Young Pacifican suicide attempts: a review of emergency department medical records, Auckland, New Zealand

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Abstract

The aim of this study was to describe the population of Pacific young people in the Auckland region who were treated at Emergency Departments as a result of a suicide attempt. Data collection involved a review of Auckland regional public hospital Emergency Department (ED) medical records of Pacific young people (16-25 years) who made suicide attempts from 01 January 1999 - 31 December 1999. A total of 56 records were reviewed. Results indicated that: 71% were young Pacific females and 29% were young Pacific males, just over half identified as Samoan; 19 year olds presented more than any other age group between the ages of 16-25 years; 43% were employed; the highest month recorded for presentations was June; there was a low incidence of attempts between midnight and 6am; the most common method used was poisonings by solid or liquid solids; the majority of attempts were at home; 62% were not under the influence of alcohol or illegal drugs; and 85% were given a post-discharge treatment plan. This study is an attempt to provide information to enhance health outcomes and inform future mental health service delivery for Pacific young people in New Zealand.

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Introduction

In a World Health Organisation (WHO) comparison of selected Organisations for Economic Co-operation and Development (OECD) countries§, New Zealand's 1996 suicide rate was one of the highest[1]. OECD statistics also indicate that New Zealand had the highest rate of youth suicide in the 15-24 year age group, within the Western World[1,2]. However, it should be recognised that comparing international rates of suicide is innately problematic, given that different methods are used to classify suicide, and that the classification of suicide may be culturally determined[3].

According to the 1996 Census, the Pacific Islands ethnic group in New Zealand was, and still is, considered a youthful population. The median age was 20.4 years[4]. The majority of Pacific people lived in Auckland, with 65% in the Auckland regional council area. Pacific young people, aged between 15-19 years, experienced higher unemployment (33%) than their older counterparts aged between 20-64 (14%) years[4].

There is a dearth of information regarding young Pacific suicide and suicide attempts in New Zealand. In some communities, discussing suicidal behaviour can be considered taboo. It is argued that shame, guilt and the stigmatisation traditionally associated with this taboo, prevents extensive study of the subject[5]. However, the exploration of this issue may provide some understanding surrounding the nature of this act which is 'killing' our Pacific young people. It is anticipated that culturally specific research will contribute towards more appropriate explanations and understandings of suicide among Pacific young people, thus highlighting that experiences are not generic. There are also different rates of deliberate self-harm among Pakeha, Maori and Pacific[6], which further suggests that there are likely to be other underlying factors which exist for each ethnic population.

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§ OECD countries compared were New Zealand, Finland, Australia, Canada, USA, Norway, France, Denmark, Sweden, Germany, Japan, UK and Netherlands.

It has been identified that unintentional injury (mainly motor vehicle crashes) and suicide account for 67% of deaths of Pacific people aged 15-24 years in the period 1991-94[7]. A recent study of suicides in the Auckland region between the periods 1989-1997 indicated that there were 108 Pacific suicides or that 9.7% of all suicides in the Auckland region were identified as Pacific[8].

For the purpose of this research, attempted suicide, rather than suicide, is the focus. This is based on the premise that most past research attention has focused on the extreme cases, ie those resulting in death[9,10] or attempts resulting in hospitalisation[11,12]. Relatively little is known about less medically serious attempts (ie those presenting to EDs) amongst young people both internationally and in New Zealand[13 14]. However, there is evidence that attempting suicide is often a precursor to completion of suicide. For instance, as many as 40% of youth suicide attempters will make a repeat attempt, and as many as 14% will eventually go on to die by suicide[15]. It is believed that those who attempt suicide have a 50-fold risk of subsequent suicide compared to the general population[16]. Current thinking suggests that knowledge of factors which contribute to this range of thoughts and behaviours is important for developing effective prevention efforts[17].

With regard to Pacific hospitalisations for attempted suicides, the highest rates occur for females aged 15-19 (175 per 100,000)[6]. More recent New Zealand Health Information Service hospitalisation data showed, that between 1 July 1996 and 30 June 1997 there were 93 Pacific inpatient and daypatient hospitalisations for self-inflicted injury in the Auckland region (40 males and 53 females), just under half of whom (n=43) were in the age group 15-24 years (21 males, 22 females)[§]. It must be noted that hospital admissions do not include ED presentations, those treated by general practitioners or traditional healers, those treated at private clinics or those who do not seek medical treatment. Furthermore, they exclude cases of self-inflicted injury where there was no suicidal intent, and there is also likely to be misclassification of ethnicity. As a result, episodes of Pacific people attempting suicide may be under-reported[18].

