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Effectiveness of Suicide Prevention Programs in Iran: A Systematic Review Protocol

Mania Naseri Manesh [1], Seyed Kazem Malakouti [2], Diego De leo [3], Morteza Naserbakht [1], Mozhgan Taban [1,*]

[1] Mental Health Research Center, Psychosocial Health Research Institute, Iran University of Medical Sciences, Tehran, Iran
[2] Geriatric Mental Health Research Center, School of Behavioral Sciences and Mental Health, Iran University of Medical Sciences, Tehran, Iran
[3] Australian Institute for Suicide Research and Prevention, Griffith University, Queensland, Australia

[*] ***Corresponding Author:*** Department of Psychiatry, Mental Health Research Center, Psychosocial Health Research Institute, School of Medicine, Iran University of Medical Sciences, Tehran, Iran. Email: taban.mozhgan@gmail.com

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Abstract

Context: Suicide is a serious public health problem and a leading cause of preventable mortality worldwide. Although several suicide prevention interventions have been implemented in Iran, no comprehensive systematic synthesis has assessed their effectiveness across settings and populations while considering the country's cultural, religious, and health care context. Regional differences, socioeconomic inequalities, and underreporting due to stigma further complicate the evidence. This systematic review and meta-analysis protocol aims to identify, appraise, and synthesize evidence on the effectiveness of interventions implemented in Iran to reduce suicidal ideation, suicide attempts, reattempts, self-harm behaviors, and suicide mortality. Intervention characteristics, settings, and target populations will also be examined to identify effective, culturally relevant approaches. Findings will be disseminated through peer-reviewed publications, national conferences, policy briefs, stakeholder engagement, and open-access repositories to inform national prevention initiatives.

Evidence Acquisition: A systematic search of PubMed/MEDLINE, Web of Science, Scopus, Google Scholar, Irandoc, Magiran, and the Scientific Information Database (SID) will cover publications from 1990 to 2025. Eligibility will be determined using the Population, Intervention, Comparator, Outcomes, and Study Design (PICOS) framework. The population will comprise individuals of any age residing in Iran who have suicidal behaviors; mixed samples will be eligible only if Iranian-specific data are separately extractable. Interventions will include psychological, pharmacological, and psychosocial suicide prevention strategies with measurable pre- and post-intervention outcomes, categorized by setting (clinical, school, community, primary care, ecological, or field) and delivery level (universal, selective, or indicated). Comparators will include usual care, no intervention, or alternative interventions. Primary outcomes, in hierarchical order, will be suicide mortality, attempts, reattempts (≥3-month follow-up), and ideation assessed using validated instruments; secondary outcomes will include self-harm, depression, and hopelessness. Eligible designs will include randomized controlled trials (RCTs), quasi-experimental studies, cohort studies, and ecological studies with at least one comparison group or pre-post measure. English- and Persian-language studies will be included. Two reviewers will independently screen studies, extract data, and assess quality using design-specific Joanna Briggs Institute (JBI) tools. Random-effects meta-analysis will be performed if ≥ 3 comparable studies are available. Heterogeneity will be assessed using I^2, subgroup analyses will be conducted by intervention type, age, gender, and setting, and publication bias will be assessed using funnel plots and Egger's test if ≥ 10 studies are available. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach will be used to assess evidence certainty. Economic data, including costs and incremental cost-effectiveness ratios, will be synthesized narratively.

Results: The final review will present findings using a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram, summary tables of study characteristics, risk-of-bias summaries, forest plots where meta-analysis is feasible, and a narrative synthesis following the synthesis without meta-analysis (SWiM) guidelines for outcomes unsuitable for meta-analysis. If fewer than three studies are eligible for meta-analysis, a qualitative synthesis will highlight evidence gaps. The discussion will synthesize key findings; address limitations, including publication bias, heterogeneity, and underreporting due to stigma; compare the findings with World Health Organization (WHO) global strategies; discuss implications for Iranian policy and practice; and identify future research directions, including RCTs in underrepresented regions and culturally adapted interventions.

