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Coping up Challenges of Risk Assessment: Towards a New Scale: SIS-MAP

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Coping up Challenges of Risk assessment: towards a new scale: SIS-MAP

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Overview

- The report highlights utility of a new assessment scale in general adult psychiatry for the purpose of deciding nature of management, level of monitoring, need for hospitalization and planning of care.
- The objective of this report is to educate clinicians for minimizing the chances of error in clinical assessment for suicide behavior and be able to enhance standard of care.
- The report also addresses the issue of measurement & documentation of risk behavior to be able to deal better malpractice litigations.

Report preparation
Background

- WHO estimated that 10.4% of the population seriously considers suicide at some point in their life time while approximately 4.2% actually attempt suicide [1]
- In Canada, specifically, the suicide rate is between 8 and 10 per 100, 000, which has been constantly rising in the past 40 years the Canadian suicide rate has tripled [2].
- WHO ..reduction in the suicide rate is attainable if appropriate treatment is provided [3].
- Suicide happens in people who have not contacted the services ever
- …. happens amongst people who established contact .. ..suicide victims do contact health services some weeks, months or even years before their suicide [4]
- ***Recognition of risk as clinical pathological parameter***
- Majority of malpractice litigation are arising from incident of suicide.
- Suicide risk assessment is a key competency required by all mental health professionals.

1. De Leo, D., Cerin, E., Spathonis, K., & Burgis, S. (2005). Lifetime risk of suicide ideation and attempts in an Australian community: Prevalence, suicidal process, and help-seeking behaviour. Journal of Affective Disorders, 86, 215-224. 2. Health Canada. (1994). Suicide in Canada. Mental Health Division, Health Services Directorate. 3. Rutz, W. (2001). Mental Health: Diversities, possibilities, shortcomings, challenges. The WHO perspective. European Archives of Psychiatric Clinical Neuroscience, 251(Suppl 2), 3-5. 4 Rihmer, Z. (1996). Strategies of Suicide Prevention: Focus on heath care. Journal of Affective Disorders, 39, 83-91

Limitations in Risk Assessment

- There are too many factors and too many variations on the subject.
- Research has highlighted that perhaps a new definition of suicide needs to be found. [5]
- Prediction of suicide behavior has been a core area of research in suicidology.
- Several psychological & biological Markers have been proposed.
- Neither are free from false positive and false negative results
- Conventional method has been a thorough clinical assessment which get enriched by aid of structured interviews.
- Scales are useful: either self-administered, clinician administered or computer-based

5.Soubrier JP.Beyond the scale: toward a new definition of suicide?Crisis. 1990 Nov;11(2):98-103.

New initiative

- Framework for risk assessment of suicide promotes a reflective style of practice, encouraging clinicians to evaluate their assessment and its limitations.
- Risk assessment is always undertaken as part of a full clinical assessment and evaluation of the person's current predicament and psychosocial-cultural context.
- The assessment of suicide risk can generate a suicide risk rating for which minimum standards of care can be mandated. [6]
- We primarily focused on structure and construction of a comprehensive tool as first requisite for measurement of suicidality
- Leaving the question of assessing the efficacy of competency

6. O'Connor, N., Warby, M., Raphael, B., & Vassallo, T. (2004). Changeability, confidence, common sense and corroboration: Comprehensive suicide risk assessment. Australian Psychiatry, 12, 352-360.

Report preparation

- This report has been prepared based upon finding of field trial of SIS-MAP is a crisis service of psychiatric hospital.
- The report and the recommendations are produce of a series of round table meetings, need assessment, literature review, focused workshop, construction of the scale, training of research workers, development of training material in form of video case vintage, written text and audio-visual presentations starting in January 2007.
- A proposal was approved by local authorities of the hospital for developing the research-cum-service improvement project .