In New Zealand, estimates of the numbers of Pacific young people presenting to EDs as a result of attempted suicide are not routinely collected, as there is incomplete information on the particular Pacific ethnic groups presenting for treatment. This lack of data on ED presentations is a major handicap toward the planning of prevention strategies for Pacific young people, as prevention strategies are based on an incomplete picture of suicidal behaviours. Additionally, Pacific young suicide attempters' contact with the ED may mark the beginning of increased contact with health services, and consequently information on this at-risk population will have relevance for improving health services for Pacific young people.

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The study on which this article is based originated from a three-stranded (Pacific, Maori and Pakeha) collaborative programme of research currently being conducted by Auckland University's Injury Prevention Research Centre (IPRC). The three strands explore suicide and attempted suicide within Pacific, Maori and Pakeha populations within the larger Auckland region. The Pacific strand entitled, *'Emergency Department Pacific Youth Suicide Study: Resiliency and Paths to Well-being"* is an attempt to explore two fundamental questions:

1. What issues contribute to suicide attempts among Pacific young people in New Zealand?

2. What are some of the resiliency factors Pacific young people, who have attempted suicide, consider being important contributions towards their future well-being in New Zealand?

The objective of the Pacific strand is to provide information, which may enhance health outcomes and inform future mental health service delivery for Pacific young people in New Zealand. Overall, it is envisaged that this study may contribute to the long-term goal of reducing suicide and suicide attempts in this population by promoting 'life'. This paper focuses on the first phase of the study, which involved a review of Auckland regional public hospital, ED medical records of Pacific young people (16-25 years) who made suicide attempts throughout 1999.

Methods

There were two phases and forms of data collection; i) the medical record reviews and ii) in-depth interviews (pilot phase currently being conducted). Medical record review data were collected from the period January 01 1999 - 31 December 1999. A standardised form was developed to obtain information from day registers and medical record reviews. It must be acknowledged that the development of the form was limited because of the availability of information in medical records.

§ *Personal communication with Information Analyst for New Zealand Health Information Service (September 1999).*

Data was collected for Pacific young people (16-25 years) who presented to Auckland, Middlemore and North Shore EDs as a result of a suicide attempt. A nurse researcher with extensive experience in an ED setting, and with mental health and research experience undertook this phase of data collection on a weekly basis. Data was then entered into the Epi6 program and frequency tables were generated using SAS version 6.12. Variables available were ethnicity, age; gender; suburb; occupation; housing situation; date and time of presentation to ED; time and venue of injury; external cause of injury using Ecodes; referrals to varying services and follow-up information.

Study population

Records from the public hospital EDs at Auckland, North Shore and Middlemore were reviewed for all Pacific young people who presented to ED and were diagnosed with an overdose, self-inflicted lacerations or self-inflicted injury by other means; identified themselves to be of Pacific origin, aged between 16-25 years; and resided in the greater Auckland region. A total of 56 Pacific records were reviewed.

Results

Females accounted for 71% of Pacific presentations to the ED for suicide attempts and males accounted for 29%. The ethnic breakdown of cases was 53% Samoan, 21% Tongan, 10% Cook Islands Maori, 6% Niuean, 2% Tuvaluan and 8% of mixed ethnicity (ie Samoan/PNG, Samoan/Pakeha, Samoan/Maori, Samoan /Tongan and Samoan/Tokelaun). The age distribution as shown in Figure 1, indicates that a higher number of Pacific suicide attempts were in the 19 year age group.

It was also found that 43% of the cases were employed, 30% were unemployed, 17% were students, 6% unspecified and 4% were recognised as other (sickness beneficiaries, home carers for ill relatives). In figure 2, the highest presentations were recorded in June.

