

# **More than just Skin Deep: An Exploration into the Reasons Behind Skin Depigmentation**

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## **Abstract**

Skin lightening is a global phenomenon involving the use of skin altering procedures to depigment the skin. Depigmentation is defined as the loss of pigment from the skin. The reasons for skin lightening are numerous and diverse, involving socio-economic perception, race relations and popular fashion statements. Some of the lightening procedures are dangerous to the human body and result in skin discoloration and other conditions, such as contact dermatitis, exogenous ochronosis and immunotoxicity. Due to the increased use of skin lightening procedures, many countries have publicized the deleterious side effects but there still is a need to raise more awareness.. Likewise, there is a need for programs celebrating dark skin and healthy skin as beautiful.

## **1. Introduction**

“Magic mirror on the wall, who is the fairest of them all?” The evil queen in *Snow White and the Seven Dwarves* asks the mirror this question to find out if she is still the most beautiful woman in all the land. This message was heard by millions of young girls around the world when Disney came out with their version of Snow White in 1937. This was a poignant example of the types of messages heard by young girls globally, on what defined a beautiful person. A beauty associated with fairness and “skin as white as snow,” for many girls growing up in global south countries this type of beauty was unattainable except through the use of skin color-altering procedures. This message has pervaded societies around the world through media, historical representation and societal perceptions. This paper focuses on the societal implications of this and similar messages to people of color (in particular, young girls) and the resulting detrimental effects on their health. The paper presents information about the prevalence of skin depigmentation agents, the process of skin depigmentation, the history of skin depigmentation, factors impacting the use of skin depigmentation agents, health concerns and potential policies and current interventions. Essentially, this paper will argue that skin depigmentation is a hazardous, yet a deeply ingrained practice that is in need of multi-level interventions including policy and educational interventions.

## **2. Use of Skin Depigmentation Agents**

Skin lightening is practiced in many parts of the world, with “forty percent of women in China and seventy-two percent of women in Nigeria reporting having used skin lightening products.”<sup>1,2</sup> In Jordan, “it was reported that 60.7% of women used skin lightening agents,” In Pakistan fifty-nine percent of women stated that they used skin lightening products.<sup>3,4</sup> In a survey carried out in Mali “twenty-five percent of two hundred and ten women developed seventy four different side effects” directly connected to the use of skin lightening products.<sup>2</sup> In a study conducted in Lagos, Nigeria, of 450 people across all socio economic strata, age, sex and marital status, 77.3% reported use of

skin lightening cosmetics and of those, 72.4% were women.<sup>5</sup> The literature on the prevalence of use of skin lightening products in the United States is scarce. However by looking at studies such as the ones mentioned it is reasonable to assume that skin lightening is prevalent among a variety of populations despite the potential harmful ingredients.

### 3. Skin Depigmentation Products and Process

The products used in skin lightening contain mainly a hydroquinone base, but some are corticosteroids and others have mercury derivatives. Hydroquinone is derived from benzene, a known carcinogen, and is linked to cases of ochronosis and dermatitis. Ochronosis is an autosomal recessive metabolic disorder that results in the discoloration of cartilaginous tissue. Dermatitis is a red, scaly inflammation of the skin, these are the more common side effects.<sup>6</sup> There are other more serious yet rare conditions associated with reported hydroquinone use, such as reported cases of neuropathy, nephropathy and other illnesses including reported developed addictions to steroids.<sup>6</sup> With these kinds of illnesses being reported to physicians on a global scale, it is imperative for public health initiatives to look into the reasons as to why people are using skin whitening products and what they can do to lessen its negative impacts on society. Skin depigmentation/ bleaching/ whitening or lightening is the process of using chemical substances to lighten a person's skin tone by reducing the concentration of melanin expressed in the skin. Melanin is the pigment produced by melanocytes found in the basal layer of the epidermis. The amount of expressed melanin in the skin, hair and nails determines the gradation of skin pigmentation. Melanin is necessary for the development of the neural tube in embryological development as well as synthesis of new cells and the regulation of methionine. It is important in the protection of cell's DNA from UV damage and prevents destruction of folic acid.<sup>7</sup>

