An exploration into the wellbeing of the families living in the 'suburbs in the bush'*

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ABSTRACT

Objective: To examine the wellbeing of families of male mine workers living in remote mining towns in Australia.

Methods: Through an extensive review of available (but limited) social science literature on mining towns this paper explores and identifies the key social issues and problems of the mining towns. Social science and health related research is used to argue that there are several factors that may negatively affect the relationship and psychological wellbeing of the family members.

Results: Atypical work schedules of the mining jobs could negatively affect long-term health of the workers, and could constrain their qualitative participation in domestic roles. Limited availability of resources, services and flexi-time jobs in mining towns marginalise female partners to domestic chores. Higher level of alcohol consumption by workers and their preferred spending of leisure time with workmates symbolize patriarchal culture in mining towns that further marginalises women and could strain marital relationships. These factors could affect the social and emotional health of the children.

Conclusion: Interdisciplinary studies are needed to gain realistic understanding of the dynamics of long-term impacts of long work hours/compressed work weeks, socio-cultural, motivational and environmental factors on the wellbeing of the workers and their families living in mining towns. Family counselors and mental health professionals working in remote mining towns must take into consideration the likely negative impacts of work and community on individuals and families.

Key words: work schedules, mental health, patriarchy, social networks, domestic violence

* The phrase 'suburbs in the bush' first used by Djao and Ng¹ (1987) was used to address the design of the isolated resource towns in Canada. It is used here in a similar way to represent remote mining towns in Australia.

“While technical and economic issues are carefully reviewed in the mine planning and environmental assessment stages of a (mining) project, how the project will affect individual, family, and community health is seldom scrutinized....”

Kuyek, NJ (2003. p121)²

“Coalfields represent classic examples of occupational communities where work comes to dominate place. But, in a more diffuse sense, such places can also be viewed as industrial districts wherein there is a strong anticipatory socialization into work identity within the community and where, further, there is a reciprocal spilling over of the workplace norms and values into non-work settings.”

Strangleman (2001, p 264)³

Introduction

Over the last couple of decades, mining activity has become one of the principal employment generating industries in Australia. Many mines are located in remote and isolated regions of the country. Purposively built mining towns in these remote regions accommodate miners and their families. These towns provide limited resources and opportunities to its residents. The lives of new migrant families in these remote towns, in particular, is affected by physical isolation from relatives, friends and established social networks. Dependents of the mineworkers have to make several adjustments to their lives to accommodate the long hour work schedules of the mining jobs. More mines are projected to start operation in coming years that will again influence the population dynamics of the regions, as well as the functioning and the wellbeing of the families of the mineworkers.

The term ‘well-being’ connotes simultaneous and balanced satisfaction of personal, relational, and collective needs.⁴ In the context of family, the term ‘well-being’ covers both physical and psychological welfare as well as the quality of relationships between parents and the quality of parent-child relationships.⁵ Family as a group and as an institution is more than a collection of individuals, living together in a socially approved intimate, and parent-child relationship. As a close-knit group, it provides economic, social and psychological support to its members, and the socialization of the children. However, there are a broad set of factors (both internal and external to a family) that could influence the wellbeing of couples and their children. The lives of the mineworkers and their families are influenced by a broad set of exogenous factors that characterise most of the remote mining towns in Australia.

Anecdotal evidence suggests that there are high rates of divorce among mining families. There are concerns about the possibility of high incidence of domestic violence⁶, and mental health problems of women in remote mining towns in

Australia.⁷ Following ecological systems theory^{8,9,10} this paper explores and examines the various structures and processes of the mining jobs and the mining communities that may negatively affect wellbeing of families living in atypical circumstances in remote regions of Australia that are spatially segregated from the mainstream society. According to this perspective, family, work and community are microsystems consisting of networks of face-to-face relationships. When two or more microsystems are interrelated, the process connecting them forms mesosystems. The relationships so developed may be positive or negative; unidirectional or reciprocal. Thus, the three microsystems affect and are affected by each other. Further, these micro- and mesosystems are influenced by the larger macrosystem (i.e. the larger social context) within which these are embedded and operate. As we shall see in the following discussion, a remote mining town exemplify a mesosystem wherein the three microsystems are intricately interrelated affecting each other, and in the process a family in remote setting is highly likely to be negatively affected. Although drawing evidence primarily from social science literature relating to mining communities and the structural domain of mining jobs in Australia, the paper has equal relevance to mining families in developed countries with similar structures and processes of extraction-industry mesosystem.

