces which assisted managers to implement interventions. These included guidance about ideas and activities, human and material resources provided by the research team, practical assistance from project and internal staff, and assistance from government or other bodies. These factors concur with enabling factors identified in other research [31–34]. Similar to the findings of Laws et al. [19], several managers in our participating workplaces struggled to identify activities or programs they could implement and were open to ideas or suggestions that might work for their workplace. More specifically, managers needed assistance with ideas or activities suitable for the age,

abilities and interests of their workers, which could be easily be integrated into the running of the workplace and at little-to-no cost. We found managers placed considerable value on the support given by the project team to help them identify suitable activities and engage their workforce, and several mentioned they could not have implemented the intervention without the team's assistance. This suggests a general lack of capacity and highlights the importance of providing managers with appropriate guidance on how to best implement health promotion activities. In most situations this requires upper management to be invested in the benefits of workplace health promotion and willing to identify staffing and resource requirements prior to implementation [35].

Where capacities do not fully exist within a workplace, which is likely in small-to-mid-sized workplaces without active wellness teams, outside assistance may be required. Structured health promotion programs run by a third party are expensive and would likely not fit into the inflexible work schedules of workers the road transport industry. Networking or developing collaborations with similar workplaces, sharing resources and facilities, and drawing on the experience of other individuals with knowledge how to build capacity in organisational health promotion, are options that could contribute to managers' implementation capacity with minimal financial outlay [36].

Our finding of the value of government assistance with implementing interventions aligns with previous findings from others [19]. Australian workplace managers believe government should play a role in supporting workplace health promotion in order to reduce the financial burden on the workplace. Support could take the form of small grants to establish programs, financial incentives for workplaces to provide workplace health promotion or to employees who choose to uptake it, and generally promoting awareness of health issues through education and social marketing campaigns. Local government could also play an important role in linking workplace managers to broader government initiatives, promoting locally run programs, activities or facilities, and providing a point of contact to share information and ideas with other local businesses [19].

Within the workplace, internal capacity was a strong enabler. Assistance with day-to-day logistics such as printing health messages or general office administration, increased the likelihood of health promotion interventions being implemented successfully. Identifying staff with higher-level health

promotion skills and investing time in staff training in workplace health promotion could be helpful for building and/or strengthening the internal capacity. Similarly, having a dedicated health promotion champion or 'change agent' [34] who, as part of their work role, is dedicated to driving interventions, could assist with maintaining worker interest and motivation and help the intervention be sustainable in the long term.

4.2. Barrier: Workers issues

There are many challenges involved in implementing workplace health promotion in geographically disparate, multi-site and multi-occupational workforces such as the road transport industry. We found the major barrier was the unavailability of drivers due to their high mobility, shift work, lack of consistent routine, and erratic work schedules with tight deadlines. Other studies, even those in workforces with regular business hours, identified time constraints and difficulties in scheduling and synchronising activities as major barriers to implementing interventions promotion [6, 19, 23, 32]. Workplace health promotion in the road transport industry is challenged, therefore, by the need to be relevant to, and compatible with, the work, logistics, and the lifestyle [5, 33]. Here, workplace managers can play a unique role. Knowing the workplace structure, processes, and workforce enabled managers to nuance interventions to best suit their workers. We found managers described "different breeds" of drivers (line haul versus day drivers) who varied in their time availability, health attitudes, and risk factor profiles. Thus, even within an individual workplace, there is no 'one size fits all' approach. Overall, it was difficult to implement interventions requiring attendance in a physical location at a regular time. If physical attendance is required, health promotion activities for road transport workers should be kept brief and scheduled on a variety of days and times to encourage attendance [37]. Most important in this process is accommodating changes to drivers' work rosters to support engagement in workplace health promotion. However, this occurred in just one of the larger workplaces, potentially being less feasible in smaller workplaces with reduced capacity for flexibility in work schedules [38]. Alternative options are to keep activities flexible and unstructured (such as subsidised gym membership) and able to be undertaken out of work time

Truck drivers in our participating workplaces were also mostly middle-aged males, and this was

identified as being a significant barrier to implementation of workplace health promotion. Older drivers were found to be lacking engagement with certain interventions, particularly those involving digital technologies like social media. They were also described as being ‘set in their ways’, not “young enough” to understand or care about using digital technologies, viewing interventions as irrelevant to themselves, and generally unwilling to change their behaviour. This highlights the importance of the ‘fit’ between the intervention, workplace and workers - targeting the right intervention to the right group and context - and being flexible and adaptive to the workplace demographic. Relatability, perceived need, personal characteristics and lack of skills can negatively affect motivation, commitment and compliance with workplace health promotion. Time and availability constraints may mean the most effective interventions will be those which are easiest and quickest to implement, and again, do not require attendance at a specific place and time. In planning interventions to improve workplace health promotion with truck drivers, practitioners need to consider if an intervention is relevant, interesting, suitable, easy, cheap, and minimally demanding of time. More contemporary strategies such as those involving digital technologies may not be appropriate unless workers have the relevant digital resources and the interest and skills to use them. Fundamental to success is good planning, encompassing engagement and consultation with workers to determine personal needs, motivation and aptitudes, and offering ideas for a range of different types of activities to appeal to different individuals.

