# "Tsada Getzu, Tsada Libu (White Face, White Heart)": An Exploration of Skin Lightening in Eritrea

by

Fikrejesus Amahazion, Ph.D.
fikrejesus87@gmail.com
Assistant Professor, Department of Sociology and Social Work, Department of Political Science and International Relations, National College of Arts and Social Sciences
Adi Keih, Eritrea

# Abstract

This paper represents an analysis of skin lightening through interviews, focus group discussions, and survey questionnaires with informants in Eritrea. Findings suggest that skin lightening is increasingly popular with many individuals, particularly females, and that those engaging in skin lightening primarily use creams, lotions, soaps, and homemade mixes consisting of natural ingredients. As with many other countries, skin lightening in Eritrea is associated with a number of different factors. It is recommended that national policymakers consider enacting legislation or developing guidelines to regulate skin lightening products and its ingredients, while public awareness of the significant health risks associated with the use of lightening products is also advocated.

# Introduction

A centuries old practice, skin lightening is the use of injections, topical ointments, creams, lotions, gels, soaps, oral formulations, and household chemicals to de-pigment or lighten skin complexion, produce an even skin tone, and remove blemishes, freckles, or scars (de Souza 2008: 28; Jablonski 2012; Street, Gaska, Lewis, and Wilson 2014: 53). Today, skin lightening is a multi-billion dollar, globalized industry, and over the past several decades it has emerged as an increasingly popular practice in many parts of the world (Charles 2003; Coopernov 2016; Glenn 2008).

Skin lightening is often driven by an array of factors, including the structural and societal elevation of light skin, as well as dermatological issues. A significant amount or work has found that skin lightening is associated with numerous and considerable adverse effects and complications (Hunter 2011). While many studies have been conducted on skin lightening, exploring the topic within various contexts around the world, including across Africa, to date, there have been no studies conducted of skin lightening in Eritrea. Using in-depth, semi-structured interviews and focus group discussions, as well as a survey of undergraduates, this paper explores the practice of skin lightening in Eritrea and also examines attitudes, knowledge, and perceptions surrounding the practice.

Significantly, this paper provides an important baseline for the current practice of skin lightening in the country, helping to reveal associated factors and ultimately contributing to and supplementing existing literature. Furthermore, this paper increases awareness about the dangers of skin lightening, and also encourages the development of appropriate prevention and intervention efforts or campaigns.

The outline of the paper is as follows. The next section presents the literature review, and it is followed by the methodology. Subsequently, the results and discussion are presented. The last section presents the conclusion, notes potential steps for policymakers, and offers recommendations for future study.

# **Literature Review**

Skin lightening is the use of injections, topical ointments, creams, lotions, gels, soaps, oral formulations, and household chemicals to de-pigment or lighten skin complexion, produce an even skin tone, and remove blemishes, freckles, or scars (de Souza 2008: 28; Street et al. 2014: 53). Skin lightening products often contain active ingredients, such as hydroquinone, mercury, lead, or corticosteroids, which break down the top layer of skin to lighten skin or disrupt and impede the synthesis and production of melanin, a natural pigment which defines skin color. The application or use of skin lightening products may be daily (or less frequently), and may be to the face, neck, hands, or to other parts of the body. While skin lightening is practiced by both genders, research suggests that it is more prevalent among females (Counter and Buchanan 2004; Fokuo 2009; Hunter 2011: 143; James et al. 2016).

# **Skin Lightening Around the World**

Although skin lightening is a centuries old practice, it has increased in recent years (Charles 2003; Del Giudice and Yves 2002; Hunter 2011: 153; Jablonski 2012; Lewis et al. 2013; Oumeish 2001). Currently, skin lightening is a multi-billion dollar global industry, and it is quite popular within the Caribbean, South America, Asia, the Middle East, and Africa, as well as among dark-skinned populations within Europe and North America (Charles 2003; Coopernov 2016; Glenn 2008).

In India, approximately 60 to 65% of women engage in skin lightening. Skin lightening is estimated to be a multi-million dollar industry that comprises the largest segment of the country's considerable dermatological market, and it is difficult to find beauty products that do not claim to have lightening or whitening properties (Glenn 2008; Nadeem 2014; UNEP 2008; Verma 2010). In Jordan, skin lightening is a common practice among women. For example, in a study exploring skin lightening among Jordanian women, Hamed et al. (2010) randomly distributed questionnaires to a total of 318 women. The researchers found that approximately 61% reported using skin lightening products, with users including women from different age and socioeconomic groups. Similarly, in a study investigating skin lightening and health consequences among female students in Malaysia, Rusmadi, Ismail, and Praveena (2015) found that approximately 61% of respondents utilized skin lightening products. Other parts of Asia where skin lightening is popular include Japan, where the use of skin lightening products has remained at consistently high levels (Ashikari 2005), the Philippines, and South Korea, where white skin has long been preferred and skin lightening has an extensive history (Glenn 2008; Li et al. 2008).

Across much of Africa, skin lightening has "reached epidemic levels" (Hunter 2011: 143). In Nigeria, Africa's most populous country, a community study in Lagos by Adebajo (2002) found that an estimated 77% of women utilized some form of skin lightening product. Furthermore, in a transverse study on a representative sample of 600 women between the ages of 15 and 55 in Dakar, Senegal, Wone et al. (2000) found the prevalence of skin lightening to be 67.2%, with hydroquinone and topical corticosteroids being the most commonly utilized agents. Notably, recent research by Ahmed and Hamid (2017) finds significantly high rates of skin lightening in Sudan. Specifically, in a cross-sectional study of female university students (348 females between 16 and 33 years old), the researchers found that approximately 74% had utilized skin lightening products within the past year. Of note, studies conducted in Burkina Faso and Togo has also found considerably high rates of skin lightening (Koumbate et al. 2012; Traore et al. 2005).

# **Problems Associated with Skin Lightening**

Despite its popularity, skin lightening is a dangerous practice associated with a range of serious health consequences and problems. The dangers associated with skin lightening include severe skin conditions, including eczema, warts, acne, and ochronosis, a form of hyper-pigmentation which causes the skin to turn a dark purple shade (Adebajo 2002; Ajose 2005; Lewis et al. 2011; Street et al. 2014: 63). In a relatively early examination of problems associated with skin lightening, Findlay, Morrison, and Stimson (1975) found that South African women who had used skin lightening products for an extended period suffered from exogenous ochronosis (Findlay, Morrison, and Stimson 1975). Skin lightening may also cause irreversible thinning of the skin, irritation and rashes, skin lesions, blistering, scabs, scarring, stretch marks, severe discoloration, and a reduction in the skin's resistance to bacterial and fungal infections (Ajose 2005; de Souza 2008; Durosaro et al. 2012: 43).

