

Pacific Islands Families Study: Intimate Partner Stressors and Psychological Distress among Pacific Adults

Original article

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Abstract

Although there has been increased research about the nature and predictors of sexual problems, relatively little is known about sexual health and wellbeing among minority ethnic groups across the world. This study explored the association between intimate partner stressors and psychological distress among Pacific adults living in New Zealand. The Pacific Islands Families (PIF) Study is a longitudinal investigation of a cohort of Pacific children born in New Zealand, and their parents. The General Health Questionnaire (GHQ12) and intimate partner stress items were used to assess the relationship between these stressors and psychological distress among mothers and fathers (n=3963 interviews with 2114 individuals). For both men and women the most significant partner stressor associated with psychological distress was problems with sex. Findings show that stressful events, particularly around sexuality and intimate relationships, affect Pacific psychological wellbeing. These intimate issues need to be considered when designing intervention and treatment programmes that are adaptive for short term outcomes, but also for long-term family stability and wellbeing. The relationship between culture, sexuality, and psychological distress needs further investigation. A qualitative methodology would provide a more intensive exploration of the role that cultural context plays in intimate relationships and sexuality in Pacific adults.

Background

Over the past decade there has been increased interest and research about the nature, predictors, and sociopolitical aspects of sexual problems (Laumann et al., 2005; Nicolosi et al, 2003). Amongst this burgeoning research, there are very few studies of intimate partner stressors in minority groups and in developing nations (Laumann et al., 2006). In this study of Pacific adults living in New Zealand (NZ), we wanted to examine the association between intimate partner stressors and psychological distress.

Pacific people living in NZ are an ethnically heterogeneous (Sāmoan, 49%; Cook Islands Māori; 21%; Tongan, 20%; and Niuean, 8%), rapidly growing, youthful, and highly urbanized group (Statistics New Zealand, 2013). A wave of migration to NZ took place in the 1950s and 1980s when Pacific peoples arrived from the islands of Samoa, Tonga, Cook Islands, Niue, Fiji, and the Tokelaus. This migration was driven primarily by the need for a labour force in NZ (Macpherson, Spoonley, & Anae, 2001) alongside the economic sustainability of small island groups such as the Tokelaus (Prior et al., 1987). Since this migration wave, Pacific people have actively participated in NZ economy and society and have significant social, sporting, and cultural links across NZ society (Sang & Ward, 2006).

A central tenet of Pacific culture is the family unit, with families playing a crucial role in the economic, social and spiritual lives of Pacific peoples (Ministry of Social Development, 2004). Pacific people, however, suffer from an excess of social, health, and economic deprivation in NZ (Ministry of Health, 2013). The relatively low socioeconomic status of Pacific people and experiences of rapid acculturation and sociocultural change have been linked to concerns about mental illness and risk-taking

behaviors in this population (Ministry of Health, 2008). Two national studies, Te Rau Hinengaro (Foliaki, Kokaua, & Schaaf, 2006; Kokaua, Schaaf, Wells, & Foliaki, 2009) and the Ministry of Health's New Zealand Health Survey (Ministry of Health, 2014) revealed higher rates of psychological distress among the Pacific population than the general NZ population.

Attitudes towards sexuality among the Pacific population tend to be more conservative than those of European descent in NZ (McDade & Worthman, 2014; Ministry of Health, 2008). This perspective stems largely from cultural norms and the strong role religion plays in the Pacific community. Little research exists regarding the attitudes of NZ Pacific adults in relation to sex. However, research with young people indicates that although sexual health is a primary concern for them, it is deemed culturally inappropriate for them to talk to their parents about sex (Statistics New Zealand and Ministry of Pacific Island Affairs, 2011; University of Auckland 1999). This norm also leads to inhibitions in accessing information and services related to sexuality, contraception and sexual health, as young people worry that their parents will find out they are having sex (Ministry of Health, 2008). Furthermore:

“In Pacific families there are often protocols and etiquettes to be observed for discussion on issues such as sex, sexuality and reproduction. It may be inappropriate to include in the same group, for example, older and younger siblings, mothers and daughters, or church leaders and non-church leaders” (Ministry of Health, 2008, p. 20).

Such protocols suggest that open discussions on matters related to sex might be a difficult task, even among the adult Pacific population.

The interrelationship between culture and health, including psychological distress, has been a recurrent theme in the social science literature over several decades (Helman, 2000; U.S. Department of Health and Human Services, 2001). Culture is now accepted as an important determinant of health status (Snowden, 2005; Spector, 2002) and it is acknowledged that the well-being of a migrant group is regulated by interlinking factors that relate to the society of origin, the migration itself, and the society of resettlement (Sam, 2006).