Drawing from a select review of research and social science literature on the mining communities, this paper explores into a number of environmental, occupational, social-cultural and psychological factors that could influence the well being of the families living in the remote mining towns. Several context-specific studies obtained from several social science and health related databases (for example JSTOR, ProQuest, CINAHL (via Ovid), Medline, PsycINFO, Google Scholar) were analysed and selectively used in this paper to highlight the possible negative impacts of the atypical work schedules and social-environmental circumstances on the relationship and psychological wellbeing of family members. The review draws on research that spans several decades as social issues in these communities are rarely given prominence and the research literature is patchy. For the lack of peer-reviewed literature addressing wellbeing of families in mining towns, the paper also includes several reports that addressed family issues in contemporary mining communities. The paper focuses on the families of male mine workers as the workforce of the mining industry in Australia, in particular, is dominated by male workers.^{11,12} The term 'wife' in this paper refers to the female partner of a male mine worker, whether legally married or cohabiting in a non-married intimate relationship.

Families in remote mining communities

Motivational factors: Moving to a remote mining town:

Nearly eighty-five percent of the Australian population lives in the coastal, urban areas; while many of the mining dependent human settlements are in remote and isolated regions of the country – temporally and spatially segregated from the mainstream society. There are various social, psychological, environmental and economic reasons for individuals to move to isolated settlements,¹³ but in the

context of the mining jobs in Australia, the main motive tends to be economic – good remuneration and job opportunities.^{14,15,16} One study suggests that most couples migrating to mining towns in Australia make a conscious decision to do so to seek highly-remunerative work for the male partner for a certain period, and regard themselves as engaged in a joint project working towards certain goals. Generally, these shared goals are: 1) A good upbringing of their children: as for many families, this migration to a mining town provides the opportunity for raising children without the mother being forced by economic necessity to seek wage employment, as she would be in the most urban centres of the Australia. This would enable her to be a full time wife and mother, and 2) Eventually, after savings have been accumulated, to have a house of their own on a coast/city, a comfortable retirement, or a different life, perhaps in a small business.¹⁷ Thus, the moving of a couple or a family to a mining town for their shared economic goals involves significant changes to the lifestyles of all family members.¹⁸ In a way, these couples (or women, in particular) of the modern, egalitarian society accept to practice the deeply embedded traditional ideologies of familism (a social pattern in which the family assumes a position of ascendance over individual interests) and patriarchy to meet their shared objectives. Arguably, these planned and mutually shared arrangements of being provider and caregiver between these heterosexual conjugal partners may help promote their marital (conjugal) satisfaction,¹⁹ and could be regarded as functional for a family. However, as this is argued in the remaining part of this paper, these families face a range of social, cultural and environmental forces. These forces, individually or collectively, may negatively impinge on their psychological and relationship well-being negatively affecting the notion of a family.

Psychological health of individuals in remote mining communities:

More than three decades ago, studies observed that there was a high incidence of various psychological problems and disorders among the residents of new, remote resource communities who live in adverse climatic conditions;^{20,21} and the incidence of incipient psychological problems was high among the female partners of the mine workers.²⁰ Several explanations were suggested regarding the underlying causes of the mental morbidities. Defying those explanations, later studies on the remote mining communities and human lives in extreme climatic conditions, do not suggest any linear causal relationship between extreme climatic conditions;^{13,22} harsh physical environment;^{16,20,23} individual personality traits;²² geographical remoteness of a town;^{16,24} and settlement type (single industry town or regional city)²³ with the mental morbidity of individuals. Thus, a stressful physical environment in a remote settlement in itself is not a cause of a mental morbidity, but it may aggravate a psychological problem.^{16,22,23}

However, isolation from friends and families may generate a state of alienation and anomie among new arrivals in a remote area. A much cited study of a remote coal mine observed that family isolation and kinship support had the largest total (direct and indirect) effect on the life satisfaction of the male mine-workers,¹⁵ and this may cause behavioural problems among newcomers in

isolated regions with extreme climatic and stressful physical conditions.²³ In the absence of direct, face-to-face support from relatives and long established friends, local social networks assume significant importance in the wellbeing of newcomers in mining towns. Social networks provide a range of supports to an individual: 1) *information support*: which provides the person with reassurance and security, 2) *emotional support*: understanding and sympathy which protect the person from negative effects of stress and restore a sense of well-being, and 3) *direct help and material assistance*: which provide relief and resources.²⁵ Studies of mining town residents suggest that immigrant workers and their female partners do develop common interest social networks that provide a range of services to them.^{23,25,26} In particular, women in mining towns develop a small affective social network and they maintain strong compensatory behaviour²⁵ within this network. But these relationships lack strong emotional ties because they regard their links with relatives and friends back in their hometowns as still their basic source of support. The transient nature of the stay in a remote town weakens their commitment to communal values and strong emotional ties with their social networks, as residency in a mining town is regarded as a temporary and justified on financial rather than social grounds. These compensatory behaviour networks and lack of integration of families with their community simply add to one's feeling of marginality and anomie.²⁵