Other problems associated with skin lightening include kidney damage, hypertension, elevated blood sugar, immunosuppression, mercury poisoning, and the risk of cancer (Addo 2000; Ajose 2005; Glahder, Appel, and Asmund 1999; Harada et al. 2001; IPCS 2003; Kooyers and Westerhof 2006; Peregrino et al. 2011; Street et al. 2014: 54). Furthermore, the use of skin lightening products may be associated with anxiety, psychiatric morbidity, depression or psychosis and peripheral neuropathy (Glahder et al. 1999; Kpanake, Sastre, Sorum, and Mullet 2008; Karamagi, Owino, and Katabira 2001; Ladizinski, Mistry, and Kundu 2011; UNEP 2008). Of note, skin lightening by pregnant women can lead to significant consequences for offspring. A study in Senegal found that pregnant women who used skin lightening products had a statistically significant lower plasma cortisol level, a smaller placenta, and presented a higher rate of low-birth-weight infants (Mahé et al. 2007).

Although skin lightening products have been banned or heavily regulated in many countries, they often remain easily accessible over-the-counter or available via black market, unregulated channels, including from roadside vendors, within market districts and backstreets, and on the Internet (Ahmed and Hamid 2017; de Souza 2008: 28; Keane et al. 2001). Consequently, consumers often do not understand proper usage or application procedures (e.g. concurrent use of several products), lack information regarding potential adverse or harmful effects, and may be unaware of the product's concentration of toxic or chemical ingredients. For example, products obtained through unregulated or black market channels may contain anywhere from 4 to 25% hydroquinone, far exceeding recommendations of the World Health Organization (WHO), dermatologists, and other health agencies (de Souza 2008; Blay 2009).<sup>2</sup>

# **Causal Factors for Skin Lightening**

There are many different reasons that individuals may seek to lighten their skin (Hunter 2011: 149). One often noted motivating factor for skin lightening is because light and white skin has historically been associated with beauty and attractiveness (Glenn 2008; Hunter 1998). In the US, for example, African Americans were long judged to be more attractive if their skin was light in color, and the country's ideal of female beauty "puts a premium on lightness and softness mythically associated with white women" (Kramer 2011: 76; Thompson and Keith 2001; West 2001: 130).

Notably, in many parts of the world, lighter-skinned individuals, particularly women, are considered more beautiful and more likely to find a spouse (Hall 1995: 176; Hunter 1998: 522). Within Indian matrimonial and mate-seeking websites, eligible brides and grooms regularly note that their skin is of "fair complexion" (Jha and Adelman 2009), while in a study exploring skin color and skin lightening in Ghana, Fokua (2009) found that women with lighter skin were perceived to be more attractive and more desirable to the opposite sex than those with darker skin. Interviewing 30 women, Fokua (2009) discovered that most women engage in skin lightening in order to have lighter skin, which is considered more attractive. These findings are consistent with Blay's (2009) exploration of skin lightening in Ghana which found that women who utilized skin lightening products were trying to attain beauty. As well, in a study of skin lightening in Jamaica, Charles' (2009) content analysis of reasons given by study participants for skin lightening finds that individuals did so for several reasons, including in order to appear beautiful and to attract a partner (Charles 2009). Another study conducted by Hamed et al. (2010) in Jordan suggests that the common perceptions driving skin lightening include that lighter skin tone increases a woman's chances of getting married, and that lighter skin tone is generally more beautiful.

Beyond the factors of beauty and marriage, individuals may lighten skin in order to increase job market competitiveness, particularly since those with dark skin or other features different from light, white standardized ideals have often faced discrimination in the workplace (Glenn 2008; Morales 2009; Perry 2006). Of note, research has suggested skin complexion may be a greater predictor of employer attraction to a potential employee than level of education and prior work experience (Harrison and Thomas 2009). In Brazil, with one of the largest Black populations outside of Africa or the US, many jobs descriptions require a "clean" appearance which is often coded language for middle class and light-skinned or white (Caldwell 2007; Hunter 2011: 153). Additionally, a 2010 study in Thailand found that women associated white skin with, inter alia, better job opportunities (Rongmuang et al. 2011: 115), while in Togo individuals sometimes engaged in skin lightening as a means of securing a job (Kpanake et al. 2008).

Another important issue driving skin lightening is the pursuit of status. Many of the countries in which skin lightening is popular are countries which have inherited a colonial legacy of racial distinction and discrimination.

Generally, dark skin is devalued, whereas light skin is valued and associated with power, status, and superiority (Hall 2003: 41; Hunter 1998: 519; Glenn 2008). Frequently, "one's proximity to whiteness often determines life chances" (Pierre 2008: 22), and "light skin works as a form of social capital (Hunter 2002: 177).

For example, in Japan, dark skin is associated with the lower class and a lighter complexion is associated with wealth and higher education levels because those from lower social classes (e.g. laborers and farmers) are exposed to the sun and thus have darker complexions (Li et al. 2008: 446). In Hong Kong, skin tone works as a type of social classification, with lighter skinned individuals and groups generally associated with higher classes and statuses (Leong 2006), while Brazil is also characterized by an informal racial order that is highly discriminatory against Black and brown people (Marx 1998: 68). Additionally, in India, white skin has long been associated with the country's traditional rulers and powerful groups, from the Aryans to British colonialists, as well as with the upper castes, while in countries as disparate as Senegal and the Philippines, many seek to lighten their skin as a way to elevate their social standing (Deshpande 2002; Saint Louis 2010).

According to Blay (2011), within the context of global white supremacy, skin color communicates one's position to and within the dominant power structure. Given this reality, people around the world, particularly those historically subjected to white domination, colonization, and enslavement, have internalized projected notions that the basis of their inferior condition is their skin color. Accordingly, skin bleaching would manifest as the seemingly most "logical" method through which to approximate the White ideal and thus empower oneself (Blay 2011: 37).

Much of the literature on skin lightening underscores the important role of the media and advertisements. Glenn (2008) suggests that the rise of skin lightening around the globe can partly be attributed to the constant mass marketing of contemporary images of white beauty. The media's transmission of cultural ideas about beauty helps to internationalize Western-created cultural ideas and standards, such as that white or light is beautiful (Baumann 2008; Coopernov 2016; Hunter 2011: 144-145; Saraswati 2010; Winders, Jones, and Higgins 2005).

In Japan, media images of Japanese women often involve features associated with Western or white women, such as pale or light, white skin (Miller 2006), while in India, where skin lightening is highly prevalent among both men and women, light or white faces adorn billboards and are found on many television commercials (Coopernov 2016).

Furthermore, around the world, advertisements for skin lightening products frequently link light skin with happiness, youth, success, sophistication, fulfillment, romance, and upward mobility (Glenn 2008; Leong 2006: 169). In Ghana, for example, there are countless billboard advertisements on how to get "perfect white" skin (Coopernov 2016), while in Jamaica, dancehall songs and lyrics often praise those who lighten their skin (Charles 2011a).

