Original Research

Skin-lightening practices among female high school students in Ghana

M. Osei a, M. Ali b, A. Owusu c, F. Baiden a,*

a Ensign College of Public Health, Kpong, Ghana
b Kintampo Health Research Centre, Ghana Health Service, Kintampo, Ghana
c Middle Tennessee State University, MTSU Box 96, Murfreesboro, TN 37132, USA

A R T I C L E   I N F O

Article history:
Received 21 August 2017
Received in revised form
13 November 2017
Accepted 26 November 2017

Keywords:
Skin-lightening
Bleaching
Adolescents
School
Ghana
Africa

A B S T R A C T

Objective: The practice of skin lightening (SL) persists despite warnings about its harmful health effects. Adolescents are particularly vulnerable and at risk of prolonged use of SL products. We explored SL practices among high school students in Ghana, West Africa.

Study design: Cross-sectional survey.

Methods: We used a self-administered questionnaire in a survey on SL practices among randomly selected female students in five Senior High Schools in the Brong Ahafo Region of Ghana. We determined prevalence and used bivariate and multivariate analysis to identify factors associated with the practice.

Results: A total of 410 students with a mean age of 17.6 years (± 1.6) participated in the study. While 71.5% of students indicated that they had been approached by relatives and friends to use SL creams, 65.6% admitted to actually using it. Most (85.5%) students identified at least five friends who were using SL products at the time of the survey. Between 22.0% and 44.0% of students knew female teachers who practiced SL. Students in first year were twice as likely to practice SL compared with students in third year (odds ratio [OR] = 1.90, 95% confidence interval [CI] 1.15–3.13). Compared with those who had never been approached, students who had been approached by relatives and friends to use SL products were likely to be using it (OR = 2.24, 95% CI 1.43–3.53). Students who had sisters who used SL products were twice as likely to be users themselves (OR = 1.82, 95% CI 1.12–2.95).

Conclusion: The practice of SL among female students in this study is high, and about the same as reported among adults in Ghana and other parts of sub-Saharan Africa. This suggests that the practice is well entrenched. A ban on the sale of SL products to adolescents in Ghana should be considered.

© 2017 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.
Skin lightening (SL) is the use of chemical agents to lighten the complexion of the skin. It is also called skin whitening or bleaching. The practice is global but has severe implications for vulnerable populations in sub-Saharan Africa (SSA) where despite concerns about the harmful health effects, prevalence remains high. Estimates of between 30% and 70% have been reported. \(^1\) \(^4\)

The practice of SL in SSA is founded on the belief that the lighter the tone of the skin, the more desirable and attractive a person becomes. \(^5\) It has been argued that colonialism in most of SSA and apartheid in South Africa reinforced the superiority notion associated with the lighter skin. \(^6\) \(^7\) The desire for lighter skin tone is not unique to SSA. \(^8\) Considerable commercial interest in SL products helps to sustain the culture of appreciation for the lighter skin. \(^9\) Some African music and arts celebrities have publicly admitted to using SL products. \(^10\) It is thought that they do this to attract greater attention and commercial works. In some cases however, SL is a continuum of a habit acquired during adolescence; long before they became celebrities. \(^11\)

The health risks posed by SL derive from the effects of the hydroquinone, mercury, and corticosteroids that are commonly found SL products. \(^12\) Hydroquinone is the most effective SL agent known yet. It has therapeutic application in the management of skin conditions that are characterized by hyperpigmentation. \(^13\) \(^16\) Hydroquinone acts by strongly inhibiting melanin production, and thereby leaving the skin depigmented. Prolonged use of hydroquinone is associated with the development of exogenous ochronosis and other skin conditions. \(^17\) \(^18\) Mercury is also used in SL because its salts inhibit the formation of melanin. \(^19\) Increased blood levels of mercury have been reported with therapeutic and cosmetic use of mercury-containing products. \(^20\) \(^21\) Damage to the kidney is one of the major adverse effect of the use of mercury-containing SL products. Corticosteroids are often used in combination with hydroquinone and mercury in SL products. \(^22\) These cause SL through vasoconstriction which over time leads to hypopigmentation. Clobetasol propionate is a popular form of corticosteroid used in SL products. The major side-effect of corticosteroid use in SL is cutaneous atrophy which manifest as skin fragility, telangiectasia, and striae. \(^19\) \(^23\) A major challenge to efforts of discouraging the practice of SL is the fact that whereas the desired effect of a lighten skin manifest early after use of SL products, the harmful effects manifest only after several years of use. Women have been known to use SL creams for as long as 20 years before manifesting harmful effects. \(^24\) \(^25\)

Adolescence is a vulnerable yet critical formative period in the life course. \(^26\) Many adolescents experience a wide range of adjustments. Behavior patterns that are established during this process, such as drug use or non-use and sexual risk taking or protection can entrench and have long-lasting positive and negative effects on future health and well-being. \(^27\) \(^29\)

On the other hand, adolescence offers a period that adults can have unique opportunities to influence young people. It is a window of opportunity to curb undesirable health-risk habits before they become intractable. \(^30\)

In Ghana, adolescents between the ages of 13—18 years are expected to be in high school where the role-model influence of teachers and parents are expected to guide them to negotiate this critical period. Not much is known about the use of SL by adolescents in Ghana. This study is an attempt to establish the prevalence of SL among high school students in Ghana and to explore factors associated with the practice.

**Methods**

**Study sites**

The Brong Ahafo Region is one of the 10 administrative regions in Ghana. It is located in the middle-belt of the country and is home to the ‘Banos’ and ‘Ahafos’ (both regarded as ‘Akans’), as well as migrants from the north and south of the country. Each of the 27 districts in the region has at least one senior high school (SHS). The SHS program in Ghana is a 3-year pre-university program where students, usually aged between 15 and 18 years, attend schools either as boarders or day students. In Ghana, the legal age of consent is 18 years.

**Sample size**

The target sample size of the survey was 410 respondents. This was set to enable an estimation of the prevalence of the use of SL products within a margin of error of 4.3% at 95% confidence level, and assuming a prevalence of 50%. \(^2\) The total population of female students in the surveyed SHSs was 3069.

**Survey**

A self-administered questionnaire was used to collect data on SL practices among female students in five SHSs in the Brong Ahafo Region of Ghana. The questionnaire was developed with information obtained from literature review and local expert advice. Face and content validity were assessed using subject-matter experts including recently completed SHS students and teachers. The questionnaire had closed-ended questions on the sociodemographic background of students, use of SL creams by themselves, relatives, friends, and school teachers. Open-ended questions were included to enable students to list SL products that they used or knew others who used. The prevalence of current or past use of SL creams was determined from responses to the question posed as ‘Have you ever used it (bleaching cream) before?’ To gauge how common the practice was among peers, the question was posed as ‘Out of 10 friends you have, how many use creams with intent to make their skin appear lighter?’

Students in SHSs in Techiman, Nkoranza, Atebubu, Prang and Kintampo participated in the survey. The SHSs were selected on the basis of proximity to Atebubu, where the researchers were stationed. The survey involved only female students because during the pre-study stakeholder meetings, school authorities indicated that it was among them that they had particular concern regarding the use of SL products. Students were selected using systematic random sampling. This was made possible by the availability of class lists. Selected students independently completed the questionnaire in a
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات