Mental Health Service Utilization by Referrals from a Helpline for Suicide Prevention in Mumbai, India

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Abstract: *Background*: Suicide is a global health problem which is highly underreported and under treated. Though suicide intervention helplines have been studied the pattern of utilization of a suicide helplines by those referred to the facility has not been studied.

Methodology: In the present study we have studied the pattern of utilization of a helpline in a community mental health clinic in the city of Mumbai. The study sample was patients who called the helpline and later attended the out patient facility of the clinic. Data was collected in semi-structured format and statistically analyzed using computer software.

Results: 15149 calls were received by the helpline. Of the 1391 patients reporting suicidal ideation (59.42%) only 718 opted for psychiatric evaluation. 18.3% of patients with suicidal ideas had a past suicidal attempt while 82.6% had a psychiatric diagnosis. Majority of patients were belonging to psychotic and mood disorder categories. Financial and educational stressors were reported as the main stressors leading to suicidal ideas.

Conclusions: A helpline offers definite advantage for patients with suicidal ideation to access mental health services. A helpline is an economical service that serves as a contact point to bring more people at an early stage to mental health care facilities.

Keywords: Mental health, helpline, suicide, suicidal ideation, community mental health.

INTRODUCTION

Suicide is a global public health problem which remains highly underreported and undertreated [1]. The suicide rate is amongst the highest in the world and a recent study has estimated that about 170,000 deaths by suicide occur in India every year with an increase by 43% in last three decades [2]. There is a dearth of intervention programmes by private and governmental agencies aimed at suicide prevention and this coupled with difficulties in reaching out to people who need these services [3]. Only 15-30% suicidal patients have an access to healthcare services [4]. Identification and timely referral are central to intervention and prevention, while the presence of stigma and unawareness further compromises utilization of even existing services there is a need to bring more people within the mental health systems [5]. It is necessary that such services remain economical, easy to access and with provisions to reduce stigma. Helplines for mental health and suicide intervention offer opportunities in which people find it easy to approach and talk to some one in crisis or seek information, which they often need [6]. Suicide helpline interventions have been scientifically evaluated and found to be effective in providing front line support, and identification for suicidal ideation, and making a referral further treatment while having a high level of consumer satisfaction and effectively reducing any treatment delay [7]. Though suicide intervention helpines have been studied, to our understanding the pattern of utilization of mental health services by those who have been referred from a helpline facility has not been examined. In fact helplines may serve to provide a gateway to community mental health (CMH) care. This information has implications for developing new programs and appropriate utilization of the funds allocated for mental health [8]. The present study attempts to examine pattern of service utilization by patients referred from a helpline for suicide prevention to community mental health clinic (CMHC). In addition, the study also examines risk factors amongst the patients referred to CMHC from a helpline facility.

METHODOLOGY

In the present study, we have utilized services of a helpline and the attached community mental health service, in city of Mumbai. This helpline had two

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facilities i.e. a round-the-clock telephonic contact and a psychiatric community mental health clinic (CMHC) located in the same residential locality. Citizens were made aware of the helpline through advertisements in local newspapers. Qualified professionals in clinical psychology, psychiatric social work and counseling psychology managed the helpline. There were no volunteers involved in attending the calls. The psychiatric facility had an outpatient's service attended by a part time qualified psychiatrist, 6 days a week from 9 AM to 3 PM. Call during hours other than these were attended by qualified and trained clinical psychologists. There was facility for psychotherapy and counseling available. The psychotherapeutic intervention consisted of eight sessions of semi-structured one-to-one therapy at the intervals, using eclectic methods that were mutually decided by the subjects and the therapists. Patients with acute suicidal ideation and relatives phoning about violent patients were suggested admission facilities in their area of residence. Subjects were also encouraged to go for psychiatric assessment after the therapeutic sessions were completed. The entire services were free, and patients were not required to pay. This facility had working arrangement with hospitals for hospitalization of high-risk patients. The study sample consisted of patients who attended the outpatients facility referred from helpline counselors. Data was collected in a semi-structured format for 5 years duration and analyzed using SAS (Statistical Analysis System ink, version 9.1, NC, USA, 2009).