Evidence

- Most clinicians combine clinical experience with evidence –based research.
- Substandard suicide risk assessment often relies on clinical experience alone.
- No single source or authority defines the standard of care in suicide risk assessment. [7]
- It is important that clinicians are able to engage such people and identify immediate risk factors and clinical treatment needs. [8]
- Development of an assessment instrument to measure the effectiveness of suicide risk assessment and training is therefore likely to assume importance.
- Training effects do modify quality of assessment. however such attempts have not been able to demonstrate an ideal form of assessment [9,10, 11]

7. Simon RI. Suicide risk assessment: is clinical experience enough? J Am Acad Psychiatry Law. 2006;34(3):276-8; 8. American Psychiatric Association (2003).; Practice Guidelines for the Assessment of Patients with Suicidal Behaviors. (Last accessed 15 May 2006)http://www.psych.org/psych_pract/treatg/pg/pg_suicidalbehaviors.pdf; 9. Simpson, G., Winstanley, J. & Bertapelle, T. (2003). Suicide prevention training after traumatic brain injury: Evaluation of a staff training workshop. Journal of Head Trauma Rehabilitation, 18, 445-456; 10. Doyle, M. (2003). Developing, delivering and valuating interprofessional clinical risk training in mental health services. Psychiatric Bulletin, 27, 73-76.; 11. Fenwick, C., Vassilas, C.A., Carter, H., & Haque, S. M. (2004). Training health professionals in the recognition, assessment and management of suicide risk. International Journal of Psychiatry, 8, 117-121.

Problem statement

- ***Lack of adequate and effective risk assessment is a likely cause behind incidents of suicide across treatment settings as well as a key factor in professional malpractice law suits.***

- Currently there is no single agreed- upon -gold standard for assessing training effects.
-
- Development of an assessment instrument to measure the effectiveness of suicide risk assessment and training is therefore likely to assume importance.
- Continued education in skills of 'risk assessment' using newer comprehensive tools is likely to add value to clinical psychiatry.

Special populations

- Suicide is no longer limited to mental health settings
- Special high-risk populations are clearly becoming newer challenges in the task of suicide prevention. Some of the high-risk groups are: teen age, post-partum, old age, substance abuse, chronic medical illness, trauma & disaster, emotional & sexual abuse, mental disorders.

Risk assessment across treatment settings

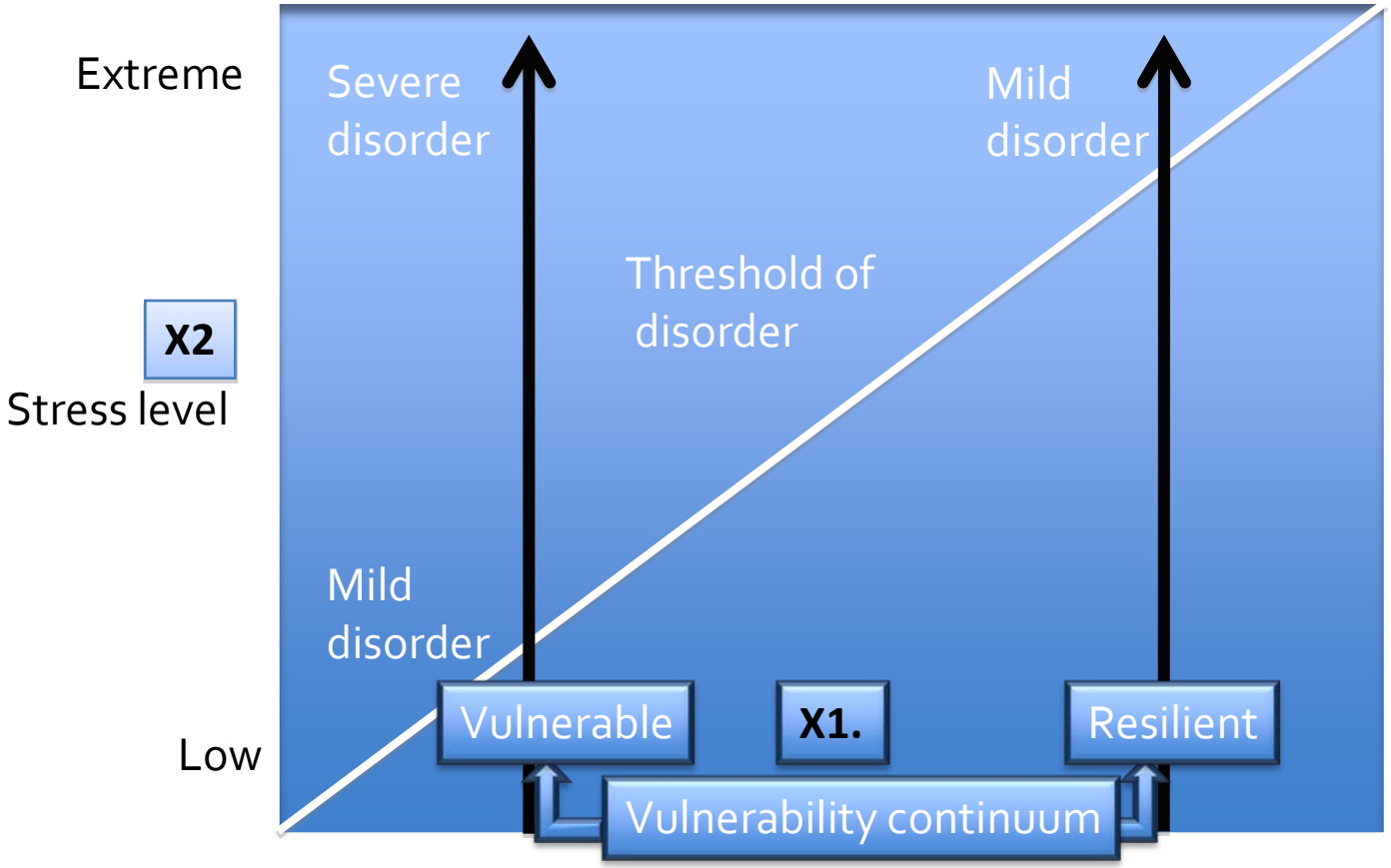
- Rising incidence of suicide attempts have been observed in a wide variety of clinical & social settings e.g. schools, universities, prisons, correctional facilities & health services.
- To provide effective intervention & prevention, we require adequate tools and skills for assessment which can be effectively applied by a range of professionals.
- There is a serious lack of skilled professionals with adequate knowledge & expertise in most of the social & non-psychiatric settings.