4.3. *Barriers: Workplace issues*

We found the financial cost of implementing interventions was frequently mentioned as a barrier to workplace health promotion, concurring with the findings of many others [16, 19, 22, 31, 32, 39]. Both staff costs (for implementing and/or participating in the intervention), and resource and materials costs, were identified. The significance of the financial burden varied by workplace. Linnan et al. [39] found senior managers in the manufacturing industry were much less likely than middle managers to believe cost was a barrier to workplace health promotion. By contrast, we found some senior managers were unlikely to authorise any purchases relating to workplace health promotion, no matter how small. As workplace size impacts on the management structure

and general outlays and expenditure, it is likely the varying size of our participating workplaces (employing between 20 and 200 drivers) may have impacted on managements’ willingness to spend on workplace health promotion.

It may also reflect the organisations’ commitment to health promotion amongst other competing workplace priorities. While not specifically discussed, the general culture of the workplace, and more specifically, the ‘culture of caring’ for driver wellbeing, was evident in some workplaces more than others. A supporting and caring workplace culture which values the wellbeing of their workforce and adopts company policies accordingly, is one of the most often cited enablers to successful workplace health promotion [15, 16, 19, 32, 34]. Workers have been shown to be more likely to participate in health promotion activities when they felt that their supervisor or colleagues expected them to participate [19].

As a corollary, a lack of high level or ‘top-down’ support can be highly detrimental to workplace health promotion as it can lead to obstructive financial and motivational barriers which trickle down through layers of management [40]. Given that poor health and a high incidence of chronic disease is a recognised problem in the truck driving workforce, improving driver wellness should be a core organisational value. A goal is to achieve greater ‘buy-in’ from senior management to encourage health promotion to be incorporated into workplace governance. In our discussions we did not find managers referenced the tangible financial advantage to be gained from looking after their drivers’ physical and emotional wellbeing. Improved worker health increases morale and reduces illness-related absences, thereby increasing productivity [15, 34]. Providing evidence to upper management of the cost and benefits of workplace health promotion, and guidance on how to best implement activities and programs may be important to increasing support.

Within the managerial hierarchy, it is likely personal characteristics and motivations of the middle manager and the amount of direct contact they have with their workers might affect their belief in the value of workplace health promotion. We found managers in this project were generally receptive, enthusiastic and motivated. This is not surprising given the PAR approach to developing the interventions had involved managers from inception, hence their levels of engagement may be much higher than managers implementing top-down or externally-driven interventions. Several studies have noted manager support

can be the key to successful workplace health promotion implementation [34, 40] as managers have direct influence on the adoption process [31]. Managers in this project were enablers and advocates, it was only at upper management levels where barriers were noted. Interestingly, no managers identified their own skills, or lack of, as being either enablers or barriers to implementation. These findings might suggest targeted interventions to address manager beliefs, including differences by age, experience, and manager level, may be worthwhile when developing workplace health promotion interventions [39].

4.4. Strengths and limitations

Our project findings are strengthened using a Participatory Action Research approach and the rich data gained from qualitative interviews with workplace managers. The findings add to the currently limited body of knowledge about barrier and enablers to workplace health promotion in small-to-mid-sized transport industries - a relatively unexplored group [31], and are meaningful for similar sized transport workplaces, especially those with a mobile workforce.

The qualitative nature of this project, the small number of workplaces involved, and the non-representative sample means it may not be possible to generalise the findings beyond the scope of those interviewed. It is possible recruitment of transport companies may have favoured those previously associated with the project team, and/or more generally engaged with the health of their workforce than other transport industries. For these reasons the views expressed by the managers may not be representative of managers from other road transport companies within the country or internationally [41].

5. Conclusions

The Participatory Action Research project explored the perspectives of road transport industry managers about the enablers and barriers to implementing selected health promotion interventions in their workplace. Managers in the six participating workplaces identified similar issues, including organisational, human, and environmental factors. Internal and external staff and resource support was identified as a key enabler to workplace health promotion implementation, and costs, workplace culture, time constraints, and the age and lack of interest

in workers were identified as barriers. This paper suggests transport industries should ensure workplace health promotion efforts have high level support and adopt flexible approaches which are resource, cost and time efficient, and sensitive to the unique culture and characteristics of their workforce. Strategies should build on pre-existing initiatives, use or adapt existing resources, and consider how to facilitate long-term implementation by integrating health promotion goals into the workplace's ongoing strategies. Workplace managers have an important role to play because successful workplace health promotion is highly context-dependent and interventions need to be finessed to suit the context of the workplace. Our findings can guide workplace managers and health promotion practitioners in developing and implementing future workplace health promotion interventions in the road transport industry or other industries where similar resources and/or challenges, such as a highly mobile workforce, are faced.

Conflict of interest

None to report.

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