# Award Paper: Dr. B. B. Sethi Award I

# Structuring and Self-Competence: How They Can Make a Difference in Assessing and Managing Risk

#### **Abstract**

Background: Assessing risk is a mandatory part of standard mental health practice in the West, but is fraught with difficulties. Structuring and self-efficacy are important factors, but there is near absence of work on this aspect from India. This study aimed to determine how these two concepts can make a difference in assessing and managing risk. Methods: A prospective cross-sectional study over 2 months was conducted with 35 participants (dealing with patients with mental illnesses) from Department of Psychiatry, Government Medical College and Hospital-32, Chandigarh and 30 participants in comparison group (dealing with people with intellectual disabilities) from Regional Institute of Mentally Handicapped-31, Chandigarh using Risk Assessment and Management Self-efficacy Scale (RAMSES). **Results:** In overall sample (n = 65), only 17% reported using a screening instrument while 62% reported use of screening questions thereby making the total prevalence of use of screening instruments and/or questions as 79%. Total RAMSES score and mean score for all three domains was 7.14 and between 7 and 8 respectively for the study group; while for the comparison group, the total RAMSES score was 7.92 and the mean score for all three domains was between 7 and 9 respectively indicating above average level of reported self-efficacy. For the individual RAMSES items, a lower competency (<7 for study group) and (<8 for comparison group) was reported for formal or written process related to synthesis of risk assessment and risk management. The study group showed lower self-efficacy scores on majority of individual RAMSES items, 2/3 domains and overall score. Conclusions: Indian mental health professionals of different backgrounds with varying duration of experience reported reasonable degree of competence regarding risk assessment (primarily for the risk toward self and others). Hence, we recommend that they embrace the western concept of "risk assessment" by incorporating structuring as a concept and ensuring more robust and appropriate documentation.

Virtu Chongtham, Nitin Gupta, B. S. Chavan

Department of Psychiatry, Government Medical College and Hospital-32, Chandigarh, India

Key Words: Harm to others, risk assessment, risk management, self-efficacy, self-harm, suicide

#### Introduction

Suicide and homicide can be taken to be the most serious outcomes associated not only with mental illnesses, but also for people in contact with mental health services (National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, 2013).<sup>[1]</sup> In fact, approximately 25–32% adults who commit suicide have had contact with mental health services in the previous 12 months or soon before death.<sup>[2,3]</sup> Similar high rates of 1 in 2 adolescent and adults presenting with deliberate self-harm (DSH) in the emergency departments have had contact with their general practitioner in the preceding month.<sup>[4]</sup>

Apart from suicide, DSH, and risk toward self; homicide

Address for correspondence: Dr. Nitin Gupta, Department of Psychiatry, Government Medical College and Hospital-32, Chandigarh - 160 030, India. E-mail: nitingupta659@yahoo.co.in



and risk of violence is another major issue and/or outcome that mental health professionals have to deal with. It has been seen that one in ten who commit homicide have had contact with mental health services in the previous 1-year, [2] with apparent lack of recognition of risk for violence in nearly 28% of the consultations with mental health professionals. [5]

Starting from the 1970s, and through the 1990s, this has led risk assessment and risk management to become ingrained within, and central to, the concept of standard mental health practice and care. This has gathered so much importance that over the last 2–3 decades, different methods and tools of risk assessment (actuarial approaches, structured clinical judgment, structured professional judgment, mixture of methods, etc.) have been developed and assessed to identify which are the most robust; 11 a

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statement in one of the chapters in the "Recent Advances in Oxford Textbook of Psychiatry" probably exemplifying and being self-explanatory about the state of affairs on this issue-to quote: "It is no longer possible for mental health professionals to distance themselves from the process of risk assessment." [6]

However, as risk assessment is not an exact science and risk itself is a dynamic variable-cum-process, [1,6] apart from using standardized risk assessment tools, clinicians tend to use their experience, knowledge and judgment to formulate risk. [3] Inherent and fundamental to safe and effective practice is the confidence in one's professional judgments and practices. [3,7]

The above mentioned description of risk assessment and related intricacies are, however, embedded in the structured practice and delivery of mental health care in the western world settings like UK, USA, Australia, Canada, etc. A detailed search in Indian literature revealed scanty information addressing the issues of risk assessment and risk management.<sup>[8,9]</sup> Furthermore, principally and typically, in Indian psychiatry, there is lack of structured assessment of risk related to "harm to self" and "harm to others" whist carrying out routine clinical assessment of patients.

The authors have been interested in trying to understand various facets related to risk assessment, suicide and violence for the last couple of years. [10,11] Hence, we were keen to understand how the concepts of "risk assessment" and "risk management" were operating among the mental health professionals in the department. In addition, we were keen to understand that whether despite the lack of use of structured risk assessment instruments as part of their routine clinical assessments, do mental health professionals feel competent in assessing and managing risk.

#### Aim

To determine the relevance of Structuring and Confidence related to Risk Assessment in a Tertiary Care General Hospital Psychiatric set-up.

# **Objectives**

- To determine the prevalence of use of (a) screening instruments and (b) screening questions for assessing risk by clinical staff
- To evaluate the level of confidence of clinical staff for risk assessment, management and referral while dealing with people with mental illness
- To evaluate the level of confidence of clinical staff for risk assessment, management and referral while dealing with people with intellectually disability
- To compare the level of confidence among clinical staff dealing with people with mental illness and intellectual disability with respect to risk assessment, management and referral.

# **Materials and Methods**

# Setting

The study was carried out at two sites. The study sample was drawn from the Department of Psychiatry, Government Medical College and Hospital (GMCH), Sector 32, Chandigarh. GMCH is a 728 bedded tertiary hospital providing comprehensive preventive, promotive, curative and rehabilitative healthcare to the residents of North India with patients being drawn from the urban/semi-urban and rural areas. The Department of Psychiatry provides different services viz. inpatient, outpatient, community, rehabilitation, clinical psychology, etc. (http://gmch.gov.in/).

The comparison sample was drawn from the Regional Institute of Mentally Handicapped (RIMH), Sector 31, Chandigarh and the residential centers for mentally challenged children which are under the direct care and supervision of RIMH. RIMH is a tertiary care specialist institute being managed by the GMCH-32, Chandigarh with the mission to rehabilitate children with intellectual disabilities in and around Chandigarh and to integrate them into mainstream society. This is being achieved through comprehensive training and educational programs, vocational training, job placements, and sheltered employment for such children under supervision and guidance of special educators in the field of intellectual disability (http://www.gimrc.nic.in/index.html).

# Sample

- Study group (from Department of Psychiatry, GMCH):
   All professionals involved in clinical care of patients and working in the Department of Psychiatry were included in the study group. These included psychiatrists, clinical psychologists, social workers (psychiatric and medical), and nursing staff
- Comparison Group (from RIMH): All professionals involved in the care of children with intellectual disability in terms of classroom teaching, direct interaction and nursing care were included in the comparison group. These included special educators, vocational instructors, yoga instructors, and nursing staff.

# Inclusion criteria

Professionals should have been directly involved in:

- Clinical care of patients with mental illnesses for at least past 1-year (study group) OR
- Care of children with intellectual disabilities for at least past 1-year (comparison group).

# **Exclusion** criteria

Those who did not give consent for the study.

#### Design

Prospective; cross-sectional.

# Time period of study

July-August 2014 (2 months).

#### **Instruments**

# Socioclinical profile sheet

This was developed by the authors to record the pertinent sociodemographic, professional and clinical details of the participants.

# Risk Assessment and Management Self-Efficacy Scale

Risk Assessment and Management Self-Efficacy Scale is a measure of task-specific self-efficacy based on the theory developed by Bandura. [12,13] It was developed by Delgadillo et al.[3] and is a perceived self-efficacy/competence measure of risk management in mental health care. RAMSES contains a total of 18 items subdivided into three broad domains: Assessment, management and referral (the actual questionnaire items are listed in both Tables 1 and 2). Each item is formulated as a specific task relating to one of the three broad domains or subscales. Respondents are prompted to rate their perceived self-efficacy on a Likert scale ranging from 0 (no confidence in ability to perform the task) to 10 (complete confidence in ability to perform the task). A composite self-efficacy score can be obtained by adding all the item ratings and diving the sum by 18. RAMSES has been subjected to psychometric analysis and shown to

have adequate 3-factor structure, internal consistency and construct validity.<sup>[3]</sup>

As we were unsure about the consistency among the respondents regarding the use of screening instruments to assess risk, it was decided to modify the first item of RAMSES, that is, A1 (use screening instruments to assess risk). The modified A1 item therefore read as - "use screening instruments or screening questions to assess risk". Screening instruments were identified as those which were used in routine clinical practice in the Department of Psychiatry (e.g., Hamilton Depression Rating Scale, Beck's Suicide Rating Scale) but contained items related to self-harm/risk. Additionally, though the questionnaire was administered in English, wherever, necessary, clarification was provided in the local language. Keeping in view the above-mentioned modifications, correlation analysis was carried out in order to ensure that the basic psychometric properties of the questionnaire were retained in principle; this will be presented as part of Discussion section subsequently.