Conceptual framework

- Concept of risk has been questioned since long
- It appears that it is a continuously evolving process.
- Suicide is a multidimensional concomitant of psychiatric diagnoses; especially mood disorders, and is complex in both its causation and in the treatment of those at risk.
- Risk and protective factors tend to be fairly consistent worldwide, with some cultural variation.
- Even with standardized assessment and prediction scales (such as the Hamilton or Beck depression inventories), suicide prediction results in about 30% false positives.[12]
- ***The present work conceptualizes understanding of risk in a new direction. An electronic search about risk factor elicited total 76 factors reported which were from biological, social, psychological, environmental, psychiatric, medical, cultural, spiritual and familial domains.***

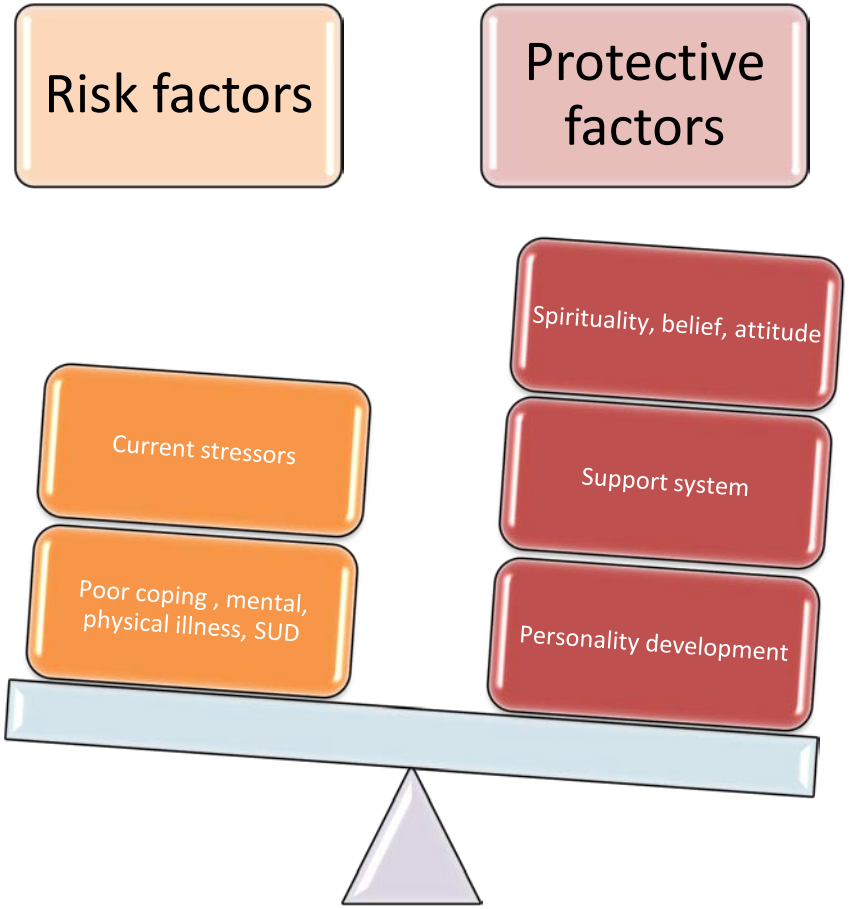
12. Maris RW.Suicide. Lancet. 2002 Jul 27;360(9329):319-26.Lancet. 2004 Oct 9-15;364(9442):1313.