International research has reported a consistent relation between current life stress and psychological distress (Kuh et al., 2002; Tennant, 2002). Psychological distress is generally associated with a number of potential factors, including the presence of stressful situations, perception by the individual that such problems are stressful, and the ability to cope with the situation. Life event research identifies external events that have the potential to influence family functioning relations (Hamilton, McCubbin & Olson, 1987; Rabkin & Struening, 1976). It has been suggested that common events represented on life events checklists may be largely irrelevant to different ethnic and socioeconomic groups (Dohrewend & Dohrenwend, 1969). The PIF Study is a successful and unique longitudinal investigation of Pacific families based on the recruitment of Pacific infants born in South Auckland, NZ in 2000 (n=1398) and their mothers and fathers. Children and their families have been visited when the children were aged 6 weeks, 1, 2, 4, 6, 9, 11 and 14 years. PIF research findings have been disseminated widely and over the last decade have provided an empirical evidence-base for Pacific ethnic groups in NZ (Paterson et al., 2008). Numerous factors have been identified that converge to influence health behaviors and outcomes in

Pacific peoples, including poor housing (Carter, Paterson & Williams, 2005), fathering (Tautolo, Schluter, & Paterson, 2015), acculturation (Borrows et al., 2010), and health issues (Paterson, Carter, Tukuitonga & Williams, 2006; Paterson et al., 2014; Sundborn et al., 2009). This paper focuses on a neglected area concerning the effect of stressful intimate partner events on psychological distress among Pacific adults.

Method

Participants

All potential participants from one hospital were selected from births where at least one parent identified as being of a Pacific ethnicity and was a NZ permanent resident. The original cohort included 1,376 mothers of 1,398 Pacific infants (including 44 twins). Ongoing contact with the family was managed via the primary contact, usually the mother. Fathers were included in the cohort at several measurement waves (including six and 11 years postpartum) when the mother gave permission for the father of the child to be contacted and interviewed. Compared with data available from Statistics New Zealand's 1996 and 2001 censuses (Statistics New Zealand, 2002), the inception cohort was broadly representative of the Pacific census figures (Paterson et al., 2008).

Procedures

At six, nine, and 11 years postpartum, individual interviews were carried out with the primary caregiver (typically the mother) and the secondary caregiver (typically the father) in their homes. Once informed consent was obtained, an interview concerning family functioning and the health and development of their child took place. Within the

context of the wider interview, issues of adult health were measured using various screening tools, including the General Health Questionnaire (Goldberg & Williams, 1988), and Intimate Partner Stress items from the Social Readjustment Rating Scale (Holmes & Rahe, 1967). Adults who were interviewed at these time points participated in these two measures (3963 interviews with 2114 individuals). Due to resource constraints, secondary caregivers were not interviewed at year 9; nevertheless all adults completing the two measures were included. Details of recruitment and procedures are available elsewhere (Paterson et al., 2008).

Measures

Adult Mental Health: The 12-item General Health Questionnaire (Goldberg & Williams, 1988) is a self-report tool that is widely used to identify recent minor psychiatric disorders in adults. It screens for non-psychotic disorders and focuses on two major areas, the inability to carry out normal functions and the appearance of new and distressing psychological phenomena. Items include “*Have you recently felt you couldn’t overcome your difficulties?*”; “*Have you recently been able to enjoy your normal day to day activities?*” and “*Have you recently felt capable about making decisions about things?*” High convergent and divergent validity coefficients for the GHQ12 of between 0.83 and 0.93 have been reported in a number of settings (Goldberg & Williams, 1988; Makowska, Merecz, Moscicka, & Kolasa, 2002). The GHQ12 was scored to give a total of 12 using the binary method of scoring. Each item was scored 1 if the answer was “rather more than usual” or “much more than usual”, otherwise it was scored 0. A cut-point of 2 is recommended for screening psychological disorder. Mothers who scored above the cut-point (3 or more) are referred to in this study as symptomatic and mothers

who scored below as non-symptomatic. Reliability coefficients of the GHQ in the PIF Study were 0.87, 0.85 and 0.83, at ages 2, 4, and 6, respectively (Tautolo, Schluter & Sundborn, 2009).