There are multiple primary active ingredients used in most skin lightening agents. Each works at different stages of melanin and post-melanin synthesis, as depigmenting agents. Some of these active ingredients have been found to be dangerous to the human body, including hydroquinone, corticosteroids and mercury derivatives.<sup>7</sup> These active ingredients work in different ways to achieve the desired pigmentation. Hydroquinone works by binding to tyrosinase, a key rate-limiting enzyme responsible for the conversion of tyrosine (a precursor to melanin) into melanin by the melanocyte. Corticosteroids are synthetic forms of cortisone, an anti-inflammatory hormone produced by the adrenal gland, and they are usually used to reduce inflammation.<sup>8</sup> In skin lighteners corticosteroids work in three ways. One way is through vasoconstriction resulting in a localized reduction of blood flow. A second way is through slowed cell turnover resulting in the reduction and activity of melanocytes and achieved by inhibiting the cell cycle directly affecting melanocyte production. A third way is through reduced production of melanocyte-stimulating hormone (MSH). Although MSH is not a significant contributor to racial differences, it is instrumental in conditions concerning localized hyperpigmentation. These mechanisms make corticosteroids the ideal, prescribed drugs for localized skin lightening (in the attempts of achieving an even skin tone).<sup>8</sup> Corticosteroids use the competitive inhibitor route, effectively decreasing or permanently stopping melanin synthesis in human melanocytes. Mercury and its derivatives work in similar ways, stopping or reducing production of melanin. The side effects include mercury poisoning which, over a period of prolonged use, can result in neurological and kidney damage.<sup>8</sup> Overall, the active ingredients used to inhibit melanin expression are effective in their purpose, but many of these chemicals have debilitating effects on the human body, which will be discussed in the health concerns portion of this paper. Skin lightening is a phenomenon that stretches back into the ancient world. Even then the processes used to lighten the skin were questionable and resulted in harm to the human body.

### 4. The History of Skin Depigmentation

Skin lightening has been practiced for many generations, and was initially practiced by North Africans, Europeans and Asians. According to Kevin Jones, curator at the Fashion Institute of Design and Merchandising Museum in Los Angeles, the earliest documented cases of skin whitening date back to Ancient Egypt. Pharaohs, noble men and normal women wore foundation to give themselves a lighter complexion.<sup>9</sup> In Ancient Greece a paste of white lead and chalk was used to lighten the Grecians faces. In the European Middle Ages, those who were wealthy enough would not venture outside for fear of the darkening rays of the sun. They showed off their affluence through paleness, in the 6th Century women would achieve this pallor by bleeding themselves. Noble women laid claim to the pale faces whilst other women painted their faces pink to differentiate themselves from upstarting working women or prostitutes. This trend of whitening continued until the Renaissance age, where women mixed a solution

of carbonate, hydroxide and lead oxide to further skin whitening. Unfortunately, this mixture resulted in lead accumulation and poisoning that manifested itself in muscle paralysis and sometimes death. In a morbid twist of events, Signora Toffana, mixed arsenic into the powders of other noble ladies creating the poison Aqua Toffana, killing approximately 600 people. Once the Industrial Age arrived, skin lightening fell out of fashion as wealthier people differentiated themselves from factory workers by their tanner skin. Tanner, darker skin signified wealth as it demonstrated the luxury of being outdoors and travelling to exotic places. Pale skin was reminiscent of long hours spent working in coal mines or in factories.<sup>10</sup> Though the phenomenon of tanning has now become more prevalent across income levels and societies, the focus of this paper focuses on the specific social and historical contexts of skin lightening.

