Mental health and well-being in the mining industry

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With mental health problems (such as depression) being a leading cause of non-permanent disability world-wide [1, 2], the promotion of positive mental health and psychological well-being in the workplace is now recognised as a global research priority [3, 4]. Much like being physically healthy is more than just not being sick; to be mentally healthy is more than being free of distress or other mental problems. It is to possess positive attributes such as self-regard, mastery, autonomy, positive relationships with other people, a sense of purpose and meaning in life, and feelings of continued growth and development - what we call well-being [5].

Psychological well-being is an increasingly important issue with strong implications for individual health and happiness, social cohesion, economic productivity and the development of mental health disorders. Coping with work stress and managing depressive symptoms are crucial factors in enhancing mental health in the workplace, which, in turn, may boost performance and even profits in organisations [6].

Despite increasing recognition of the importance of mental health in the workplace, there is very limited research information concerning mental health issues in key industries such as mining. While many risk factors are common across different industries, mining presents some unique issues. These include the increasing work pressures associated with productivity demands and working in remote locations often living away from families and access to support services. Organisational characteristics, such as extended rosters, fly-in fly-out arrangements, and living on camp have been linked with social isolation [7], stress [8], and poor help-seeking behaviours [9].

Moreover, existing research examining the mining workforce has focused on issues in fly-in fly-out samples. To date, we are aware of no work that has examined local mine site workers who live at home and commute small distances to see if these same issues are prevalent. Such a comparison may help discern what factors are most detrimental to the mental health of workers and what, if any, provide support for stressors, thus contributing to a more positive experience.

What we did

To gain a more in-depth understanding of the issues, interviews were conducted on site with 10 mine workers (9 male, average age = 43.6 years). Workers came from both workshop and production crews and had an average of 8.5 years (range = 11 months – 30+ years) experience in the industry. In

addition, three workers only worked day rosters while the remaining seven worked shifts according to a range of rosters, and eight workers lived within an hour of site.

What we found

The interview process uncovered some interesting insights into working on a local mine. Analysis produced four general themes, (a) the importance of relationships, (b) lifestyle, (c) work characteristics, and (d) mental health status.

Relationships
The importance of relationships both within and outside of work was a clear theme to emerge from the data. Comments from workers about relationships at work centred on the camaraderie experienced, group dynamics on site, and the closeness of the group. Outside of work, relationships were discussed in terms of having adequate time to spend with family/friends. For the most part, comments reflected more time being possible at this site compared with previous experiences. The impact of work on relationships was generally viewed positively, but it wasn't without problems with some statements reflecting knowledge of failed marriages and strained relationships with kids.

Lifestyle
Perhaps the biggest theme to emerge from the data was lifestyle, which encompassed the local setting of the mine, the roster, and the remuneration offered. The local setting was considered advantageous, along with the smaller size of the site which was staffed by a predominantly local working population. In turn, this lead to a strong sense of community feeling on site. In addition, participants commented that the roster schedules at this site allowed them to spend more time with friends and family than they had experienced in previous jobs. Rostered hours within a shift also allowed workers to finish night shifts while it was still dark, contributing to better sleep for all workers interviewed.

Unsurprisingly, for many participants, the main motivation for mining was the money and the lifestyle it afforded. Indeed it was commented that once you began earning a mining wage it was very difficult to do anything else. The high remuneration on offer was also considered to be recognition of the work done, that is, you did your job and received payment and did not require any other praise or acknowledgement.

Work Characteristics
Both positive and negative aspects of the job, the influence of management, and the need to keep mentally stimulated were discussed by all participants. Positive aspects included general job satisfaction, an appreciation for the responsibility involved, and enjoyment of work. In contrast, negative aspects of work such as the effects of shift work, stressful tasks required, and general feelings of burnout were also discussed.

In general, management on this site were discussed in positive terms, however there was some scepticism about the LTI record. In addition, older workers felt that praise was given too freely from management and was consequently meaningless. In contrast, one younger worker liked the recognition offered as this was something he had not experienced on other sites. Finally, most mentioned the need to keep their brain busy when operating as it could make you 'brain dead', particularly in situations where workers were working entirely for the pay.

Mental Health Status
Personal experiences with mental health issues, acceptance, coping with stress, and specific issues on site were discussed. Personal experiences related to both encounters with colleagues on site and experiences with family and friends at home. One participant in particular mentioned that he felt depression was more common in mining, especially in fly-in fly-out contexts where workers relationships were strained by distance.

In terms of acceptance, themes in this area varied among the group. It was widely commented that perceptions of mental health have changed over time, largely due to the expanding media profile and personal experiences with issues such as depression. On site, most said they would happily discuss issues with peers however they felt that most people would be hesitant to talk about things at work. Despite this, most commented that while their workmates may wish to keep their issues private, the closeness of the working group meant that it was likely you would notice changes in their behaviour and this could prompt discussion. While not everyone was comfortable with the idea of their colleagues dealing with depression, the close relationships on site meant that people were happy to support each other.

Conclusion

While some significant mental health concerns were identified, this particular site seemed to have elements that promoted more positive mental health outcomes. Overall, those miners who subjectively rated their happiness and mental well-being more highly expressed more satisfaction with indicators of well-being.

These findings have implications for workplace structure. Specifically, workplace culture was aided by the closeness of colleagues built on local connections, friendships, and managers who were respected. In addition, adopting a rostering policy which allowed adequate sleep on night duty and time with family and friends was of benefit. Finally, support built on trust between colleagues and the knowledge that supervisors were willing to be supportive and accommodating was key to mental health on this site.

It must be stressed that all participants qualified that their mine site was not typical and they felt things were a lot better there than at other places they had experienced. However it is precisely this difference that makes the information valuable. Different sites need to identify the particular areas of

strength that allow them to support the mental health and well-being of their workforce. In turn, a happier and mentally-well site will benefit from increased workplace performance, retention, and reputation. Importantly, HSE supervisors need to be prepared to deal with mental health issues when brought to their attention and training should reflect this.

Overall, this project provides a small snap shot of issues supporting mental health and well-being. From here, more extensive work is needed to understand the complexities of mental health issues within the mining industry.

References

1. Mathers, C.D. and D. Loncar, *Projections of global mortality and burden of disease from 2002 to 2030.* PLoS medicine, 2006. **3**(11): p. e442.
2. World Health Organization [WHO], *The World Health Report 2001; Mental health: New understanding, new hope.* 2001, Geneva: WHO.
3. Australian Government. *Australia's National Research Priorities.* 2007 [cited 2007 October 17]; Available from: http://www.dest.gov.au/priorities/
4. WHO, *The World Health Report 2002: Reducing risks, promoting healthy life.* 2002, Geneva: WHO.
5. Ryff, C.D., *Psychological well-being in adult life.* Current Directions in Psychological Science, 1995. **4**(4): p. 99-104.
6. Chen, W.Q., et al., *Work stress and depression: The direct and moderating effects of informal social support and coping.* Stress and Health, 2009. **25**(5): p. 431-443.
7. Carter, T. and E. Kaczmarek, *An exploration of generation Y's experiences of offshore fly-in/fly-out employment.* The Australian Community Psychologist, 2009. **21**(2): p. 52-66.
8. Lovell, J. and J. Critchley, *Women living in a remote Australian mining community: Exploring their psychological well-being.* Australian Journal of Rural Health, 2010. **18**: p. 125-130.
9. Collis, M., *Marital conflict and men's leisure: How women negotiate male power in a small mining community.* Journal of Sociology, 1999. **35**(1): p. 60.