The Relationship Between Spirituality and Suicide Incidence Among Adolescents: A Literature Review

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This study aims to systematically review the relationship between spirituality and suicide occurrence in adolescents. A systematic literature search was conducted on PubMed, ScienceDirect, and Google Scholar for articles published between 2013 and 2023. After screening 287 records, 16 observational studies (cross-sectional, cohort, case-control) involving 58,674 adolescents from various countries, including Indonesia, met the inclusion criteria. The majority of studies (13/16) demonstrated a significant negative association between spirituality and suicidal ideation, attempts, and completed suicide. Dimensions of meaning in life and positive religious coping emerged as the strongest protective factors. Spirituality reduced suicide risk by up to 55% through mechanisms of enhanced resilience, hope, moral objections, emotion regulation, and faith-based social support. These protective effects were stronger in highly religious sociocultural contexts. The findings underscore the importance of incorporating spiritual assessment and spiritually integrated interventions into adolescent suicide prevention programs, particularly in settings where religious values are salient. This review provides a comprehensive synthesis of current evidence and highlights the multidimensional role of spirituality as a protective factor against youth suicide.
Keywords: spirituality; suicide; adolescents; literature review; protective factor.

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1. Introduction

Suicide is an urgent global public health problem. The World Health Organization reported more than 700,000 suicide deaths annually, making suicide the fourth leading cause of death among individuals aged 15–29 years (World Health Organization [WHO], 2021). In Indonesia, the official suicide rate is approximately 3.7 per 100,000 population; however, experts suspect substantial underreporting due to stigma and legal considerations (Onie et al., 2022). Adolescents are in a vulnerable developmental transition period, during which identity exploration, emotional instability, and academic and social pressures may increase susceptibility to suicidal behavior (Patton et al., 2016).

Numerous epidemiological studies have identified risk factors for adolescent suicide, including depressive disorders, previous suicide attempts, bullying, social isolation, substance abuse, and family dysfunction (Hawton et al., 2012). Nevertheless, understanding of protective factors, particularly spirituality, remains relatively limited. Spirituality is defined as the search for meaning, purpose, and connection with something transcendent, whether within or outside the framework of organized religion (Puchalski et al., 2014). This concept differs from religiosity, which emphasizes formal religious practices, although the two constructs often overlap.

Studies among adult populations have consistently demonstrated that spirituality and religiosity play protective roles against suicide through mechanisms such as enhanced coping, moral prohibitions, and social integration (Koenig, 2012; Dervic et al., 2004). However, whether these findings can be fully generalized to adolescents requires further investigation. Adolescents experience dynamic spiritual

development; some may abandon childhood beliefs, while others seek new forms of personal spirituality (Good & Willoughby, 2014). This uniqueness necessitates a specific analysis focused on the adolescent population.

Previous studies examining this topic have generally focused on adult populations or have measured only formal religiosity, without exploring the more personal and intrinsic dimensions of spirituality. In Indonesia, research on spirituality and adolescent suicide remains scarce, despite the country's strong religious and cultural values providing a relevant context for examining the role of spirituality. The novelty of this review lies in its comprehensive synthesis of global empirical evidence specifically linking various dimensions of spirituality with the spectrum of suicidal behavior among adolescents, as well as in identifying the underlying mechanisms with particular emphasis on implications for the Indonesian context.

Accordingly, the research question of this study is: What is the relationship between spirituality and suicide incidence among adolescents based on current literature evidence? The objective of this review is to analyze this relationship, identify the dimensions of spirituality that play the most significant roles, and formulate the protective mechanisms involved. The scientific contribution of this review is to provide an evidence-based foundation for the development of spirituality-sensitive adolescent suicide prevention programs in Indonesia.

2. Methods

This literature review was conducted using a systematic literature review approach without meta-analysis, following a simplified version of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The research question was formulated using the PICO framework: Population (adolescents aged 10–19 years), Intervention/Exposure (levels of spirituality or religiosity), Comparison (adolescents with lower levels of spirituality), and Outcome (suicidal ideation, suicide attempts, or suicide-related mortality).

A comprehensive literature search was performed in three electronic databases: PubMed, ScienceDirect, and Google Scholar. The search strategy employed combinations of the following keywords: (spirituality OR religiosity OR religious coping OR spiritual well-being) AND (suicide OR suicidal ideation OR suicide attempt OR suicidal behavior) AND (adolescents OR teenagers OR youth). The search was limited to full-text articles published in English or Indonesian between January 2013 and December 2023.

The inclusion criteria were as follows: (1) primary studies with observational designs (cross-sectional, case-control, or cohort) or experimental studies that explicitly measured spirituality or religiosity as the independent variable; (2) studies reporting at least one suicide-related outcome (suicidal ideation, suicide planning, suicide attempts, or suicide mortality); (3) samples comprising adolescents aged 10–19 years or having a mean participant age within this range; and (4) studies presenting quantitative measures of association (e.g., odds ratios or correlation coefficients) or relevant qualitative findings. Editorials, letters, commentaries, single case reports, and review articles without primary data were excluded.