Proposed concept

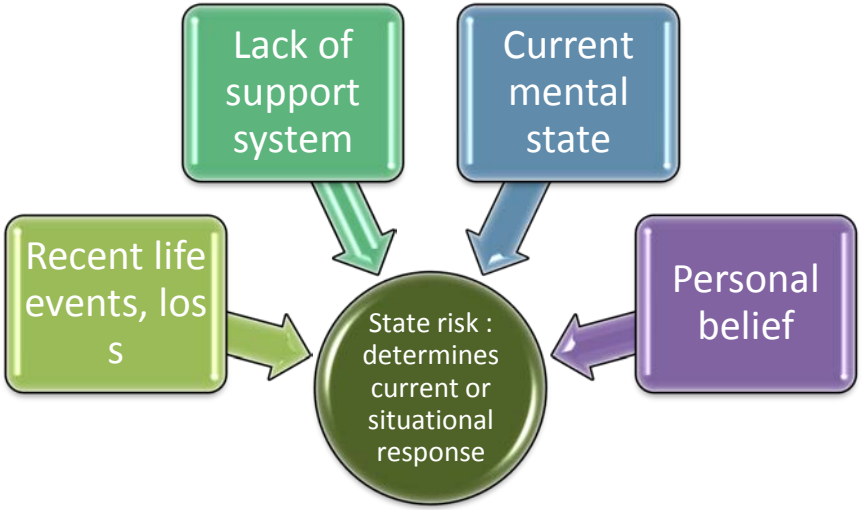


Stress-diathesis model forms the theoretical context of Risk-Vulnerability hypothesis

