CHAPTER 5

DISCUSSION

5.1. Socio Demographic Characteristics

Based on the socio demographic characteristics, only education level showed a significant association ($p < 0.05$). As for other characteristics, the results were not statistically significant because of the existence of homogenous populations where most of the respondents were Malay and Muslim (91.2%). Besides that, target group were respondents in the manufacturing sector where criteria such as sex, age, education background, year of service etc, were not the main qualification or preference in production. Most of the workers especially in production department were married and they were Malay Muslim women with SRP and SPM education background that obviously make a living less than RM1000 to RM2000 a month.

Even though in this study only one socio demographic characteristic, i.e. education level that is significant to stress, other results found by other researchers regarding stress should not be neglected. For example, study done by Donders et al (2003) which involved university personnel showed older employees in the Non Scientific Personnel (NSP) group reported more ‘‘tension’’ and more ‘‘perceived health complaints’ where as younger workers were more concern about their work appear and more focused on task content. Older workers may experience problems with contextual issues, e.g. lack of recognition, devaluing behaviours of supervisors and colleagues, and disappointment with management.

Situation where female was predominant group in industrial sector in Victoria, Australia is about the same situation found in this study. Significantly they also found that women were more likely to expose to job stress based on more claims among women compared to men and high involvement of health and community services for women workers compared to other industries (Keegel et al., 2006).

Sandanger (2004) also concluded that stress was more strongly related to symptoms in women. Managerial women may experience more stress than men and that the sources of stress are gender-related; working women have multiple roles as they are also married and/or have children. Stressors that may be particularly important for working women include organizational politics, tokenism, barriers to achievement, overload, social-sexual behavior, work/home conflict, and organizational restructuring and downsizing (Burke, 2002).

Three factors that have significantly increased stress in women are:

i. women's increased workforce participation,
ii. The rise in divorce and single parenthood. Divorce and single parenthood not only increase women's exposure to stress, but also the poverty that they engender may increase women's vulnerability to additional stressors.
iii. The aging of the population, because of their greater life expectancy, women substantially outnumber men at all ages over 65. The most dramatic sex difference is seen among the oldest-old: approximately 72% of those over age 85 are women. These trends have important implications for the types of

stressors that women encounter throughout their lives (Williams and Kurina, 2002).

In term of year of service, a study conducted by Lee (2003) found that stress level was significantly higher in junior nurses than in senior nurses. There were also studies reported that the longer the nurses had worked in their units the more likely they were to experience stress, regardless of their seniority. For this study it was found out that there was no significant difference between stress and year of service.

According to the national surveys which is performed every 5 years in Japan, job-related stress has consistently increased, reaching 63.8% in 2002 and is expected to remain high (Nakata et al., 2007). Taking into account, we should look into the causes more seriously because certain areas there were more male workers involved compared to female and vice versa. Ways of intervention and approaches in handling the problems should be introduced and practiced to balance up the short comings. In related issue, this study was not able to show any association between sex and stress.

5.2. Stress Prevalence

Stress prevalence among workers in this study was 41% compared to industrial workers in Victoria, Australia where their stress prevalence was only 21%. Their prevalence was lower because of the effectiveness in their stress intervention management and advancement in health care infrastructure and health insurance. However, a survey done by WHO indicated that stress is fast becoming the most

prevalent cause of worker disability where 40% of job turnover is due to stress (deVries and Wilkerson, 2005).

5.3. Health and Safety Information

This study shows that 68.8% of the respondents know about the existence of health and safety policy at their workplace. However, only 13.2% of the respondents involved as health and safety committee member in their respective organization and more than 70% did not know about the issues and objectives of having health and safety committee at workplace. Almost 100% agreed that the committee should be more proactive in handling health and safety issue at their workplace. The reasons behind these probably that they normally have received insufficient Occupational Health and Safety education and are unaware of the potential stress-relatedness of their illnesses and afraid of losing their jobs if they often seek for medical advice from panel medical practitioner or general physician regarding stress-related medical claim or because of other reasons.

The results from this study are consistent with the findings from Hurrel (1998). He believed that the workers should be advised by their organization about health and safety at workplace and a few questions such as regarding the protection offered by standards for exposure to chemicals and physical agents-such as noise, vibration, and radiation-that are based on 8-hour-workday exposures.

The workers and the management should also have critical mind on how do these work schedules affect rates of illness, sick leave, employee turnover, workers'

compensation, and health care costs. What are the effects of new management philosophies, employment practices, and production technologies on job demands, health, and safety? With answers to questions such as these, workers will have better understanding on health and safety and be in a position to develop preventive and awareness on the issues without jeopardise their health and safety for the sake of working even though in work settings, relationship between stress and accidents is not firmly established.

