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SUMMARY

Some cosmetics especially skin lightening creams are known to have adverse effects on the skin. Some of the constituents of these cosmetics are absorbed through the skin resulting in systemic organ damage and toxicity. The aim of this article is to stimulate awareness of the adverse effects these cosmetic and beauty products which can only be prevented by cessation of use of these dangerous cosmetics.

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INTRODUCTION

A cosmetic product is defined as any substance or preparation intended for placing in contact with the various external parts of the human body (skin, hair, nails, lips and genital organs) or with the teeth and mucous membranes of the oral cavity, with a view to cleaning them, perfuming them, enhancing their appearance and/or correct body odours as well as protecting them to keep them in good condition¹.

People all over the world belong to different types of skin colour from white to yellow to black. Skin with the melanin pigment is the better suited to the hot, humid and sunny climate of Africa. However, many people who are dark skinned especially in Africa and Nigeria have resorted to intentional skin lightening or "bleaching" as generally described, in the search of enhanced beautification.

Most skin lightening products contain one of the following active ingredients: Hydroquinone, mercury and topical corticosteroids². The long term use of these products for several months to years may cause skin or systematic (internal organs) side effects^{2,5}.

SKIN LIGHTENING ("BLEACHING")

For years, cosmetics products intended to lighten the dark skin of Africans in the quest for beauty has found an ever growing market in Nigeria². It has become a trend to "bleach" the dark skin to a fair complexion without taking into consideration the long term side effects of these cosmetic creams.

Hydroquinone toxicity:

Hydroquinone is a phenolic compound used in bleaching creams. Death has occurred from ingestion of as little as 5 grams. When ingested, it causes nausea, vomiting, ringing in the ears, delirium, a sense of suffocation and collapse^{3,5}. On the skin, it causes de-pigmentation (whitening of the skin) by simply killing the melanocytes (the cells that produce the pigment called melanin) and blocking further melanin (pigment) synthesis. Prolonged use on the skin can also cause exogenous ochronosis which is seen as a dirty brown pigmentation on sun exposed areas (the face, upper chest, back and upper arms) and can also cause alteration of the texture of the skin. The skin loses its elasticity and easily tears when an attempt is made to scratch the skin e.g. after trauma or surgery^{3,5}. The situation predisposes the subjects to poor wound healing, which may invariably lead to a burst abdomen (when the intestines surge out of the failed surgical wound to the exterior) following surgeries like caesarean sections. This could lead to death from overwhelming bacterial infection in addition to the danger of repeated operations to close the burst abdomen.

Mercury toxicity:

Mercury-based skin lightening creams and soaps contain ammoniated mercury or mercurous chloride as a bleaching agent. These compounds could cause allergic or irritant dermatitis⁶, however the most serious complications arise from cumulative toxicity following long term use resulting in nephrotic syndrome, renal failure and hypertension^{5,7}.

Corticosteroid toxicity:

Extensive and prolonged use of topical corticosteroids would lead to adverse cutaneous and systemic effects. The cutaneous effects include recalcitrant acne (pimples), thinning of the skin (atrophy) red striae (stretch marks), hypertrichosis (excessive skin hairiness) and an increased risk of infection i.e. bacterial, fungal such as *Tinea corporis* (ring worm)^{2,3}. The more severe systemic adverse effects result from systemic absorption of topical steroids. These adverse effects include severe hypertension, diabetes, cataract (clouding of the eye lens), fluid retention (bloated skin), mood swings and

sleep disturbance.

The need for prevention:

The aim of this report is to enhance awareness of the adverse effects of skin lightening cosmetics among medical practitioners at all levels as well as the general public, thereby encouraging the prevention of their use.

It is pertinent to note that there is a regulation in Nigeria prohibiting the use of skin lightening (bleaching) creams. This regulation was published in an extra-ordinary Federal republic of Nigeria Official Gazette No. 31c vol. 82 of 1995. It is expected that Government agencies like NAFDAC should be more proactive in enforcing this regulation in addition to promoting public awareness and education on the adverse effects of skin lightening (bleaching) cosmetics.

CONCLUSION

Some cosmetic habits especially, the use of skin lightening (bleaching) creams, have proved to be dangerous and harmful. Most of the users are probably unaware of the local and systemic adverse effects of these cosmetic products. It is therefore important to improve public awareness on the harmful effects of these skin lightening cosmetics and improve the implementation of regulation banning sale of these harmful creams.

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