RESULTS

The helpline received a total of 15,169 calls during the study period. The CMHC services were utilized for counseling, psychiatric assessment and treatment. Out of the callers, only 2,341 (15.4%) subjects reported to the CMHC. On examination it was noted that of the subjects reporting 1391 (59.42%) were having significant suicidal ideation when assessed and only 718 opted to see a psychiatrist for assessment. The rest did not opt for psychiatric evaluation. These subjects were advised psychosocial intervention, 1419 were started on counseling, but only 330 completed the 8 session's course and 1079 subjects dropped out at various stages. These patients also had the opportunity of psychiatric assessment after the therapy of 8 sessions. Out of 330 patients who completed the therapy only 234 turned up for assessment. Thus the total number of patients assessed by the psychiatrist in CMHC was 1015 (718 + 234).

18.3 % of those reported in CMHC with suicidal ideas was having at least one past suicide attempt. A diagnostic work up of 1015 subjects showed that, 848 (82.6%) had a psychiatric diagnosis and 177 (17.4%) patients did not have any axis I diagnosis. Out of these 848 subjects, 241 (23.7%) had non-affective psychosis (schizophrenia and other psychoses), 153 (15%) had major mood disorder (major depression and dysthymia), 106 (10.4%) had Substance use disorder, 221 (21.7%) had anxiety disorder and 33 (3.2%) had bipolar disorder while 87 (8.5%) had personality disorder.

Table 1: Preliminary Data of Patients Using the Helpline Service

	Clients Calling suicide helpline in a 5 year period			p value (Association between item & sex)
	All (n=15169)	Male (n=9430)	Female (n=5739)	
Number of clients calling with suicidal ideation	1391 (9.2%)	770 (8.2%)	621 (10.8%)	<.001
Number of clients visiting center following the call	2341 (15.4%)	1440 (15.3%)	901 (15.7%)	.478
Number of clients visiting with suicidal ideation	718 (4.7%)	430 (4.6%)	288 (5.0%)	.197
Received counseling	1419 (9.4%)	880 (9.3%)	539 (9.4%)	.902
Utilized second session	960 (6.3%)	503 (5.3%)	457 (8.0%)	<.001
Utilized third session	760 (5.0%)	430 (4.6%)	330 (5.8%)	.001
Completed 8 sessions	330 (2.2%)	186 (2.0%)	144 (2.5%)	.028

Table 2: Psychiatric Diagnosis of the Patients Assessed at the Clinic

Diagnosis	Patients assessed on clinic (781)	Patients assessed on clinic (N=234) at 12 months	Total 1015
N [%]	781 [24]	234	1015
Non-affective psychosis	187 [23.9]	54	241 [23.7%]
Major Mood Disorder	83 [10.6]	70	153 [15%]
Substance Use Disorder	78 [9.9]	28	106 [10.4%]
Anxiety-depression	178 [22.7]	43	221 [21.7%]
Bipolar disorder	22 [2.8]	11	33 [3.2%]
Personality Disorder	85 [10.8]	2	87 [8.5%]
No Diagnosis	151 [16.1]	26 (11.1%)	177 [17.4%]

Patients having significant suicidal ideas who attended for psychiatric assessment were more severe in psychopathology, besides having a mental illness and past history of attempt, a large number of patients were feeling 'unsafe'. Patients who reported at the CMHC were having statistically significant more number of men with poor ability to deal with exams and educational stresses. Many of the visitors had the stress of repayment of a loan or faced examination stress.

DISCUSSION

Helplines offer an additional gateway for care, particularly in context of high level of stigma of mental illness which prevents access to care. They serve as a contact where a patient can speak without being identified perhaps tries to break this barrier [8]. The helpline counselor is in a unique position to discuss and motivate a patient to go for outpatient services if required considering the fact that it is difficult to deal with the barriers for accessing care. They are easily

Table 3: Risk Factors for the Suicide Attempt in the Helpline Callers

Variable	Callers n=1391	Visitors n=718	Chi-square p value	Callers (male) n=770	Visitors (male) n=430	Chi-square p value	Callers (female) n=621	Visitors (female) n=288	Chi-square p value
Addiction in husband	159 (11.4%)	87 (12.1%)	.668	0 (0.0%)	0 (0.0%)	1.000	159 (25.6%)	87 (30.2%)	.149
Inability to cope with exam & education	430 (30.9%)	230 (32.0%)	.586	186 (24.2%)	150 (34.9%)	<.001	244 (39.3%)	80 (27.8%)	.001
Loans	220 (15.8%)	288 (40.1%)		218 (28.3%)	230 (53.5%)	<.001	2 (0.3%)	58 (20.1%)	<.001
Known Psychiatric Patients	1291 (92.8%)			693 (90.0%)			598 (96.3%)		
First contact	790 (56.8%)	203 (28.3%)	<.001	230 (29.9%)	180 (41.9%)	<.001	560 (90.2%)	23 (8.0%)	<.001
H/O Previous contact with mental health services without established psychiatric diagnosis	501 (36.0%)	458 (63.8%)	<.001	220 (28.6%)	329 (76.5%)	<.001	281 (45.3%)	129 (44.8%)	.943
Life events/ current psychosocial stress	773 (55.6%)	251 (35.0%)	<.001	430 (55.8%)	150 (34.9%)	<.001	343 (55.2%)	101 (35.1%)	<.001