Research suggests that there are certain groups of people who, due to their prior socialisation and backgrounds, find it particularly difficult to socio-culturally adjust in a new environment. For example, a reference can be drawn toward the immigrant Asian women married to the Australian mine workers, and who immigrate to Australia as their permanent abode. A study observed that the harshness (of the environment), combined with actual isolation among immigrant Asian women in remote mining towns, exacerbates any feelings of loneliness and homesickness for loved ones, familiar culture, language and religious rituals. Non-English speaking background and the culture-specific upbringing of these women limits their social interaction, networking and the use of basic facilities and support services.²⁷ These immigrant Asian women in physically isolated areas are at a greater risk of mental morbidity. This possibility is further amplified when they do not constitute a large enough immigrant group of its nationals with a supportive, and hence psychologically prophylactic, socio-cultural milieu.²⁰

Thus, in a remote mining town with a plurality of individuals from various socio-cultural backgrounds, one's adaptation is dependent on the 'density of acquaintanceship' - a predictor of one's psychosocial adjustment in a community. The antecedent variables that affect this density are: population of the community, an individual's length of residence, anticipated length of residence, diversity in the population, and segregation.²⁸

Work schedules and role relationship in the families:

Most mines in Australia operate on 7 days week and 24 hour a day operational cycle, and the overwhelming majority of the production employees works for more than 40 hours per week. Each individual mine, often for site-specific reasons, observes its own roster. Typically these are: 4/4 (four on-work days, four off-work days), 7/4, 10/5, 14/7 etc. with fixed or rotational shifts involving weekend work. Due to the 12-hours or more of shift work during on-work days, a worker is temporally and spatially segregated from the family and the community.

Shift work significantly disturbs the circadian rhythm (sleep/wake cycle) of a worker,^{29,30} impacting on their physiological functioning. The immediate disturbances to shift workers are symptoms such as sleep disorders, fatigue, jet-lag or gastro-intestinal malfunctions³¹ that induces irritability, grumpiness, lethargy and relative non-participation in family activities. This disrupts the family and the social relations of a shift worker^{32,33} as there is a 'spillover' of job-generated worker's negative moods and energy levels to the family domain. These work-family conflicts affect a worker's physical and mental health, quality of family life, life satisfaction, and marital satisfaction.^{34,35}

It is often suggested that non-standard work schedules do not necessarily have a direct adverse effect on familial/marital relationship wellbeing. This may depend on the way such work hours are interpreted by each partner. Some partners may object to such work hours while others may accept this practice as an important source of achieving mutually acceptable goals (such as financial security).³⁶ However, certain work schedules can significantly disrupt the functioning of a family. For example, the seven day roster, widely initiated in the mining sector in 1988 in Australia, was labelled as the 'divorce-roster'.³⁷ In the said roster, the work force was divided into four groups, one not working for a given week. The roster included eight hours of work in each shift for seven consecutive days, afternoons and nights. Between each shift, workers had a short period of one or two days off and at the end of cycle a longer period of 4 days off. Over-time was compulsory, and most workers were entitled to only one consecutive Saturday and Sunday off per month. As a result of these rosters, the quantity and the quality of time spent together and limited opportunities for sexual intimacy (with the fatigued male partner) impacted on their marital relations. Over burdened with the household chores women had to take on the additional responsibility of disciplining the children, the mothers effectively acting as the sole parent. Due to the nature of the work roster and the resultant fatigue there was a reduced contribution of men to household or domestic labour, adding to marital stress. For many families with children at home, the seven-days roster stripped away the activities and the notions associated with an Australian family.^{17,38}

Since 1996, 12-hour shifts have been introduced in mining sector. Further, the compressed work week/days rosters (on and off-work days) are designed to be 'family friendly' by providing more opportunities for a worker to meet family demands and obligations during extended off-work days. Contrary to the expected family-friendliness of the 12-hours work shifts recent studies^{39,40}

analysing the impact of extended work hours on the mining families in Australia observe that the 12-hours shifts: 1) impoverish life generally – hobbies, friendships, the extended family; 2) affect the quality and quantity of time that employees can spend with their families. Family life and the timing get ‘all out of sync’. The work/eat/sleep cycle of the worker creates a drought of intimacy with family members; 3) induced fatigue generated grumpiness, irritability, short tempers, and simple unavailability which all contribute to a dearth of intimacy in relationships; 4) affect ‘full fathering’, in the sense that male employees miss on both time and key/important events in their children’s early lives like performances, school events, reading at school and sporting events etc.; 5) result in role overloading on female partners. The wife is more likely to play a dual role in child rearing, and she faces enormous responsibility both inside and outside the family; and 6) children seeking father’s attention whenever he is available. Often, children miss him during nights. The working father with these atypical work rosters is ‘like a visitor to the family’.

