CME

A MODEL "GATEKEEPER TRAINING" FOR PHYSICIANS AND NURSES

Dr Avik Chakraborty

Associate Professor (Designated), Department of Psychiatry, ESI-PGIMSR, ESIC Medical College and ESIC Hospital & ODC (EZ), Joka

Background

Suicide is a global pandemic now-a-days and takes a toll of around seven lakh lives per year, the majority of them being young and from low and middle income countries.[1] In 2008, the World Health Organisation launched Mental Health Gap Action Program and set Suicide prevention as a primary goal and recommended "Gatekeeper training" for every nation.[2] Gatekeepers are those who are trained to identify persons at risk of suicide and intervene appropriately.[3]

Objectives of Gatekeeper training

The following are the objectives for gatekeeper training based on different competencies[4]:

1. Participants should have knowledge about suicide.
2. Participants should be able to identify warning signs, risk factors, and protective factors for suicide.
3. Participants should be able to assess suicidality and plan appropriate interventions.
4. Participants should have the belief and attitude that suicide is preventable.

Understanding suicide and related terminologies

When an act of self-injurious behavior with the intention to end life results in death, it can be called suicide, and the same act resulting in a non-fatal outcome is called a suicide attempt, whereas self-injurious behavior not intended to end life can be called deliberate self harm or parasuicide.[5] Suicidal behavior is a spectrum of complex interlinked behaviors, starting with suicidal ideations at one end, preparatory behavior in the middle, and suicide at the end point.[6] Suicidal ideation may be a passive thought of death or an active thought to end own self.[5] Preparatory behavior consists

of planning, arranging means and platform for suicide before its initiation [5] e.g., collecting ropes for hanging, buying poison from the market, writing suicide notes, giving valuables away, etc.

Understanding suicide demography

Women attempt suicide more frequently (three times more than men) but men complete suicide four times more than women, with maximum suicide rate in the 35-64 years age group and greater risk among white collar professionals, those belonging to higher social status, and those who live alone (unmarried, divorced, widowed, or widower).[7] The most common method of suicide in India is hanging (10–72%); other methods are poisoning (16–49%), drowning (3–39%), burning (6–57%), jumping from heights (0.5–2%), being run over by a train (6–13%), and using firearms (3%).[8]

Suicide and health care professionals

Worldwide, physicians are at higher risk of suicide than the general population, especially female physicians and certain specialties like anesthesiology, psychiatry, general practitioners and general surgeons.[9] In India, the suicide rate among physicians in specialties like anesthesiology, general medicine, and psychiatry is high, and the most common methods of suicide among them are hanging and lethal injections.[10] National data regarding suicide among Indian nursing professionals is lacking. However, data from abroad shows that nurses, especially females, are also at higher risk of suicide than general population, even more than physicians, and the most common means of suicide is by overdosing on drugs like antidepressants, benzodiazepines and opioids.[11] Suicide rate is also higher among nursing students compared to other college students.[12] Among Indian medical students and professionals, etiologies of suicide include academic stress, mental illness and harassment.[10] For other healthcare workers, data regarding suicide is limited.

Deliberate self- harm

In deliberate self-harm or parasuicide, self- injurious behavior can be seen like multiple superficial cuts made over accessible body parts like wrist, thigh, arm, etc., in order to attain relief from tension. It is commonly seen in females, usually in their

20s, irrespective of marital status and the majority of them had emotionally unstable or impulsive personality trait or disorder.[13] Parasuicide is different from suicide that in suicide the target of behavior is self, with the goal to end life and thought content is predominated by hopelessness, helplessness, worthlessness whereas in parasuicide the target of behavior is a significant other, with the goal being to reorder life space or reduce mental discomfort and their thoughts are predominated by disconnectedness, deprivation and disappointment.[14]

Suicide and India

According to the National Crime Record Bureau data of 2015 , suicide rate in India is 10.6 per lakh population, which is much lower than WHO report (16.5 per lakh population) and has been criticized for underestimation due to stigma and legal issues related to suicide in India.[15] For a long time suicide was a criminal offence in India under section 309 IPC with imprisonment up to one year with or without fine but in 2008 and 2011, Law commission and Supreme Court respectively opined for its amendment; finally with the Mental Health Care Act 2017, section 309 IPC was repealed maintaining its reportable status.[16,17]