Current concept of risk

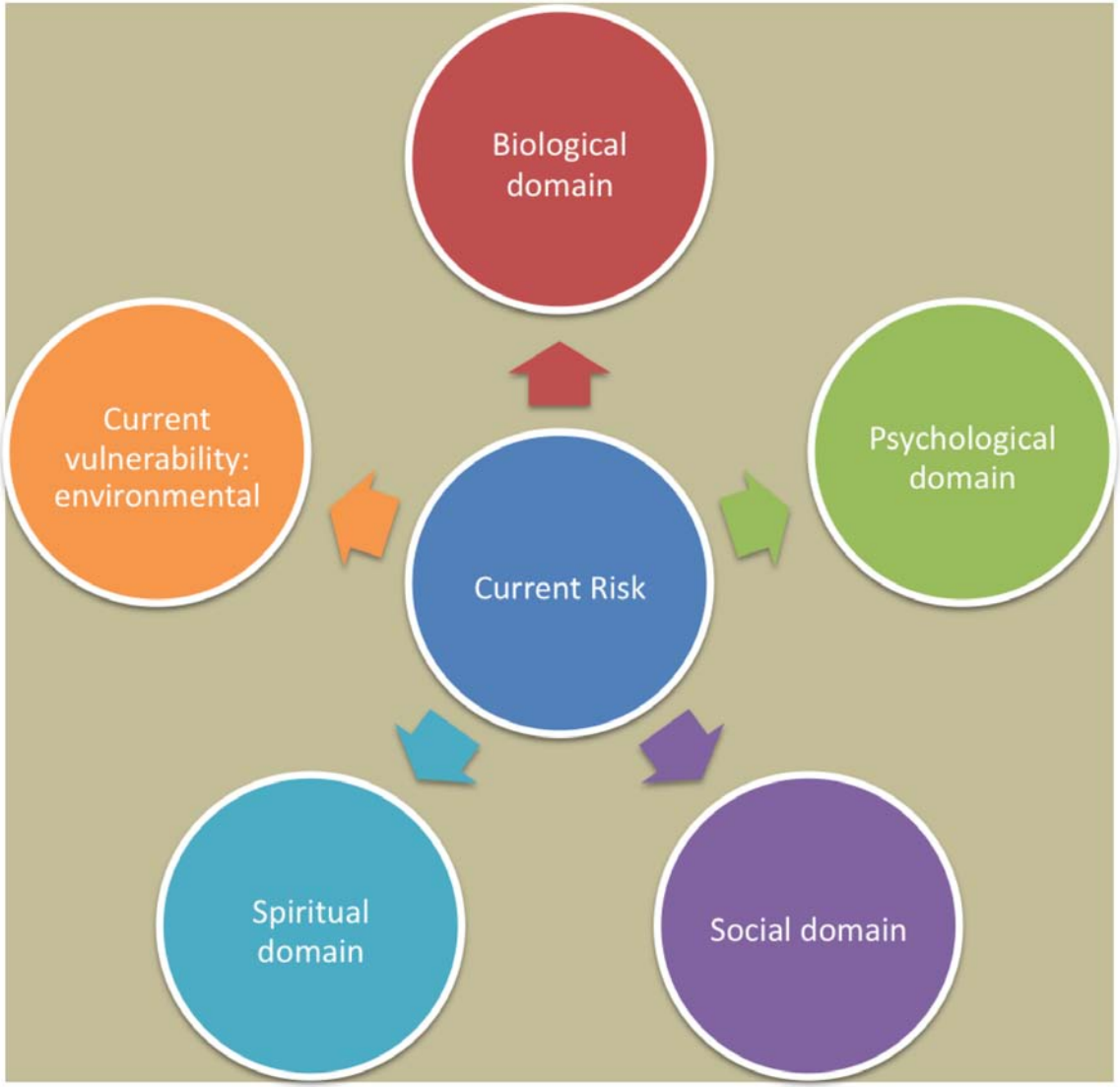


Components of RISK



Development of scale

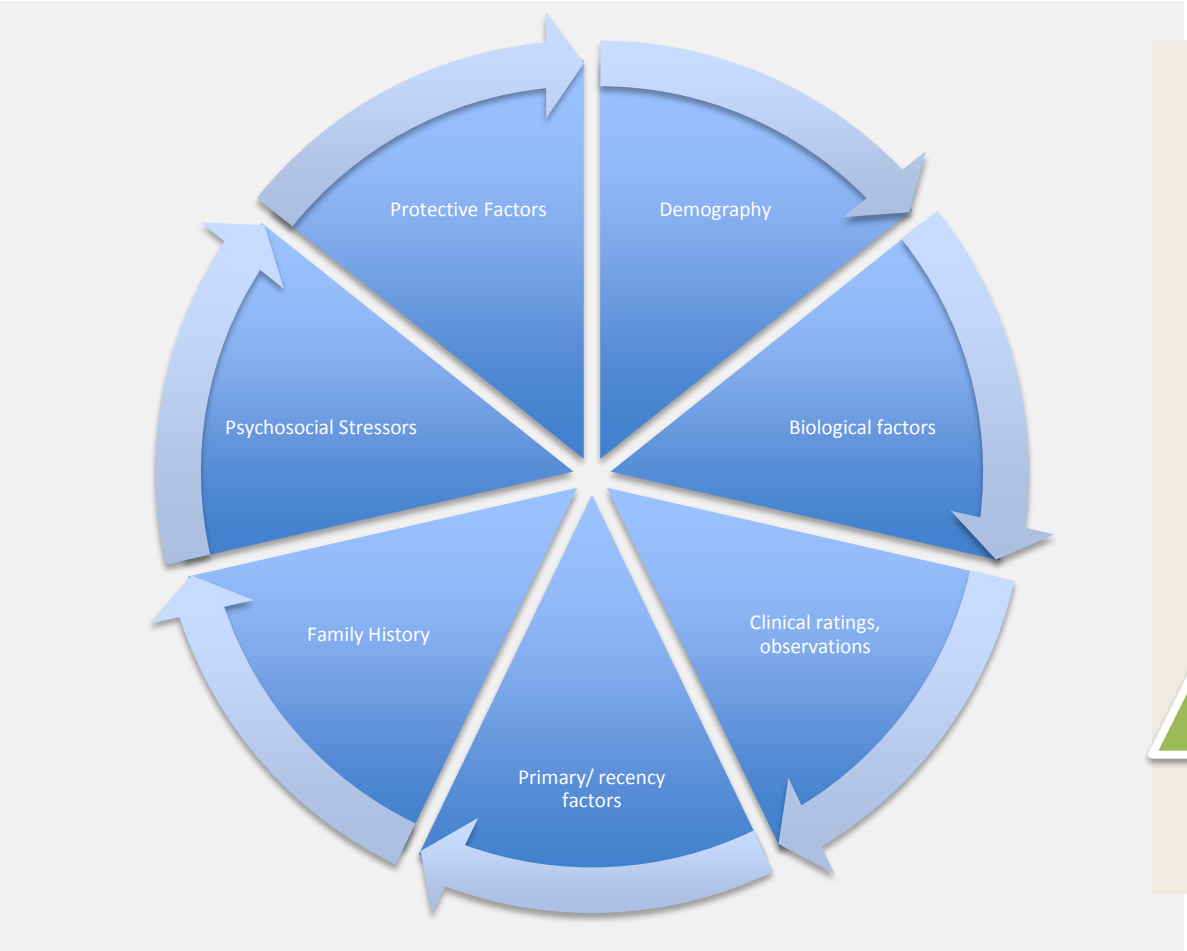
- consideration of the most prominent risk and resilience factors identified by 16 experts in the field
- Twenty one commonly mentioned indicators,
- incorporate most of known risk factor
- The SIS-MAP measures an individual's current level of risk in five different domains:
- assessment of protective factors: self-esteem , stability of the home environment.

