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RCT of Cognitive Behaviour Therapy in active suicidal ideation-as feasibility study in Sri Lanka

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ABSTRACT – Background and Objectives: With one of the highest rates of suicide in the world and high rates of suicidal ideation in the population, we set out to pilot a study to ascertain whether it is possible to conduct a randomised controlled trial. Secondly we aimed to study whether Cognitive Behavioural Therapy (CBT) for suicidal ideation is better than treatment as usual (TAU).

Method: Those with suicidal ideation (identified by a population survey using GHQ-30 and Beck's suicidal ideation scale) were randomly allocated to 3-6 sessions of structured Cognitive Behavioural Therapy. The CBT was provided using a manual in primary care settings.

Results: Of the two groups (CBT = 5, TAU = 4) the group which had received CBT showed a greater reduction in Beck's Suicidal Intent Score (from mean 11.2 to 0.2) and in GHQ-30 (from 22.0 to 10.8) in three months.

Conclusions: The pilot study indicates that it is possible to conduct CBT and RCT in developing countries. The implications of this are discussed.

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Introduction

Paykel¹ defines suicidal ideation as self-reported thoughts of engaging in suicide related behaviour and may be passive with the notion of weariness and death wish, or be active where the individual is making active plans to end his or her life. These ideations have been seen as one end of the spectrum of suicidal behaviour where in some cases suicidal ideation may lead to attempted suicide which in some cases may end in completed suicide. Goldney² states that suicidal behaviours are preventable but a multidisciplinary and multipronged approach is indicated and likely to be successful.

Following a community survey of suicidal ideation in Sri Lanka, Samaraweera et al.³ found that 3.6% of population had active suicidal ideation. Cognitive Behaviour Therapy (CBT) was successfully used for depression⁴ and has subsequently been used for other conditions as well^{5,6}. In a controlled trial of suicidal patients, it was found that CBT reduced the risk of repetition. Evans et al.⁷ were able to replicate these findings. Following the identification of active suicide ideators in Sri Lanka we attempted a randomized controlled trial of CBT for suicidal thoughts and compare it with Treatment As Usual (TAU) on a pilot basis.

Method

In a geographical area with a 1.08 million population just outside Colombo, a population based study of suicidal ideation was carried out using GHQ-30⁸ and Beck Scale for Suicidal Ideation (BSSI)⁹. A clustered sampling technique was used and 850 participants were recruited of whom 808 completed

all questionnaires. Details of the methods are given elsewhere³. Using cluster sampling and random walks, households were identified. From each household randomly approached adults aged 15-64 were selected for detailed interviews. Several attempts were made to contact selected individuals and if these were unsuccessful, they were excluded from the study. Written informed consent was obtained from individuals.

In addition to sociodemographic details GHQ-30 and BSSI were used in Sinhala version on Sinhala ethnic individuals only. Ethical approval for the study had been obtained from the Faculty of Medical Sciences at the University of Sri Jayewardenepura. At the time of the screening, those who had active suicidal ideation were asked if they would agree to participate in intervention stage if required. They were given written information and subsequent informed consent was obtained. Of 14 individuals who had active suicidal ideation at the time of screening, one was alcohol dependent at the time of recruitment and was excluded. A further three decided not to participate. Ten persons were randomly allocated to CBT or TAU (which involved referral to the local psychiatrist and mental health team). Those who were due to receive CBT, did so in a structured manner using a training manual developed by the first author who had been trained in CBT. The treatment was offered in primary care settings.

CBT sessions were of 45 minutes duration and occurred weekly. The number of sessions and duration was modified from previous research with the use of CBT in medically unexplained symptoms in Sri Lanka. The adaptation of CBT focused on culturally relevant psychotherapeutic strategies and again were modified from previous work. The first three sessions are mandatory taking place weekly and remaining are

optional and fortnightly. The key elements of the intervention are recapitulation of the problem, acknowledging distress, explaining management strategies, concentrating on patient's explanatory models, return to normal activities and diary keeping. Randomisation was conducted using computer generated random numbers.

Each session had a very structured intervention and the participant maintained a diary which was discussed with the therapist in the session. Detailed contents of each session can be obtained from the authors. The participants were given GHQ-30 and BSSI after a one month period and then three months after the initiation of the intervention. The control group received the same assessments at the same intervals, but the treatment interventions were selected by the treating team. In the control group the individuals found it difficult to seek tertiary care help because of stigma and distances involved. The research assessments were conducted by a researcher blind to the actual intervention.

Results

Of 10 participants, 6 were female (of whom 3 were married, one unmarried and two widowed). They were on average younger (33.7 years SD 5) than males whose mean age was 40.3 years (SD 4.9). Only three out of 10 were employed and the average income level was less than Rs. 3000 p.m. (US \$30 approx). Nine participants had suicidal ideation for less than six months and four had previously attempted suicide. Financial difficulties, marital problems, illness and hopelessness were attributed reasons. One participant from the CBT group had to be admitted to hospital subsequently.

Baseline: Mean BSSI score for control group was 14.5 (SD 11.8) and mean GHQ score was 11.5 (9.7) whereas for the intervention group these scores were 11.2 (9.6) and 22.0 (8.1) respectively. The baseline and subsequent assessment scores are illustrated in Table I.

Table I
BSSI Scores in the 2 Groups

	Control mean (SD)	Intervention mean (SD)	Difference means (CI)	T	P
Baseline	14.5 (9.2)	11.2 (9.7)	3.33 (-11.7-18.3)	0.5	0.619
Second month	12.5 (6.2)	0.2 (0.5)	12.3 (5.9-18.8)	4.5	0.003*
Third month	12.3 (5.9)	0.2 (0.5)	12.1 (5.9-18.2)	4.6	0.002*

* $p < 0.01$

The drop in scores and sustaining of the drop is remarkable in the intervention group in comparison with the control group.

Discussion

In view of the small numbers this study should be seen as a pilot study firstly to

ascertain whether such an intervention in a randomized manner is possible (which it appears to be) and secondly whether using CBT models reduction in suicidal ideation can be obtained (again it appears to be so). The CBT given was quite structured with written information, diary keeping and homework. As noted earlier this had been based on earlier work of Sumathipala et al.¹⁰ who had demonstrated that it is possi-

ble to use CBT in a developing country. A key lesson from the present study is that CBT can reduce suicidal ideation but the modification of the CBT taking into account local cultural norms, values and mores is essential if it is to succeed. There are clear indicators that CBT worked in this group. This pilot study indicates that it is possible to offer CBT which will be acceptable to individuals. Secondly it is also possible to deliver such therapy in the developing countries with appropriate training and support. What is also apparent is that life events and stressors are quite similar across different countries which contribute to suicidal ideation. The follow-up was only three months and yet it clearly indicated that the drop in initial suicidal ideation scores was sustained. However this is short term follow up and as suicidal behaviour (in attempts) is repeated a longer follow up is recommended.

Conclusions

In spite of small numbers we have been able to demonstrate that it is possible to reduce suicidal ideation if appropriately modified therapy and trained CBT therapists are available. Future research should explore this in a proper RCT.

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