Warning signs of Suicide

Someone at risk of committing suicide often conveys suicidal thoughts or death wishes, guilt, feelings of being burden on others, having no reason to live, feeling empty or trapped and presence of emotional or bodily distress.[18]

Observable changes in usual behavioral pattern like withdrawal from near and dear ones, presence of preparatory behavior (making arrangement for suicide, writing suicide notes, etc), engagement in risky and impulsive behaviors (driving too fast, using drugs or alcohol in increased amounts and frequency), displaying extreme mood changes (or presence of sadness for too long), change in biological habits (eating or sleeping more or less) are also warning signs of impending suicide.[18]

Risk factors and protective factors for suicide

There are numerous risk factors reported in literature which can be categorized in various ways like biological (male gender, age above 65 years, Caucasian),

psychological (mood disorders, personality disorders, etc.), cognitive (e.g. inflexibility of thinking, poor problem solving skills) and environmental (e.g. loss of job, breakup in relationship, etc.); proximal (acute stressor) or distal (chronic stressor).[19] A few have been described below.

- Presence of stressor (abuse, family turmoil, social isolation, event triggering humiliation, chronic distressing medical illness, etc.)
- Active symptoms of mental illnesses (hopelessness, anhedonia, command hallucinations, etc.)
- Easy access to means like medicine, poison or firearms
- Co-morbid mental disorders with impaired judgement, poor insight, presence of impulsivity
- Presence of catastrophic stressor as core or associated phenomena (Depression, Psychosis, Substance use disorders, Cluster B personality disorders, conduct disorder, Attention Deficit Hyperactivity Disorder, Traumatic Brain injury sequel, Post traumatic stress disorder, etc.)
- Past history of self -injurious behavior like suicide attempt or deliberate self harm
- Family history of suicide attempt and mental disorders
- Recent changes in treatment course (discharge from mental health facility, change in doctor, change in medicine, etc.)

All of the above may be risk factors for suicide.[20] About half of the completed suicides are preceded by a failed attempt and history of prior suicide attempt increases the risk of future suicide by twenty three times. Unsuccessful attempt may be due to miscalculation of plan, but those people are at high risk of suicide in the future.[21]

The majority of suicide victims had at least one diagnosis of mental disorder in their lifetime; most common being mood disorders (30.2%), followed by substance use disorder (17.6%), schizophrenia (14.1%), and personality disorders (13%). [13,22]

Despite the many risk factors, there are few protective factors like the adequacy of coping repertoire, strong religious belief against suicide, responsibility to beloved (pet or children), positive therapeutic relationship with a physician, and presence of firm

social support; however they may not be strong enough to counter significant risk factors.[20]

Suicide risk assessment

Granello (2010) et al. [19] described twelve principles for suicide assessment, which are: 1. Suicide risk assessment yields best result with a team approach that includes corroboration of suicide inquiry from family and friends for better exploration, collaboration with them by sharing information for ensuring safety of concerned persons, and consultation with professionals for enhancing therapeutic care and legal protection. 2. Considering the uniqueness of every person, as much information as possible must be gathered to explore the interplay of warning signs and risk factors determining risk at the individual level. 3. Suicidal thoughts may be changing over time; besides, presence of ambiguity, irrational cognition and unstable emotional state may pose challenges to suicide risk assessment. 4.Due to the unstable nature of suicidality, it must be assessed on every session at least during life transitions, heightened stress and change in environmental support. 5. None of the rating instruments can replace sound clinical acumen of an experienced physician for suicide assessment. 6. Errors in assessment may occur; a false positive result may cause poor utilization of resources whereas a false negative result may cause fatalities, in that view it is recommended to entertain every positive result with sincerity. 7. All suicide threats and attempts should be considered as a plea for help and responded quickly by ensuring safety and exploring the hidden message behind such behavior. 8. Usually three types of messages may underlie a suicidal behavior; it may be a communication of intolerable psychological pain on failure of conventional communication, may be a wished means to control destiny or it may be simply be an escape behavior. 9. A direct open - ended question should be made, which limits miscommunication, but allows ambiguity and inconsistency to surface. 10. Assessment process also allows verbalization thus easing distress and may promote therapeutic relationship. 11. While assessing, cultural perspectives must be explored regarding attitudes toward suicidality and acceptability of therapeutic interventions. 12. Suicide assessment must be documented for better patient care and to avoid litigation.