In China and Japan skin lightening has a longer history. A classic saying in China and Japan is, “One whiteness covers three uglinesses.” As with Older Europe, white skin was associated with the gentile class.<sup>11</sup> The rich had the luxury of staying indoors whilst the workers browned in the rice fields. In Ancient China, the nobility “ground up pearls from seashells and ingested them to obtain whiter skin, across the sea in Japan, Geisha girls powdered their faces chalk white.”<sup>11b</sup> In India skin whitening is tied directly to the Caste system. Lighter skin indicated whether one was born into a higher rank, and what status one had in society. As with its East Asian and European counterparts, pigmentation was tied to socio-economic status. In an interview carried out by National Public Radio (NPR), Mr. Prahlad Kakkar, an Indian social activist and renowned television director alluded to the historical trauma faced by India and its ties to skin lightening in his statement, “It [skin lightening] also has direct ties to our history of invasion by foreigners who all appeared to have lighter skin, the British, Persians and Moghuls. Lighter skin was associated with power, success, ambition and drive.”<sup>12</sup>

In Africa and within the African diaspora, skin whitening is tied closely to the region’s colonial and imperial past. In the United States, during the Slave time period, biracial slaves were promoted to house slaves and separated from their darker skinned kinsmen. This dichotomy of treatment created deep furrows within the African American community that are still felt and experienced through systems such as colorism, discrimination based on skin shade. Examples include lighter-skinned blacks being afforded greater liberties,

*Whites tended to view mulattoes as more intelligent than blacks but not the equal of Caucasians [and believed that] because mulattoes were intellectually superior to blacks, with whom they were racially grouped, they were the leaders in every line of activity undertaken by Negroes.*<sup>13</sup>

These perceptions perpetuated stereotypes that lighter-skinned individuals were better educated, more successful and more highly valued.

In African and Caribbean countries, colonial rule played a large part in setting distinctions within black communities, treating lighter skinned individuals better, offering them higher positions in their governments than their darker skinned counterparts. For instance, aspects of imposed colorism and the remnants of colonial rule can be found in the Rwandan genocide. Studies conducted at Princeton University, the Smithsonian Institute, Oxford University, Columbia University and other institutions show direct associations between the occupancy of Rwanda by Belgium and the gravity of the genocide that ensued. Research showed that, pre-colonization, the three ethnic groups coexisted with each other, there was recognition of distinction amongst them but one that did not result in disenfranchisement.<sup>14</sup> During the Belgian occupation, racial stratification (between the Tutsis and Hutus) was entrenched and exploited in the Belgians’ search for natural resources. According to Dr. Etienne Smith, at Universités à l’IEP de Paris one of the numerous factors that led to the civil war between the Hutus and Tutsis was the discriminatory treatment of the Tutsis during colonial rule.<sup>15</sup> This manifested itself in the implementation of a racist regime that used (amongst other discriminators) the lighter skin and more Anglicized features of the Tutsis. The Belgian colonials promoted the Tutsis to higher public positions, gave them land and provided them more access to resources. This resulted in the maltreatment of the Hutus during that time period, thus causing one more barrier between the Hutus and Tutsis.<sup>16-20</sup> Another aspect of skin bleaching that is found mainly in the Caribbean is bleaching for fashion. This approach is akin to present day tanning amongst lighter populations.

Colorism is the first cousin to racism. It is discrimination based on skin color. The distinctions are made on gradation of skin color from light to dark and are usually intra-racial. Colorism promotes better treatment to lighter skinned individuals compared to their darker skinned counterparts.<sup>21</sup> Many people of color are affected by both racism and colorism. Both racism and colorism involve discrimination based on skin color. However with racism the discrimination is interracial, darker skinned people of color are prone to experience discrimination on both levels, within and outside of their communities. W.E.B. Dubois stated that “for the problem of the twentieth century is the problem of the color line.”<sup>21</sup> with regards to race relations in the United States.