It was further suggested that the wellbeing of some families were at risk because everyday problems that were left unresolved due to intensive rosters might escalate into more chronic family problems.³⁹

These few studies on the impact of 12 hours shift in mining industry on the wellbeing of families of mine workers are indicative of work induced stressful and strained marital relationship of mine workers. Likewise, studies in the non-mining, mainstream society suggest that long work hours and shift works have correlates with a negative work-to-family spillover among wage earners with families.³⁴ Excessive work hours result in difficulty meeting family role demands, negative mood spill-over and tension within the family,⁴¹ and these long hours at work and the subsequent work interference with family life is related to depression and stress related health problems.⁴² Further, working on weekend days has been found to be associated with high level of specific types of conflicts between work and family life, and a lower level of family adjustment.⁴³

Although, the contemporary work schedules (on and off-work days) in the mining jobs are designed to be family-friendly and provide ample temporal opportunities for a worker to meet his family demands and obligations during off-work days, but the recently emerging literature on work-family interface suggests that these non-standard work schedules are negatively affecting relationship wellbeing of the spouses. A few recent studies on the mining communities in Australia, as discussed above, indicate that the families of the mineworkers are living in stressful relationships. Similarly, in a recent study of the remote mining towns in Canada, shift work was identified as a major cause of marital and family discord, dysfunction and breakdown.⁴⁴

It could be argued that nonstandard work schedules (i.e., nonstandard patterns of days and hours of work) are generally associated with a decrease in the quality of a worker’s family life; but not always associated with poorer family life among

husbands.⁴⁵ Further, certain studies suggest that quality of a marital relationship depends on the way work is perceived by spouses.^{19,46} The high levels of work time do not necessarily diminish marital role enactment and wife's marital satisfaction if husbands are willing to give the marital role a priority over alternative uses of non-work time.⁴⁶ Work schedules in mining sectors exert certain pressures on the functioning of mining families, and while female partners try to accommodate to these work schedule demands there are certain socio-cultural forces that directly and/or indirectly limit a male worker's participation in domestic lives and marital role priority. This patriarchal ethos, discussed below, in the mining towns operates against the wellbeing of the female partners and the children of the mineworkers.

Patriarchy, men's leisure and family

Recent years have seen an increase in the number of women entering the mining workforce in the country; but the proportion of women's representation in the workforce remains very small.^{11,12} Studies that inquired into the relational position of female partners of mine workers in Australia suggest that the economic base set by the predominance of men in the mining jobs results in and promotes a patriarchal culture in the mining towns.^{18,38,47} The relative exclusivity of men in mining jobs and the structural aspects of mine work often support the expression and the maintenance of a culture of male domination in the mining towns. This is largely because that mining provides several conditions for development of an *occupational community* of mine workers, who live in physically isolated settlements which reduce the opportunities for contact with other occupations. Among these occupational communities, the social relations of work are carried over into non-work activities. Further, shiftwork strengthens the out-of-work social relations which exist between those who work together.^{47,48} As a result of working together for 12 hours on shifts, men develop 'homosocial bonds' (an integral part of a patriarchal society that promotes men's interest) with their crew members and most of their leisure time is spent drinking with these friends, while the family suffers from their long absences. For many workers, spending time with crew members has become an integral part of their lives outside of work, and takes priority over time spent with wives and children.⁴⁷ In many instances, manifest power within a family was observed to be clearly with the men.⁴⁷ A study commenting on the culture of male dominance in the coal mining towns in the central Queensland observed that the new mining towns epitomised 'the heart of Australia's "blokeland" - a cultural landscape dominated by big machinery, big machismo, big drinking and where people were big at sports where mining towns women were marginalised by many processes.'³⁸ (p. 63)

Further, it has been observed that the monopoly of males in mining jobs results in the miners being recognised as the true and sole representatives of their families. This often affects the policies of the mining companies (e.g. housing policies, introduction of work rosters, provision of resources and facilities by the mining companies for the family members of mine workers in these remote localities

etc.) wherein families are relegated to a secondary position in the community, as employers (and sometimes the workers themselves) seldom recognise the importance of the family and the community inputs into industrial production and performance.³⁸

It is generally observed that many of the mine town women stay at home because the mining town culture does not provide an acceptable social environment for women alone in public. Men determine and decide as to whom their wives can meet and where they can go, and women accept the male discipline over their behaviour as a fact of life.³⁸ In comparison to the rural women who have larger social networks constituting of either gender; young mothers in the mining towns have a small network comprising of women only.²⁵

For a family, the atypical work schedules in the mining sector appear to work best if there is a supportive partner who is prepared to take primary caring responsibility for any children (virtually as a single parent) for the period of time the worker is rostered on.⁴⁹ Further, even among those women who are willing to work, the very nature of the work schedules of their male partners in the mining jobs, and the non-availability of flexi-time job opportunities for women in the mining towns forces them to remain a housewife. It is not always convenient for every woman to stay at home. Attention is drawn here to a study in the mining towns that revealed that the probability of mental morbidity was found to be more among women who were unemployed, willing to work but did not have a job.²⁶

