

Pattern and trend of deliberate self harm at emergency department of Patan hospital, PAHS

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ABSTRACT

Introduction: Deliberate self-harm is a major problem in the developing world. This study aims at observing the general pattern and sociodemographic variables related to it.

Methods: Present study is a hospital based Prospective study which included all age group of patients with DSH. During study period ie from April 2010-to march 2011 AD, one hundred and six patients were seen in emergency department with history of deliberate self harm (DSH).

Results: Study showed more female patients than male. Common age for DSH falls on fifteen to twenty five. House wife and students were mostly involved in DSH. Patients mostly used organ phosphorus compounds for DSH. Majority of patients discharged or admitted in medical ward, but six patients died despite of management in emergency department.

Conclusion: DSH is a problem in our community which need to be studied more extensively.

Keywords: Deliberate harm, self harm, suicide

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INTRODUCTION

Deliberate self-harm (DSH) is the intentional destruction of healthy body tissue without conscious suicidal intent¹ and typically includes behaviors such as cutting, burning, scratching and head banging.² However, broader definitions of DSH may include a range of self-harming behaviors³ from some with no immediate physical tissue damage (i.e. self-starvation or alcohol abuse^{2,4} to those that include suicide-related behaviors (i.e. self-poisoning).⁵ There are a number of theories explaining DSH, including affect regulation, depersonalization, and behavioral/environmental⁶ but there remains a lack of consensus on the etiology of DSH.⁷ The prevalence rates of DSH range between 4% to 20% in adult inpatients and up to 40% in adolescent inpatients.⁸ In non-clinical populations, the estimates range between 12% and 66% in high school students^{3,9,10} and 12% and 38% in college/university students.¹¹⁻¹⁴ The highest risk age group for DSH is 18 to 34 years with a female to male ratio estimated at 8:1 for adolescents and at 1.6:1 for the 20 – 50 age groups.¹⁵

METHODS

This is a hospital based prospective study done at emergency department of Patan Hospital, PAHS. Study period was one year from July 2010 to June 2011. Standard format was developed before starting this study. All age and sex groups with DHS were included in this study group. Data were taken round the clock by attaining resident doctor on intern doctor. All doctors working in emergency department were given orientation class for this. Data were analyzed initially at monthly basis and at the end all of them were analyzed manually and with the help of computer and tried to compare with the data presented by other authors.

RESULTS

Total no of DHS during study period were 106 cases and total emergency visit were 40000 patients. So incidence of DSH for

this department of Patan Hospital is 0.265%. Total number of male involved were 32 (30.1%), and female were 74 (69.9%).

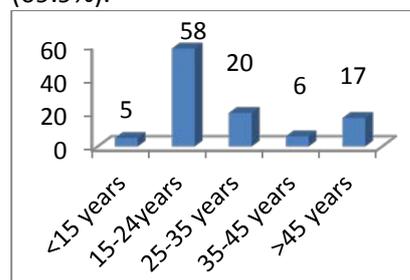


Figure 1: Age of Patients

The most common method of DSH as organophosphorous compound (40), followed by Paracetamol (11), Sharp instrument (11), Zinc phosphide (10), Antidepressant (7). Among organophosphorous compound Metacid (26) was most common followed by Nuvan (6). The most common cause of DSH was family conflict (45). Ninety two patient presented with first episode of DSH while eight patient had second episode and three patient each had third and fourth episode. Out of all 6 patient presenting had mortality (5.6%).

DISCUSSION

The World Health Organization’s definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” clearly relates social and mental wellbeing to physical health¹⁶ and entered into force on 7 April 1948. The definition has not been amended since 1948.) For many years, however, attempts to improve health in the developing world concentrated on physical illness—mental health was relegated to the bottom of the list of priorities.¹⁷ Only recently has it begun to appear at the forefront of international public health¹⁸ Deliberate self-harm (DSH), defined as intentional self-poisoning or self injury, and is closely related with public health problem¹⁹. Pesticide poisoning from occupational, accidental and intentional exposure is a major developing world

public health problem.²⁰ Millions of people are exposed to danger by hazardous occupational practices and unsafe storage.²¹ However, it is deliberate self-poisoning that causes the great majority of deaths and the immense strain that pesticides put on hospital services, particularly in Asia.²² In 1990, Jeyaratnam estimated that self-harm resulted in 2 million cases of poisoning each year with 200 000 deaths.²³ In contrast, accidental and occupational exposure were estimated to cause 1 million cases with 20 000 deaths. Many studies have shown that deliberate self-poisoning has a far higher mortality than accidental poisoning.²⁴

Total no of DHS during study period were 106 cases and total emergency visit were 40000 patients this. So incidence of DSH for this department of Patan Hospital was 0.265%. Our data was much less than the data presented by Lotte Hendrix who got 0.6% of DSH patients of all ED visits in his study.²⁵ Similarly our data was less than report presented by Classen CA²⁶ and MC Kaig LF. However, a higher incidence of 2.1% was found by Cook et al in a Scottish hospital.²⁷

Study showed female predominance (72%) over male patients (28%). As reflected in various study there is a typical female predisposition—especially among younger adults—with a current female to male ratio of 1.56:1. As outlined in previous work, this probably reflects a gender preference in that women tend to rely on drug overdose as a means of self-harm whereas men may be more likely to enact physical self-harm.²⁸ Present study showed, most of the patient with DSH falls on age group 15-24 years (54%). Study from western part of Nepal has similar report on age group. They had 60 % patient of 15-24 years. Zakiullah N from Pakistan. found common age group for DSH falls on age group within 21-25 age group.²⁹

CONCLUSION

Deliberate self harm is common in the developing world. Mainly common among females than male. Many people admitted for deliberate self poisoning were young: about two thirds were aged fewer than 30. Self poisoning with agricultural pesticides is an important cause of mortality, and among pesticides Metacid is used for DSH, more common than other pesticides. Other methods used for DSH are self cutting, use of Paracetamol, zinc oxide and others. Major risk factors for DSH were family conflict, dispute in between wife and husband and friends' etc. DSH more in married people than unmarried. Mortality rate is 5.6%. However the study period is very short. Sample size is small. Sample size may not include all the DSH cases presented to hospital and this may not represent rural DSH.

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