Additionally, an analysis of labels for skin lightening products sold in New York found that the images were derogatory toward dark skin and promoted the idea that white skin was healthier, beautiful, pure, and superior (Charles 2011). Importantly, advertising campaigns frequently feature local celebrities, utilizing their iconic power to draw sales and appeal to a larger demographic (Mak 2007).

Researchers have also explored the emotional and psychological underpinnings of skin lightening, as well as its potential association with self-hatred and low self-esteem. Generally, there is a potential relationship between adolescents' satisfaction with their skin color and their self-esteem, while the impact of skin color differences may also influence the self-esteem of adults (Coard, Breland, and Raskin 2001; Robinson and Ward 1995; Wade 1996). Using survey data, Thompson and Keith (2001) found that skin tone can have negative effects on both self-esteem and self-efficacy, with skin color being an important predictor of self-esteem for Black American women. However, a study by Charles (2003) found that mean self-esteem scores for both skin bleachers and non-skin bleachers were comparable, suggesting that self-esteem does not fully explain the desire to lighten skin.

According to Azibo (2011), skin lightening is a "psychological misorientation mental disorder" – formally termed "skin bleaching and skin lightening behavior disorder" (SBSLB), and it is described as "inappropriate, abnormal, and pathological" (Azibo 2011: 225). Furthermore, SBSLB should be treated and conceptualized as one more of the 18 psychological misorientation mental disorders originally presented in the "Azibo Nosology" which is a system for diagnosing mental disorders of an African-centered culture-specific nature in African descent persons (Azibo 2011; Azibo, 1989).

Importantly, skin lightening may also be associated with other factors, such as trauma or depression. For example, in a large multi-country study of skin lightening in the Caribbean, James et al. (2016) found that individuals who lightened skin were more likely to have been abused as children, were more likely to have significant symptoms of trauma, and were more likely to have significant depression. Similarly, in a study on the use of skin lighteners among university students from 26 countries, researchers found that among young women, those with depressive symptoms were more likely users of skin lightening products (Peltzer, Pengpid, and James 2016).

Finally, the practice of skin lightening has been associated with removing facial blemishes and imperfections (Hamed et al. 2010; Menke 2002; Pierre 2008). For example, in a study investigating motivations driving skin lightening practices in Tanzania, Lewis et al. (2011) conducted qualitative interviews with 42 urban women in Dar es Salaam who reported engaging in skin lightening practices for several reasons, including to remove pimples, rashes, and skin disease. As well, Charles' (2009) content analysis of reasons the individuals gave for lightening their skin included to remove facial blemishes.

While a growing body of literature has explored skin lightening around the world, increasing understanding, to date, there have been no formal studies investigating skin lightening in Eritrea. Accordingly, this paper helps to fill the void by exploring the practice of skin lightening in Eritrea, and also examining attitudes, knowledge, and perceptions surrounding the practice.

# **Design and Methodology**

This study relied on a variety of methods.<sup>3</sup> Using anonymous survey questionnaires, data was collected from 213 undergraduate female students (mean age 21.37, SD 1.51) from a large college in Eritrea. Students were selected randomly from an enrolment list provided by the college and written consent was obtained from all respondents. Inter-alia, the questionnaire covered demographic characteristics, as well asking about experience with skin lightening, family or peers' use of lightening products, awareness of problems, as well as perceptions about skin tone.

In addition to surveys, between January and July 2017, in-depth, semi-structured interviews were conducted with individuals, households, and key informants across Eritrea.<sup>4</sup> Individuals and households were selected through convenience and snowball sampling techniques. Key informants were from several educational institutions (e.g. the College of Arts and Social Sciences), the Ministry of Health, the National Union of Eritrean Women (NUEW), as well as several private businesses (e.g. cosmetics and beauty shops), and pharmacies. Importantly, the wide array of sources helps provide a diversity of views and perspectives, ultimately broadening understanding of the topic.

Interviews were open-ended and semi-structured (Hammer and Wildavsky 1989), a particularly useful format since the study retained many exploratory features. Furthermore, open-ended questions offered respondents an opportunity to organize responses within their own framework, thus potentially increasing the validity of responses. While the interviews and questions were semi-structured, they involved many follow-up queries and creative locutions (e.g. "why" and "what else") in order to further probe issues of merit or pursue clarity (Hammer and Wildavsky 1989).

All interviews were conducted in person or by telephone, generally lasted between thirty minutes and two hours, were conducted in either Tigrinya or English (which are two of Eritrea's three national working languages), and began after obtaining consent. During all interviews, handwritten notes were taken, with transcription occurring shortly afterward in order to reduce errors and ensure a high degree of accuracy and detail (Newing 2011: 113-114).

Additionally, the paper is also guided by numerous informal conversations and several focus group discussions. Notably, focus groups are practical and effective as they can reveal "how several people work out a common view, or the range of views, about some topic" (Fielding 1993: 141). Moreover, the utilization of focus groups helps to stimulate fruitful discussion and bring to the surface responses and perspectives about skin lightening in Eritrea that otherwise might lay dormant. For example, participants, on the basis of engaging with others, may be able to articulate more clearly their thoughts or views than they otherwise might if alone (Babbie 2007: 308).

Data analysis is based on data triangulation: obtaining, comparing, and contrasting evidence from a wide range of data sources (Bieri 2010; Creswell and Miller 2000: 126; Yin 2003). Relying on multiple sources of data allows for the convergence of various lines of inquiry and strengthens validity (Creswell and Miller 2000: 126 ff.; Yin 2003), and is important in gaining cumulative insights and acquiring a broader, richer perspective of skin lightening in the context of Eritrea. In addition, descriptive analysis and chi-square tests are utilized to present survey results and explore associations between different variables.

# **Results and Discussion**

Eritrea is a young, low-income country located within the fractious Horn of Africa region. After waging one of the longest liberation wars of the 1900s, it eventually gained independence in 1991. Eritrea has an area of approximately 124,000 square kilometres, and is divided into six main political administrative regions (*zobas*) – Debub, Gash Barka, Maekel, Southern Red Sea, Northern Red Sea, and Anseba. Eritrea has a population of approximately 3.5 million people, which is distributed between nine separate ethno-linguistic groups, and its per-capita GDP is approximately \$US 700. The population of Eritrea is split almost evenly between Christianity and Islam, with each representing nearly half of the population (EPHS 2010; IMF 2016; World Bank 2015).

Notably, Eritrea has made commendable progress within the health sector, especially upon the United Nations Millennium Development Goals (MDGs); life expectancy has increased; maternal, infant and child mortality rates have reduced dramatically; immunization coverage has rocketed; malaria mortality and morbidity have plummeted; and HIV prevalence has decreased considerably (Eritrea MDG 2014; Pose and Samuels 2011; UNDP 2014; WHO 2014). Although these developments reflect considerable progress, the country continues to face a variety of significant issues, including poverty reduction, socio-political challenges, erratic rainfall and the potential for severe drought, infrastructure development, food security, a shortage of skilled labor, macroeconomic imbalances, regional conflict and instability, and international sanctions (AfDB 2016; EPHS 2010; Eritrea MDG 2014; IMF 2003; Pose and Samuels 2011; World Bank 2015).