#### **Ethical Considerations**

Written informed consent was taken from the respondent. The respondents were provided with a participant information sheet and made aware about the purpose of this study and nature of the questionnaires. He/she was also informed that they had the freedom not to participate,

Table 1: Individual items, domain-wise, and total scores on RAMSES for study group (n=30)			
Item number/domain	Item description	Mean (SD)	
	How confident are you that you can		
A1	Use screening instruments to assess risk	7.50 (1.66)	
A2	Interview people to elicit key information about risk factors	7.63 (1.52)	
A3	Identify a person who is presenting risk to self	7.27 (1.55)	
A4	Identify a person who is presenting risk to others	7.40 (1.40)	
A5	Differentiate between people presenting high risk and low risk	7.37 (1.56)	
A6	Synthesise relevant information in a formal or written risk assessment	6.70 (2.10)	
Domain A	Risk assessment	7.31 (1.28)	
B1	Use specific interventions focusing on risks of self-harm or self-neglect	7.07 (2.02)	
B2	Help people to minimise the severity of risk to self	7.17 (1.80)	
B3	Use specific interventions focusing on risks of harm to (or neglect of) others	6.67 (1.83)	
B4	Help people to minimise the severity of risk to others	7.20 (1.65)	
B5	Develop rapport with people who present significant risks	7.43 (1.31)	
B6	Manage risks in line with organisational confidentiality policies	7.57 (1.50)	
B7	Use strategies to avoid malpractice liability or disciplinary action	7.13 (2.18)	
B8	Develop a formal or written risk management plan	6.30 (2.04)	
Domain B	Risk management	7.07 (1.43)	
C1	Appropriately judge whether or not a person should be referred to an external service or professional on the basis of risk	7.47 (2.22)	
C2	Identify an appropriate service to refer someone on the basis of risk	6.97 (1.88)	
C3	Successfully refer and engage a person with an appropriate service	6.63 (1.81)	
C4	Motivate a person to successfully self-refer to an appropriate service	7.00 (1.37)	
Domain C	Risk referral process	7.02 (1.45)	
Total		7.14 (1.20)	

RAMSES: Risk Assessment and Management Self-Efficacy Scale, SD: Standard deviation

Table 2: Individual items, domain-wise, and total scores on RAMSES for comparison group $(n=21)$			
Item number/domain	Item description	Mean (SD)	
	How confident are you that you can		
A1	Use screening instruments to assess risk	8.90 (1.38)	
A2	Interview people to elicit key information about risk factors	8.81 (1.40)	
A3	Identify a person who is presenting risk to self	8.43 (1.43)	
A4	Identify a person who is presenting risk to others	8.57 (1.12)	
A5	Differentiate between people presenting high risk and low risk	8.29 (1.42)	
A6	Synthesise relevant information in a formal or written risk assessment	7.48 (2.18)	
Domain A	Risk assessment	8.41 (1.06)	
B1	Use specific interventions focusing on risks of self-harm or self-neglect	8.24 (1.64)	
B2	Help people to minimise the severity of risk to self	7.71 (1.52)	
В3	Use specific interventions focusing on risks of harm to (or neglect of) others	8.38 (1.43)	
B4	Help people to minimise the severity of risk to others	8.05 (1.24)	
B5	Develop rapport with people who present significant risks	8.57 (1.43)	
B6	Manage risks in line with organisational confidentiality policies	$0.00(0.00)^{@}$	
B7	Use strategies to avoid malpractice liability or disciplinary action	7.90 (1.30)	
B8	Develop a formal or written risk management plan	7.95 (2.06)	
Domain B	Risk management	7.16 (0.88)	
C1	Appropriately judge whether or not a person should be referred to an external service or professional on the basis of risk	9.00 (0.89)	
C2	Identify an appropriate service to refer someone on the basis of risk	8.81 (1.29)	
C3	Successfully refer and engage a person with an appropriate service	8.33 (1.32)	
C4	Motivate a person to successfully self-refer to an appropriate service	8.67 (0.97)	
Domain C	Risk referral process	8.70 (0.83)	
Total		7.92 (0.87)	

Not applicable. RAMSES: Risk Assessment and Management Self-Efficacy Scale, SD: Standard deviation

and had the liberty of withdrawing their consent at any time during the study. Anonymity and confidentiality was ensured for each respondent.

#### **Procedure**

The participants in both study and comparison groups were approached by the principal author (VC) and explained about the study in detail with the help of the Participant Information Sheet. Written Informed Consent was obtained. Subsequently, face to face assessment interviews were conducted in a single sitting wherein the instruments were administered over a time frame of 30–45 min. In order to determine the prevalence of "assessment of risk" and prior to administering RAMSES, a two-stage procedure was adopted as outlined in Figure 1.

#### Statistical analysis

Statistical analysis was carried out using SPSS version 16.0 (IBM Corporation). Descriptive analysis in the form of calculation of frequency, percentage, and mean (standard deviation) was carried out. Univariate analysis in the form of Chi-square and t-test were carried out. Correlational analysis was carried out using Pearson's correlational analysis. The level of statistical significance was kept as P < 0.05 for all tests.