In general, most of the respondents agreed stress is pervasive and can affect diverse areas of human functioning. Undue levels of stress can alter one's mood state, perceptions, performance, and thinking processes in addition to biochemical and physiological (Murphy et al., 1986).

5.4. Job Stress Factors

This study showed the respondents were significantly job stressed where mean value of severity job pressure (5.35 ± 1.41) was higher compared to mean value of lack of organizational support (5.16 ± 1.26). Some of the common features that contribute stress to workers in the selected SMI companies were assignment of new or unfamiliar duties, fellow workers not doing their job, assignment of increased responsibility and insufficient personal time.

Lunstrom et al. (2002) explained that situations in which work demands cannot be met because of a lack of resources such as social support from co-workers and supervisors, job control, assignment of increased responsibility and insufficient

personal time were the result for stress. Stress was related to specific demands of work, including overload, variations in workload, role conflict, and role ambiguity.

Furthermore, high levels of stress may result in increased staff turnover, diminished productivity, higher accident rates, more physical and psychological ill-health and absenteeism. Absenteeism in particular has become a major concern in industrialized countries because of its economical consequences (Van Rhenen et al., 2007).

Factors that involved in job stress in this study are in tandem with the results obtained from study conducted by Mino et al. (1999) where there was an association between mental health and job stress involving too much trouble, too much responsibility, not allowed to make mistakes, poor relationship with superiors, and cannot keep up with new technology in work. Thus, interaction between job demand and co-worker support is an important factor predicting mental symptoms. The importance of the co-worker support was proven by a study carried out by Sargent and Terry (2000). The results indicated that high levels of supervisor support will be mitigated against any negative effects caused by high-stress jobs, the support acting as a buffer to the negative effects.

Additional to that, study by Paulsson et al. (2005) also showed that support from co-workers and non-work support (from people external to the work context) also had a positive influence on any negative effects from high-strain jobs. High levels of support from co-workers acted as a buffer for individual workers who

reported that they had low levels of control over their work tasks. In this case the support acts as counterbalance to the workers' low levels of control.

Since combination of the 4 job stress factors in this study contributed 24% to stress, study done by Sveindottir et al. (2005) revealed that opportunities to practice the professional role of nursing, unscheduled work, less work experience and less satisfaction with the head nurses contributed significantly to the production of stress. This showed that less experienced nurses felt they got less support from co-workers which are consistent with one of the findings in this study; fellow workers not doing their job.

Other studies that support the results was the one carried out by Lee (2003) among 1000 nurses working in the various primary care settings of the Department of Health in Hong Kong. He identified major sources of job stress which were due to heavy workload, poor staffing, dealing with death and dying, inter-staff conflict, strain of shift work, careers, and lack of resources and organisational support. He also found that different nurses experience job stress differently.

Apart from that, a study done by Gellis and Jong (2004) discovered that younger case managers expressing low satisfaction with supervision, type of work, and communication within the organization were likely to perceive increased job stress. In addition, perceived lack of organizational, support and job pressures were significant individual predictors of job stress in younger case managers. Satisfaction with pay and pay raises, promotional opportunities, co-workers, and communication

with the organization were the strongest individual predictors of older case manager job stress. Older case managers who reported less satisfaction with their co-workers, pay, career advancement, and internal agency communication were likely to report higher occupational stress support.

5.5. Family and Marital Factors

The results of this study showed that family and marital factors contributed significantly to stress of the respondents. The 3 factors in relation to stress because of family and marital factors contributed 20.2%. The factors were problems or conflict with children, not enough time to be with family members and conflict or distance from close friends or relatives. De Vries and Wilkerson (2005) found that more than 1 out of 3 employees reported a conflict between work and family as a major life problem. This finding is consistent with the result in this study. These individuals who were involved in the conflict, recorded nearly 3 times more absenteeism, generally higher levels of burn out, perceived stress and physicians' visit. Work life conflicts can cause job dissatisfaction and decrease the person's commitment to the organization, while at the same time increasing costs due to the use of medical services and absenteeism.

Wang (2006) also agreed that in addition to work, one also has commitment to family as a parent and/or a spouse and to their personal lives. Imbalance between work and family/personal lives may lead to negative health outcomes including stress, depressive and anxious syndromes. It may also lead to dissatisfaction with job leading to decreased productivity.

Estimates also indicate that employed married women perform approximately twice the amount of housework to about two thirds of all household chores. Women perform more than 75% of all childcare tasks. The result is that many employed women face a "second shift" when they return home from the workplace. Employed married women spend an average of 64.7 hours per week engaged in paid work and housework. Most employed mothers juggle the heavy burden of gainful employment and unpaid housework and childcare because traditional gender role expectations persist around the world, and child-care and housekeeping remain mainly women's responsibility. Housework and childcare tasks may possess characteristics as demanding as those of paid employment and performance of such tasks may be associated with chronic pressures that can result in generalized psychological distress. In fact, domestic demands may contribute at least as much as occupational factors do to women's health and well-being (Kushnir and Melamed, 2006).