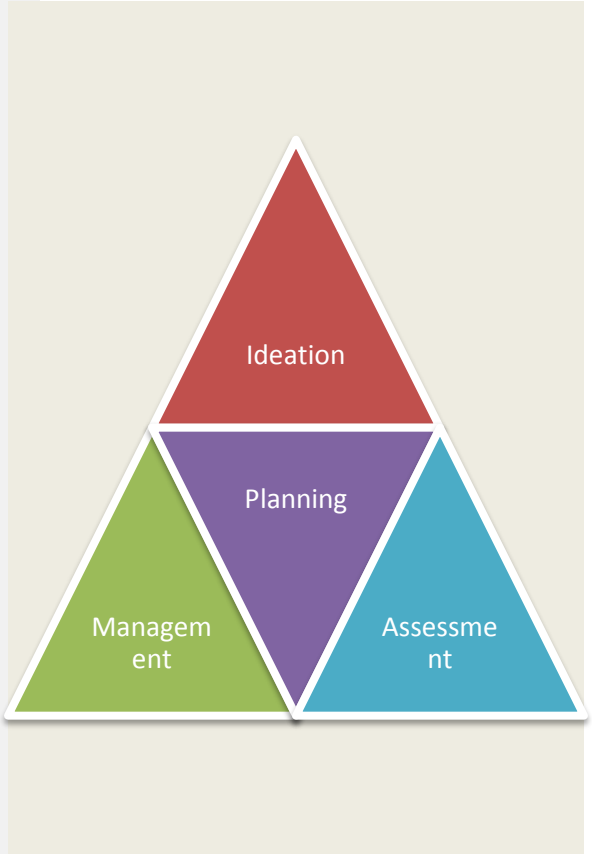


(Pope & Vasquez, 2007).

Disposition

Contents & measurements of the new scale





Methods

Psychometric Properties

- **Inter-rater reliability**
- **The inter-rater reliability of the scale was assessed by videotaping a case** vignette in which a therapist administers the structured interview to a mock client.
- Twenty clinicians were then familiarized with the SIS-MAP and were asked to score the mock client using this scale according to what they observed in the videotaped interview.
- The twenty clinicians included registered nurses, social workers, occupational therapists, and psychometrists.
- SIS-MAP has shown an inter-rater reliability between 0.71 and 0.81 (x=. 76) N=20, p<. 001.
- In the field trial it has demonstrated a specificity of 78.1%, sensitivity of 66.7% and validity of correctly classifying 74%. On comparison with other popular scales SIS-MAP comes out as parallel on all parameters.