#### Results

The universe comprised of two samples viz. both study (Department of Psychiatry, GMCH) and comparison (RIMH) groups.

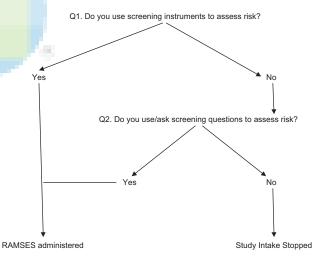


Figure 1: Methodology prior to administering of Risk Assessment and Management Self-efficacy Scale (original)

The study group had initially 40 potential participants. However, two nursing staff were on leave and two nursing staff got transferred to another clinical area (outside the department) during the period of study. Another participant (nursing staff) had only 3 months clinical experience of working with patients with mental illnesses; hence did not fulfill the inclusion criteria. Therefore the final study group comprised of 35 respondents.

The comparison group had initially 37 potential participants. However, 2 staff were on long leave and 5 staff did not fulfill the inclusion criteria of providing direct care to children with intellectual disabilities for last 1-year (as they were purely involved in administrative duties). Therefore, the final comparison group comprised of 30 respondents.

Hence, the total combined sample comprised of 65 respondents. Among these, majority (57%) were females; nearly 50% being in the age range of 31–40 years, with mean age being 33.89  $\pm$  6.06 (range = 26–52) years; of varied professional background (17% each-nursing/psychiatrists, 11% psychology, 12% social work, 34% vocational education; 9% others-yoga and music); and with 8.04  $\pm$  5.97 (range = 1–28) years of professional experience. Among the main risks reported to be handled, handling for both types (i.e., harm to self and others) (n = 54; 83%) was more common than for either type (n = 11; 17%); additionally handling risk to others being more commonly reported.

# Objective 1

The first objective was to determine the prevalence of use of (a) screening instruments and (b) screening questions for assessing risk by clinical staff.

As can be seen from Table 3, the prevalence of use of screening instruments amongst the combined group, study group, and comparison group was 17%, 31%, and 0% respectively.

Additionally, the prevalence of use of screening questions for assessing risk among the combined group, study group, and comparison group was 62%, 55% and 70%, respectively.

Use of either screening instrument or screening question was done by 30/35 (86%) in the study group and 21/30 (70%) in the comparison group. These formed the actual assessment groups subsequently.

# Objective 2

The second objective was to evaluate the level of confidence of clinical staff for risk assessment, management and referral while dealing with people with mental illness.

Table 3: Prevalence of use of (a) screening instruments and (b) screening questions for assessing risk by clinical staff across the study, comparison and combined sample groups

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	Study	Comparison	Combined
	group $n$ (%)	group $n$ (%)	sample n (%)
Use of screening	11 (31)	0 (0)	11 (17)
instrument			
Use of screening	19 (55)	21 (70)	40 (62)
questions only			
None of the above	5 (14)	9 (30)	14 (21)
Total	35 (100)	30 (100)	65 (100)

Mean RAMSES scores were computed for the study group (n = 30) (Refer Table. No. 1).

Individual item mean scores for Risk Assessment (A1-A6) ranged above 7 that is, from 7.27 to 7.63, except for A6 which had a mean score of 6.70. Individual item mean scores for Risk Management (B1-B8) ranged above 7 that is, from 7.07 to 7.57, except for two items-B3 which had a mean score of 6.67, and B8 which had a mean score of 6.30. Individual item mean scores for Risk Referral Process (C1-C4) ranged <7 that is, from 6.63 to 7.00, except for C1 which had a mean score of 7.47.

Domain scores were also calculated and ranged between 7.02 (Domain C) and 7.31 (Domain A) for all 3 domains; highest being for Domain A and lowest for Domain C. The total RAMSES score was 7.14 (1.20).

# Objective 3

The third objective was to evaluate the level of confidence of clinical staff for risk assessment, management and referral while dealing with people with intellectual disabilities.

Mean RAMSES scores were computed for the sample group (n = 21) (Refer Table. No. 2).

Individual item mean scores for Risk Assessment (A1-A6) ranged above 8 that is, from 8.29 to 8.90, except for A6 which had a mean score of 7.48. Four individual item mean scores for Risk Management (B1, B3-B5) ranged above 8 that is, from 8.05 to 8.57, three items (B2, B7, B8) ranged between 7.71 and 7.95, and one item (B6) had a mean score of 0.43. Individual item mean scores for the risk referral process (C1-C4) ranged above 8 that is, from 8.33 to 8.81, except for C1 which had a mean score of 9.00.