Mining town families show a strong adherence to traditional male/female roles in the family.⁵⁰ Majority of women in mining towns work full time as wives and mothers, and are often overworked in their domestic roles. Over a decade ago Gibson suggested that as the female partners of miners these women's work produced more than what was necessary for their own survival. She compared these spousal relationships to that of an exploitative feudal class structure of a society in history. Accordingly, she observed, that a household (of a mine worker in a mining community) was a site of fundamental class process, and household process a feudal class process. It was a class process in which men (the lords) occupied a feudal class position as direct appropriators of surplus labour in use-form from their women (their serfs).¹⁷

The aforesaid description of the place of the female partners of the mineworkers in mining towns delineates the social and economic marginalisation, and the dependence of women on their husbands. Patriarchal hegemony in various spheres of social and domestic life in mining towns confines women to household chores, and defines the unequal power relations between men and women. And for the mining town women it has long been observed that the low level of amenities for women, the lack of job opportunities and educational opportunities, the uniformly greater differences between male and female policy-making and economic power in mining towns, which arise out of the very structure and ethos

of mining, all help to keep women dependent on their environment – which includes their male partners – for their satisfaction and well being.⁵⁰

Father (worker) – Child relationship

In general, the 12 hour shift timings in a mine is 7 to 7 i.e. day shift starts at 7am and ends at 7pm, while night shift starts at 7pm and ends at 7am. It is reasonable to assume that, in many cases, a child would be sleeping when the father goes to work, and it would be child's sleeping time when the fatigued father returns home. Alternately, the father will be sleeping during the daytime after a night shift, while the child is awake. Thus, particularly during work-on days, father and child do not have the temporal opportunities to interact with each other. Further, the recuperation time of the fathers from the intensive on-work schedules determines the quality of the time spent with their children during work-off days.

A recent epidemiological study in Australia found that children of parents who work consistently long hours or come home stressed are more likely to develop psychological problems and physical illness.⁵¹ In the context of the remote mine-town families, female partners of most of the mine-workers are full-time mothers – either by choice or by the temporal demands of the jobs of their male partners. But, most of the children miss their fathers most of the days of the on-work rosters, and at key events in their lives.

A much-cited research into the quality of work and family balance in the USA has revealed that children do not just want more time with their parents. They also want them there for key events and rituals. Most importantly, they want them to be happy and not worn out when they are around.⁵² A study demonstrates that long hours and high overload of work was consistently associated with the less positive father-adolescent relationships, a pattern that was similar for older and younger adolescent and for sons and daughters.⁵³ However, at times, many shift workers overextend themselves out of guilt and a desire to compensate for their lack of availability, which may increase their fatigue³³ and affect their own wellbeing.

As mentioned earlier, many mineworkers spend a lot of their off-work time in the company of their workmates. A study suggest that father's socializing with friends may have negative effects on the educational attainment of the children.⁵⁴

We, however, lack knowledge and evidence about the quality of father-child relationships in mining communities and the long-term wellbeing of children in these contexts. This domain of father-child relationship and the psychological development of these children needs examination both for the wellbeing of these children, in particular, as well as to enable strategies and policies to adequately meet their social and emotional needs during these critical years of their upbringing.

Spousal violence in mining communities

The aforesaid discussion so far suggests that women in mining communities face a unique mix of social, economic and political marginalization, isolation, and role overload. A review of literature⁶ suggests that domestic violence in remote communities is higher than other rural communities. A recent telephonic survey observed that the prevalence rate of cohabiting female partner physical abuse in the coal-mining dominated central region of Queensland State⁵⁵ was slightly higher than the rate for whole of Australia. The study could have underreported the prevalence rate because the study excludes those who refused to be interviewed on phone and the interviews were conducted in English that did not interview non-English speaking women. Further, it needs to be taken into account that the intrinsic characteristics of mining communities may make it difficult for women experiencing domestic violence to seek assistance or end a violent relationship (and for that matter participate in surveys). These include: the lack of cohesiveness of many mining communities, isolation from family and other support networks, limited employment, lack of alternative housing opportunities, and an overall lack of appropriate or accessible services. Further, geographical remoteness and isolation can make leaving a violent relationship near impossible. There is evidence that lack of anonymity makes help seeking more difficult in rural areas, especially where the male partner may be known to police or other authorities within the town.⁶

In these remote mining towns, not only does one often know everything about everyone else, they know it in detail. Thus, often for the threat of a negative gossip of small towns, families and individuals limit their social interactions.¹³ They prefer to maintain anonymity, and avoid getting involved in the personal lives of others; thereby, extending no support to the victims of domestic violence or to exert informal social control on the perpetrator of violence.