Conclusions: This protocol outlines a systematic review intended to provide the first comprehensive synthesis of evidence on suicide prevention interventions in Iran. By identifying effective, culturally appropriate interventions, the findings will inform national suicide prevention plans and resource allocation and support alignment with United Nations Sustainable Development Goal 3.4. By disseminating the findings to multiple stakeholders, the review aims to support evidence-informed initiatives to reduce the societal burden of suicide in Iran. PROSPERO registration number: CRD42023416110

Keywords: Suicide, Prevention, Intervention, Protocol, Systematic Review, Meta-analysis, Suicidal Ideation, Mental Health Interventions, Iran, Cost-effectiveness

1. Context

Suicide is a major global public health issue (1). Its devastating effects extend to individuals, families, and health systems worldwide (2, 3). A growing body of research indicates that suicide prevention can be addressed through multilevel approaches involving public education, stronger health systems, restricted access to lethal means, and therapeutic interventions (4, 5).

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Although suicide mortality is declining worldwide (6), Iran is experiencing a substantial increase, with an average suicide mortality rate of approximately 9.9 per 100,000 population (7, 8). Iran launched a national suicide prevention program in 2010 and integrated it into the primary health care system. The program includes initial screening, referral systems, media training, and postdischarge services (9). However, it has not reversed the increasing trend. The lifetime prevalence estimates for suicidal thoughts, plans, and attempts are 12.7%, 6.2%, and 3.3%, respectively (10). This increase despite prevention efforts may reflect limited intervention effectiveness, uneven implementation across provinces, regional differences, socioeconomic pressures, and underreporting due to stigma (9, 11).

Considerable regional variation exists in Iran. For example, Ilam Province has a suicide mortality rate of 20 per 100,000 population, whereas central provinces have lower rates (11). Suicide deaths are more common among males, who account for approximately 65% of deaths, whereas suicide attempts are more common among females. Most deaths occur among people aged 15 - 34 years (11, 12). Urban-rural differences have also been observed and may reflect reduced access to services (13). Mental health stigma, religious beliefs, delayed help-seeking, socioeconomic inequality, and suicide misclassification also influence intervention effectiveness and data reliability (12, 14, 15).

Various therapeutic strategies have been investigated in Iran, including cognitive-behavioral therapy, dialectical behavior therapy, pharmacotherapy, electroconvulsive therapy, means restriction, and aftercare services (16-22). Recent Iranian studies of multilevel primary care interventions (23), gatekeeper training in military settings (24), and qualitative risk factors (25) provide relevant contextual insights. However, most existing studies have methodological limitations, including small samples, short follow-up periods, lack of controls, limited cultural adaptation, and unclear risk of bias. Few have examined long-term effectiveness or scalability (23, 24). No comprehensive systematic review has synthesized the effectiveness, cost-effectiveness, and contextual applicability of these interventions specifically in Iran (11, 19). This protocol therefore aims to consolidate the evidence to guide clinical practice and national policy and ultimately reduce the burden of suicide in Iran.

1.1. Objectives

This systematic review aims to identify, appraise, and synthesize evidence on the effectiveness of suicide prevention interventions implemented in Iran. It will assess the effects of different interventions on suicidal thoughts, suicide attempts, reattempts, and suicide mortality across demographic groups and intervention settings.

The specific objectives are to:

1) Identify and describe the methodological approaches used in suicide prevention in Iran.

2) Identify the settings in which suicide prevention interventions have been implemented.

3) Evaluate the types of interventions used, including pharmacological and nonpharmacological approaches.

4) Examine the target populations of suicide prevention interventions.

The review will address the following research questions:

1) What nonpharmacological interventions have been used, and how effective are they? Effectiveness will be measured using risk ratios (RRs) or odds ratios (ORs) with 95% confidence intervals (CIs) for dichotomous outcomes and mean differences (MDs) or standardized mean differences (SMDs) with 95% CIs for continuous outcomes.