In the 21st century the problem has shifted from the color line to the color chart. The issue of colorism removes whiteness from the center of the equation and looks at how “racially subordinated groups may contribute to and are responsible for the construction of their own identities and sometimes oppressive intra-group relations.”<sup>22,23</sup> To better understand colorism in the African American context, the history of race in America must first be understood. One feature that is integral to this paper is the definition of black. In the United States, the one-drop rule was issued, which regarded that any person with one ancestor from Africa was considered black. Blackness includes biracial, multiracial, light skinned and dark skinned blacks. Even though one may pass for white and may have been born to generations of white ancestors, they were still considered black. In *Wall v. Oyster* (1910), Isabel Wall was admitted to a segregated white school based on her lighter complexion but was later removed from the school due to her colored lineage. The judge described her as “white” in appearance and was recognized as white by her neighbors and friends. However, due to her paternal great-grandmother being a biracial black woman, Wall was considered colored. This case determined that colored meant “a person of negro blood no matter the proportions of mixtures, so long as Negro blood is traceable.”<sup>24</sup> Regardless of the racial divide between whites and blacks, there was still a clear difference in treatment between dark-skinned blacks and light-skinned blacks within and outside of the African American community.

In later studies conducted by Keith and Herring, the authors of *Skin Deep: How Race and Complexion matter in the Colorblind Era*, the authors found that skin tone was a more significant discriminatory factor for women than for men when determining their levels of “education, occupation and family.”<sup>25</sup> This conclusion was sustained in further studies conducted in the 21st century. One study by Johnson and Farrell Jr. found that “light skinned African-American men were more likely than their dark skinned counterparts to be working.”<sup>25</sup> They found that the light skin tone advantage was greatest for men with thirteen or more years of education, with unemployment rates between light-skinned black men and whites being almost identical and significantly lower to dark skinned males.

In the pursuit of lighter, whiter skin as a result of colorism, in 1949 the president of the National Association for the Advancement of Colored People (NAACP), Walter White, praised the development of skin lighteners. He is recorded stating “that skin color, more so than phenotype, determines race in the United States, and white skin would allow more persons of African descent to pass as white... signaling a new era in which skin color no longer would be a determinant of a person’s ability or social acceptance.”<sup>26</sup> The use of skin lighteners as a means to a better end is deftly tied with judicial, social and economic practice and status, resulting in millions of people of color worldwide using over the counter skin whiteners.

## 5. Factors Impacting the Choice to Practice Depigmentation

In addition to the pursuit of higher economic status, power and better social treatment, skin bleaching is closely tied to the pursuit of aesthetic beauty, an idea greatly influenced by media. Aesthetic beauty is defined as physical attributes that please the senses, sight in particular.<sup>27</sup> Women receive constant messages to “improve” and change their bodies in order to succeed, attract partners and live valuable lives. Women’s existences are dependent on their physical selves. Each day there are numerous advertisements telling women how to improve, change, alter and cover their natural bodies resulting in approximately 80% of women reporting unhappiness with their physical selves.<sup>28</sup> Constant viewing of these advertisements result in “internalized sexism,” as found by sociologist Jean Killbourne, since “women see their appearance as the primary source of their worth, neglecting other interests in favor of the perpetual pursuit of aesthetic perfection.”<sup>28</sup> Initiatives such as The Dove Campaign for Real Beauty have been set up to combat this violence against women with articles that emphasize the importance of natural beauty. The downside of these campaigns is their focus on one type of natural beauty. They focus on that of the dominant Caucasian culture, or their parent companies (in this case Unilever) own other investments that contradict their causes. The Dove Campaign for Real Beauty is an example of the latter; the Dove Campaign is run by Unilever a parent company for Dove, Axe and Fair & Lovely. The Dove campaign seeks to celebrate the diversity of beauty in women stating “a new definition of beauty will free women from self-doubt and encourage them to embrace their real beauty.”<sup>29</sup>

Other brands that Unilever supports that are in disaccord with the Dove campaign are the Citra brand and the Fair and Lovely brand. These brands insinuate that people of lighter skin have better life opportunities and are more desired in society. In Thailand, Citra had to withdraw its Pearly White television advertisement due to viewers’ cries of racism. The advertisement blatantly tied light skin to intelligence and education level.