The rise in the divorce rate has been accompanied by an increase in non marital childbearing. The proportion of children born to single mothers in America has increased from 18.4% in 1980 to 33.2% in 2000. A consequence of these trends is that an increasing number of single parents are raising children on their own, a situation that exposes them to a range of chronic stress that can ultimately affect their health and well-being. Divorce and single parenthood not only increase exposure to stress, but also the poverty that they engender may increase vulnerability to additional stressors (William and Kurina, 2002).

5.6. Correlation between coping strategy score and stress

Results from this study showed that emotional support, behavioural changes and humour were the 3 coping strategies that significantly have positive correlation with stress that indirectly lower accident risk through reduction of stress symptom. Overall, only 17% of coping strategies in this study correlates with stress. Coping strategies were designed to prevent or reduce stress may have potential for decreasing accident risk and find value as adjuncts to safety training programs. The results were supported by a study done by Lundstrom et al. (2002) where workers who perceived a high level of stress and resulting job burnout have poor coping responses and lack of job satisfaction, which often erode commitment to the organization and lead to higher turnover.

Study conducted by Wong et al. (2001) also proved that correlation between coping strategy and stress is important to Chinese nurses in Hong Kong. Those nurses who employed more direct-action coping, positive thinking, help-seeking and acceptance strategies would have better mental health outcomes than nurses who used these strategies less. Those who used more avoidance strategies and alcohol to cope would have poorer mental health.

In looking at the association of education and stress, one-way ANOVA from study also done by Wong et al. (2001) showed that nurses with tertiary education had significantly better mental health, fewer depressive symptoms, and more overall active coping strategies than nurses with secondary school education. They also were better able to use help-seeking strategies than nurses with secondary school education.

Apart from that nurse holding administrative positions in the hospitals used significantly more direct action, help-seeking and overall active coping strategies than clinical and charge nurses. Lastly, nurses of older age (36 or above) employed significantly more direct-action, help-seeking and overall active coping strategies than nurses aged 35 years or less.

5.7. Stress Management Programme

Result of this study showed that 85% of the respondents interested to participate in stress management programme which include of 26% choose physical exercise, 23% preferred stress workshop and 21% in sport activities. However, for non stress respondents, their method of choices was different where 32% preferred to present for stress workshop, 26% for physical exercise and 15% for entertainment. The findings from a study done by Van Rhenen et al. (2007) supported this result where the most common type of stress management intervention is the combination of muscle relaxation and cognitively oriented training. This is, in combination with a solid cognitive training, generally accepted as the most effective intervention across all types of outcome measures.

Stress management training may suggest a rather uniform set of intervention strategy and it usually refers to a mixture of treatment techniques. In practice, two main intervention types can be distinguished: psychological interventions such as cognitive behavioural and client centered approaches, and physical interventions such as relaxation methods and physical exercise. Both programs aim at improving mental health but use a different approach.

Interventions based on physical-oriented approaches such as relaxation and physical exercise aim at improving mental health by reducing physiological arousal, whereas individual focused interventions based on cognitively oriented techniques aim at reduce behaviour. Although programmes apply different interventions, and many include more than one intervention, their structures are comparable. Programmes usually commence with an educational phase, in which participants learn about the causes and consequences of occupational stress. Subsequently, a cognitive skill component is included, such as cognitive coping skills or time-management, which is intended to change the way in which people structure and organize their working situation (Van der Hek and Plomp, 1997).

Haraldsson et al. (2005) believed that stress management programme is cost effective because normally small number of personnel and low implementation costs will be involved at a time. The entire team works together to solve the problems and it is not possible to distinguish which of the tools (mental training or physical exercise) was the most effective.

5.8. Study Limitation

1. The research design of this study was cross sectional and it only determined the association between stress and risk factors. For details a longitudinal studies should be carried out in a more proper manner.
2. Existence of selection bias when choosing the selected SMI companies where there were differences in number of workers, race, departments and activities.

3. Another bias was information bias that happened during the respondents answering the questionnaires. Some of the respondents gave the answer exactly like their colleagues.

Stress in the workplace will always be there and the respondents will react to the stress using whatever coping strategies that they have to deal with difficulties. This paper found that emotional support, behavioral changes and humour were the 3 types of coping strategies that statistically significant to the stress. In addition, most of the respondents were interested to participate in stress management programmes where the most common type of stress management programmes were stress workshop, counselling, physical exercise, sport activities, entertainment and others.