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Research Article

Demography, Psychiatric Morbidity and Motives of Self-Harm: A Pilot Study in Bangladesh

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Abstract

Objectives: Self-harm (SH) has been considered as an important risk factor for suicide. However, it is under studied in Bangladesh. We aimed to see the distribution of demography, psychiatric morbidities along with motives behind the self-harm events in context of Bangladesh.

Methods: This cross-sectional observation was carried out within the time period of January to June 2018 among the outdoor patients of department of Psychiatry of Bangabandhu Sheikh Mujib Medical University. Data were collected from patients with history of self-harm either current phase or previously from 39 patients those were approached conveniently. Psychiatric diagnosis was recorded based on the available clinical diagnoses confirmed by psychiatrist. Face to face interview was conducted with semi structured pretested questionnaire. Data were collected and analyzed by Statistical Package for the Social Science version 16 and Microsoft Excel version 2007 software.

Results: The mean age was 25.08 (± 10.68), ranges from 21 - 51 years. Seventy four percent of the respondents were female, and 59% were unmarried. About 49% had borderline personality disorder and about 31% had major depressive disorder and mean age of onset of suicidal ideation was 20.49 (± 8.24) years. Overdose was found among 67% respondents, followed by self-cutting (51.3%), familial discord was found among about 28%, and about 49% had the motive of dying.

Conclusions: Self-harm found to be more common in unmarried females and borderline personality was the commonest psychiatric morbidity followed by depression. Overdose and poisoning were the commonest form of injury, family discord was the commonest risk factor and dying was the commonest motive of self-harm.

Keywords: *Self-harm in Bangladesh; Self-harm; Demography; Risk factors; Motive; Psychiatric Morbidity*

Introduction

Self-harm (SH) is a regular, common, important as well as major public health concern in many countries [1-3]. However, it is poorly studied in many other countries, mainly the least developing countries. It usually covers the intentional acts of injuries directed towards the self, irrespective of the presence of intent to dye by suicide [4,5]. It is common among the adolescents and creates a significant health care services burden [2,5]. A deliberate medication overdose or ingestion of poisons may create a life-threatening clinical challenge which may lead to chronic disabilities such as drug induced liver injury (in case of paracetamol) or even the cause of death [6]. SH should be studied adequately as because repetition happens frequently and it is an important risk factor for suicidal attempts and suicides ultimately [2-5,7-9]. Bangladesh is a developing economy in south Asia with high density of population and under researched suicide issues [10]. Pesticide poisoning is a prime suicidal means and more common in rural Asian communities like Bangladesh [11,12]. However, analysis of self-harm by poisoning could not detect high proportion of major psychiatric disorders among the cases in Bangladesh [13]. On the

contrary, personality disorder, substance abuse, relationship problem, depressive disorders, inadequate performance, presence of enduring stressors were found to be associated with frequent self-harm in adolescents in the developed countries [14]. One study conducted in Bangladesh revealed poison ingestion as the commonest method, followed by over dosing, frustration was found as the commonest motive (59%), followed by making other people guilty and dying [15]. Mood disorder was found as major psychiatric illness and relational discords were found as major risk factors [15]. Recent reviews on risk factors of suicide in Bangladesh revealed marital discord and familial discord covers the lion share of risk factors [10]. Thus, here we aimed to see demography, distribution of psychiatric morbidities along with motives behind the self-harm events in context of Bangladesh.

Methods

Data Collection

We carried out this cross-sectional study within the time period of January to June, 2018 among the patients with self-harm who attended for services at department of psychiatry of Bangabandhu Sheikh Mujib Medical University (BSMMU). Respondents were approached thorough convenient sampling during the study period and data were collected from 39 patients. Diagnosis of the respondents were confirmed by the psychiatrist based on Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) criteria [16]. All adult (> 18 years) patients with previous or current self-harm behavior were approached to interview as well as to include in the study. Patients with acute and emergency conditions were excluded. We consider the term "suicidal behaviour" as a group of activities closely linked each other, comprised of suicidal ideations (intentions), gestures of suicide, self-harm in which the intention may not to die, behaviours of self-punishment and eventually the suicides [6,11]. Initially, patients were diagnosed by the outdoor consultant psychiatrist based on the DSM-5 criteria. After that, they were approached for permission to be enrolled in the study. A total of 47 patients were approached, among them 8 patients refused to take part in the study. As the data were collected conveniently, there might have possibilities of selection biases. Data were collected through face to face interview with semi structured preformed pretested questionnaire. Interview was conducted by trained data collectors who were recruited and trained up for the study. Questionnaire for was study was semi structured in nature which was consist of demographic variables, diagnoses related variables, motives, risk factors and other self-harm related variables. Motives were considered the exact thoughts behind the attempts and risk factors were considered as the immediate events for which (s)he attempted. Methods were recorded as per the statement of the respondents and extracted as the which means (s)he used for SH. Adequate training was provided to data collectors focusing the data collection procedures by last author. After collection data were cleaned, managed, analyzed by Statistical Package for the Social Sciences (SPSS) 16.0 software and Microsoft Excel version 2007 software.