*Many believed the inference to be that darker-skinned students are less intelligent than their lighter-skinned colleagues in a country where fairer skin has long been equated with higher class – as a whiter complexion suggests a life not spent toiling on a farm.<sup>30</sup>*

The advertisement showed two girls, one dark skinned and one light skinned each was asked a question. The advertisement showed the light skinned girl answering the question, whilst the darker skinned girl stumbled over the answer, followed by the lighter skinned girl saying “maybe Citra products could help.” Another popular skin lightening product is Fair and Lovely, it does not contain any mercury or hydroquinone derivatives according to the lab reports posted on the company’s website.<sup>30</sup> On the other hand, the Fair and Lovely campaign promotes internalized racism for dark skinned women. It perpetrates the view that lighter skinned women have more opportunities in life, have less discriminatory treatment, and enjoy greater social acceptance. In India the brand launched campaigns using the 2000 Miss World’s Priyanka Chopra as their spokesperson. The advertisements focused on her as a dark skinned lady unable to find love or a job but after six weeks of use [Fair and Lovely] she became more desirable as an applicant and woman. These advertisements had, and still have, profound impacts on young women worldwide. In an interview conducted with a young Indian woman named Amaya William she affirmed the damage this message did to her psyche

*She remembers how her mother would vigorously rub fairness creams on her face and her body in hopes of lightening her color when she was about eight years old. “I associated dark with being dirty and ugly because that is what I was made to believe.” Little Amaya would scrub herself for hours, thinking her color would somehow fade, that the ‘dirt’ would rub off. The dejected eight-year-old girl tried to hang herself from a ceiling fan at her Mumbai home...White is simply better, she says. And not only is it more attractive, but equates to a better husband, better job, and a more successful life in general.<sup>31</sup>*

An eight year old girl who thinks that her natural body is “dirty and ugly” and thinks there is nothing she can do to change that, may develop low self-esteem as well as potential psychological disorders. In Amaya’s case she developed an eating disorder at the age of twelve years, related to her attempt to make herself more desirable. She remained stuck in an abusive relationship because she considered herself worthless as a result of her skin color. This example is proof that these products have a negative effect on society in particular non-white societies. The use of celebrities for these campaigns show young girls that even if they do become successful their color will continue to be a factor in whether they live the most desirable lives possible.<sup>31</sup>

A prevalence of Caucasian or “western” notions and standards of desirability that included light or white hegemonic representations based on the alleged superiority of light to dark skin are left over effects from colonialism and slavery. An example of this is the United States where the slave trade was prominent. In the years following the Emancipation Proclamation and preceding the Second World War slavery was seen as a blight amongst African Americans and White Americans. Ties to relatives or ancestors that were slaves were hidden and severed, and assimilation to white culture was embraced. This allowed the success of Madame C. J. Walker’s hair straightening formulas and skin whitening formulas that helped African Americans “pass as white.”<sup>32</sup> Black women lamented their color, as evidenced in the 1929 Broadway show *Hot Chocolates* where an African American female socialite sings “What did I do to be so black... and blue?” the song continues “Browns and yellors have the fellars; Gentlemen prefer them light, Wish I could fade, can’t make the grade; Nothin’ but dark days in sight.”<sup>33</sup>