Apart from the identification of warning signs and risk factors, suicide inquiry must include details of suicidal ideation (frequency, intensity, duration), plan (timing,

location and method) and intent (presence of rehearsals, ambivalence, person's expectation about success and lethality of plan).[20]

A past attempt made in isolation with active precaution against rescue or without any help seeking behavior during or after attempt, making future securing arrangements for beloved, presence of extensive preparation, presence of suicide note, unequivocal communication of intent, contemplation of suicide three hours before attempt, presence of regret for failed attempt, more than three previous attempts made and concomitant use of drugs or alcohol, are indicators for strong intent.[23]

After suicide inquiry is completed, stratification of risk may be attempted, which may be either quantitative or qualitative. There are various scales for Quantitative risk stratification. One of the popular scales among them is the SAD PERSONS scale which is acronym of sex, age, depression, previous suicide attempt, ethanol abuse, rational thinking loss, social support lacking, organized plan, no spouse, sickness; each of items carry 1/0 score as per their merit and a total score determines setting (home care/hospitalization) and frequency of care.[24]

Quantitative method has been criticized for being a crude and fallacious measure as it does not encompass the overall context of patients and strict cut off score can't predict suicide in person; hence it is not a suitable way to dictate clinical decision.[25,26]

Qualitative method categorises patients in three levels of risk group: high, moderate and low. Patients having psychiatric disorder with severe symptoms and/ or acute stress, associated with history of potentially lethal suicide attempt or persistent suicidal ideation with strong intent or preparatory behavior are regarded as at high risk and they are recommended for hospital admission with suicide precautions. Patients with multiple risk factors and few protective factors having suicidal ideation with plan but without intent or behavior, are considered at moderate risk and they may or may not require hospital admission depending on clinical judgement but crisis plan must be developed and telephonic assistance must be provided in case of home care. Patients with modifiable risk factors and strong protective factors having only passive death wish without plan, intent or behavior are considered at low risk; can be treated on outpatient basis but time to time telephonic assistance may be provided.[20]

Suicide prevention strategies

It may include, Call for help and suicide precautions. In hospital setting where mental health professionals, particularly psychiatrists are available, they can be consulted and collaborated for patient care, but in other settings where mental health practitioners are not readily available, assistance can be sought calling different helpline numbers available. In India, the Government of India launched "Kiran" - an initiative under ministry of social justice and empowerment, which provides 24X7 tele-health support through 1800-599-0019; NIMHANS, Bangalore, also provides similar support through 080-4611-0007 and National Helpline for Suicide Prevention of Indian Psychiatric Society is 1800-532-0807 (from 8 pm to 2 am).[27] These numbers may be provided to the patients or can be called on behalf of patients.

Suicide prevention in hospital settings, includes, environmental modifications, patient related strategies and staff training. Environmental modifications include: 1. Re-modelling of the psychiatric ward with enhanced safety features if possible and if not possible an a priori list must be prepared of safest wards in hospital. 2. Elimination of points suitable for hanging such as hooks, sprinkler head etc. 3. Installation of breakaway bars, shower curtain rods, closet rods etc. 4. Redesigning door locking mechanism so that patient can't lock the door from inside for too long. 5. Enhancement of monitoring systems or alarms. 6. Installation of non-breakable glass or plastic mirrors in window or door. 7. Avoidance of plastic can liner if possible 8. Installation of windows that don't open from inside or installation of rails on it. [28]