Domain scores were also calculated and ranged between 7.16 (Domain B) and 8.70 (Domain C) for all 3 domains; highest being for Domain C and lowest for Domain B. The total RAMSES score was 7.92 (0.87).

# Objective 4

The fourth (final) objective was to compare the level of confidence among clinical staff dealing with people with mental illness and intellectual disability with respect to risk assessment, management, and referral.

Both groups were comparable in terms of gender distribution and age at intake [Table 4]. However, though the study group was significantly less experienced in terms of professional experience, yet reported more frequent use of screening instruments than the comparison group from RIMH [Table 4].

On RAMSES, both groups were comparable for items A6, B2, B4, B7 and Domain B. Significantly higher scores were obtained by the comparison group from RIMH for every other individual item, remaining two domains (A, C) and total score wrt study group, except for item B6, which could not be assessed [Table 5].

Table 4: Study group $(n=30)$ versus comparison group $(n=21)$ on select socio-clinical variables					
Parameter	Study group (n=30)	Comparison group (n=21)	$\chi^2/t$ -test (df)	Level of significance	
Gender					
Male	13	10			
Female	17	11	0.762(1)	NS	
Actual age (in years)	33.27±6.55	35.05±5.92	-0.993(49)	NS	
Years of professional experience (in years)	$6.18\pm6.21$	10.88±4.64	-2.937(49)	P=0.005**	
Use of screening instruments/questions to assess risk					
Only screening instruments	11	0			
Only screening questions	19	21	9.818	P=0.002**	

<sup>\*\*</sup>P< 0.0001. NS: Not significant

Table 5: Study group (*n*=30) versus comparison group (*n*=21) on individual items, domains, and total score of RAMSES

Item	Study	Comparison	<i>t</i> -test	Level of
number/	group value	group value		significance
domain	mean (SD)	mean (SD)		
A1	7.50 (1.66)	8.90 (1.38)	3.19	0.002***
A2	7.63 (1.52)	8.81 (1.40)	2.81	0.007**
A3	7.27 (1.55)	8.43 (1.43)	2.71	0.009**
A4	7.40 (1.40)	8.57 (1.12)	3.18	0.003***
A5	7.37 (1.56)	8.29 (1.42)	2.14	0.037*
A6	6.70 (2.10)	7.48 (2.18)	1.28	$0.208^{NS}$
Domain A	7.31 (1.28)	8.41 (1.06)	3.25	0.002***
B1	7.07 (2.02)	8.24 (1.64)	2.20	0.033*
B2	7.17 (1.80)	7.71 (1.52)	1.14	0.261 <sup>NS</sup>
В3	6.67 (1.83)	8.38 (1.43)	3.60	0.001***
B4	7.20 (1.65)	8.05 (1.24)	1.99	0.052 <sup>NS</sup>
B5	7.43 (1.31)	8.57 (1.43)	2.94	0.005**
В6	7.57 (1.50)	0.00 (0.00)	-	-
B7	7.13 (2.18)	7.90 (1.30)	1.45	$0.153^{NS}$
B8	6.30 (2.04)	7.95 (2.06)	2.84	0.007**
Domain B	7.07 (1.43)	7.16 (0.88)	0.25	$0.803^{\mathrm{NS}}$
C1	7.47 (2.22)	9.00 (0.89)	2.99	0.004***
C2	6.97 (1.88)	8.81 (1.29)	3.89	0.000***
C3	6.63 (1.81)	8.33 (1.32)	3.67	0.001***
C4	7.00 (1.37)	8.67 (0.97)	4.81	0.000***
Domain C	7.02 (1.45)	8.70 (0.83)	4.80	0.000***
Total	7.14 (1.20)	7.92 (0.87)	2.55	0.014*

\*P<0.05, \*\*P<0.01, \*\*\*P<0.005. NS: Not significant, RAMSES: Risk Assessment and Management Self-Efficacy Scale, SD: Standard deviation

#### Discussion

At the outset it will be pertinent to discuss about the primary instrument used in the study (as mentioned earlier under "Methodology"). The authors' of RAMSES had used different methods to test its validity; one being to compute correlation between RAMSES score and years of experience for the total sample, with the hypothesis that self-efficacy would positively correlate to experience.<sup>[3]</sup> We used the same parameter to check whether the validity of RAMSES was maintained despite modifications and use in an entirely

different setting. On applying Pearson's correlation to the respondents, it was seen that RAMSES scores were positively correlated with years of experience in the whole sample (n = 51; r = 0.34; P = 0.014). This was indicative of a modest association between years of experience and self-reported self-efficacy levels, and was in keeping with the results reported in the original study.[3] In the original study, at the time of development of RAMSES, a robust factor structure was identified with three domains: Risk assessment (Domain A), risk management (Domain B), and risk referral process (Domain C).[3] Though not an objective of our study, yet it was felt important to determine if the internal consistency of the scale was maintained or not. This was so as it was being used in a different setting and culture. In order to achieve this, we separately calculated the mean scores of these three domains. It was seen that all three domains significantly inter-correlated not only with each other but also with the total RAMSES score (Domain A: r = 0.928, P = 0.000\*\*; Domain B: r = 0.872, P = 0.000\*\*; Domain C: r = 0.777, P = 0.000\*\*). Hence, overall, we were able to demonstrate that the basic psychometric properties of RAMSES were maintained in terms of validity and internal consistency.