2) What pharmacological interventions have been used, and how effective are they?

3) In which settings have suicide prevention activities been conducted?

4) How effective are interventions in clinical settings compared with field settings?

5) What are the cost-effectiveness and cost-benefit findings for interventions, where reported? Cost-effectiveness will be measured as the cost per unit of outcome, such as the cost per suicide attempt prevented or per quality-adjusted life-year (QALY) or disability-adjusted life-year (DALY) averted. Incremental cost-effectiveness ratios (ICERs) will be extracted where available.

Secondary objectives focus on quantifying the effects of programs in reducing suicidal ideation, suicide attempts, and suicide mortality.

2. Evidence Acquisition

2.1. Original Planned Timeline

This systematic review protocol was registered in September 2023 (PROSPERO: CRD42023416110). Under the original planned schedule, the literature search was scheduled for October - November 2025, study selection and screening for November - December 2025, and data extraction and quality assessment for December 2025 - January 2026. Data synthesis and manuscript preparation were planned for September 2026, and final manuscript submission was planned for November 2026. These dates describe the original planned schedule rather than

confirmed completion dates. January 1990 was selected as the start of the search period to cover modern interventions introduced following the establishment of Iran's primary healthcare network and the initiation of systematic suicide data reporting. The protocol also provides for the inclusion of newly identified studies during the review process if they meet the eligibility criteria and are published before the final analysis. Any amendments resulting from delays will be recorded in PROSPERO.

2.2. Study Design

This study will be conducted as a systematic review and, where feasible, a meta-analysis, following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) guidelines. The review will systematically identify, select, appraise, and synthesize evidence on suicide prevention interventions in Iran.

2.3. Search Strategy

A comprehensive systematic search will be conducted in international and national electronic databases, including PubMed, Web of Science (ISI), Scopus, Google Scholar, Irandoc, Magiran, and the Scientific Information Database (SID), to identify relevant articles. The search will cover studies published from January 1990 to December 2025. A multidisciplinary team of specialists in psychiatry, psychology, and social medicine will develop the search strategy using controlled vocabulary, such as Medical Subject Headings (MeSH), and free-text terms related to suicide, self-harm, intervention or prevention strategies, and Iran.

The initial search strategy will be developed for PubMed and then adapted to the indexing systems and search requirements of the other databases.

Sample search string for PubMed:

("Suicide"[Mesh] OR "Suicidal Ideation"[Mesh] OR "Self-Injurious Behavior"[Mesh]

OR "suicide attempt"[tiab] OR "suicidal behavior"[tiab] OR "self-harm"[tiab])

AND ("Prevention"[Mesh] OR "Intervention"[tiab] OR "Program"[tiab] OR

"therapy"[Subheading] OR "treatment"[tiab]) AND ("Iran"[Mesh] OR "Iran"[tiab]

OR "Persia"[tiab] OR "Tehran"[tiab] OR "Isfahan"[tiab] OR "Mashhad"[tiab] OR

"Shiraz"[tiab] OR "Tabriz"[tiab]).

2.3.1. Persian-Database Search Strategies

Complete, reproducible search strategies will be developed for SID, Magiran, and Irandoc. These strategies will specify Persian search terms and synonyms, Boolean operators, search fields (title, abstract, and keywords), date limits of 1990 - 2025, and Persian-language restrictions. Database-specific adaptations will reflect each platform's search interface. The restriction to English and Persian is justified by the review's focus on interventions implemented in Iran: Persian is the country's primary language of scientific publication, whereas English captures international studies reporting on Iranian populations.

To maximize study identification, the reference lists of all included articles and relevant reviews will be screened manually for additional eligible studies. Clinical trial registries and gray literature sources will also be searched for ongoing or unpublished studies where available.

2.4. Eligibility Criteria

2.4.1. Participants

Studies involving individuals of any age or gender who reside in Iran and have suicidal ideation, suicide plans, or suicide attempts, or who die by suicide, will be eligible. Studies with mixed Iranian and non-Iranian samples will be included only if Iranian-specific data are separately extractable.

2.4.2. Interventions

Eligible interventions will include suicide prevention strategies aimed at reducing suicidal behaviors, including psychological approaches such as cognitive-behavioral therapy and dialectical behavior therapy; pharmacological approaches such as antidepressants; psychosocial approaches such as means restriction; educational interventions; and gatekeeper-focused interventions. Studies must report measurable pre- and post-intervention outcomes related to suicidal behaviors or associated psychological indicators.

A direct suicide prevention intervention will be defined as a strategy explicitly targeting suicide risk reduction as a primary or co-primary outcome. General mental health or depression treatments will be included only if suicide-related outcomes are reported. Interventions will be categorized by delivery setting, including clinical settings such as hospitals and primary care, schools, communities, ecological settings, and field settings, and by delivery level: universal, selective, or indicated.

2.4.3. Comparators

Eligible comparators may include usual care, no intervention, waiting-list controls, alternative interventions such as psychological, pharmacological, or community-based programs, and age- and sex-matched comparators. Comparable populations or geographic regions may serve as comparators in ecological and field studies.

2.4.4. Eligible Study Designs

Eligible designs will include randomized controlled trials (RCTs), quasi-experimental studies, controlled before-and-after studies, cohort studies, and ecological or population-based studies with at least one comparison group or pre-post measure.

2.4.5. Outcomes

Changes in suicidal ideation severity, suicide attempts, reattempts, and suicide mortality will be considered primary outcomes. The following hierarchical order will be applied:

1) Suicide mortality: death resulting from intentional self-harm, confirmed by medical or forensic records.

2) Suicide attempts: self-injurious behavior with intent to die.

3) Suicide reattempts: subsequent attempts following an index attempt, with a minimum follow-up of 3 months.

4) Suicidal ideation: thoughts of engaging in suicide-related behavior, measured using validated instruments such as the Beck Scale for Suicide Ideation (BSSI).

Acceptable follow-up periods will be at least 1 month after intervention for ideation and 3 months for attempts and mortality. When multiple instruments assess the same outcome, validated and standardized instruments will be prioritized over nonvalidated instruments. Secondary outcomes may include other reported psychological or behavioral indicators related to suicidal behavior, such as self-harm behaviors, psychological distress, depression, and hopelessness.

2.4.6. Exclusion Criteria

Studies without measurable suicide-related outcomes will be excluded. Gray literature will be included only if it originates from verifiable institutional sources, such as university reports or ministry publications, and has documented methodological rigor.

2.4.7. Language

Only studies published in English or Persian will be included for the reasons described above.

2.5. Study Selection and Data Management

Study selection will follow the Population, Intervention, Comparator, Outcomes, and Study Design (PICOS) framework. All retrieved records will be imported into EndNote for reference management and duplicate removal. Two reviewers will independently screen titles and abstracts against the predefined eligibility criteria. The same reviewers will then independently assess the full texts of potentially eligible studies.

Disagreements will be resolved through discussion and consensus. If disagreement persists, a third reviewer will adjudicate. The selection process will be documented using a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram.

2.6. Data Extraction

Two reviewers will independently extract data using a standardized form developed for this review. Extracted information will include study characteristics, participant demographics, intervention details, outcomes, and results, including authors, publication year, study location and setting, design, participant characteristics, inclusion and exclusion criteria, sample size, mean differences in ideation, and odds ratios for attempts.

For each intervention, the following will also be extracted, where reported: the underlying theory or framework, program components, implementation model, intensity and duration, follow-up periods, maintenance of effects, and long-term suicide-related outcomes, defined as ≥ 12 months after the intervention. When required data are incomplete or unclear, attempts will be made to contact the corresponding authors of the original studies.

2.7. Risk of Bias and Quality Assessment

Two reviewers will independently assess the methodological quality and risk of bias of included studies using Joanna Briggs Institute (JBI) critical appraisal tools appropriate to each design:

1) JBI Checklist for Randomized Controlled Trials.

2) JBI Checklist for Quasi-Experimental Studies (non-randomized experimental studies).

3) JBI Checklist for Cohort Studies.

4) JBI Checklist for Analytical Cross-Sectional Studies, if applicable.

For ecological or population-based studies without a comparison group, the JBI Checklist for Prevalence Studies will be adapted to focus on data quality and representativeness.

Studies will be evaluated across domains relevant to methodological rigor, including participant selection, exposure or intervention assessment, outcome measurement, confounding control, and completeness of follow-up. Risk-of-bias judgments (low, moderate, or high) will be used to: 1) inform the narrative synthesis by weighting the evidence, 2) conduct sensitivity analyses excluding high-risk studies, 3) interpret subgroup analyses, and 4) downgrade Grading of Recommendations Assessment, Development and Evaluation (GRADE) certainty ratings, where applicable. Disagreements will be resolved through discussion or consultation with a third reviewer.

2.8. Data Synthesis and Statistical Analysis

Quantitative synthesis through meta-analysis will be performed when sufficient methodological and clinical homogeneity exists. Meta-analysis will be conducted only when at least three studies have sufficiently comparable populations, interventions, and outcome measures.

2.8.1. Effect Measures

For dichotomous outcomes, such as suicide attempts or deaths by suicide, pooled estimates will be calculated using RRs or ORs with 95% CIs. For continuous outcomes, such as suicidal ideation scores or related psychological measures, pooled estimates will be calculated using MDs or SMDs with 95% CIs, depending on the consistency of the measurement scales.

2.8.2. Economic Evaluation Synthesis

Where reported, economic data will be extracted, including costs in Iranian rials or US dollars, cost-effectiveness ratios such as cost per QALY or DALY averted, cost-benefit ratios, and ICERs. The currency and price year will be recorded. Economic findings will be synthesized narratively. Where applicable, the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) checklist will provide supplementary guidance. If no economic evidence is identified, this will be reported explicitly as an evidence gap.

2.8.3. Statistical Models

A random-effects model will be the primary analytical approach because substantial clinical and methodological heterogeneity is anticipated. Fixed-effect models may also be explored in sensitivity analyses when heterogeneity is minimal.

2.8.4. Assessment of Heterogeneity

Statistical heterogeneity will be assessed using Cochran's χ^2 test, the τ^2 statistic, and the I^2 statistic. Heterogeneity will be interpreted as follows:

$I^2 < 40\%$: low heterogeneity.

$I^2 = 40 - 75\%$: moderate heterogeneity.

$I^2 > 75\%$: substantial heterogeneity.

Potential sources of heterogeneity will be explored through subgroup analyses, where feasible.

2.8.5. Subgroup Analyses

Where sufficient data are available, subgroup analyses may be conducted by study design, age group, gender, intervention type, and setting (clinical, community, or school).

2.8.6. Sensitivity Analyses

Sensitivity analyses will exclude studies with high risk of bias or extreme effect sizes to assess the robustness and stability of pooled estimates.

2.8.7. Publication Bias

Publication bias will be assessed using funnel plots, Begg's assessment of funnel plot symmetry, and Egger's regression test when at least ten studies are included in a meta-analysis.

2.8.8. Certainty of Evidence

The GRADE approach will be used to assess the certainty and overall quality of evidence for major outcomes, considering risk of bias, inconsistency, indirectness, imprecision, and publication bias.

2.9. Ethics and Dissemination

Ethical approval is not required for this study design. However, the Ethics Committee of the Iran University of Medical Sciences granted approval for related preliminary work.