Patient related strategies include, routine room search, planned observation, restriction of patient movements, supervised medication,[29] reducing access to means like keeping sharp objects, medicines, poisonous material out of reach of the patient.[30] The levels of supervision depending on suicide risk are : L1(general observation, patient's location must be known to nursing staff at all time), L2(Patients must be checked every 15 min), L3(patient must be present within eyesight) and L4(for patients having highest risk, nursing staff supposed to be present at "arm length").[29] There must be dedicated set of staff only for observer duty; an observer must be changed every two hours to avoid burnout.[28] Patients must be monitored for warning signs and may require risk assessment before and after being allowed pass.[28]

Hospital staff related strategies include staff education regarding communication and attitude towards suicidal patients, training to ensure safety of cleaning fluids or medicine carts, adequate staffing to restrict unauthorized entry or exit into ward, screening of visitors for potentially lethal objects [29] and awareness regarding warning signs of suicide.[28]

Tips regarding communications and attitudes towards Suicidal patients

Reflective listening with appropriate use of silence, allowing patients to verbalise and vent, avoidance of consolation and critical comments are found to be effective in easing the patient's emotional distress.[19]

Myths & Facts about Suicide

There are certain myths and respective actual facts about suicide [31] described below. This may be a crucial knowledge that can promote better awareness and attitude towards suicidal persons.

Myth: Talking about suicide or asking someone if they feel suicidal will encourage suicide attempt.

Fact: talking about suicide opens opportunity for communication.

Myth : People who talk about Suicide never attempt suicide.

Fact: It can be a plea for help/ warning sign of upcoming suicide attempt.

Myth: Suicide attempt/ death happens without warning.

Fact: Survivors of suicide often say intention was hidden from them, it is more likely that intention was not recognized.

Myth: If a person attempt Suicide and survive, they will never make a further attempt.

Fact: Past suicide attempt is a risk factor for future suicide attempt.

Myth: Once a person is intent on suicide, there is no way of stopping them.

Fact: Suicide is preventable, suicide crisis can be relatively short-lived.

Myth: People who threaten suicide are just seeking attention.

Fact: Don't dismiss it as a means to gain attention; if you really give some attention you can save a life.

Myth: Suicide is hereditary.

Fact: Although suicide can be over-represented in some families it may be due sharing of common stressful family situations; attempts are not genetically inherited.

Myth: Only certain types of people become suicidal.

Fact: Everyone has the potential for suicide.

Myth: Suicide is painless.

Fact: Many suicidal methods are painful.

Myth: All people with thoughts of suicide are depressed.

Fact: Suicidal thoughts are one of criteria for depression, depression is the most common mental disorder associated with suicide, depression also contributes to suicide, but it need not be present for a person to attempt or die by suicide.

Myth: Break-up in relationships happen so frequently, they don't cause suicide.

Fact: Break up can precipitate suicide.

Myth: Every Suicide death is preventable.

Fact: No matter how well intentioned, alert and diligent the effort may be , there is no way of preventing every suicide.

Myth: The only effective intervention for suicide comes from professionals like Psychiatrist/ Psychologist.

Fact: All people who come in contact may help in crisis by emotional support, at least by observation.

Myth: Marked and sudden improvement in mental state of suicide attempter signifies that risk is over.

Fact: Evidence suggests that individuals are at most risk three months after recovery from suicide crisis.

Ethical issues in management of Suicidal patients

Patient's autonomy and confidentiality are the issues that may come into the way of management, however short - term paternalistic approach and divulging information during notification and collaborative care, are justifiable under principles of "Nonmaleficence" and "Duty to protect ". [32,33]

Suggested reading for Self-directed learning:

1. Clinical Practice Guidelines for Management of Suicidal Behaviour[34]
2. Mental Health Environment of Care Checklist (MHEOCC)[35]