Further, mining communities are alleged to consume more alcohol than any other area of a comparable size,⁵⁶ and employees of mines consume high quantities of alcohol most days of the week.^{15,57} This is not to suggest here that there is a high incidence of alcoholism⁵⁸ or acute intoxication, as the great majority of individuals do not allow their drinking to get out of control, but these men have inappropriately high level of norms as to acceptable consumptions levels⁵⁷ that could account for high consumption of alcohol in resource communities. Research indicates that alcohol consumption increase the likelihood of domestic violence; not only during periods of intoxication, but also during periods of sobriety. The highest rates of abuse are found in moderate to heavy drinkers (not the heaviest drinkers). Chronic use of alcohol is a better predictor of battering than acute intoxication.⁵⁹ Thus, in the context of remote mining towns with a culture of male domination and high alcohol consumption, high rates of domestic violence are a possibility; because it has been suggested that alcohol abuse and wife (intimate female partner) assault are manifestations of an underlying need for power and control related to gender-based distortions.⁶⁰ This exercise of

power by certain males over their spouses is a manifestation of hegemonic masculinity in these mining towns.

There is a lack of research in the domain of the quality of conjugal relationships that has addressed to the issue of domestic violence in mining communities. However, as the aforesaid literature indicates, there is every likelihood of high incidences of female partner abuse in mining communities since women are not only economically dependent and socially isolated, but patriarchal culture, men's leisure in big drinking and relative non-participation in domestic lives can all contribute in men's hegemony in marital relationship and possible domestic violence and abuse. Further, long work hour shifts and consequent fatigue induced irritability of a worker can ignite a strained relationship.

Conclusion:

Families living in remote mining towns constitute a unique sociological group who live and work under atypical circumstances. There are several structural and cultural characteristics of mining jobs and communities of these towns that could individually or collectively, directly or indirectly affect the wellbeing of individuals and families living there. However, little is known about the wellbeing of these families.

This review of select social science literature on mining towns in Australia identifies several characteristics of mining jobs and communities that could have negative implications on the psychological and relationship wellbeing of the resident families. Non-standard work schedules of mining jobs, limited availability of resources and opportunities for recreation and personal development, economic dependence and domestic role overload on the female partners of the workers, cultural ethos of the occupational community of male workers, high consumption of alcohol in mining towns, privacy in community relationships, transient nature of stay and compensatory social networks characterize mining towns. Studies suggest that these factors could negatively affect the psychological health and the quality of family relationships. Dependents of male mineworkers are at a particular disadvantage. Long hours of shift work generated fatigue could limit qualitative participation of mineworkers in their domestic roles. Periodic long absences of mineworkers – whether, while on work shifts or leisure time spending in the company of work mates - could affect the emotional and social wellbeing of their dependents. Fear of the 'gossips of small towns', anonymous way of living, and physical isolation from relatives, friends and established social networks could affect counseling and help seeking behaviour of some aggravating their condition.

The structural and cultural characteristics of the mining jobs and communities have specific implications for family counselors and health professionals working in the remote mining towns. These professionals should take into consideration the likely negative influences of work and community on the relationship wellbeing and mental health of individuals living in remote mining towns. Such

professionals must develop a good understanding of the structural and cultural traits of the mining jobs and communities they work-in, so as to identify the underlying cause/s of a symptom, complaint or behaviour. In addition, by recognizing the victims of spousal violence in mining towns the health professionals can play a crucial role for the welfare and security of those abused women who, for the several reasons as discussed in this paper, do not seek counseling or help.

The mining industry is one of the biggest employment generation industries in Australia. Remunerative job opportunities in the industry shall continue to attract families from the mainstream society into remote mining towns affecting their lifestyles and domestic role relationships in their efforts to accommodate into atypical circumstances. Drawing from the ecological systems theory, this paper suggests that there is a need for a holistic, interdisciplinary examination of the interplay of work, family and community of remote mining towns. The findings could help in devising strategies and policies for the wellbeing of individuals and families living under atypical circumstances, so as to promote the quality of marital and parent-child relationships of the workers and the psychological health of individuals living in remote mining towns.

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References:

1. Dajo, A. and Ng, R Structured isolation: immigrant women in Saskatchewan. In: Storrie K, editor. *Women: Isolation and Bonding*, Toronto: Methuen; 1987. p. 141-58.
2. Kuyek, NJ. Overburdened: understanding the impacts of mineral extraction on women's health in a mining community, *Canadian Woman Studies*. 2003; 23(1):121 (a quote of the Yukon Conservation Society page.121).
3. Strangleman, T. Networks, place and identities in post-industrial mining communities. *International Journal of Urban and Regional Research*. 2001; 25(2):253-267