Ethical Consideration

Current study was conducted according to the declaration of Helsinki 1964. Current study was reviewed and approved by ethical review committees of the department of Nursing and department of Psychiatry, BSMMU. Informed written consent was taken before initiation of interview. Data were collected anonymously and confidentiality was maintained strictly. No unauthorized exposer was not possible.

Results

A total of 39 patients with self-harm was interviewed to see the demography, psychiatric morbidities, motives and few risk factors of self-harm in Bangladesh. The mean age of the respondents was 25.08 (± 10.68) years with ranges from 21 - 51 years. About 74% of the respondents were female, 59% unmarried, 23% had family history of mental illness, 5% had family history of suicide and 10% had family history of suicidal attempts (Table 1). About forty-nine percent had diagnosis of borderline personality disorder, followed by major depressive disorder (Figure 1). The age of onset of suicidal ideation was found 20.49 (± 8.24) years (Table 2). About 67% of respondents had attempts with overdose/poisoning, 51% had cut injury, followed by hanging (15%), jump under train (13%), burn and electric shock (Table 3). Familial discord was found as the commonest risk factors (28%), followed by premarital relationship problem (18%), mental disorder (13%), marital discord (10%), sexual harassment, unknown, work place concern, financial crisis, and few other issue (Table 3). Dying was found as the motive among 49% of the respondents, followed by getting escaped from unbearable pain (15%), changing other's behavior (15%), drawing attention, escaping from situation, getting relief and other (Table 3).

Variables	n (%)	Mean (SD)
Age		25.08 (10.68)
Gender		
Male	10 (25.6%)	
Female	29 (74.4%)	
Marital status		
Unmarried	23 (59.0%)	
Married	13 (33.3%)	
Widowed	1 (2.6%)	
Divorced	1 (2.6%)	
Separated	1 (2.6%)	
Educational status		
Under S.S.C. (below 10 academic year)	16 (41.0%)	
S.S.C. (above 10 academic year)	3 (7.7%)	
H.S.C. (above 12 academic year)	12 (30.8%)	
Graduation/Honors (usually above 16 academic year)	7 (17.9%)	
Post-graduation/others (both academic and professional)	1 (2.6%)	
Residence		
Rural	12 (30.8%)	
Urban	27 (69.2%)	
Religion		
Islam	37 (94.9%)	
Hindu	2 (5.1%)	
Family type		
Nuclear family	29 (74.4%)	
Joint family	10 (25.6%)	
Family history of mental illness	9 (23.1%)	
Family history of suicides		
Family history of completed suicide	2 (5.1%)	
Family history of attempt suicide	4 (10.3%)	

Table 1: *Distribution of demographic variables of the respondents (n = 39).*

Behavior	N	%	M (SD)
Suicidal ideation in 48 hours	17	43.6	
Suicidal ideation in last month	25	64.1	
Suicidal ideation in last year	30	76.9	
Lifetime suicidal ideation	39	100	
Ventilation of suicidal ideation	25	64.1	
Suicidal plan	29	74.4	
Suicidal preparation	28	71.8	
Suicidal attempt	33	84.6	
Age of onset of suicidal ideation (year)			20.49 (8.24)

Table 2: *Frequency and pattern of suicidal behaviors among the respondents (n = 39).*

Variable	n	%
Method		
Cut injury	20	51.3
Overdose and poisoning	26	66.7
Hanging	10	25.6
Fall from height	6	15.4
Jump under train	5	12.8
Burn	1	2.6
Electricity shock	1	2.6
Number of attempts		
One time	11	28.2
Two times	13	33.3
Three times	8	20.5
Six times	2	5.1
Four times	1	2.6
Five times	1	2.6
> 5 times	3	7.7
Risk factors		
Familial discord	11	28.2
Marital disharmony	4	10.3
Premarital relationship issue	7	17.9
Mental disorder	5	12.8
Immediate disappointment	2	5.1
Unknown	2	5.1
Sexual harassment	1	2.6
Work place problem	1	2.6
Financial hardship	1	2.6
Extramarital relationship issue	2	5.1
Nearest person death	1	2.6
Guilty feeling (may be due to depression)	1	2.6
Attention drawing	1	2.6
Motives of self-harm		
To die	19	48.7
To escape from unbearable pain	6	15.4
To change behavior of others	6	15.4
To draw attention	3	7.7
To escape from situation	2	5.1
To obtain relief	1	2.6
Others	2	5.1
Total	39	100