References

1. Suicide [Internet]. [cited 2022 Jul 20]. Available from: https://www.who.int/news-room/fact-sheets/detail/suicide
2. WHO EMRO | Mental health gap action programme | Mental health [Internet]. [cited 2022 Jul 27]. Available from: http://www.emro.who.int/mnh/mental-health-gap-action-programme/index.html
3. Burnette C, Ramchand R, Ayer L. Gatekeeper Training for Suicide Prevention. Rand Health Q [Internet]. 2015 Jul 15 [cited 2022 Jul 27];5(1):16. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5158249/
4. Hawgood J, Woodward A, Quinnett P, De Leo D. Gatekeeper Training and Minimum Standards of Competency. Crisis [Internet]. 2022 Dec [cited 2023 May 15];43(6):516–22. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9716344/
5. O'Connor E, Gaynes B, Burda BU, Williams C, Whitlock EP. Table 1, Definitions of Suicide-Related Terms [Internet]. 2013 [cited 2022 Jul 21]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK137739/table/ch1.t1/
6. Suicidal Behavior - an overview | ScienceDirect Topics [Internet]. [cited 2022 Jul 27]. Available from: https://www.sciencedirect.com/topics/medicine-and-dentistry/suicidal-behavior
7. Sadock BJ, Sadock VA, Ruiz P. Kaplan & Sadock's Synopsis of Psychiatry: Behavioral Sciences/clinical Psychiatry. Wolters Kluwer; 2015. 1472 p.

8. RANE A, NADKARNI A. Suicide in India: a systematic review. Shanghai Arch Psychiatry [Internet]. 2014 Apr [cited 2022 Jul 19];26(2):69–80. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4120287/
9. Dutheil F, Aubert C, Pereira B, Dambrun M, Moustafa F, Mermillod M, et al. Suicide among physicians and health-care workers: A systematic review and meta-analysis. PLoS One. 2019;14(12):e0226361.
10. Das N, Khar P, Karia S, Shah N. Suicide among Health Care Professionals—An Indian Perspective. Healthcare [Internet]. 2022 Feb [cited 2022 Jul 26];10(2):354. Available from: https://www.mdpi.com/2227-9032/10/2/354
11. Association of US Nurse and Physician Occupation With Risk of Suicide | Nursing | JAMA Psychiatry | JAMA Network [Internet]. [cited 2022 Jul 26]. Available from: https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2778209
12. Goetz CS. Are you prepared to S.A.V.E. your nursing student from suicide? J Nurs Educ. 1998 Feb;37(2):92–5.
13. Sadock BJ, Sadock VA, Ruiz P. Kaplan & Sadock's Synopsis of Psychiatry: Behavioral Sciences/clinical Psychiatry. Wolters Kluwer; 2015. 1472 p.
14. Unni KES. Human Self Destructive Behavior. In: Vyas JN, Ahuja N.(eds.) *Textbook of Postgraduate Psychiatry.* 2nd ed. Jaypee Brother; 2008. p531.
15. Thippaiah SM, Nanjappa MS, Math SB. Suicide in India: A preventable epidemic. Indian J Med Res [Internet]. 2019 Oct [cited 2022 Jul 19];150(4):324–7. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902368/
16. Ranjan R, Kumar S, Pattanayak RD, Dhawan A, Sagar R. (De-) criminalization of attempted suicide in India: A review. Ind Psychiatry J [Internet]. 2014 [cited 2022 Jul 19];23(1):4–9. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4261212/
17. Vadlamani LN, Gowda M. Practical implications of Mental Healthcare Act 2017: Suicide and suicide attempt. Indian J Psychiatry [Internet]. 2019 Apr [cited 2022 Jul 27];61(Suppl 4):S750–5. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6482674/
18. Warning Signs of Suicide [Internet]. [cited 2022 Jul 21]. Available from: https://www.nimh.nih.gov/health/publications/warning-signs-of-suicide
19. Granello DH. The Process of Suicide Risk Assessment: Twelve Core Principles. Journal of Counseling & Development [Internet]. 2010 [cited 2022 Jul 22];88(3):363–70. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/j.1556-6678.2010.tb00034.x
20. SAFE-T Pocket Card: Suicide Assessment Five-Step Evaluation and Triage for Clinicians | SAMHSA Publications and Digital Products [Internet]. [cited 2022 Jul 27]. Available from: https://store.samhsa.gov/product/SAFE-T-Pocket-Card-Suicide-Assessment-Five-Step-Evaluation-and-Triage-for-Clinicians/sma09-4432
21. Suicidal Behavior - an overview | ScienceDirect Topics [Internet]. [cited 2022 Jul 27]. Available from: https://www.sciencedirect.com/topics/medicine-and-dentistry/suicidal-behavior.
22. Bertolote, J. M., Fleischmann, A., De Leo, D., & Wasserman, D. (2004). Psychiatric diagnoses and suicide: revisiting the evidence. *Crisis*, *25*(4), 147–155. https://doi.org/10.1027/0227-5910.25.4.147
23. Beck, R. W., Morris, J. B., & Beck, A. T. (1974). Cross-validation of the Suicidal Intent Scale. *Psychological reports*, *34*(2), 445–446. https://doi.org/10.2466/pr0.1974.34.2.445