The findings will be disseminated through the following channels: 1) peer-reviewed publications in international and national journals; 2) presentations at national and international conferences on suicide prevention and mental health; 3) policy briefs for the Iranian Ministry of Health and Medical Education; 4) workshops and seminars for clinicians, primary care providers, and mental health professionals; 5) engagement with stakeholders, including the National Suicide Prevention Program office; and 6) open-access repositories.

All protocol revisions, including updates to saved searches and analysis methods, will be documented and incorporated into the bibliographic databases used for data collection and synthesis. The review aims to examine suicide prevention strategies in Iran within its socioeconomic and cultural context, identify effective programs, and demonstrate their applicability in primary health care and clinical settings. The findings may support the integration of effective programs into national suicide prevention initiatives and address evidence gaps in Iran. Protocol amendments will be documented in PROSPERO and bibliographic databases.

3. Results

The final systematic review will present findings using a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram documenting study selection; summary tables of study characteristics (design, sample size, interventions, and outcomes); risk-of-bias summaries using Joanna Briggs Institute (JBI) tools; forest plots where meta-analysis is feasible; and a narrative synthesis following the synthesis without meta-analysis (SWiM) guidelines for outcomes unsuitable for meta-analysis. If fewer than three studies are eligible for meta-analysis, a qualitative synthesis will highlight evidence gaps and the need for further primary research.

4. Conclusions

This protocol outlines a systematic review intended to provide the first comprehensive synthesis of evidence on suicide prevention interventions in Iran. By identifying effective, culturally appropriate interventions, the findings will inform national suicide prevention strategies, mental health resource allocation, and alignment with United Nations Sustainable Development Goal 3.4, which addresses premature mortality from noncommunicable diseases. The review aims to support evidence-informed action to reduce the societal burden of suicide in Iran by disseminating its findings to multiple stakeholders through peer-reviewed publications, policy briefs, and clinician workshops.

4.1. Planned Discussion

The discussion will synthesize findings on the most effective interventions across settings and populations. It will address limitations, including publication bias in Persian-language literature, heterogeneity, and cultural reporting biases, such as stigma-related underreporting. Findings will be compared with global strategies of the World Health Organization. Implications for Iranian policy and practice will include the potential expansion of cost-effective programs in primary care. Future research directions will include RCTs in underrepresented regions and culturally adapted interventions.

Footnotes

AI Use Disclosure: clude was used for text editing in the introduction section at a Minor level.

Authors' Contribution: Project Conception: S. K. M.; Protocol Writing and Final Approval: S. K. M., M. T., and M. A. N.; Protocol Co-Writing, Critical Review, and Final Approval: M. T., M. O. N., and D. D.; Protocol Development: S. K. M., M. N., M. N., D. D., and M. T.; Literature Search: S. K. M., M. N., and M. T.; Guarantor: M. T.; All authors read and approved the final protocol.

Conflict of Interests Statement: The authors declare that they have no conflicting interests.

Data Availability: The datasets generated and/or analyzed during the current systematic review will not include primary participant data. The extracted data, search strategies, study selection records, and data extraction forms will be available from the corresponding author upon reasonable request. Any additional materials related to the review process may also be shared to support transparency and reproducibility.

Ethical Approval: Due to the characteristics of this study design, ethical approval is not required. However, the Ethics Committee of the Iran University of Medical Sciences (code: IR.IUMS.REC.1402.666) granted ethics approval for the related preliminary work of this project.

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References

1. World Health Organization. *Preventing suicide: a global imperative*. Geneva: World Health Organization; 2014.
2. Zalsman G, Hawton K, Wasserman D, van Heeringen K, Arensman E, Sarchiapone M, et al. Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry*. 2016;**3**(7):646-59. [PubMed ID: 27289303]. https://doi.org/10.1016/S2215-0366(16)30030-X.
3. Fakhari A, Azizi H, Farahbakhsh M, Esmaeili ED. Effective Programs on Suicide Prevention: Combination of Review of Systematic Reviews with Expert Opinions. *Int J Prev Med*. 2022;**13**(1):39. [PubMed ID: 35529514]. [PubMed Central ID: PMC9069150]. https://doi.org/10.4103/ijpvm.IJPVM_454_20.
4. Doty B, Bass J, Ryan T, Zhang A, Wilcox H. Systematic review of suicide prevention studies with data on youth and young adults living in low-income and middle-income countries. *BMJ Open*. 2022;**12**(9).

e055000. [PubMed ID: 36691131]. [PubMed Central ID: PMC9453991]. https://doi.org/10.1136/bmjopen-2021-055000.