The inundation of white hegemonic standards of desirability resulted in internalized racism within African Americans also known as the “self-hate” aspect of skin lightening. The self-hate reasoning for skin lightening ties directly to the history of race and color in the United States, to succeed in American society, African Americans would have to assimilate and that meant conforming to white ideals of beauty, success and acceptability. Many blacks perpetrated the idea that light skin was ideal by incorporating “paper bag tests” as an entryway to elite social events, public institutions, jobs and organizations. This idea still carries today with celebrities such as P. Diddy putting advertisements out that offer auditions explicitly to “Caucasian, Hispanic and light skinned ‘Beyoncé type’” African American women.<sup>34</sup> Thus suggesting that within the black community that dark skinned women would not be able to sell the merchandise due to their coloring. It also emphasized the lack of appeal that dark-skinned women have within their communities. Dark skinned women would never measure up or attain the same success as their lighter skinned counter parts. In a study conducted by Midge Wilson at DePaul University “When viewing two pictures of the same black woman, one with light skin and the other with dark skin, the students attributed positive qualities to the light skinned black woman and very negative qualities to the darkened version of the same picture.”<sup>35</sup> This ideal goes back to representation, without representation of dark skinned women in the media, the association

between light skin, success and beauty is strengthened. At least one third of the United States is made up of people of color. The media does not reflect this especially when the desirable roles given to women of color the number is negligible. The mainstream media overwhelmingly portrays white beauty with a few renowned women of color Beyoncé, Jennifer Lopez, Queen Latifah and Halle Berry. However over time these portrayals have been anglicized.<sup>36</sup> Their pictures in advertisements have been lightened, hair straightened, given colored contacts and had cosmetic surgery resulting in more anglicized features.

This lack of representation of dark skinned women in media and in positions of power has led to a pandemic. Women from around the world are engaging in practices (many of which are unsafe) to achieve this desired skin tone. They are putting themselves at risk for serious side effects or permanent damage to their skin a vital part of the human immune system. The media and historical precedence has made this goal a facet of non-white culture, associating lighter skin tones with education, literacy, opportunity and desire. Aside from the physical ramifications caused by the use of skin bleaching products the effect of these ideals on the minds of young girls is devastating and needs to be averted and further studied. Campaigns such as the Dove Campaign need to be emulated by other companies. There also needs to be a celebrity spokesperson to counter the damage done by other celebrities that have shown support for the use of skin lighteners (both indirectly and directly). Communities need to become more aware of the toll placed on women of color by the media's biased representation of non-white women and the effect that portrayal has on women of all ages. The documentary *Dark Girls* includes interviews with African American women, on their experiences growing up as dark-skinned girls, and it considers the pressures the media, society and history have placed on psychological and physical levels. This documentary can assist in raising awareness on the issues that dark skinned women in America face on a daily basis both within and outside of the African American community. These issues include, psychological distress, physical malaise and perpetuate a feeling of inadequateness amongst the affected population. More stringent safety policies need to be issued to increase the safety standards of these products and reduce the negative side effects experienced by users of these products.

## 6. Health Concerns and Potential Policies

The psycho-social pressures on women force them to pursue lighter skin at any cost, (putting them at risk for numerous health complications) in the hopes of an improved quality of life. Seventy five percent of women in a second study conducted in Senegal experienced negative cutaneous side effects. Of the six hundred and eighty five women who participated in the study 25% reported using products with unknown chemicals and ingredients obtained from the black market. The main ingredients used in these products were hydroquinone and corticosteroid based (75%), whilst the last 25% were mercury based or of questionable composition (detergents, household bleach and hydrochloride sodium).<sup>37</sup> In Togo the use of mercury based skin whitening was highly prevalent with a 31% usage rate. Mercury based products have been tied to the development of nephropathy. Nephropathy is a group of symptoms including protein in the urine, low blood protein levels, high cholesterol levels, high triglyceride levels and swelling. Whilst the more commonly used hydroquinone was associated with other adverse cutaneous effects, hypo and hyper pigmentation. There was a marked increase in the expression of facial acne and the presence of stretch marks that was highly unusual. In a general population where these conditions are at a <5% rate, the greater than 30% of women in the study who suffered from these skin conditions indicates a clear connection between the use of these products and the increased occurrence of the aforementioned conditions.<sup>37</sup>