Fig. 1. Age distribution of young Pacificans attempting suicide, 1999

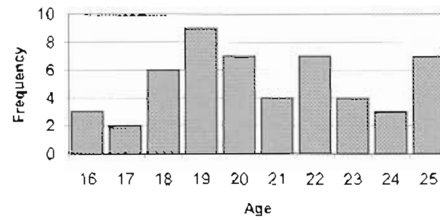

Fig. 2. Month of presentation to emergency departments 1999

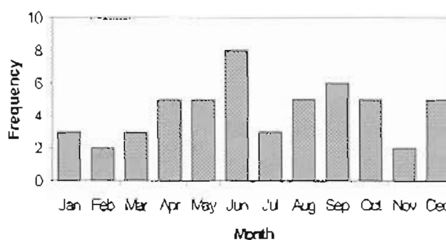

Fig. 3. Time of day of injury

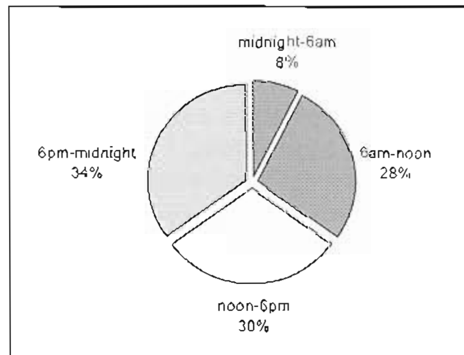

Fig. 4. Methods used in suicide attempts

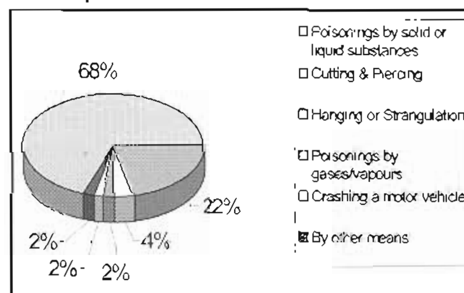

Figure 3 highlights that there was a low incidence of attempts between midnight and 6am.

The most common methods used, as seen in figure 4, were poisonings by solid or liquid solids and cutting and piercing. The majority of attempts (80%) were conducted at home, followed by 6% of attempts being at a friend's house/flat, 4% at a parent's home, 4% within the school environment and 6% at other specified venues (i.e. a cemetery, a motel room and a party).

Of all 56 cases, 62% indicated that illegal drugs or alcohol were not involved in the attempt. Of those who had taken illegal drugs or alcohol, two-thirds involved alcohol either at admission or during the attempt and just over half were suspected of taking other drugs.

It was evident from the medical records that 85% of cases were given a post-discharge treatment plan. Referrals for post-discharge follow-up care were made for 65% of the cases. These follow-up services included community mental health services, GP's, child and adolescent psychiatrists/psychologists, hospital psychological services, school counsellors etc.

Discussion

There are limitations to the accuracy of suicide attempt data as records are only kept on those who are admitted to hospital as inpatients or daypatients. They do not include people treated in private Accident & Emergency clinics (A&E) as outpatients, people treated by general practitioners, those who do not seek medical treatment or those that have been classed as motor vehicle crashes[3]. Consequently, the numbers of attempted suicides are

likely to be under-reported.

Unlike many studies, this study was able to conduct an extensive examination of the records to determine the ethnic breakdown of Pacific cases. Given that the Samoan population is the largest Pacific group in New Zealand it is not surprising that just over half of those presenting to EDs self-identified as Samoan. Other Pacific ethnic groups represented were Tongan, Cook Islands Maori, Niuean and Tuvaluan with 8% being of mixed ethnicity.

There was no pattern in the age distribution of Pacific cases. However, the median age of 20.4 years is consistent with Europeans who attempt suicide in New Zealand[1,19]. In relation to gender, Pacific results support findings across ethnicities in New Zealand that females have a higher risk of attempting suicide than males who are at higher risk of completion[20].

Surprisingly, the time of injury showed that the attempts occurred at almost the same rate from 6am to midnight with a low incidence between the hours of midnight to 6am.

The occupational status of cases is very interesting as it contradicts research which suggests that the unemployed have a higher risk of attempting/committing than those who are employed[21].

There was no consistent pattern in the month of presentation. It is unclear why the month of June was high although it could perhaps be, as other studies[22] have suggested, due to the winter season.

Surprisingly, the time of injury showed that the attempts occurred at almost the same rate from 6am to midnight with a low incidence between the hours of midnight to 6am. Not surprisingly 80% of the attempts occurred in the home, which is similar to findings of all ethnic groups in New Zealand[23]. Also consistent with national data for all ethnic groups, is that 90% of the attempts involved poisoning by solid or liquid substances[20,24].

It is pleasing that medical records indicated that 85% of cases were given a post-discharge treatment plan and 65% were given referrals for post-discharge follow-up care. Unfortunately we do not know if these plans and referrals were acted upon. This requires further investigation.

This study provides previously unavailable information on Pacific young people who have attempted suicide. The information obtained will be very valuable for the continuation of the main project *'Emergency Department Pacific Youth Suicide Study: Resiliency and Paths to Well-being"*. It is an attempt to provide information, to enhance health outcomes and inform future mental health service delivery for Pacific young people in New Zealand. In particular, it is envisaged that this study may contribute to the long-term goal of reducing suicide and suicide attempts in the young Pacific population by promoting 'life'.

Acknowledgments

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Mate i te tamaiti he aurukowhao
mate i te whaēa he tākerehaia

Death of a child is like a leak in a canoe, but the death of a mother is like an open rent in the bottom of the canoe

Maori Proverbs by A L Brougham & A W Reed (1987)