INPLASY PROTOCOL

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Prevalence rate and association risk factor of suicide among people living with human immunodeficiency virus: a scoping review

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Review question / Objective: Suicide rates among PLHIV? What are the risk factors for suicidal? This study aims to use a scoping review to determine the suicide rate and association risk factor of suicide among people living with HIV. Detection of suicidal ideation and suicide attempt is important in planning early intervention and optimizing HIV/AIDS management.

Condition being studied: Committing suicide represents the extreme end of the spectrum and suggests a complex interrelationship between behaviors. Complete suicidal imply complete suicidal attempts resulting in death. The presence of suicidal ideation represents an important predictor for subsequent attempted and suicide commitment. That suicidal ideation is more common than suicide attempt and suicide commitment, and the presence of suicidal ideation increases the risk of suicide attempt and suicide commitment. Characterization of suicidal attempt among HIV-infected adults is crucial; however, practically there is no long-time suicide data among people with HIV in worldwide. The most studies only consider single suicidal factors and behaviors, particularly suicidal ideation and suicide attempt.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 11 July 2021 and was last updated on 11 July 2021 (registration number INPLASY202170033).

INTRODUCTION

Review question / Objective: Suicide rates among PLHIV? What are the risk factors for suicidal? This study aims to use a scoping review to determine the suicide rate and association risk factor of suicide among

people living with HIV. Detection of suicidal ideation and suicide attempt is important in planning early intervention and optimizing HIV/AIDS management.

Rationale: Research studies were searched using MEDLINE, Embase, Web of Science,

CINAHL, Cochrane and PsycARTICLES database from January 1, 1990 to July 8, 2021 using keywords including suicide and risk factors. Information regarding study design, suicide measurement techniques, risk factors and study findings were extracted.

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METHODS

Search strategy: English synonyms as such AIDS, T-lymphotropic virus, OR human Tcell lymphotropic virus, type III human Tcell leukemia virus, type III lymphadenopathy-associated virus, LAV-HTLV-III, HTLV-III-LAV, type III infection. or HTLV III infection were used for each database to identify suicidal behavior among PLHIV. Also, we used several control phrases from the Emtree and Mesh databases. For Emtree, they included "Human immunodeficiency virus," "Human immunodeficiency virus infection," "suicidal behavior," or "automutilation." "suicide" and for Mesh, they included "HIV Infections," "HIV," or "Self-Injurious Behavior." We supplemented the search results with the Endnote X9 bibliographical database and the search results and manually screened through citation formats, reference lists of relevant articles, and previous systematic reviews to confirm the sensitivity of the search strategy.

Participant or population: People with HIV.

Intervention: No.

Comparator: No.

Study designs to be included: Obsevational studies.

Eligibility criteria: The inclusion criteria were as follows: (1) The studies provided primary data on the prevalence or incidence of suicidal ideation, suicide attempts, or suicides measured using validated assessment tools or coded medical report data within a population-based study; (2) the participants were aged ≥15 years; (3) the participants were diagnosed with a HIV/AIDS, and (4) an original, published article. The following types of study designs were excluded: (1) Study population did not include PLHIV; (2) unrelated to suicide, and (3) case report and review studies.

Information sources: Embase, Ovid MEDLINE, CENTRAL, Web of science, Academic Search Complete, Psychology & Behavioral Sciences Collection and scopus database.

Main outcome(s): Global prevalence rate and risk factors associated with suicidal ideation, suicide attempts, and suicides among people living with HIV.

Additional outcome(s): The inconsistent risk factors are gender, age, economic status, sexual orientation, education level, race, and marital status. In mental illness factors, the consistent suicide risk factors are depression, substance abuse, anxiety, intravenous drug-using (IDU), post-traumatic stress disorder (PTSD), psychiatric, major mood disorder, and mental disorders.

Data management: Titles and abstracts will be independently screened by three researchers based on the inclusion and exclusion criteria after removing duplicates using the Endnote X9 bibliographical database.

Quality assessment / Risk of bias analysis:

All eligible studies were assessed for quality of evidence using the Joanna Briggs Institute (JBI) Critical Appraisal for Checklist for Prevalence Studies Scale (CACPSS), which contains nine items and four responses (yes, no, unclear, and not applicable) [21]. Studies with a total score of 8 and above were considered to have high quality evidence and were included in this systematic review.

Strategy of data synthesis: After data extraction, thematic analysis was conducted to explore the key themes within the papers and compare the findings between studies. Three researchers independently extracted data on the baseline of participants' the suicidal risk factors and suicide ideation rate, suicide attempts rate and completed suicide rate. All authors reviewed the themes and agreed the final findings structure.

Subgroup analysis: Risk factors are gender, age, economic status, sexual orientation, education level, race, and marital status. In mental illness factors, the consistent suicide risk factors are depression, substance abuse, anxiety, intravenous drug-using (IDU), post-traumatic stress disorder (PTSD), psychiatric, major mood disorder, and mental disorders.

Sensitivity analysis: No sensitivity analysis.

Language: No restriction.

Country(ies) involved: Taiwan.

Other relevant information: No.

Keywords: HIV, suicide ideation, suicide attempts, completed suicide.

Contributions of each author:

Author 1 - Yi-Tseng Tsai - developed the initial concept for the manuscript. conducted the literature review, article abstraction and drafted an initial draft. performed the statistical analyses.

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Author 2 - Sriyani Padmalatha Konara Mudiyanslage - conceptualized the study and developed the research protocol. created an initial draft of a data extraction chart containing study features of interest a priori. identified articles for full-text review. A full data extraction was then carried out independently on each article.

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