Intimate Partner Stress: Eleven items that were associated with intimate partner stress were derived from items from the 43-item Social Readjustment Rating Scale (Holmes & Rahe, 1967). The full scale determines the occurrence of stressful events that had been experienced by the family in the past 12 months. High internal consistency ranging from 0.89 to 0.96 has been reported (Gerst et al., 1978). The full scale includes a wide range of common stressors and is designed to estimate the total stress an individual is experiencing by adding up the values corresponding to events that had occurred in the past year. Preliminary analysis with this cohort revealed that problems with sex was the most significant life event associated with psychological distress. In order to explore this issue in more depth for this paper we focused solely on the intimate partner stressors that have occurred over the past year.

Socio-demographic characteristics: Sociodemographic variables included marital status, highest educational qualification (dichotomized to tertiary-educated versus not tertiary-educated), postnatal depression and unemployment. These variables were included as they may be confounding factors in the analysis of the association of life intimate partner stressors with the outcome of psychological distress.

Following the interviews, data were coded and entered into an electronic database (SPSS Data Entry Builder 4.0) that employed comprehensive data validation and checking rules.

Data Analysis

Associations of life events with the binary outcome variable of psychological distress were examined using logistic multiple regression models, while allowing for a small number of confounding variables. Two generalised linear models (GLM) were fitted, one for the men and one for the women. Life event variables where fewer than ten events were observed were excluded from analysis. The potential impact of the repeated measures design was evaluated using generalised estimating equations (GEE). It was found to be negligible in one model (women) and was inestimable due to lack of model convergence in the other model (men). The observed negligible effect of repeated measures may be due to the transient nature of the outcome combined with the non-overlapping time periods covered by the questions at consecutive measurement waves. Therefore, allowance for repeated measures was not included in the analysis. No model selection procedures were used. Model fit diagnostics were conducted, specifically for over-dispersion, goodness of fit and independence of residuals. All analyses were conducted using R 3.0.2 (R Core Team, 2013) and $p < 0.05$ was used to determine statistical significance.

Results

Descriptives

Across the three measurement waves, a total of 1379 interviews were conducted with men and 2584 with women. Psychological distress was identified in 109 (7.9%) interviews of men and 238 (9.2%) interviews of women (Table 1). The intra-cluster correlation for repeated measures on the same individual was low at 12% for both men

and women which suggests that the outcome is transient rather than persistent for individuals.

Table 1 about here

Model fitting

Three intimate partner stress variables (Reconciliation with partner, Assault by partner, your partner was given a jail sentence) were dropped from the model of men due to insufficient numbers of events; no variables were dropped from the model of women.

Both of the logistic multiple regression models (of men and of women) passed all diagnostic tests of model fit. No over-dispersion was evident in either model, with estimates of dispersion being 0.90 and 0.97, respectively; both are less than one.

Goodness of fit was assessed using the Hosmer-Lemeshow test and was acceptable ($p=0.16$ and $p=0.39$, respectively). Independence of residuals in both models was tested using the Durbin-Watson test and no significant auto-correlation was detected ($p=0.09$ and $p=0.07$).

Associations

Figure 1 presents the estimated effects of intimate partner stressors (sorted by Adjusted Odds Ratio, AOR) on the odds of psychological distress among (a) men and (b) women.

The statistically significant ($p<0.05$) effects found were as follows. For both men and women, *problems with sex* had the biggest effect (AOR=16.99 and 5.30, respectively, both $p<0.001$), followed for both by *serious arguments with partner* (AOR=3.64 and 3.19, respectively, both $p<0.001$). Distress among men was increased when their *partner's job required significant absence from home* (AOR=3.57, $p<0.01$). Finally, for

both men and women, greater distress was seen when their *partner became unemployed* (AOR=2.21, $p<0.01$ and AOR=2.57, $p<0.001$, respectively). No other intimate partner stressors exhibited a significant association ($p>0.05$).

Figure 1 about here

Discussion

The most important finding in this study was that, among this Pacific cohort, the item related to *problems with sex* was the most strongly associated intimate partner stressor with psychological distress (for both men and women). To our knowledge, this finding has not previously been reported when it comes to the Pacific population (inside or outside NZ) and requires further empirical investigation.

Epidemiological and clinical studies have demonstrated the link between impairments of sexual function and satisfaction and psychological distress (Baldwin, 2001; Dunn, Croft, & Hackett, 1999). The shift in social attitudes, represented in advertisements and entertainment, may have exacerbated this by increasing the number of people who feel anxious that their sexual performance is less than ideal (Laumann, Park, & Rosen, 1999). The expectation that everyone is interested in and proficient at sex has been described as a socially normative prescription but this is not the actual state of affairs (Richters et al., 2003). This situation may be exacerbated for Pacific peoples in NZ, as the broader cultural context is likely to be less restrictive than Pacific culture when it comes to matters related to sex and sexuality.