24. Patterson WM, Dohn HH, Bird J, Patterson GA. Evaluation of suicidal patients: the SAD PERSONS scale. Psychosomatics. 1983 Apr;24(4):343–5, 348–9.
25. March;3:102-102 CP 2004. Revised 'SAD PERSONS' helps assess suicide risk [Internet]. [cited 2022 Jul 27]. Available from: https://www.mdedge.com/psychiatry/article/59790/depression/revised-sad-persons-helps-assess-suicide-risk
26. Cochrane-Brink KA, Lofchy JS, Sakinofsky I. Clinical rating scales in suicide risk assessment11Information about the rating scales can be obtained from the author. General Hospital Psychiatry [Internet]. 2000 Nov 1 [cited 2022 Jul 22];22(6):445–51. Available from: https://www.sciencedirect.com/science/article/pii/S0163834300001067
27. Mental Health Awareness | WBUHS [Internet]. [cited 2022 Jul 28]. Available from: https://wbuhs.ac.in/mental-health-awareness/
28. Tishler CL, Reiss NS. Inpatient suicide: preventing a common sentinel event. General Hospital Psychiatry [Internet]. 2009 Mar 1 [cited 2023 Jun 7];31(2):103–9. Available from: https://www.sciencedirect.com/science/article/pii/S0163834308001680
29. Navin K, Kuppili PP, Menon V, Kattimani S. Suicide Prevention Strategies for General Hospital and Psychiatric Inpatients: A Narrative Review. Indian J Psychol Med [Internet]. 2019 Sep 5 [cited 2022 Jul 28];41(5):403–12. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6753714/
30. Thippaiah SM, Nanjappa MS, Math SB. Suicide in India: A preventable epidemic. Indian J Med Res [Internet]. 2019 Oct [cited 2022 Jul 19];150(4):324–7. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6902368/
31. The Myths & Facts of Youth Suicide [Internet]. [cited 2022 Jul 27]. Available from: https://suicideprevention.nv.gov/Youth/Myths/
32. Kelly C, Dale E. Ethical perspectives on suicide and suicide prevention. Advances in Psychiatric Treatment [Internet]. 2011 May [cited 2023 Jun 9];17(3):214–9. Available from: https://www.cambridge.org/core/journals/advances-in-psychiatric-treatment/article/ethical-perspectives-on-suicide-and-suicide-prevention/68ECBD1F07C36A62E1CF1E8C3343AD4C
33. Ethical and Philosophical Issues in Suicide [Internet]. Springer Publishing Company; 2021 [cited 2023 Jun 9]. Available from: https://connect.springerpub.com/content/book/978-0-8261-3515-5/part/part01/chapter/ch01
34. Sarkhel S, Vijayakumar V, Vijayakumar L. Clinical Practice Guidelines for Management of Suicidal Behaviour. Indian Journal of Psychiatry [Internet]. 2023 Feb [cited 2023 Jun 9];65(2):124. Available from: https://journals.lww.com/indianjpsychiatry/Fulltext/2023/65020/Clinical_Practice_Guidelines_for_Management_of.6.aspx
35. VA.gov | Veterans Affairs [Internet]. [cited 2023 Jun 9]. Available from: https://www.patientsafety.va.gov/professionals/onthejob/mentalhealth.asp

Correspondence Address: Dr Avik Chakraborty
C/L- 1, Jyangra, Ghoshpara (Near Sishu Kalyan Sangha),
P.O- Jyangra B.O, P.S- Baguiati, Kolkata-700059, West Bengal, India
Email: brain26091986@yahoo.com