# Skin Lightening in Eritrea

Skin lightening is increasingly popular in Eritrea and many individuals, particularly females, engage in the practice. Interviews and discussions with numerous shopkeepers and merchants, from both large urban and smaller rural locations, revealed that skin lightening products were "highly popular" and "many customers" often purchased or enquired about various products or "ways to lighten their skin." Furthermore, several pharmacists and health workers noted that "numerous" individuals sought treatments or advice for complications (e.g. acne, rashes, irritation, patches, and blemishes, etc.) arising due to the use of skin lightening products. For example, a pharmacist in a southern rural town explained, "young women frequently come in and ask about how to deal with problems [and] spots or patches on their faces" associated with skin lightening products.

Additionally, during several focus group discussions, participants acknowledged "regularly" using skin lightening products and mentioned that "female friends, family members, and classmates" also used products. According to a group of young women, the majority of whom used skin lightening products or suggested they were "planning to" in the future, skin lightening was "normal [and] popular" among "women" in Eritrea. As well, during an interview, a male from a large urban center noted, "many of my [female] co-workers and former [college] classmates use skin lightening products."

Importantly, these views and perspectives are reflected by survey findings. Table 1 presents data collected from a random survey of 213 undergraduate female students (mean age 21.37, SD 1.51) from a college in Eritrea. A large proportion of the sample, 69.48%, knew others who used lightening products (e.g. family, friends, classmates, etc.). The prevalence of current skin lightening amongst the sample was 27.23%, while a total of 44.13% noted that they have ever used skin lightening products, suggesting that many respondents had previously used products and subsequently stopped. For those who have used products, the average age of first use was 18.1 years. Of note, the prevalence of skin lightening is considerably less than reported findings from other African countries. For example, a recent study in neighboring Sudan found that over 70% of undergraduates use skin lightening products, while a study of undergraduates in Nigeria found a prevalence of 64.9% (Ahmed and Hamid 2017; Ofili, Eze, and Onunu 2006).

The survey also revealed that 65.52% of respondents engaging in skin lightening primarily used creams and lotions, although a large percentage also used lightening soaps or homemade mixes consisting of natural ingredients such as lemons, papaya, honey, mango, chickpeas, turmeric, yogurt, or eggs. Throughout the country, a broad array of skin lightening creams, lotions, and soaps are readily available in general stores and cosmetics shops, as well as from roadside vendors or street merchants, while other types of products (such as pills or injections) are essentially nonexistent.

In Eritrea, lightening products are imported from countries in the Middle East and North Africa (e.g. Sudan, the UAE, Qatar, and Saudi Arabia).<sup>5</sup> Problematically, with the country lacking explicit legal or health regulations covering skin lightening products, many imported products have high levels of harmful, active ingredients or do not fully disclose contents. Furthermore, as suggested by the survey, many people are not fully aware of the dangers or side effects of using lightening products.

As with many other countries, skin lightening in Eritrea is associated with a number of different factors. Interviews, conversations, and discussions suggest there exists a socio-cultural emphasis on a light, fair complexion. This is particularly illustrated by numerous traditional or common words or phrases associating light skin with beauty, attractiveness, and purity and dark skin with negative traits. For example, the term "baria", meaning "slave", is a commonly used pejorative term linked with dark skin and features, while another common derogatory term, "harfaf", refers to having dark, coarse, and rough features. Furthermore, oft-used phrases, such as "keih kem Ade Mariam", translated as "red-white like [Virgin] Mother Mary", and "tsaeda getzu, tsaeda libu", meaning "white face, white heart," associate light skin with purity and honesty. These connections between light skin and positive traits or characteristics reflect significant color consciousness in Eritrean society and culture. Moreover, they serve to promote light skin tone as the ideal physical aesthetic, and ultimately valorize light skin over darker complexions.

Part of the explanation for this is rooted in Eritrean history. The country was an Italian colony from the late 1800s until 1941. Colonization and fascism saw power and control held by the Italians and the exploitation and subjugation of the dark, indigenous population, who were regarded as inferior, primitive and savage, ignorant, and uncivilized. Until 1937, children who had an Italian father and Eritrean mother were considered Italians (providing the father acknowledged the child as his), and unlike Eritreans, they received an education. By 1937, there were thousands of Eritreans of mixed race and they began to play a leading role in Eritrean society (Pateman 1990: 58). As well, during the early years of Italian rule, for judiciary purposes the Italians considered the lighter-skinned "Indians and Middle Easterners" above the local population. The notion of racial hierarchy was also evident in urban residential policies; for example, in 1908, colonial administrators divided the city of Asmara into different zones segregated by racial categories (Barrera 2003: 91).

Another important factor is the media, which plays a central role in setting expectations and standards about beauty and skin color. In Eritrea, televisions and satellite dishes are ubiquitous and foreign films and programs, particularly from the US, the Middle East, India, and South Korea, are quite popular. Moreover, Internet usage is increasing, particularly amongst the youth. Collectively, these perpetuate standardized conceptions of beauty, which tend to glorify fair, white, light skin. Notably, films and programs from India and South Korea almost exclusively feature fair, light-skinned stars.

Furthermore, advertisements for lightening products frequently use fair, light-skinned models with Eurocentric or Western features, while also linking light skin with beauty, success, and youth. For example, numerous products that are available from and prominently displayed in stores found throughout the country often promise "happiness" and "flawless," "gorgeous," "great," or "perfect" skin.

Ultimately, not only do the media and advertisements expose Eritreans to foreign, standardized ideals and expectations about beauty and skin tone, they also influence how Eritreans come to define and regard both. As explained by a respondent during an interview, "when people, especially young women, are repeatedly exposed to these images and messages, they think *that* is who or what they have to be."

Importantly, these points are supported by survey findings. Table 1 reveals how respondents tended to associate light, white skin with beauty and success. For example, 53.99% agreed that lighter skin tone is preferred in society, 47.42% agreed that it can help people find a better partner, and 34.74% preferred a light-skinned partner. Of note, Chi-square tests, presented in Table 2, show a statistically significant association between the former two preferences and the use of lightening products.

Moreover, during a lively discussion with a group of young male college students, many described a preference to marry a light-skinned partner, and in response to questions about describing beauty, typical responses included "keih" (essentially "light skin"). When participants described how products were also sometimes used to "[hide] or remove marks and spots" or combat acne and blemishes, they underscored the societal significance of beauty, as well as its being epitomized by a light, fair, unblemished complexion. As noted by one young single mother during an interview, many women engage in skin lightening "as a way to attract potential partners…[since] that's what a lot of people think is beautiful."