The expectation and willingness to discuss problems with sex varies widely between different cultures (Bhugras & De Silva, 1993). There is some evidence that Pacific peoples are reluctant to be open and frank in discussing issues around sex, sexual behavior, practices, and attitudes (Ministry of Health, 2008). This general attitude may be a barrier to addressing the association between intimate relationships and psychological distress. Research with young Pacific people has revealed a secretiveness around sexual relationships due to a fear of judgment from their family and wider community (McMillan & Woth, 2010; University of Auckland, 1999). Adequate sexual expression is a vital part of intimate human relationships and has the capacity to enhance quality of life by providing a sense of physical, psychological, and social wellbeing. Difficulties in sexual communication among the Pacific population requires further research and educational attention.

Descriptions of problems with sex are subjective and are dependent on ideas of what is perceived as “normal”. Problems with sex can be regarded as a stressful life event that contributing to psychological distress. However, in some cases psychological distress may be the starting point, rather than the consequence of sexual problems. Some findings have suggested that psychological distress can impair the ability to maintain intimate relationships and may produce difficulties in sexual relationships and family functioning (Baldwin, 1996).

Serious arguments were significantly associated with psychological distress for both male and female participants. In the field of life event research, conflict in the relationship has been consistently revealed as a significant predictor of psychological distress (Dunn et al., 1999; Cupina, 2009; Maughan & Taylor, 2001). It is possible that

in some cases psychological distress has driven the conflict in a relationship (Rabkin & Struening, 1976). The breakdown of a relationship often brings with it a loss of social support which is a protective buffer against the effects of stressful life events (Blasco-Fontecila et al., 2012).

The PIF Study provides information from a large and culturally diverse sample of Pacific adults within NZ. This longitudinal programme has a strong study design, and has utilised sophisticated analytical techniques to examine the PIF data over time (Gao et al., 2007). Some evidence of differential attrition has previously been reported in the PIF Study (Sundborn et al., 2011), however, there was no evidence that missingness was associated with the GHQ12 outcome variable. The GHQ12 is an internationally recognised screening tool which has been used with numerous population groups worldwide. Although the use of self-report can lead to underreporting, in large scale studies such as the PIF study, self-report is usually the most feasible option for measurement.

There are methodological and conceptual issues around the measurement of intimate partner stressors that need consideration. In line with most studies of the depressive effect of stressful life events, the current study is non-experimental, and thus cannot make causal inferences. In addition, the accuracy of retrospective reporting is an important consideration.

In the current study we revealed that intimate partner stressful events, particularly around problems with sex were found to significantly affect psychological distress in Pacific adults. These issues are impacted by religious and cultural expectations and

norms around family and community that are deeply implicated in health and wellbeing (McDade & Worthman, 2004).

The relationship between culture, sexuality and psychological distress needs further investigation. Further research, within and outside the PIF longitudinal study, which uses qualitative methodology to provide a more in-depth exploration of intimate relationships and sexuality in Pacific adults is needed. Building on the current study, such research would shed light on the cultural contexts, interpersonal factors, and psycho-emotional issues surrounding these intimate problems. Issues related to intimate relationships, problems with sex and Pacific norms surrounding sexuality need to be considered when designing intervention and treatment programmes that are adaptive for short term outcomes, but also for long-term family stability and wellbeing.