Table 3: *Methods, motives and risk factors of self-harm variables among the respondents (n = 39).*

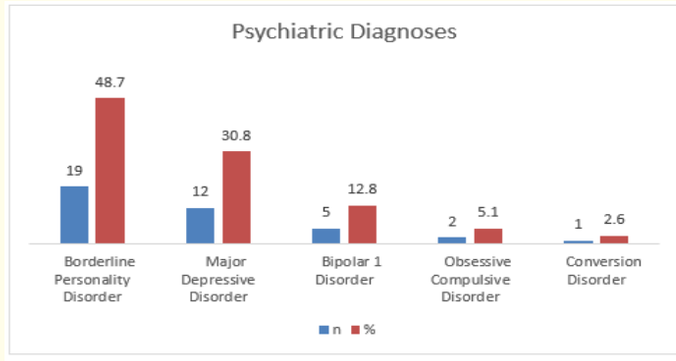

Figure 1: *Distribution of psychiatric diagnoses of the respondents.*

Discussion

As an underexplored problem we aimed to see the demography, psychiatric morbidities, risk factors and motives of SH among the patients with lifetime history of SH behaviors. Current study found the mean age of the SH patients was 25.08 (± 10.68) years with ranges from 21 - 51 years. Studies from different context revealed different age distribution as those were conducted among the adolescent population group [4,11]. One study found the mean age as 15.44 (± 0.61) years, ranging from 14 to 19 years [4] and another study in the same country found the mean age was 17.35 ± 1.62 ranging from 14 - 20 years [11]. Whereas other found mean age was 33 years ranging from 15 to 64 years [17]. These differences can be explained by different study population and setting. Majority (74%) of the study population were female, 59% unmarried, 23% had family history of mental illness, 5% had family history of suicide and 10% had family history of suicidal attempts (Table 1). Such female predominance was revealed in previous studies viz female was about 60% [4], 73% [5], 76% [11] and 58% [18]. However, one study revealed no gender difference [19] and others found the reverse gender trend in China [20] and SH in substance users where 94% were male [21]. Again, the differences were explained by different study setup and study population. However, SH is more prevalent in young females [4,5,11,18].

Among the study population, about 49% had borderline personality disorder as the prime psychiatric morbidity, followed by depression (Figure 1). Similar morbidity pattern was found in previous studies [2,11,17,18,22]. Commonly found disorders were borderline personality disorder, depressive disorder, bipolar affective disorder, schizophrenia, obsessive compulsive disorder, phobia, conversion disorder, substance abuse and few others neurotic disorders [2,11,17,18,22]. However, another found major depressive disorder as the main psychiatric morbidity in the same country context where relational problem was mentioned as another psychiatric diagnosis which might be an issue to explore further as personality disorder [15].

Majority of current study population had SH by overdose/poisoning (67%), cut injury (51%), followed by hanging, jump under train, burn and electric shock (Table 3). Similar mode of injury was found in other studies [5,11,15,17,18]. Poisoning was found as a major modality of self-harm in Bangladesh which is more prevalent among females [13]. Cutting was found as the commonest mode in another study in developed country [6].

Familial discord was found as the commonest risk factors (28%), followed by premarital relationship problem (18%), mental disorder (13%), marital discord (10%), sexual harassment, unknown, work place concern, financial crisis, and few other issue (Table 3) those were supported by other studies on the same cultural context [10,18]. About 49% of the respondents had the intention to dye by their SH attempts, followed by getting escaped from unbearable pain, changing other's behavior, drawing attention, escaping from situation, getting relief and other (Table 3) which is supported by other studies [11,18]. The different finding was noticed in the study conducted Hussain., *et al.* where immediate frustration was found as the maximum motives followed by dying. Dealing with SH in clinical setting is a challenging issue as it is the non-verbal expression of emotion where both parties have to open up the pandora [1].

Though, the study provides insights regarding motives and risk factors of self-harm in Bangladesh, with these findings of such small size comprised of clinical population may be difficult to generalize. Convenient sampling method was used to collect data which might be a potential source of bias. Further larger scale studies are warranted to draw inferences on self-harm motives and risk factors in Bangladesh.

Conclusion

This pilot study revealed self-harm is more common in unmarried females, borderline personality was the commonest psychiatric morbidity and dying was the commonest motive of self-harm. However, this single centered study with small sample size would make difficult to generalize the study results. Further larger scale study with larger sample size from both clinical and community sample would be better to replicate or nullify the study findings. Culture specific motive, risk factors and prevention strategies could be an important focus for future studies.

Conflict of Interest

None.

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