Before discussing in detail the objectives of the study, it will be helpful to mention about the respondents who comprised the total sample. There was a slight preponderance of females with a wide variation in their age range and years of professional experience, though overall the mean age of around 34 years was neither too young or too old. Additionally, having an average 8 years of professional experience reflected an adequate experience in their respective field. A higher percentage of professionals from "vocational background" was a reflection of the sampling than anything else. Interestingly, handling of two risks (risk of harm to others and self; others >self) was predominantly reported by the respondents. Even in those who reported handling a single risk, "risk of harm to others" was reported far more commonly than "risk to self". These findings could be a reflection of the near equal presence of staff from RIMH where they deal with persons with intellectual disabilities experiencing externalizing behavioral difficulties.

# Objective 1

To determine the prevalence of use of (a) screening instruments and (b) screening questions for assessing risk by clinical staff.

In order to achieve Objective 1, we had adopted a two-stage procedure as outlined in Figure 1. The main reason for adopting this procedure was the observation by the authors that mental health professionals (especially psychiatrists) do not use any structured risk assessment instruments as part of their routine clinical assessments, coupled with the fact that whilst undergoing specialist training, structured assessment or enquiry for risk is generally not part of the history taking or mental status examination in the given standard textbooks of psychiatry (e.g. comprehensive textbook of psychiatry, Oxford textbook of psychiatry etc.), clinical psychology or psychiatric nursing. In fact, a recent study from South India has highlighted the patchy training and services related to assessment and management of people who attempt suicide. [9] Also, a search of the official guidelines issued by the Indian Psychiatric Society from 2005 onwards revealed that no such guidelines have been issued in relation to risk assessment or suicide assessment (http://www.indianjpsychiatry.org/cpg.asp).

In the overall sample (n=65), only 17% reported using a screening instrument which, in a manner of speaking, validates our observation mentioned above. An additional 62% reported the use of screening questions thereby making the total prevalence of use of screening instruments and/or questions in 79% (four-fifths) of the sample. This is a reasonably high reported prevalence for assessing risk. The study from South India had reported training for assessment of risk regarding suicide in 33% ( $1/3^{\rm rd}$ ) of their sample of 35 medical colleges with a Psychiatry Department. [9]

Breakup of the total sample revealed different findings however. The study sample (n = 35) reported a much higher prevalence rate (31%) of use of screening instruments. This could be attributed to the familiarity and use of rating instruments (having items assessing suicidal risk) like Hamilton Depression Rating Scale, Beck's Suicide Rating Scale which are used by the psychiatrists and psychologists in the department-these two groups comprised approximately 50% of the sample. An additional 55% reported the use of screening instruments thereby making the total prevalence in the GMCH/study sample to be 86%. Such an overall high prevalence rate is probably a reflection of the clinical sensitization of the overall sample, keeping in perspective their average duration of professional experience, due to their dealing with patients with mental illnesses of differing nature and in different clinical settings (viz. outpatients, inpatients, community) within the department.

On the contrary, none reported the use of screening instrument while 70% reported the use of screening questions

in the comparison group. This is understandable in keeping with the protocol followed in the institution (RIMH) where all persons undergo generic comprehensive evaluation for their IQ, medical and psychological morbidity and functional abilities at the initial stage before being taken on the teaching rolls of the Institute. Subsequently persons selectively undergo assessment related to a detailed evaluation of their behavioral problems ONLY if any such are identified during a 15-day observation period prior to admission (or when they are in their training classes). This is carried out using BASIC-MR, Part B which has items related to problems of violent and destructive behavior and self-injurious behavior.[14] BASIC-MR is essentially not a screening instrument as it has no norms or cut-offs available to rate severity. However, by having items conceptually related to risk of self-harm (e.g. bites self, hits self, etc.) and harm to others (e.g. "hits others, throws objects at others, breaks objects/glass/toys, etc".), it provides the professional with some competence about being able to ask questions related to issues of risk. Hence, the reported response rate accordingly.

# Objective 2

To evaluate the level of confidence of clinical staff for risk assessment, management and referral while dealing with people with mental illness.