Visitors = callers who after calling made a visit to the centre personally.
The same case may have been in more than one group (%age with respect to n value).

accessible for crisis intervention and can serve to identify high-risk individuals while making appropriate referrals for further treatment [9]. In our study a large number of patients used the helpline when in crisis. 15.4% of our subjects used the helpline as a means to gain access to psychotherapeutic and psychiatric intervention.

In this study we also find the unique model of combining helpline service with CMHC and a number of patients could receive a range of treatment e.g. counseling, psychiatric assessment and treatment though a significant number of patients dropped out at various steps in the process of care, despite availability of a continuous contact with mental health professionals in CMHC. Besides reasons of personal choice, attitude toward illness and treatment team, logistical problems of the city also might have contributed to this. These dropouts are well within the range of any treatment and referral in mental health e.g. from family physicians, (40-60%) and compliance during treatment, (40-70%), continuation of psychotherapy and behavior therapy [10]. In our cohort, it was also possible that some patients found it physically impossible to travel and come and therefore they might have accessed care in their respective catchment. Family factors also might have interfered due to stigma and faulty perception of the problems they might not have seen that it as a matter of medical help [11]. Suicide has a high rate of stigma, which is a barrier for treatment seeking, besides being a risk factor [12-13]. Suicidal ideas and risk are dynamic process and changes from minute to minute and hour to hour [14]. It is also possible, that what was reported as a risk during telephonic conversation might have changed subsequently depending upon individual's resilience and other factors and therefore these subjects might not have felt the need for further interaction. The service in our study was definitely underutilized and a significant treatment gap exits in management of metal disorders across the globe particularly in developing countries [15]. It would be useful if the people attending the telephone calls were qualified with good telephone counseling skills or were in adept in communication skills. There is a need for future studies targeted toward maximizing utility of helplines will be important for bringing more patients into treatment fold. There is a need for training in telephone counseling skills amongst mental health professionals in a center like ours as well as the need for better advocacy of helplines by different mental health professionals so that utilization may be increased like display in hospitals and psychiatric clinics.

In our study a large number of subjects had no axis I diagnosis of major psychiatric disorder though suicidality existed. It has been shown in studies that in India about 25 to 40% subjects of attempted suicide do not qualify for any psychiatric diagnosis and a large number of psychosocial factors are exclusively responsible for suicide attempt. It is also likely that such attempts might have taken place in prodromal or at risk phase of a psychiatric illness complicated and precipitated by psychosocial stress [16]. We also observed that most of these patients had nature of risk factors related to finance and loans, they were under burden and unable to pay it back. Economic factors as a risk factor for suicide are a recent phenomenon with financial loans as cause of suicide being typically a social problem and well described amongst the recent spate of farmer's suicides seen in India [17]. Changing social and economic conditions appear to be responsible for poor coping for real-life problems [18]. A study from Malaysia also reported that independent predictive risk factors for a current suicide attempt were major mortgage or loans, besides being newly diagnosed with depression and recent marital separation [19].

Community services are required to be economical for success in sustenance. If these are expensive service the model will not be replicated. A preliminary analysis of cost involved in setting up an managing the services shows that it was significant and offered economic service for benefits of patients. Annual expenditure only for professionals who were managing the helpline was approximately 540000 INR or 11000 USD) annually. Considering the expenditure on running the services of helpline and number of people utilizing the service it does not appear an expensive model of health care in a 'patient-centric approach' [20]. It has been reported that low-cost intervention which can be readily implemented may be an important suicide prevention strategy in healthcare settings in India [21].

CONCLUSIONS

A helpline does offer some definite advantages for allowing people with suicidal ideation to connect and much of such contacts open up opportunities for intervention. A number of individuals with suicidal ideation and those with attempted suicide, do access psychiatric care despite such social, legal and cultural barriers. The helpline service is an economical one

even in developing country and a number of patients with severe mental illness do contact the CMHC and the facility is a definite contact point for bringing more people in treatment fold at an early stage.

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