INPLASY

INPLASY202570106

doi: 10.37766/inplasy2025.7.0106

Received: 25 July 2025

Published: 26 July 2025

Corresponding author:

Anuli Njoku

njokua3@southernct.edu

Author Affiliation:

Southern Connecticut State University.

A Scoping Review of Skin Whitening Products: Users' Knowledge and Motivations, Marketing Strategies, and Adverse Health Effects

Njoku, A; Sawadogo, W; Pierce, T; Albert, K; Plummer, F.

ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202570106

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 26 July 2025 and was last updated on 26 July 2025.

INTRODUCTION

Review question / Objective To comprehensively review the literature and summarize the current evidence on knowledge, motivations, marketing strategies of skin whitening products and the resulting health effects.

Background Skin whitening, or skin lightening, is a global public health issue that intersects with deeply rooted sociocultural, historical, and economic dynamics. The commercial proliferation of skin whitening products has surged in recent decades, fueled by evolving beauty standards, and aggressive marketing strategies. These products are widely used in Asia, Africa, and the Caribbean, and are increasingly used among minority communities in Western countries.

Rationale While some studies explored the health risks associated with chemicals in skin whitening products and users' knowledge of these adverse health outcomes, others focus on the psychosocial motivations, such as internalized colorism and perceptions of attractiveness. Still, others highlight the role of media and corporate marketing in shaping consumer behavior. To date, no comprehensive review has synthesized these multiple dimensions of skin whitening products.

METHODS

Strategy of data synthesis Exposure to chemicals in skin whitening products and the resulting health effects. Skin whitening is defined as the whitening of the epidermal layer through the application of homemade, cosmetic or dermatological products. The following terms have been used to refer to skin whitening; skin

lightening or skin beaching. Chemicals in skin whitening products include mercury, hydroquinone, and corticosteroids, a big industry and predominantly targets women of color in every region of the world, particularly women with darker complexions.

Eligibility criteria Inclusion criteria:

We will include (1) qualitative and quantitative studies that evaluate users' knowledge, motivations, and marketing strategies of skin bleaching products and quantify the resulting health effects, (2) published in English, (3) in a peer-reviewed journal.

Exclusion criteria:

We will exclude (1) articles that were a review, commentary, or expert opinion, (2) duplicate studies or overlapping data, (3) articles without fulltext or abstract-only papers.

Source of evidence screening and selection Medline (PubMed), Embase(Ovid), and PsycINFO.

Data management Two reviewers will independently screen each article and extract the relevant information according to the PRISMA guidelines. Any disagreements will be resolved by a third reviewer. . The following information will be extracted: the study details (title, location, publication journal, and year); study characteristics (design, participants, sample size, type of analysis): health outcomes, users 'knowledge, users' motivation, marketing strategies, covariateadjusted for, measures of effect, and limitations.

Reporting results / Analysis of the evidence The Newcastle Ottawa Quality Assessment Scale will be used to assess the quality of quantitative studies. The Critical Appraisal Skills Program (CASP) will be used to assess the quality of qualitative studies.

Presentation of the results A narrative synthesis will be used to summarize the findings of the included studies.

Language restriction English.

Country(ies) involved USA.

Other relevant information None.

Keywords Skin whitening products, chemicals, knowledge, marketing, motivations, health outcomes.

Dissemination plans Peer review publication.

Contributions of each author

Author 1 - Anuli Njoku. Email: njokua3@southernct.edu Author 2 - Wendemi Sawadogo.

Email: sawadogow1@southernct.edu

Author 3 - Taryn Pierce.

Email: piercet5@southernct.edu

Author 4 - Kaleigh Albert.

Email: albertk6@southernct.edu Author 5 - Fabian Plummer.

Email: plummerf1@southernct.edu