5. Hofstra E, van Nieuwenhuizen C, Bakker M, Özgül D, Elfeddali I, de Jong SJ, et al. Effectiveness of suicide prevention interventions: A systematic review and meta-analysis. *Gen Hosp Psychiatry*. 2020;**63**:127-40. [PubMed ID: 31078311]. https://doi.org/10.1016/j.genhosppsych.2019.04.011.
6. Ilic M, Ilic I. Worldwide suicide mortality trends (2000 - 2019): A joinpoint regression analysis. *World J Psychiatry*. 2022;**12**(8):1044-60. [PubMed ID: 36158305]. [PubMed Central ID: PMC9476842]. https://doi.org/10.5498/wjp.v12.i8.1044.
7. Hassanian-Moghaddam H, Zamani N. Suicide in Iran: the facts and the figures from nationwide reports. *Iran J Psychiatry*. 2017;**12**(1):73-7. [PubMed ID: 28496505]. [PubMed Central ID: PMC5425355].
8. Hajebi A, Abbasi-Ghahramanloo A, Hashemian SS, Khatibi SR, Ghasemzade M, khodadost M. Risk-taking behaviors and subgrouping of suicide in Iran: A latent class analysis of national registries data. *Psychiatry Res*. 2017;**255**:355-9. [PubMed ID: 28609673]. https://doi.org/10.1016/j.psychres.2017.05.052.
9. Rezaeian M, Platt S, Arensman E. Iran's National Suicide Prevention Program. *Crisis*. 2022;**43**(4):344-7. [PubMed ID: 34042463]. https://doi.org/10.1027/0227-5910/a000788.
10. Shooshtary MH, Malakouti SK, Bolhari J, Nojomi M, Poshtmashhadi M, Asgharzadeh Amin S, et al. Community study of suicidal behaviors and risk factors among Iranian adults. *Arch Suicide Res*. 2008;**12**(2):141-7. [PubMed ID: 18340596]. https://doi.org/10.1080/13811110701857475.
11. Sayehmiri K, Ashraf Mozafari A, Valizadeh R, Yadeghari N, Rostamkhani M, Khorshidi A, et al. Rate and Causes of Suicide in Ilam: A Report of the Suicide Registry. *Iran J Psychiatry*. 2022;**17**(3):312-9. [PubMed ID: 36474690]. [PubMed Central ID: PMC9699812]. https://doi.org/10.18502/ijps.v17i3.9732.
12. Sadeghi M, Ahmadinia H, Ayoobi F, Rezaeian M. Resilience and Suicidal Thoughts in Young People: Based on the Rafsanjian Youth Cohort Study. *Arch Iran Med*. 2023;**26**(11):623-8. [PubMed ID: 38310422]. [PubMed Central ID: PMC10864940]. https://doi.org/10.34172/aim.2023.92.
13. Malakouti SK, Nojomi M, Poshtmashadi M, Hakim Shooshtari M, Mansouri Moghadam F, Rahimi-Movaghar A, et al. Integrating a suicide prevention program into the primary health care network: a field trial study in Iran. *Biomed Res Int*. 2015;**2015**:193729-9. [PubMed ID: 25648221]. [PubMed Central ID: PMC4306260]. https://doi.org/10.1155/2015/193729.
14. Kabir H, Wayland S, Maple M. Qualitative research in suicidology: a systematic review of the literature of low- and middle-income countries. *BMC Public Health*. 2023;**23**(1). 918. [PubMed ID: 37208634]. [PubMed Central ID: PMC10199541]. https://doi.org/10.1186/s12889-023-15767-9.
15. Canbolat F. *A qualitative research on suicide notes: mental representations in suicide notes of men [doctoral thesis]*. Ankara: Middle East Technical University; 2018.