For the individual RAMSES items, the study group gave a score above 7 for 73% of the items and above 6 for the rest 27%. Hence, in principle, an above average level of self-efficacy was reported. One important aspect to highlight would be that a lower competency (<7) was reported for formal or written process related to synthesis of risk assessment (A6) and risk management (B8); these being areas for intervention and focus in the future.

Although domain wise mean scores were not reported in the original study, we made an attempt to do the same for the following reasons-the three domains represented clear, robust and separate factors of RAMSES thereby measuring three different yet inter-related constructs (see Discussion above), and also since ours is an exploratory study being the first of its kind in India, it was felt important to try and develop an in-depth understanding of the different facets of risk assessment in our setting and set-up. For all the three domains, the mean score was between 7 and 8 indicating a reasonably above average level of reported self-efficacy; however this was lowest for "Risk Referral Process" and highest for "Risk Assessment". Lowest being for "Risk Referral Process" is probably reflective of lack of clear policies or protocols related to the onward referral for patients with risk and even with availability of specialist services to handle risk-related complex clinical scenarios, akin to those that exist in the West. Hence, this is another area to consider for possible focus and development. The total RAMSES score was 7.14 which was again a reasonably above average self-efficacy score, despite

some degree of variation amongst the domain scores. Therefore, it can be concluded that professionals dealing with patients suffering with mental illness demonstrate a reasonably high degree of self-confidence in various aspects of risk assessment. We feel that it can be enhanced through provision of training programs, providing robust clinical supervision,<sup>[2,3]</sup> and development of guidelines and protocols.<sup>[3,8,9]</sup>

# Objective 3

To evaluate the level of confidence of clinical staff for risk assessment, management and referral while dealing with people with intellectually disability.

For the individual RAMSES items, the comparison group gave a score above 8 for 67% of the items and above 7 for 27% of the items, with item B6 not being scored by all the respondents. B6 was not scored as the respondents said that there no such confidentiality policies existed in their institute; this probably being understandable as a pure internal system of referral exists related to risk management issues (corroborated from the high scores obtained for individual items C1-C4). Hence, in principle, a high level of self-efficacy was reported for all items (apart from that for item B6).

One important aspect to highlight would be that a relatively lower competency (<8) was reported for formal or written process related to synthesis of risk assessment (A6) and risk management (B8); these being areas for intervention and focus in the future. This result being similar to that obtained for the study group in the item-wise analysis.

Following the principle of domain-wise assessment (as in Objective 2), for all the three domains, the mean score was between 7 and 9 indicating a reasonably above average level of reported self-efficacy; however this was lowest for "Risk Management" and highest for "risk referral process". Highest being for "risk referral process" is probably reflective of availability of a robust system of protocols and monthly monitoring in place related to the onward referral for patients with risk and availability of specialist services to handle risk-related complex clinical scenarios occurring in persons with intellectual disabilities. Hence, though in the field of intellectual disability and as part of a local service, one can probably consider the available system as an example to consider for possible focus and development of risk assessment services for various mental illnesses and disabilities in other parts of India. On the other hand, low "risk management" scores are influenced by the absence of scoring for item B6; exclusion of B6 and average score on basis of rest of seven items will be 8.11 which may be relatively low than the other domains but is actually high. The total RAMSES score was 7.92 which was again a reasonably high self-efficacy score, despite some degree of variation among the domain scores. Therefore, it can be concluded that professionals dealing with patients suffering

with intellectual disability demonstrate a reasonably high degree of self-confidence in various aspects of risk assessment. This appears to be due to more regular use of screening questions (e.g. BASIC-MR), periodic assessments, availability of protocols for persons who are being taught in the school of the Institute, and presence of regular monitoring processes.

# Objective 4

To compare the level of confidence among clinical staff dealing with people with mental illness and intellectual disability with respect to risk assessment, management, and referral.

Both groups were comparable for age and gender [Table 4]. The study group had significantly less years of professional experience than the comparison (RIMH) group, which could be due to the fact that the study (GMCH) group was more heterogenous and with a relative lack of stability inherent in the job profile of some of the cohort; this not being the usual case for the RIMH cohort. The study group had a significantly higher reported use of screening instruments; reasons for this have been discussed earlier (under Objective 1).

For the individual RAMSES items, both groups were comparable on items related to Risk Management of self and others (B2, B4), malpractice liability (B7), synthesis of risk assessment (A6). Apart from that, the study group scored significantly lower than the comparison group on all other 13 items (B6 could not be compared, as mentioned earlier).