Interestingly, the use of lightening products may also be a form of conspicuous consumption and serve as a class or status marker. Eritrea is a low-income, developing country and, as described by several respondents, individuals using products may do so openly in order "to show off [or] to illustrate to others that they possess the wealth and ability to do so." For many, foreign products, which tend to be relatively expensive, offer distinction and confer status or prestige.

Table 1: Skin Lightening Among Female Undergraduates at a College in Eritrea

Overall N	213			
Age	Mean: 21.37			
	SD: 1.51			
Currently use	58 (27.23%)			
Have ever used	94 (44.13%)			
Age at first use	Mean: 18.1			
Lightening product used:				
Cream or Lotion	38 (65.52%)			
Soap	27 (46.55%)			
Natural Mix	21 (36.21%)			
Dill	0			
Pills	0			
Injection	0			
Know others who lighten	148 (69.48%)			
Person known that lightens:	140 (07.4070)			
Family	79 (37.09%)			
	75 (87.0570)			
Friends	112 (52.58%)			
	(= .= = )			
Classmates	86 (40.38%)			
Others	23 (10.79%)			
Aware of potential problems	127 (59.62%)			
from use				
Lighter skin is preferred in	115 (53.99%)			
our society				
Lighter skin helps people to	101 (47.42%)			
find a better partner in				
society				
Prefer light-skinned partner	74 (34.74%)			

N = 213

**Table 2**: Association Between Variables and Skin Lightening Among Female Undergraduates at a College in Eritrea

	Overall N - 213	Current Use				
	213	Yes		No		$\mathbf{P}^{\mathrm{a}}$
	n (%)	n	%	n	%	
Know others who lighten	148 (69.48%)	35	23.65	113	76.35	0.076
Aware of potential problems	127 (59.62%)	34	26.77	93	73.23	0.855
from use						
Lighter skin is preferred in	115 (53.99%)	41	35.65	74	64.35	0.010**
society						
Lighter skin helps people	101 (47.42%)	36	35.64	65	64.36	0.031*
find better partner in society						
Prefer light-skinned partner	74 (34.74%)	26	35.14	48	64.86	0.089

N = 213

# **Conclusion**

A centuries old practice, skin lightening is a multi-billion dollar, globalized industry, and over the past several decades it has emerged as a common practice in many parts of the world (Charles 2003; Coopernov 2016; Glenn 2008). This paper explores skin lightening within Eritrea, a young, developing country located in the Horn of Africa. Interviews and focus group discussions with informants from across Eritrea suggest skin lightening is increasingly popular in Eritrea and many individuals, particularly females, engage in the practice. Additionally, a random survey of female undergraduates at a large college in Eritrea found a prevalence of 27.23%, with most using lightening creams, lotions, or soaps. As with many other countries, skin lightening in Eritrea is associated with a number of different factors.

Despite the growing popularity of skin lightening in the country, there are no legal guidelines or health regulations covering lightening products in Eritrea. As a result, numerous unsafe products are imported and sold in general stores, cosmetic shops, and by informal merchants, ultimately posing significant dangers for potential users. In this context, it is important that national policymakers consider enacting legislation or developing guidelines to regulate skin lightening products and their ingredients.<sup>6</sup>

 $<sup>^{</sup>a}P = p$ -values were calculated by Chi-square tests

<sup>\*=</sup>significant at 0.05 alpha-level

<sup>\*\*=</sup>significant at 0.01 alpha-level

Given the prevalence of unsafe lightening products marketed and sold in Eritrea, combined with the fact that many people are not fully aware of the dangers of lightening products, there is a need to increase public awareness of the significant health risks associated with their use. Currently, youths receive extensive education, both in school and through out-of-school community programs, about general health issues (e.g. sex education, smoking, etc.). These types of programs can be expanded or augmented to include information about the dangers and implications of using lightening products. Furthermore, public health and safety campaigns can use national radio, television, and newspapers to disseminate messages, while informational posters or pamphlets can be displayed in pharmacies, health clinics, shopping areas, or other public spaces.

While this paper helps to broaden awareness and knowledge about skin lightening in Eritrea, a number of limitations may be noted. First, despite assurances of confidentiality, informants and participants may have provided inaccurate histories about their use of lightening products. This may have been due to the fear of stigma or discrimination. In many societies and cultures there is shame around skin lightening "either because one should 'naturally' have light skin, not chemically derived light skin, or because some believe that lightening the skin implies a shame of one's race or ethnic identity" (Hunter 2011: 147). It is quite possible that this factor may have influenced responses by informants and survey participants.

In addition, survey results are from a sample of female undergraduate students. This sample is not representative of the general Eritrean population. Accordingly, future research can explore skin lightening among the general population of women or examine lightening among the male or general population of Eritrea.

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# **Endnotes**

<sup>1</sup>In addition to "skin lightening," other terms frequently utilized to describe the practice include "skin bleaching," "skin brightening," "skin fading," and "skin whitening." For ease, I use the term skin lightening here (Hunter 2011).

<sup>2</sup>Furthermore, in many developing countries, while laws or regulations may be in place regarding skin lightening products and their contents, countries may lack the means to meaningfully enforce or implement laws and regulations.

<sup>3</sup>The study was approved by the College of Arts and Social Sciences Research Committee, as well as the Department of Sociology and Social Work Research Committee, both located in Adi Keih, Eritrea.

<sup>4</sup>Interviews took place in and with respondents from Asmara, the capital, as well as a number of other towns and cities including Adi Kuala, Adi Keih, Dekemhare, Keren, Massawa, Mendefera, and Senafe.

<sup>5</sup>Notably, skin lightening is quite popular within these countries and lightening products are widely available. For example, Saudi Arabia – from which many Eritrean merchants and traders import products – offers a wide variety of different types and brands of skin lightening products (Al-Saleh and Al-Doush 1997).

<sup>6</sup>Research suggests that legislation is often not enough, and that stiff compliance and enforcement are also required (Ahmed and Hamid 2017).

# Bibliography

Adebajo S.B. 2002. "An Epidemiological Survey of the Use of Cosmetic Skin Lightening Cosmetics Among Traders in Lagos, Nigeria." West African Journal of Medicine. 21(1): 51–55.

AfDB. 2016. African Economic Outlook: Sustainable Cities and Structural Transformation. Abidjan: African Development Bank Group. Available at http://www.africaneconomicoutlook.org/sites/default/files/2016-05/eBook\_AEO2016.pdf.

Ahmed, A.E. and M.E. Hamid. 2017. "Use of Skin-Whitening Products by Sudanese Undergraduate Females: A Survey." *Journal of Racial and Ethnic Health Disparities*. 4(2): 149-155.

Addo, H. 2000. "Squamous Cell Carcinoma Associated with Prolonged Bleaching." *Ghana Medical Journal*. 34: 3.

Ajose, F.O.A. 2005. "Consequences of Skin bleaching in Nigerian Men and Women." *International Journal of Dermatology*. 44(1): 41–43.