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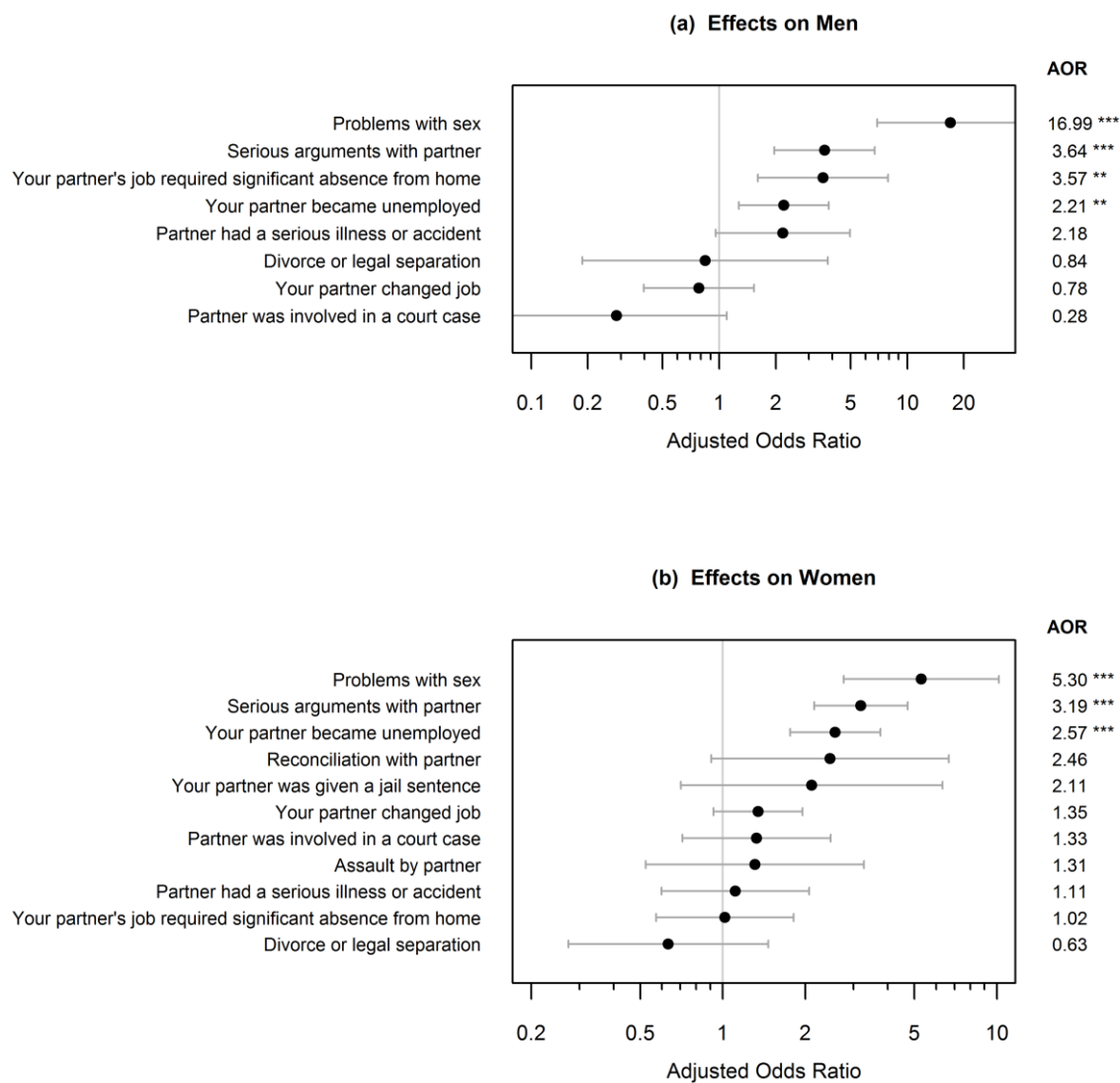
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Figure 1: Adjusted odds ratios for the effect of specific life events on the odds of psychological distress, derived from logistic multiple regression models and sorted by effect size.



Notes: ** $p < 0.01$; *** $p < 0.001$. Adjusting variables: unemployment, marital status and education (men); postnatal depression, marital status, education (women).

Table 1. Sample characteristics and outcome prevalence, by measurement wave.

(a) Men

	Year 6 (N=598)		Year 9 (N=48)*		Year 11 (N=733)	
	N	%	N	%	N	%
<i>Currently married</i>						
No	21	4%	19	40%	27	4%
Yes	577	96%	29	60%	706	96%
<i>Tertiary education</i>						
No	408	68%	35	73%	458	62%
Yes	190	32%	13	27%	275	38%
<i>Currently unemployed</i>						
No	541	90%	44	92%	642	88%
Yes	57	10%	4	8%	91	12%
<i>Outcome: psychological distress</i>						
No	554	93%	46	96%	670	91%
Yes	44	7%	2	4%	63	9%

(b) Women

	Year 6 (N=924)		Year 9 (N=853)		Year 11 (N=807)	
	N	%	N	%	N	%
<i>Postnatal depression (baseline)</i>						
No	781	85%	718	84%	694	86%
Yes	143	15%	135	16%	113	14%
<i>Currently married</i>						
No	123	13%	173	20%	44	5%
Yes	801	87%	680	80%	763	95%
<i>Tertiary education</i>						
No	512	55%	523	61%	426	53%
Yes	412	45%	330	39%	381	47%
<i>Outcome: psychological distress</i>						
No	871	94%	796	93%	679	84%
Yes	53	6%	57	7%	128	16%

* Men at year 9 include only male primary caregivers, as secondary caregivers were not interviewed at year 9.