The use of hydroquinone leads to the next concern with the misuse of skin bleaching agents. The aforementioned 25% of products made up of questionable ingredients were also being prescribed by physicians and pharmacists. In South Africa physicians have prescribed monobenzyl ether a derivative of hydroquinone that is highly toxic. Use of this derivative has been connected to incidences of leukomelanoderma a rare condition associated with mental retardation, hypo/ hyper skin pigmentation and hair loss. Monobenzyl ether is particularly harmful due to how it is metabolized. Once metabolized in the cells it releases free radicals that completely destroy melanocytes, stopping the production of melanin permanently.<sup>38</sup> Prolonged use of these products results in irreversible exogenous ochronosis characterized by the bluish black discoloration of certain tissues, such as the ear cartilage and the ocular tissue. These deleterious side effects have resulted in the ban of the use of hydroquinone in cosmetic products in some Sub-Saharan countries and Europe.

*In view of the widespread inappropriate use of skin-lightening creams, it is recommended that over-the-counter sales of creams containing Hydroquinone be restricted. Health Education Programmes should be developed to discourage the use of Hydroquinone-containing creams for whole body skin lightening.*<sup>39</sup>

The International Programme on Chemical Safety ran tests in a controlled laboratory environment to further explore the effects of hydroquinone on mammals. High level exposure to hydroquinone was shown to cause “convulsions, hyper excitability, tremors, coma and death” in cats.<sup>40</sup> In vitro tests were run on mice and injections of hydroquinone in mice germ cells caused aberrations at the chromosomal level. Further tests were carried at a human level reinforcing the dangers of prolonged use of hydroquinone at any concentration. However it was also noted that the complications were reversible if the concentrations were less than 2% (concentration allowed in United States by the FDA).<sup>41</sup> This is a step closer to banning the entire line of products however one must also be aware that at levels below 4-5% of hydroquinone the effectiveness of the product greatly diminishes especially for people with more highly expressed melanin in their skin. At a 4% concentration the side effects caused by hydroquinone are highly increased and more difficult to reverse. Due to the societal pressures to have a lighter skin tone, determined individuals may turn to the black market to obtain products with higher concentrations of hydroquinone or other dubious ingredients vastly increasing their exposure to adverse side effects. The rule placing the acceptable concentration for hydroquinone was set in 1982 and states that

*The eye and skin damage [reported] from industrial exposure and the disfiguring skin effects observed after prolonged use of high concentrations and exposure to the sun] have not been reported from use of concentrations of hydroquinone less than 5percent.*<sup>41</sup>

The Food and Drug Administration has “no jurisdiction to make recommendations with respect to cosmetic claims and that the legal standards applicable to cosmetic claims are different from those applicable to drug claims.”<sup>41</sup> This increases the difficulty for there to be regular monitoring in the manufacture of these products, thus increasing the likelihood of other harmful ingredients being included in their makeup. In 2006 the Food and Drug Administration proposed a bill banning over the counter skin bleaching agents stating that “possible health risks cannot justify their being sold without a prescription.”<sup>42</sup> The proposal did not pass.

Further discrepancies with regards to skin lightening products are availability and monitoring. With regards to tanning beds the owners of the establishments can monitor and supervise the use of their products, ensuring adherence to codes and policies. The nature of over the counter skin lightening products allows for the user to determine how they use the product. This becomes an issue when regulating the use of these products on children, the container states that “the product is not suitable for use for children under the age of twelve.” The use of skin lightening products on persons under twelve years old can damage developmental processes, as well as increasing the chances of allergic reactions and put children at risk for cutaneous maladies that the presence of melanin would divert. Dr. Anderson a dermatologist and venereologist in Jamaica draws concern to the increased risk of infection due to the damage done to the skin, the first layer of defense in the immune system. He also stresses concern at the use of steroids within the products, if used in young children or by pregnant women could result in retardation of the brain and physical growth.<sup>43</sup>