Al-Saleh I. and I. Al-Doush. 1997. "Mercury Content in Skin-lightening Creams and Potential Hazards to the Health of Saudi Women." *Journal of Toxicology and Environmental Health*. 51(2): 123-130.

Ashikari M. 2005. "Cultivating Japanese Whiteness: The 'Whitening' Cosmetics Boom and the Japanese Identity." Journal of Material Culture. 10(1): 73-91.

Azibo, D. 2011. "Commentary: On Skin Bleaching and Lightening as a Psychological Misorientation Mental Disorder." *The Journal of Pan African Studies*. 4(4): 219-232.

Azibo, D. 1989. "African-centered Theses on Mental Health and a Nosology of Black/African personality Disorder." *Journal of Black Psychology*. 15: 173-214.

Babbie, E. 2007. *The Practice of Social Research*. Belmont, CA: Wadsworth Publishing Company.

Barr R.D., P.H. Rees, P.E. Cordy, A. Kungu, B.A. Woodger, H.M. Cameron. 1972. "Nephrotic Syndrome in Adult Africans in Nairobi." *British Medical Journal*. 2(5806):131–134.

Barrera, Giulia. 2003. "The Construction of Racial Hierarchies in Colonial Eritrea: The Liberal and Early Fascist Period (1897-1934)." Pp. 81-116 in Patrizia Palumbo (ed.), *A Place in the Sun: Africa in Italian Colonial Culture from Post-Unification to the Present*. Berkeley, CA: University of California Press.

Baumann, S. 2008. "The Moral Underpinnings of Beauty: A Meaning-Based Explanation for Light and Dark Complexions in Advertising." *Poetics*. 36(1): 2-23.

Bieri, F. 2010. From Blood Diamonds to the Kimberley Process: How NGOs Cleaned up the Global Diamond Industry. Burlington, VT: Ashgate Publishing Limited.

Blay, Y.A. 2011. "Skin Bleaching and Global White Supremacy: By Way of Introduction." *The Journal of Pan African Studies*. 4(4): 4-46.

Blay, Y.A. 2009. "Ahoofe kasa!: Skin Bleaching and the Function of Beauty Among Ghanaian Women." *JENdA: A Journal of Culture and African Women Studies*. 14: 51–85.

Charles, C.A.D. 2011a. "Skin Bleaching and the Prestige Complexion of Sexual Attraction." *Sexuality and Culture*. 15(4): 375-390.

Charles, C.A.D. 2011. "The Derogatory Representations of the Skin Bleaching Products Sold in Harlem." *Journal of Pan African Studies*. 4(4): 117-141.

Charles, C.A.D. 2009. "Skin Bleachers' Representations of Skin Color in Jamaica." *Journal of Black Studies*. 40(2): 153-170.

Charles, C.A.D. 2003. "Skin Bleaching, Self-Hate, and Black Identity in Jamaica." *Journal of Black Studies*. 33(6): 711-728.

Coard, S.I., A.M. Breland, and P. Raskin. 2001. "Perceptions of and Preferences for Skin Color, Black Racial Identity, and Self-esteem Among African-Americans." *Journal of Applied Social Psychology*. 31(11): 2256-2274.

Coopernov, Helene. 2016. "Where Beauty Means Bleached Skin." *New York Times*. 26 November. Available at https://www.nytimes.com/2016/11/26/fashion/skin-bleaching-south-africa-women.html?\_r=0#whats-next.

Counter, S. A. and L.H. Buchanan. 2004. "Mercury Exposure in Children: A Review." *Toxicology and Applied Pharmacology*. 198(2): 209-230.

Creswell, J. and D. Miller. 2000. "Determining Validity in Qualitative Inquiry." *Theory into Practice*. 39(3): 124-130.

de Souza, Melanie. 2008. "The Concept of Skin Bleaching in Africa and Its Devastating Health Implications." *Clinics in Dermatology*. 26(1): 27-29.

del Giudice, P. and P. Yves. 2002. "The Widespread Use of Skin Lightening Creams in Senegal: A Persistent Public Problem in West Africa." *International Journal of Dermatology*. 41(2): 69-72.

Deshpande, A. 2002. "Assets versus Autonomy? The Changing Face of the Gender-Caste Overlap in India." *Feminist Economics*. 8(2): 19-35.

do Nascimento, Abdias. 1979. Brazil: Mixture or Massacre? Dover: Majority Press.

Durosaro, A.I., S.K. *Ajiboye, and A.O. Oniye.* 2012. "Perceptions of Skin Bleaching Among Female Secondary School Students in Ibadan Metropolis, Nigeria." *Journal of Education and Practice.* 3(7): 43.

EPHS. 2010. Eritrea: Population and Health Survey: 2010. Asmara, Eritrea: The State of Eritrea and the National Statistics Office.

Eritrea MDG. 2014. *Health Millennium Development Goals Report: Innovations Driving Health MDGs in Eritrea*. Asmara, Eritrea. Available at www.er.undp.org/content/dam/eritrea/docs/MDGs/Eritrea% 20Health% 20MDGs% 20Report% 202014.pdf?download.

Fielding, N. 1993. "Qualitative Interviewing." Pp. 135-153 in: N. Gilbert (ed.), *Researching Social Life*. London: Sage.

Findlay, G.H., J.G.L. Morrison, and I.W. Simson. 1975. "Exogenous Ochronosis and Pigmented Colloid Milium from Hydroquinone Bleaching Creams." *British Journal of Dermatology*. 93(6): 613-622.

Fingerson, Laura. 1999. "Active Viewing." Journal of Contemporary Ethnography. 28: 389-418.

Fokuo, J. K. 2009. "The lighter side of marriage: Skin-bleaching in post-colonial Ghana." *African and Asian Studies*. 8(1-2): 125-146.

Gagne, Patricia and Deanna McGaughey. 2002. "Designing Women: Cultural Hegemony and the Exercise of Power Among Women Who Have Undergone Elective Mammoplasty." *Gender & Society*. 16: 814-838.

Glahder C.M., P.W.U. Appel, G. Asmund. 1999. *Mercury in Soap in Tanzania*. Copenhagen: Ministry of Environment and Energy, National Environmental Research Institute (NERI) Technical Report No. 306. Available at http://www2.dmu.dk/1\_viden/2\_publikationer/3\_fagrapporter/rapporter/fr306.pdf.

Glenn, E.N. 2008. "Yearning for Lightness. Transnational Circuits in the Marketing and Consumption of Skin Lighteners." *Gender & Society*. 20(10): 281-302.

Grauerholz, Liz and Lori Baker-Sperry. 2003. "The Pervasiveness and Persistence of the Feminine Beauty Ideal in Children's Fairy Tales." *Gender & Society*. 17: 711-726.

Hall, Ronald. 2003. "Skin Color as Post-Colonial Hierarchy: A Global Strategy for Conflict Resolution." *The Journal of Psychology*. 13(1): 41-53.

