INPLASY

Substance Use Prevention among Asian American Adolescents: A Systematic Review of Literature

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ADMINISTRATIVE INFORMATION

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 May 2024 and was last updated on 09 May 2024.

INTRODUCTION

Review question / Objective To synthesize existing literature on substance use prevention programs for AA adolescents in the U.S. and identify critical research gaps to be addressed in future studies.

Rationale Asian American (AA) adolescents are the fastest growing population in the United States, yet understudied regarding disparities in substance use access and prevention. This systematic review aimed to summarize existing literature on programs targeting substance use prevention among AA adolescents in the U.S. Four databases were systematically searched following PRISMA guidelines, and a total of nine articles representing six unique prevention programs were identified. Four programs reported promising changes in substance use intentions, with intervention strategies including psychoeducation, skills training, and photovoice. Cognitive outcomes such as risk perceptions, attitudes, mood, and self-efficacy, as well as behavioral outcomes including drug use initiation and frequency, were discussed. The small number of intervention studies reported in this systematic review emphasizes the need for more preventative efforts for AA adolescents. Specifically, more culturally tailored substance use prevention programs are needed for AA adolescents, particularly those targeting alcohol, illicit drugs, and emerging substances.

Condition being studied Substance use.

METHODS

Participant or population Asian American adolescents.

Intervention Substance use prevention programs targeting solely or mostly Asian American adolescents in the U.S.

Comparator No intervention or other interventions that are not culturally specific for Asian American adolescents.

Study designs to be included Randomized controlled trials; non-randomized trials; before-and-after study.

Eligibility criteria Studies were included in the review if they: (1) focused on substance use, (2) developed or evaluated a prevention or intervention program for substance use, (3) were empirically based (i.e., based on observations of the intervention being studied), (4) were conducted in the U.S., (5) included an adolescent sample, (6) either recruited solely or mostly AA sample or included culturally appropriate prevention strategies for AAs, and (7) published in or after 2000.

Information sources Electronic databases and contact with authors.

Main outcome(s) Behavioral outcomes (e.g., changes in substance use).

Additional outcome(s) Cognitive outcomes (e.g., changes in substance use attitudes or knowledge).

Quality assessment / Risk of bias analysis This review utilized the NIH Study Quality Assessment Tools, specifically the Quality Assessment of Controlled Intervention Studies and the Quality Assessment Tool for Before-After (Pre-Post) Studies with No Control Group. The Quality Assessment of Controlled Intervention Studies assesses various domains including the adequacy of randomization, concealment of treatment allocation, blinding procedures, dropout rates, adherence to intervention protocols, and other potential biases such as variations in baseline measures, reliability and validity of primary outcomes, and adequacy of sample sizes. The Quality Assessment Tool for Before-After (Pre-Post) Studies with No Control Group evaluates various domains including the clarity of objectives, precision of inclusion criteria, relevance of participants, sufficiency of sample size, clarity and consistency of intervention and its delivery, blinding procedures, validity of outcome measures, completeness of follow-up, and potential biases related to other outcome measures and individual-level data collection. The Quality Assessment of Controlled Intervention Studies comprised 14 questions, while the Quality Assessment Tool for Before-After (Pre-Post) Studies with No Control Group consisted of 12 questions. Responses to these questions were categorized as 'yes' (low risk of bias), 'no' (high risk of bias), 'NR' (not reported), or 'CD' (couldn't determine).

Strategy of data synthesis Data extracted from the articles included information about study characteristics (e.g., study design, study setting, sample size, statistical tests used, outcomes, intervention effects, follow-up times, limitations), participant characteristics (e.g., age, gender, race), prevention and intervention program characteristics (e.g., program content, targeted substance(s), program type, and theory used). To ensure the accuracy of the data extracted, two researchers independently coded the articles and cross-checked for any errors, and discrepancies were resolved by consensus among all authors. When published articles did not present sufficient data, we contacted the corresponding author twice to request the required information.

Subgroup analysis No subgroup analysis is conducted due to small numbers of studies published.

Sensitivity analysis No sensitivity analysis is conducted due to the small number of studies that were published.

Language restriction Studies published in English only.

Country(ies) involved United States.

Keywords substance use; Asian American; adolescent; prevention programs; systematic review.

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