There is evidence of the negative effects of the ingredients that constitute these skin whitening products however there is very low awareness of these dangers at the public level. In a study conducted by members of the University of Limpopo’s public health department and medical school, 69.5% of their participants (n=225) reported that their doctors had prescribed corticosteroids as skin whitening agents. Out of those 69.5% only 19.1% had any awareness of the products’ side effects.<sup>44</sup> These statistics raise the question in the medical field about ethical medical practice. Doctors take oaths to “never do harm” (Hippocratic Oath) yet in this case there is the potential to cause psychological harm by affirming their patients’ views of inadequacy due to darker skin as well as putting their patients at risk for skin thinning, atypical fungal infections and hypopituitarism? Or are the patient’s desires the doctor’s priority, because by providing them with the means to lighten their skins they may be providing their patients access to a perceived better quality of life. As well as policies addressing the make-up of these products, a multidimensional approach, addressing the issues surrounding skin lightening needs to be taken, in an attempt to curtail its use.

## 7. Interventions

Presently there are international interventions, promoting dark skin as beautiful and healthy skin as desirable, however still more needs to be done to properly combat this phenomenon. Countries such as Tanzania, Nigeria and Jamaica are looking at ways they can prevent the use of skin lightening products through programs such as “Don’t kill the Skin.” These programs combat the predominantly white/ light skinned commercials on multiple forms of media and highlight the detrimental side effects and dangers of the use of these products.<sup>45</sup> The focus of these programs need to be on racial identity, media exposure and self-esteem in youth. They should not focus on condemnation of skin bleachers but on the lack of representation of dark skinned people in media and the societal pressures placed on them.

Another campaign that looks at representation and the impact it has on young black girls is the “My Black is Beautiful: Imagine A Future” campaign that uses short documentaries, and speakers to empower black girls, and realize the individual beauty within them regardless of skin tone.<sup>46</sup> It is a program sponsored by Black Girls Rock! And UNICEF that go further than focusing on beauty, but also fund education programs, scholarships and leadership camps to further black girls’ progress.

In India the Dark is Beautiful campaign is sponsored by Women of Worth, combatting the Bollywood view that “fair skin is better”, counteracting the association of “dark and dusky” with poverty, dirtiness and ugliness.<sup>47</sup> The campaign has the endorsement of actresses such as Nandita Das, one of Bollywood’s top actresses and a TED talk speaker. She shares information about the type casting in Indian films particularly with regards to darker skinned Indian women. Other documentaries such as *Hue: A Matter of Colour* which comes out this year, are further discussing the issues of colorism in global societies including post-Apartheid South Africa.<sup>48</sup> Further, more stringent policies need to be put in effect to reduce exposure to detrimental chemicals, and to ensure proper use of these substances and education for the public on the dangers of prolonged use of skin whitening agents and the benefits of melanin. Policies that hold the manufacturers of these products accountable on the safety of the ingredients contained in these products, including thorough testing of prolonged use of these products to determine if there are latent effects to long-term exposure. Regulations on the sale of skin lighteners should also be tightened, an age restriction on skin whiteners should be issued similar to that in place for commercial tanning beds to dissuade youth from purchasing these products without the proper knowledge of what they contain and the possible consequences.

## 8. Conclusion

Skin lightening is a global phenomenon, with diverse reasons behind its practices. Some partake in this procedure as a fashion statement whilst for others it embodies years of subjugation by people in power. Regardless of its origins the health risks associated with skin lightening are too numerous to be ignored. Ranging from psychological distress to physical malaise, it is time for institutions of public health, governments and other bodies who believe in the welfare of all people to take note. Additional research needs to be done into the makeup of these products. Interventions such as the *Dark is Beautiful* campaign and the *Don’t Kill the Skin* campaign need to be emulated, to reduce the prevalence of use of these products, the stigma surrounding dark skin and to raise awareness of their detrimental side effects. Skin whitening is akin to the poisoned apple in Disney’s Snow White, promising acceptance, success and desirability with its red, perfect gleam, but in reality contains a deadly poison that will result in illness, psychological distress and alienation.

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