Comparison of SIS-MAP to other suicide risk assessment scales

	SIS-MAP	SPS	**SPS-clinical scales**	ASIQ	BDI-II
Specificity	78.1%	65.9%	81.3%	71.4%	70.3%
Sensitivity	66.7%	58.3%	63.6%	64.0%	72.0%
Correctly Classified	74.0%	63.1%	74.1%	71.0%	68.7%

Results:

Correlations among Variables and Admission Status

- Whether individuals were admitted or not was correlated with various outcome measures.

Analyses demonstrated that admission status was correlated with subtotals in the protective domain (r = -.333, p <.05), suggesting that individuals with higher levels of resilience factors were less likely to be admitted, a key assumption of the SIS-MAP.

Additionally, the individual items of previous suicide attempts and the presence of psychosis were correlated with admission status (r = .368, p<.05, and r = .321, p<.05 respectively).

Classifying Individuals Using the SIS-MAP

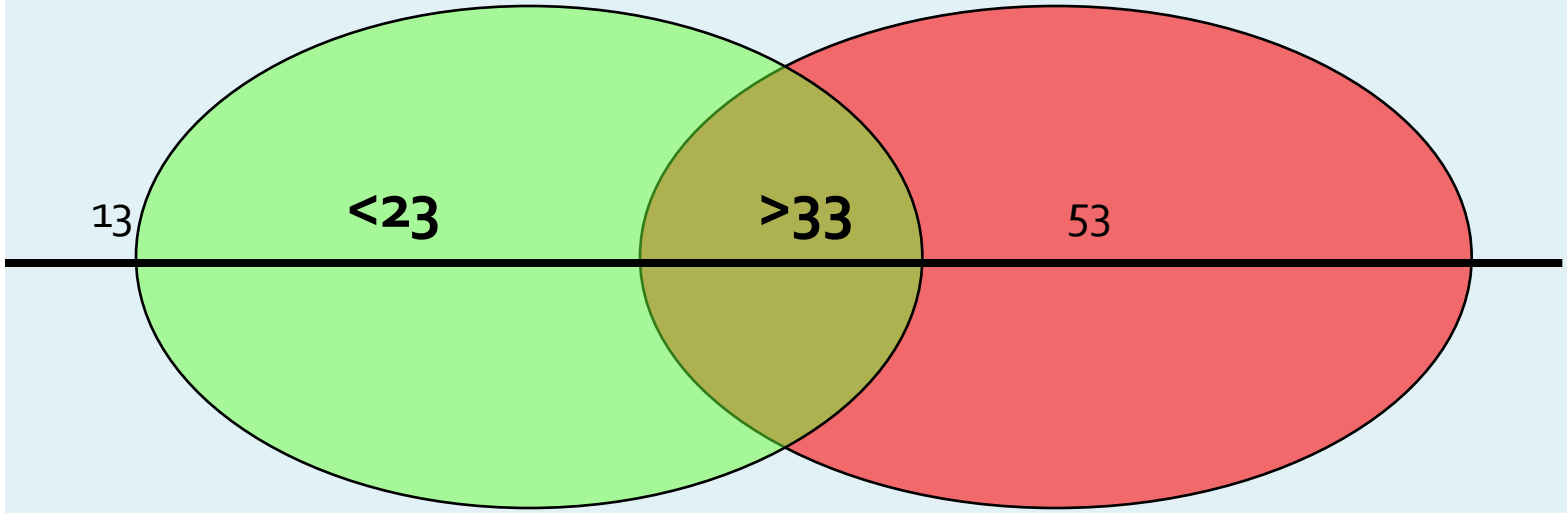
The specificity of the scale (correctly identifying individuals who did not require admission) was 78.1%

while the sensitivity of the scale (correctly identifying individuals who required admission) was 66.7%.

The false positive rate was 33.3% while 21.9% of cases resulted in a false negative.