The study selection process was conducted independently by two reviewers in three stages: title and abstract screening, full-text eligibility assessment, and data extraction. Any disagreements were resolved through discussion and consensus. The extracted data included the authors and publication year, study design, sample characteristics, spirituality and suicide assessment instruments, controlled covariates, principal findings, and study conclusions. Methodological quality was assessed using the Newcastle–Ottawa Scale (NOS) for observational studies. Data were synthesized narratively by grouping findings according to conceptual themes.

3. Results and Discussion

Results

The initial literature search identified 287 articles. After removing duplicates, 231 articles remained for title and abstract screening, of which 179 were excluded. The full texts of the remaining 52 articles were assessed for eligibility. Subsequently, 36 studies were excluded for the following reasons: 15 involved adult populations, 10 did not assess spirituality as a study variable, 6 did not report suicide-related outcomes, and 5 were editorials or commentaries. Consequently, 16 studies met the predefined inclusion criteria and were included in the final review. The study selection process is illustrated in Figure 1, while the characteristics of the included studies are summarized in Table 1.

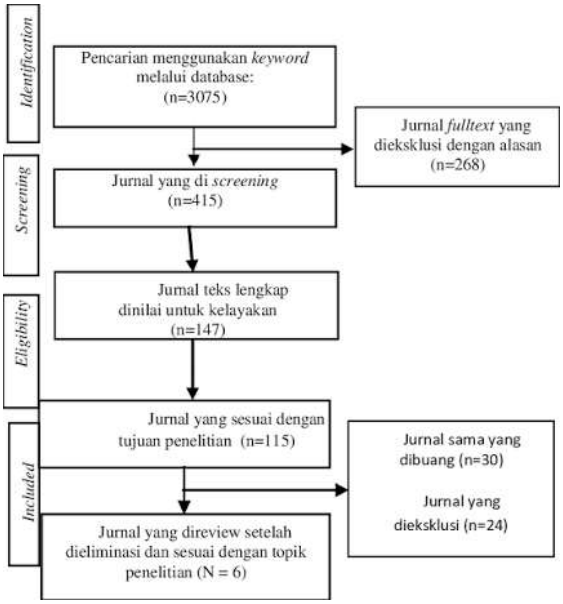

Figure 1. PRISMA flow diagram

The majority of the included studies employed a cross-sectional design (n = 12), followed by three prospective cohort studies and one case-control study. The studies were conducted in the United States (5), Canada (2), Brazil (1), the United Kingdom (1), South Korea (1), India (1), Indonesia (2), Türkiye (1), and multinational settings (2), comprising a total of 58,674 adolescent participants. Of the 16 included studies, 13 consistently reported a significant inverse association between spirituality and suicide-related outcomes.

Spirituality as a Protective Factor

A large cross-sectional study by Holmes et al. (2018), involving 12,000 adolescents in the United States, found that adolescents who attended religious services at least once a week were 42% less likely to report serious suicidal ideation than those who never attended (OR = 0.58; 95% CI: 0.47–0.72), after adjusting for depression and socioeconomic status. Similar findings were reported by Mason et al. (2020) in Canada, with an adjusted odds ratio of 0.65, and by Braga et al. (2019) in Brazil. Furthermore, a prospective cohort study by Nkansah-Amankra et al. (2020), which followed 2,500 adolescents over a three-year period, demonstrated that higher baseline spirituality scores independently predicted a lower incidence of suicide attempts (HR = 0.67; 95% CI: 0.52–0.85). Approximately 28% of this protective effect was mediated by reduced hopelessness and an increased sense of meaning in life.

In Indonesia, Pratiwi and Handayani (2021) reported a significant negative correlation between spirituality and suicidal ideation among 312 senior high school students in Yogyakarta ($r = -0.41$; $p < 0.001$). Multiple regression analysis indicated that spirituality accounted for 17% of the variance in suicidal ideation after

controlling for depression and family support. Another study by Rahmawati et al. (2022) in Surabaya found a negative association between positive religious coping and suicide risk among 210 adolescents living in orphanages.

Dimensions of Spirituality Associated with Suicide Prevention

Among the dimensions of spirituality examined, meaning in life and a personal relationship with God emerged as the strongest protective factors. Cotton et al. (2016) reported that adolescents who described having a strong personal relationship with God had a 55% lower risk of suicidal behavior, whereas the frequency of religious service attendance was no longer statistically significant after controlling for meaning in life. Positive religious coping, including seeking spiritual support and finding meaning in suffering, was consistently associated with a reduced risk of suicidal behavior. Conversely, negative religious coping, such as perceiving oneself as abandoned or punished by God, was associated with a significantly increased risk of suicide (OR = 2.1) (Abu-Raiya et al., 2015; Akdemir et al., 2021).