Hall, Ronald. 1995. "The Bleaching Syndrome: African Americans' Response to Cultural Domination Vis-à-vis Skin Colour." *Journal of Black Studies*. 26 (2): 172-184.

Hamed, S.H., R. Tayyem, N. Nimer, and H.S. AlKhatib. 2010. "Skin-lightening Practice among Women Living in Jordan: Prevalence, Determinants, and User's Awareness." *International Journal of Dermatology*. 49(4): 414–420.

Hammer, D. and A. Wildavsky. 1989. "The Open-ended, Semi-structured Interview: An (almost) Operational Guide." Pp. 57-101 in *Craftways: On the Organization of Scholarly Work*. New Brunswick: Transaction Publishers.

Harada, M., S. Nakachi, K. Tasaka, S. Sakashita, K. Muta, K. Yanagida, and H. Ohno. 2001. "Wide Use of Skin-Lightening Soap May Cause Mercury Poisoning in Kenya." *The Science of The Total Environment*. 269(1–3): 183–187.

Hardwick, N., L.W. Van Gelder, C.A. Van der Merwe, M.P. Van der Merwe. 1989. "Exogenous Ochronosis: An Epidemiological Study." *British Journal of Dermatology*. 120(2): 229-238.

Harrison, M.S. and K.M. Thomas. 2009. "The Hidden Prejudice in Selection: A Research Investigation on Skin Color Bias." *Journal of Applied Social Psychology*. 39(1): 134–168.

Harrison, Kristen and Joanne Cantor. 1997. "The Relationship Between Media Consumption and Eating Disorders." *Journal of Communication*. 47: 40-68.

Hesse-Biber, Sharlene. 2007. Am I Thin Enough Yet? New York: Oxford University Press.

Hunter, Margaret L. 2011. "Buying Racial Capital: Skin-Bleaching and Cosmetic Surgery in a Globalized World." *The Journal of Pan African Studies*. 4(4): 142-166.

Hunter, Margaret L. 2002. "If You're Light You're Alright' Light Skin Color as Social Capital for Women of Color." *Gender and Society*. 16 (2): 175-193.

Hunter, Margaret L. 1998. "Colorstruck: Skin Color Stratification in the Lives of African American Women." *Sociological Inquiry*. 68(4): 517-535.

IMF 2016. World Economic Outlook Database: April 2016. Washington, DC: International Monetary Fund. Available at http://www.imf.org/external/data.htm.

IMF. 2003. Eritrea: Selected Issues and Statistical Appendix. IMF Country Report No. 03/166. Washington, DC: International Monetary Fund.

IPCS. 2003. Elemental Mercury and Inorganic Mercury Compounds: Human Health Aspects. Geneva: World Health Organization, International Programme on Chemical Safety (Concise International Chemical Assessment Document 50). Available at: http://www.who.int/entity/ipcs/publications/cicad/en/cicad50.pdf.

Jablonski, N.G. 2012. *Living Color: The Biological and Social Meaning of Skin Color*. Berkeley, CA: University of California Press.

James, C., A.A. Seixas, A. Harrison, G. Jean-Louis, M. Butler, F. Zizi, and A. Samuels. 2016. "Childhood Physical and Sexual Abuse in Caribbean Young Adults and Its Association with Depression, Post-Traumatic Stress, and Skin Bleaching." *Journal of Depression and Anxiety*. 5(1): 214-235.

Jha, S. and M. Adelman. 2009. "Looking for Love in All the White Places: A Study of Skin Color Preferences on Indian Matrimonial and Mate-Seeking Websites." *Studies in South Asian Film & Media*. 1(1): 65-83.

Karamagi, C., E. Owino, and E.T. Katabira. 2001. "Hydroquinone Neuropathy Following Use of Skin Bleaching Creams: Case Report." *East African Medical Journal*. 78(4): 223-4.

Keane, F.M., S.E. Munn, N.F. Taylor, and A.W. du Vivier. 2001. "Unregulated Use of Clobetasol Propionate." *British Journal of Dermatology*. 144(5): 1095–1096.

Kooyers, T.J. and W. Westerhof. 2006. "Toxicology and Health Risks of Hydroquinone in Skin Lightening Formulations." *Journal of the European Academy of Dermatology & Venereology*. 20(7), 777–780.

Koumbate, K., A. Mouhari-Toure, B. Saka, A.S. Akapo, A. Maboudou, P. Pitche, and K. Tchangai-Walla. 2012. "Acne and Skin Bleaching in Lome, Togo." *International Journal of Dermatology*. 51(1): 27-29.

Kpanake, L., M.T.M. Sastre, E. Mullet. 2010. "Skin Bleaching Among Togolese: A Preliminary Inventory of Motives." *Journal of Black Psychology*. 36(3): 350-368.

Kpanake, L., M.T.M. Sastre, P.C. Sorum, and E. Mullet. 2008. "Knowledge of the Risks Associated With Skin Bleaching Among Togolese Users." *Tropical Doctor*. 38(1): 49-50.

Kramer, Laura. 2011. The Sociology of Gender: A Brief Introduction. New York: Oxford University Press.

Ladizinski B., N. Mistry, R.V. Kundu. 2011. "Widespread Use of Toxic Skin Lightening Compounds: Medical and Psychosocial Aspects." *Dermatologic Clinics*. 29(1): 111–123.

Leong, Solomon. 2006. "Who's the Fairest of Them All? Television Ads for Skin-Whitening Cosmetics in Hong Kong." *Asian Ethnicity*. 7(2): 167-181.

Lewis, Kelly M., Navit Robkin, Karie Gaska, and Lillian Carol Njoki. 2011. "Investigating Motivations for Women's Skin Bleaching in Tanzania." *Psychology of Women Quarterly*. 35(1): 29-37.

Li, Eric P.H., Hyun Jeong Min, Russell W. Belk, Junko Kimura, and Shalini Bahl. 2008. "Skin Lightening and Beauty in Four Asian Cultures", Pp. 444-449 in Angela Y. Lee and Dilip Soman (eds.), *NA - Advances in Consumer Research*, *Volume 35*. Duluth, MN: Association for Consumer Research.

Mahé, A., J.L. Perret, F. Ly, F. Fall, J.P. Rault, and A. Dumont. 2007. "The Cosmetic Use of Skin-Lightening Products During Pregnancy in Dakar, Senegal: A Common and Potentially Hazardous Practice." *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 101(2): 183-187.

Mak, A.K.Y. 2007. "Advertising Whiteness: An Assessment of Skin Color Preferences Among Urban Chinese." *Visual Communication Quarterly*. 14(3): 144-157.

Marx, Anthony W. 1998. *Making Race and Nation: A Comparison of the United States, South Africa, and Brazil.* New York: Cambridge University Press.

Miller, L. 2006. *Beauty Up: Exploring Contemporary Japanese Body Aesthetics*. Berkeley, CA: University of California Press.