4. Prilleltensky I, Nelson G. *Doing Psychology Critically: Making a Difference in Diverse Settings*. Macmillan Press, 2002. p.8
5. McKeown K, Pratschke J, Hasse T. Family well-being: what makes a difference? Study based on a representative sample of Parents and Children in Ireland, Kieran McKeown Limited, Dublin. 2003. p.5
6. WESTNET (The Women's Service Network). Domestic violence in regional Australia: A literature review, A Report for the Commonwealth Department of Transport and Regional Services, Australia. 2000.
7. Sharma S, Rees S. Consideration of the determinants of women's mental health in remote Australian mining towns. *The Australian Journal of Rural Health*. 2007;15 (1):1-7
8. Bronfenbrenner U. Ecological systems theory. *Annals of Child Development*. 1989; 6:187-249.
9. Voydanoff P. Incorporating community into work and family research: A review of basic relationships. *Human Relations*. 2001 (a); 54(12): 1609-1637.
10. Voydanoff P. Conceptualizing community in the context of work and family, *Community, Work and Family*. 2001 (b) 4(2):133-156.
11. Minerals Council of Australia. *Unearthing new resources: attracting and retaining women in the Australian minerals industry*, Canberra. 2007
12. Centre for Social Responsibility in Mining. Key findings from the AUSIMM 2001 survey of mining industry professionals. Research Paper No. 1, University of Queensland, Australia. 2002.
13. Nadkarni S, Stening BW. Human resource management in remote communities. *Asia Pacific Human Resource Management*, 1989; Aug, p. 41-63.
14. Brealey TB, Newton PW. Migration and new mining towns. In: Burley IH, Pryon RJ, Rowland DT, editors. *Mobility and Community Change in Australia*, 1980; p. 48-66.
15. Iverson RD, Maguire C. The relationship between job and life satisfaction: Evidence from a remote mining community. *Human Relations*. 2000; 53(6): 807-839.
16. Neil CC, Jones JA. Environmental stressors and mental health in remote resource communities. *ANZJS*. 1988; 24(3), 437-458.

17. Gibson C. Hewers of cake and drawers of tea: Women, industrial restructuring, and class processes on the coalfields of central Queensland. *Rethinking Marxism*, 1992; 5(4): 29-56.
18. Williams C. *Open Cut: The working class in an Australian mining town*. George Allen & Unwin Australia Pty Ltd. NSW, Australia. 1981.
19. Sabatelli RM. The marital comparison level index: A measure for assessing outcomes relative to expectations. *Journal of Marriage and the Family*. 1984; 46(3): 651-662.
20. Burvill PW. Mental health in isolated new mining towns in Australia. *Australian and New Zealand Journal of Psychiatry*, 1975; 9: 77-83.
21. Siemens LB. Single-enterprise community studies in Northern Canada. In: UNESCO Seminar on *Man and the Environment: New Towns in Isolated Settings*. Canberra: Australian Government Publishing Service. 1976; p.123-146.
22. Palinkas LA. *On the Ice: Individual and group adaptation in Antarctica* [monograph on the Internet]. Department of Family and Preventive Medicine, University of California, San Diego, 9500. US. (n.d) [cited 2006 January 17]. Available from:
http://www.sscnet.ucla.edu/anthro/bec/papers/Palinkas_On_The_Ice.pdf
23. Neil CC. Regional centre or single enterprise town: Implications for the social well-being of residents. In: Brealey TB, Neil CC, Newton PW, editors. *Resource Communities: Settlement and Workforce Issue*. CSIRO, Melbourne. 1988; p.165-192.
24. Bramston P, Rogers-Clark C, Hegney D, Bishop J. Gender roles and geographic location as predictors of emotional distress in Australian women. *Australian Journal of Rural Health*. 2000; 8:154-160
25. Cotterell, J.L. (1984). Social networks of mining town women. *Australian Journal of Social Issues*, 1984; 19(2), 101-112
26. Neil CC, Brealey TB, Jones JA. Deligitimization of mental health myths of new remote mining communities in Australia. *Community Health Studies*. 1983;7(1): 42-53.
27. Reeve C. Migrant women in the north west mining towns of western Australia. In: Franklin M-A, Short LM, Teather EK, editors. *Country Women at the Crossroads: Perspectives on the lives of rural Australian women in the 1990'*, Armidale, University of New England Press. 1994; p. 76-83.
28. Freudenburg WR. The density of acquaintanceship: An overlooked variable in community research. *The American Journal of Sociology*, 1986; 92(1): 27-63.