16. Afrasiabifar A, Hosseini N, Haghgoo A. The Effects of Group Cognitive Behavior Therapy (GCBT) on Suicidal Thoughts in Patients with Major Depression. *World Family Medicine*. 2018;**16**(2):228-35. https://doi.org/10.5742/MEWFM.2018.93293.
17. Zamani N, Jahangir AH, Noohi S, Nikdel Teimouri N. Effectiveness of Dialectical Behavior Therapy for Reducing Suicidal Thoughts (Suicidal Ideations) in Suicide Attempters with a History of Previous Suicide. *Health Research Journal*. 2016;**1**(3):161-9. https://doi.org/10.18869/acadpub.hrjbaq.1.3.161.
18. Varmaghani P, Alipour F, GhaedAmini Harouni G, Javadi MH. The Effectiveness of Group Social Work Intervention with Resolving the Problem of Reducing Suicidal Ideation in Qorveh City. *USWR*. 2019;**20**(3):286-97. https://doi.org/10.32598/rj.20.3.286.
19. Malakouti SK, Nojomi M, Ghanbari B, Rasouli N, Khaleghparast S, Farahani IG. Aftercare and Suicide Reattempt Prevention in Tehran, Iran. *Crisis*. 2022;**43**(1):18-27. [PubMed ID: 33563037]. https://doi.org/10.1027/0227-5910/a000754.
20. Kheirabadi D, Kheirabadi GR, Mirlohi Z, Tarrahi MJ, Norbaksh A. Comparison of Rapid Antidepressant and Antisuicidal Effects of Intramuscular Ketamine, Oral Ketamine, and Electroconvulsive Therapy in Patients With Major Depressive Disorder: A Pilot Study. *J Clin Psychopharmacol*. 2020;**40**(6):588-93. [PubMed ID: 33060432]. https://doi.org/10.1097/JCP.0000000000001289.
21. Keshtkar M, Ghanizadeh A, Firoozabadi A. Repetitive transcranial magnetic stimulation versus electroconvulsive therapy for the treatment of major depressive disorder, a randomized controlled clinical trial. *J ECT*. 2011;**27**(4):310-4. [PubMed ID: 22080240]. https://doi.org/10.1097/YCT.0b013e318221b31c.
22. Hajebi A, Ahmadzad-Asl M, Ershadi M, Nikfarjam A, Davoudi F. National registration system of suicide behaviors in Iran: barriers and challenges. *Arch Suicide Res*. 2013;**17**(4):416-25. [PubMed ID: 24224674]. https://doi.org/10.1080/13811118.2013.803445.
23. Mohamadian F, Rostamkhani M, Veisani Y, Aibod S. Evaluating the effectiveness of an educational-therapeutic intervention program in reducing suicide and suicide attempts in comprehensive health centers of Ilam, Iran. *Iran J Psychiatry Behav Sci*. 2025;**19**(4). e161779. https://doi.org/10.5812/ijpbs-161779.
24. Mehravar M, Shahmiri H, Ebrahimi M, Rahnejat AM. Effectiveness of the Gatekeeper-Based Suicide Prevention Training Package in Improving the Attitude and Enhancing the Knowledge About Suicide Prevention in Iran Army Commanders. *Ann Mil Health Sci Res*. 2023;**21**(4). e141853. https://doi.org/10.5812/amh-141853.
25. Mohamadian F, Fakour Y, Menati W, Menati R. Qualitative Exploration of Factors Contributing to Suicide: Perspectives of the Deceased's Family Members. *Health Scope*. 2025;**15**(1). https://doi.org/10.5812/healthscope-165563.