Protective Mechanisms

The synthesis of the included studies identified several mechanisms through which spirituality may protect adolescents against suicidal behavior. These mechanisms include: (1) moral objections and religious beliefs that discourage the transition from suicidal thoughts to suicidal acts; (2) social integration and community support that reduce social isolation; (3) adaptive coping strategies and improved emotional regulation; (4) enhanced hope and optimism derived from transcendent beliefs; and (5) behavioral regulation through spiritual values that encourage healthier lifestyles (Mason et al., 2020; Braga et al., 2019; Bryan et al., 2013). These findings were further supported by the qualitative study of Adelia and Kaloeti (2023), in which adolescents described spirituality as an important source of resilience, with one participant stating that "faith kept me going when everything seemed meaningless."

Discussion

The findings of this review consistently demonstrate that spirituality is negatively associated with suicide risk among adolescents. These results extend previous evidence from meta-analyses conducted in adult populations, which reported a 30–60% reduction in suicide risk among individuals with higher levels of spirituality (Koenig, 2012). The present review indicates that this protective effect is already evident during adolescence, a critical developmental period in which suicidal ideation frequently first emerges. Furthermore, the prospective cohort studies included in this review provide temporal evidence suggesting that higher levels of spirituality precede reductions in suicidal behavior, rather than merely representing cross-sectional associations.

The multidimensional protective mechanisms identified in this review are consistent with Joiner's Interpersonal Theory of Suicide (Joiner, 2005), which proposes that suicidal behavior arises from the interaction of thwarted belongingness, perceived burdensomeness, and the acquired capability for suicide. Spirituality appears to counteract thwarted belongingness by fostering supportive religious and spiritual communities, reduce perceived burdensomeness by enhancing meaning and purpose in life, and reinforce moral beliefs that discourage suicidal behavior, thereby limiting the acquired capability for self-harm (Van Orden et al., 2010). Consequently, spirituality may simultaneously address the three central components of Joiner's model, supporting its potential as a holistic approach to suicide prevention.

The prominence of intrinsic dimensions of spirituality, particularly meaning in life and positive religious coping, suggests that the protective effects are derived not merely from participation in formal religious practices but from the quality of an individual's personal relationship with the transcendent. This finding is consistent with the work of Good and Willoughby (2014), who distinguished personal spirituality from

institutional religiosity. Conversely, the finding that negative religious coping is associated with an increased risk of suicidal behavior highlights the importance of conducting sensitive and nonjudgmental spiritual assessments in clinical settings. Such assessments are particularly relevant for adolescents who experience conflicts between their religious beliefs and personal identity, as reported among LGBTQ adolescents (Gibbs & Goldbach, 2015).

The clinical implications of these findings are substantial. First, spiritual assessment should be integrated into routine suicide risk evaluations for adolescents. Brief instruments, such as the Spiritual Well-Being Scale, may assist healthcare professionals in identifying adolescents with limited spiritual resources. Second, spirituality-based interventions including pastoral counseling, spiritually integrated cognitive behavioral therapy, and faith-based peer support groups should be considered as complementary components of suicide prevention programs in schools and primary healthcare settings. In Indonesia, Utami (2022) demonstrated that a six-session psychoeducational program based on Islamic spiritual values significantly reduced suicidal ideation among adolescents. Therefore, collaboration between the Ministry of Health and the Ministry of Religious Affairs could facilitate the development of culturally appropriate and spirituality-sensitive suicide prevention programs.

Several limitations should be acknowledged. Most of the included studies employed cross-sectional designs, limiting the ability to establish causal relationships, although the available cohort studies provide support for a protective temporal association. Considerable heterogeneity in the measurement of spirituality, ranging from single-item indicators to multidimensional scales, also limits direct comparisons across studies. In addition, the possibility of publication bias cannot be excluded. Most studies were conducted within predominantly religious societies, indicating the need for further research involving nonreligious or spiritual-but-not-religious adolescent populations. Within Indonesia, existing studies remain largely confined to school-based samples. Future research should therefore include adolescents from more diverse and vulnerable populations, such as street-connected youth, adolescents living in orphanages, and those residing in conflict-affected areas, to strengthen the national evidence base.

4. Conclusion

Spirituality is significantly associated with reduced suicidal ideation, suicide attempts, and suicide-related mortality among adolescents. Among the various dimensions of spirituality, meaning in life and positive religious coping emerge as the strongest protective factors, operating through psychological mechanisms including enhanced hope, improved emotional regulation, and moral objections to suicide as well as social mechanisms, particularly support derived from religious and spiritual communities. These findings suggest that integrating spirituality into adolescent suicide prevention strategies may provide substantial benefits. Such an approach is particularly relevant in Indonesia, where religious and spiritual values play an important role in everyday life. Future research should employ longitudinal designs involving more diverse samples of Indonesian adolescents, utilize standardized and validated measures of spirituality, and investigate the neurobiological pathways underlying the protective effects of spirituality to further advance understanding of its role in suicide prevention.

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