Morales, M.C. 2009. "Ethnic-Controlled Economy or Segregation? Exploring Inequality in Latina/o Co-ethnic Jobsites." *Sociological Forum.* 24(3): 589-610.

Nadeem, Shehzad. 2014. "Fair and Anxious: On Mimicry and Skin-Lightening in India." *Social Identities: Journal for the Study of Race, Nation and Culture*. 20(2-3): 224-238.

Newing, H. 2011. "Qualitative Interviews and Focus Groups. Ch. 6 in H. Newring (ed), *Conducting Research in Conservation: Social Science Methods and Practice*. New York, NY: Routledge.

Ofili A.N., E.U. Eze, and A.N. Onunu. 2006. "Prevalence of Use of Skin Lightening Agents amongst University of Benin Undergraduates in Benin City, Nigeria." *Nigerian Medical Practitioner*. 49(1): 24-27.

Oumeish, Oumeish Youssef. 2001. "The Cultural and Philosophical Concepts of Cosmetics in Beauty and Art Through The Medical History of Mankind." *Clinics in Dermatology*. 19(4): 375-386.

Pateman, R. 1990. Eritrea: Even the Stones are Burning. Trenton, NJ: The Red Sea Press, Inc.

Peltzer, K., S. Pengpid, and C. James. 2016. "The Globalization of Whitening: Prevalence of Skin Lighteners (or Bleachers) Use and Its Social Correlates Among University Students in 26 Countries." *International Journal of Dermatology*. 55(2): 165-172.

Peregrino, C.P, M.V. Moreno, S.V. Miranda, A.D. Rubio, and L.O. Leal. 2011. "Mercury Levels in Locally Manufactured Mexican Skin-Lightening Creams." *International Journal of Environmental Research and Public Health*. 8(6): 2516-2523.

Pierre, Jemima. 2008. "I Like Your Colour!' Skin Bleaching and Geographies of Race in Urban Ghana." *Feminist Review*. 90(1): 9-28.

Pose, R.R. and F. Samuels. 2011. *Progress in Health in Eritrea: Cost-Effective Inter-Sectoral Interventions and a Long-Term Perspective*. London: Overseas Development Institute.

Robinson, T.L. and J.V. Ward. 1995. "African-American Adolescents and Skin Color." *Journal of Black Psychology*. 21(3): 256-274.

Rockquemore, Kerry A. 2002. "Negotiating the Color Line." *Gender & Society*. 16: 485-503.

Rongmuang, D., B.J. McElmurry, L.L. McCreary, C.G. Park, A.G. Miller, C. Corte. 2011. "Regional Differences in Physical Appearance Identity Among Young/Adult Women in Thailand." *Western Journal of Nursing Research*. 33(1): 106-115. http://wjn.sagepub.com/content/33/1/106.full.pdf+html.

Rusmadi, Siti Zulaikha, Sharifah Norkhadijah Syed Ismail, and Sarva Mangala Praveena. 2015. "Preliminary Study on the Skin Lightening Practice and Health Symptoms among Female Students in Malaysia." *Journal of Environmental and Public Health*. Available at https://www.ncbi.nlm.nih.gov/pubmed/26693230.

Saint Louis, Catherine. 2010. "Creams Offering Lighter Skin May Bring Risks." *New York Times*. 15 January. Available at http://www.nytimes.com/2010/01/16/health/16skin.html.

Saraswati, L. A. 2010. "Cosmopolitan whiteness: The Effects and Affects of Skin Whitening Advertisements in a Transnational Women's Magazine in Indonesia." *Meridians*. 10(2): 15-41.

Shevde, Natasha. 2008. "All's Fair in Love and Cream: A Cultural Case Study of Fair & Lovely in India." *Advertising and Society Review*. 9(2): 1-9.

Street, Jalika C., Karie Gaska, Kelly M. Lewis, and Michael L. Wilson. 2014. "Skin Bleaching: A Neglected Form of Injury and Threat to Global Skin." *African Safety Promotion Journal*. 12(1): 52-72.

Thompson, Maxine S. and Verna M. Keith. 2001. "The Blacker the Berry: Gender, Skin Tone, Self-Esteem, and Self-Efficacy." *Gender & Society*. 15: 336-357.

Traore A., J.C. Kadeba, P. Niamba, F. Barro, and L. Ouedraogo. 2005. "Use of Cutaneous Depigmenting Products by Women in Two Towns in Burkina Faso: Epidemiologic Data, Motivations, Products and Side Effects." *International Journal of Dermatology*. 44: 30-32.

UNDP. 2014. Innovations Driving Health MDGs in Eritrea: Health Millennium Development Goals Report (Abridged Version). Asmara, Eritrea: Ministry of Health and United Nations Development Programme (UNDP) in Eritrea. Available at www.er.undp.org/content/dam/eritrea/docs/MDGs/Abridged%20MDG%20report\_final.pdf.

UNEP. 2008. *Mercury in Products and Wastes*. Geneva: United Nations Environment Programme, Division of Technology, Industry and Economics, Chemicals Branch. Available at http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/AwarenessPack/English/UNEP\_Mo d1\_UK\_Web.pdf.

Verma, S.B. 2010. "Obsession With Light Skin: Shedding Some Light on Use of Skin Lightening Products in India." *International Journal of Dermatology*. 49(4): 464-465.

Wade, T.J. 1996. "The Relationship Between Skin Color and Self Perceived Global, Physical, and Sexual Attractiveness, and Self Esteem for African-Americans." *Journal of Black Psychology.* 22(3): 358-373.

Walters, Suzanna Danuta. 1999. "Sex, Text, and Context: (In) Between Feminism and Cultural Studies." Pp. 222-257 in *Reviewing Gender*, edited by M.M. Ferree, B.B. Hess, and J. Lorber. Thousand Oaks, CA: Sage.

West, Cornel. 2001. Race Matters. Boston, MA: Beacon Press.

WHO. 2014. Country Cooperation Strategy: At a Glance - Eritrea. Geneva: World Health Organization (WHO). Available at: http://www.who.int/countryfocus/cooperation\_strategy/ccsbrief\_eri\_en.pdf.

Winders, J., J. P.I. Jones, and M.J. Higgins. 2005. "Making Gueras: Selling White Identities on Late-Night Mexican Television." *Gender, Place and Culture*. 12(1): 71-93.

Wone I., A. Tal-Dia, O.F. Diallo, M. Badiane, K. Touré, and I. Diallo. 2000. "Prevalence of the use of skin bleaching cosmetics in two areas in Dakar, Sénégal." *Dakar Medical*. 45(2): 154-157.

World Bank. 2015. *Eritrea Overview: Context, Strategy, Results, Partners*. Washington, DC: The World Bank. Available at www.worldbank.org./en/country/eritrea/overview.

Yin, R.K. 2003. *Case Study Research: Design and Methods*. (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.