Both groups were comparable for the domain of "risk management" whereas the study group had significantly lower scores for other domains of "risk assessment" and "risk referral process". lower "risk assessment" scores could be a reflection of two possible factors viz. [i] more frequent and consistent use of "risk assessment" questions with use of protocols and monitoring (as mentioned under Objective 1 and under Objective 3), and [ii] less average number of years of professional experience. The latter reason is not hypothetical as there is a positive correlation between the number of professional years and "risk assessment" domain scores (r = 0.337, P = 0.016\*, n = 51). Comparable "risk management" scores could be due to the fact that both groups experience clinical scenarios that they are expected to, and necessarily have to, deal with on a reasonably consistent and regular basis; hence the reported self-efficacy is not dependent on other extraneous factors (there was no correlation with key factors like years of professional experience, age, etc). A couple of key reasons for lower "Risk Referral Process" scores have already been discussed in Objectives 2 and 3. Additionally, less average number of years of professional experience in the GMCH group is also a contributory factor (positive correlation between the number of professional years and "risk referral process"

domain scores; r = 0.399, P = 0.004\*\*, n = 51). Another factor to keep in perspective would be that professionals in the comparison group (i.e., those assessing and managing people with learning disabilities) have been working on a daily basis with such clients, and in the institute (RIMH) such people tend to be those who experience behavioral problems with a very high prevalence; hence they deal with "risk" related issues practically on a near day to day basis. On the other hand, the study group does not encounter disturbance of behavior to that degree and/or frequency in patients with mental illness, which can have a potential influence on their perceived self-efficacy for "risk assessment and management". This factor needs to be explored in further detail, but does merit further thought.

Hence, our study shows that mental health professionals of different backgrounds with varying duration of professional experience reported a reasonable degree of competence regarding risk assessment (primarily for the risk towards self and others). Also, we can form a reasonable judgment that the reported self-efficacy by this group of mental health professionals was not bordering onto over-confidence. However, though heartening, this needs to be seen in perspective when compared with the group of professionals working with intellectual disabilities. They reported significantly higher levels of competence and the reasons for the same have been discussed in detail earlier.

Suicides<sup>[8]</sup> and acts of deliberate self-harm<sup>[15]</sup> are on the rise in India, and the greatest predictor of completed suicide is the presence of previous suicide attempt.[8] Hence, it is essential that the concept of "risk assessment" is given due credence. In the West, risk assessment is a core aspect incorporated into the clinical practice for managing patients presenting to mental health services.[16,17] Hence, we recommend that Indian psychiatry should also embrace the western concept of "risk assessment" in a more robust and efficient manner by incorporating structuring as a concept and ensuring more robust and appropriate documentation. One initiative in that direction can be-to consider enquiring about and documenting risk in every patient being seen on every occasion by any (and every) mental health professional. We suggest a set of 4 single-sentenced questions [Appendix 1] on these lines. It is acknowledged that the sensitivity and efficacy of such an approach should not be ideally accepted at face value and needs to be evaluated. But, the purpose for putting forward this set of questions is to "sensitize" mental health professionals towards regular, consistent and documented risk assessments, and not to ensure accurate risk assessments; which in itself is a complex issue having its own intricacies and whose discussion is beyond the scope of this paper. The corresponding author (NG) has had extensive experience of working in the UK and has found this (i.e., appendix) to be a practically useful, non time-consuming approach for "risk assessment". Additionally, it is well documented that in India, practice

of psychiatry occurs under the constraints of inadequate resources, time, manpower etc.),<sup>[18]</sup> and it is essential that we have a method to assess risk which is not time consuming. In our department, we have already started implementing this by formally incorporating the set of "risk screening" questions in the clinical histories/assessments.

Any study cannot be without limitations. Our study had the following: Small sample size; lack of investigation of association between self-efficacy/competency and actuarial risk data; and usage of a broad definition of clinical risk used in RAMSES which does not differentiate between acute or lifetime risk or risk relate to specific illnesses. However, it also has its strengths viz. this is the first study of its kind; we have applied a psychometrically sound questionnaire; and have focused on an extremely important clinical yet unaddressed issue.

We feel that for the future, there is an obvious need to replicate the study with a larger sample, on different professional and in different settings; a need to validate the RAMSES questionnaire in greater detail. However, most importantly, one needs to continue work on risk assessment; in terms of developing tools, structured assessments, and policies at local and national level. To conclude, if our recommendation of the "risk assessment tool" (appendix) and/or any of the future directions are adopted and implemented by mental health professionals in India, it will be akin to the famous words by Neil Armstrong "that's one small step for man, one giant leap for mankind".

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# Conflicts of interest

There are no conflicts of interest.

# Appendix 1

# Proposed screening questionnaire for risk assessment

- 1. Current and/or Past h/o risk of harm to self
- Current and/or Past h/o risk of harm to others Yes/No
- Current and/or Past h/o risk of severe self-neglect Yes/No
- 4. Current and/or Past h/o risk of exploitation (or abuse) by others Yes/No

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