SIS-MAP

Clinical Cut-Offs for Level of Care Needed



Scores 13-23 = outpatient follow-up highly recommended

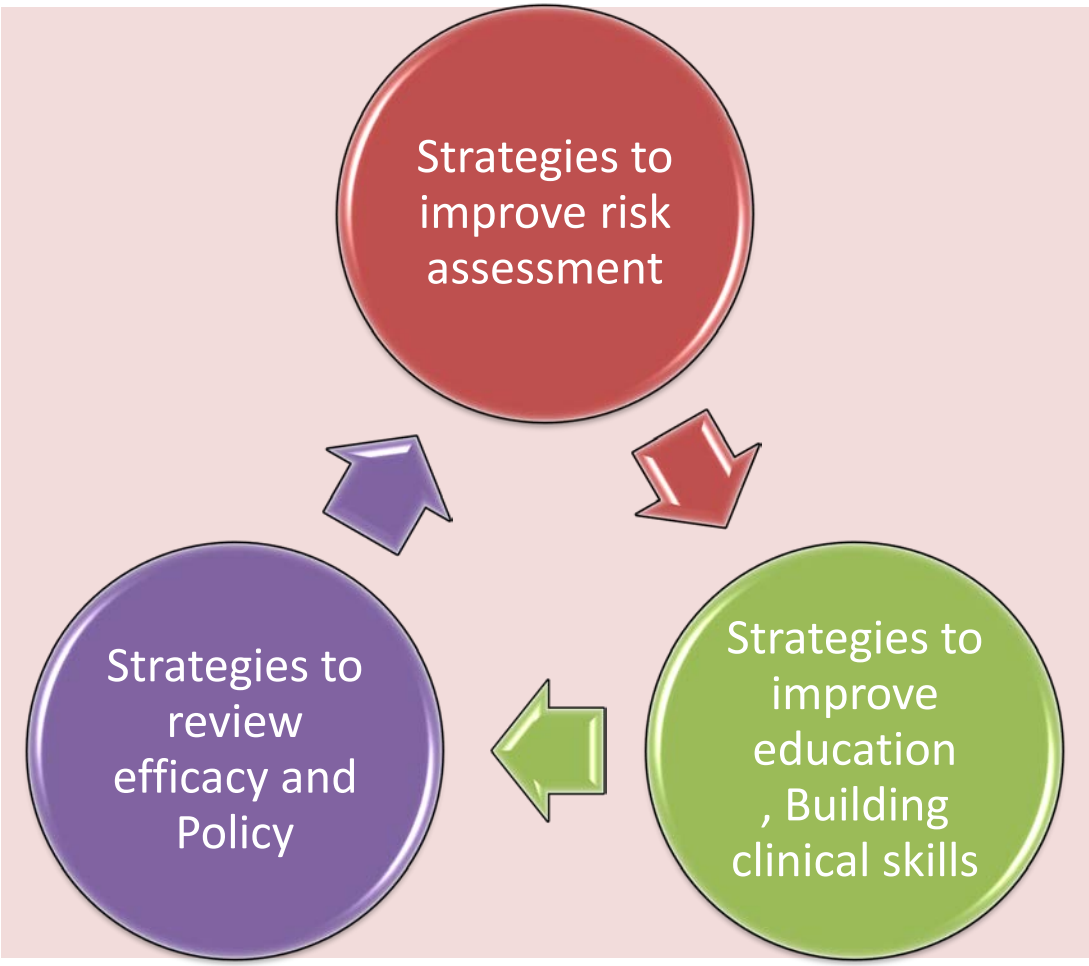
Scores >33 = admit highly recommended

Scores 23-33 = consider psychosis, previous suicide attempts, and protective factors

Strategies to improve quality of risk assessment: WHO Recommendations

1. Requires a public health approach.
2. The burden of suicide is so large that prevention could be considered the responsibility of an entire government, under the leadership of the health ministry.
3. Suicide-prevention programmes are needed and should consider specific interventions for different groups at risk
4. Health-care professionals, especially in the emergency services, should be trained in the effective identification of suicide risk and proactive collaboration with mental health services.
5. Both health professionals and the general public should be educated about suicide as early as possible, with a focus on both risk and protective factors.
6. Policy-oriented research on and evaluation of suicide prevention programmes is needed.
7. The mass media should be involved in suicide prevention via training, and use of the WHO guidance on media treatment of suicide

Recommendation for clinical governance

Continuing medical education

- Psychiatrists
- Mental health professionals
- Family physicians
- Law enforcement personnel
- Correctional officers