29. Akerstedt T. Shift work and disturbed sleep/wakefulness. *Occupational Medicine*. 2003; 53(2): 89-94.
30. Sallinen M, Harma M, Mutanen P, Ranta R, Virkkala J, Muller K. Sleep-wake rhythm in an irregular shift system. *Journal of Sleep Research*. 2003; 12:103-112.
31. Knutsson A. Health disorders of shift workers. *Occupational Medicine*. 2003; 53(2): 103-108.
32. Rosa RR. Extended workshifts and excessive fatigue. *Journal of Sleep Research*. 1995; 4(2): 51-56.
33. Simon BL. Impact of shift work on individuals and families. *Families in Society: The Journal of Contemporary Human Services*. 1990; June: 342-348.
34. Grosswald B. Shift work and negative work-to family spillover. *Journal of Sociology and Social Welfare*. 2003; 30(4): 31-56.
35. Grosswald B. The effects of shift on family satisfaction. *Families in Society: The Journal of Contemporary Social Services*. 2004; 85(3): 413-423.
36. Weston R, Qu, L, Soriano G. Implications of men's extended work hours for their personal and marital happiness. *Family Matters*. 2002; 61:18-25.
37. Pearce J. UFMA to examine claims that rosters cause family break-ups. *Common Cause*. 1990; 55(8): 7.
38. Gibson C. Researching the 'Divorce Roster' with women in the coal communities of central Queensland. In: Franklin M-A, Short LM, Teather EK, editors. *Country Women at the Crossroads: Perspectives on the lives of rural Australian women in the 1990's*. Armidale: University of New England Press. 1994; pp. 63-83.
39. Heiler K. *The struggle for time: A review of extended shifts in the Tasmanian mining industry*, Overview Report, A Report prepared for the Tasmanian Government, UOS and ACIRRT. 2002.
40. Pocock B, Wanrooy B van, Strazzari S, Bridge K. *Fifty Families: What unreasonable hours are doing to Australians, their families and their communities*. Australian Council of Trade Unions, Melbourne. 2001.
41. Hughes D, Galinsky E, Morris A. The effects of job characteristics on marital quality: Specifying linking mechanisms. *Journal of Marriage and the Family*, 1992; 54: 31-42.

42. Major VS, Klein KJ, Ehrhart MG. Work time, Work interference with family, and psychological distress. *Journal of Applied Psychology*. 2002; 87(3): 427-436.
43. Staines GL, Pleck JH. Nonstandard work schedules and family life. *Journal of Applied Psychology*. 1984; 69(3): 515-523.
44. Coumans C. Research on contested grounds: Women, mining and health, *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*. 2005; 3(1):9-32.
45. Staines GL. Men's work schedules and family life. *Marriage and Family Review*. 1986; 9(3/4): 43-65.
46. Clark RA, Nye FI, Gecas V. Husbands' work involvement and marital role performance. *Journal of Marriage and the Family*. 1978; 40(1):9-21.
47. Collis M. Marital conflict and men's leisure: how women negotiate male power in a small mining community. *Journal of Sociology*. 1999; 35(1): 60-72.
48. Bulmer MIA. Sociological models of the mining community. *Sociological Review*. 1975; 23: 61-92.
49. Bretherton T, Buchanan J, Considine G. *Working time arrangements in Queensland*, Report prepared for Department of Industrial Relations, ACIRRT, and University of Sydney. 2001.
50. Sturmey RI. Women and services in remote company dominated mining towns. A report to the Department of Primary Industries and Energy, University of New England, Rural Development Centre, Armidale. 1989.
51. Earle J. Health for life, report from the pilot study. National centre for epidemiology and population health. [cited 2006 April 12] from http://nceph.anu.edu.au/Health_For_Life/Publications/pilot_report.pdf. 2003
52. Galinsky Ellen. Ask the children: What America's children really think about working parents. New York: William Morrow. 1999.
53. Crouter AC, Bumpus MF, Head MR, McHale SM. Implications of overwork and overload for the quality of men's family relationships. *Journal of Marriage and Family*, 2001;63(2), 404-416.
54. Buchel F, Duncan GJ. Do parent's social activities promote children's school attainments? *Journal of Marriage and the Family*. 1998; 60:95-108.

55. Nancarrow H, Lockie S, Sharma S. Intimate partner abuse of women in the Bowen Basin and Mackay region of Central Queensland – A report submitted to the Criminology Research Council, The Australian Institute of Criminology, Australia, by the Central Queensland University, Mackay, July, 2008.
56. Daly A, Philp A. Alcohol consumption in Western Australia, July 1991 to June 1993. Perth: State Health Purchasing Authority, Health Department of Western Australia. 1995.
57. Midford R, Marsden A, Phillips M, Lake J. Workforce alcohol consumption patterns at two Pilbara mining related worksites. *The Journal of Occupational Health and Safety - Australia and New Zealand*. 1997; 13(3): 267-274.
58. Stockbridge ME, Gordon B, Nowicki R, Paterson A. Dominance of Giants: A Shire of Roeburne Study, Nedlands, WA: Dept. of Social Work, University of Western Australia. 1976.
59. Tennessee Association of Alcohol & Drug Abuse Services, Domestic Violence and Substance Abuse – Things You need to know, Fact Sheet. 2000. [cited 2006 April, 13] from:
<http://www.tnclearinghouse.com/factsheets/DVFacts.htm>
60. Gondolf EW. Alcohol abuse, wife assault, and power needs. *Social Science Review*. 1995; June: 274-284.