

Skin Cancer in People of Color

Misconceptions and Opportunities for Early Detection and Treatment

Katherine D. Shue-McGuffin and Kelly Powers

ABSTRACT: People of color are at a lower risk for developing skin cancer; however, melanoma skin cancer in this population is associated with a high mortality rate. Misconceptions regarding skin cancer risk often delay treatment, contributing to negative outcomes. These misconceptions were evident in a nurse-practitioner-led project that was conducted at a Division I University to improve sun safety in female collegiate athletes, with a lack of sun safety knowledge noted among Black participants. Nurses and nurse practitioners have a pivotal role in preventing skin cancer in people of color. This article summarizes the project's findings and current literature to clarify misconceptions regarding skin cancer in people of color, specifically in Black individuals. Clinical information is provided to guide nurses and nurse practitioners in promoting awareness and early detection of skin cancer.

Key words: Black Individuals, Early Detection, Melanoma, People of Color, Prevention, Skin Cancer

Nonmelanoma and melanoma skin cancers are the most common form of cancer in the general population (American Cancer Society, 2021). The prevalence of skin cancer has steadily risen over the past decade and is projected to continue rising because of an aging population and increased personal sun exposure despite education on sun safety behaviors (American Cancer Society, 2021). Although skin cancer is more common in non-Hispanic white individuals, people of color can develop skin cancer (Dawes

et al., 2016). Misinformation, as well as medical “myths,” surrounds the diagnosis of skin cancer in people of color (Chao et al., 2017). Dermatology nurses and nurse practitioners are uniquely positioned to promote the health and safety of all patients by increasing awareness, providing education to aid in prevention, and detecting skin cancers early to improve treatment outcomes.

The aims of this article are to

1. briefly summarize the findings of a project that was conducted to evaluate the effect of education on knowledge, attitudes, and behaviors regarding sun safety in female collegiate athletes (Shue McGuffin et al., 2019) and to describe project findings specific to participants who identified themselves as persons of color, many of whom identified as Black;
2. relate project findings to the literature to strengthen understanding of the need to focus on skin cancer prevention and early detection in people of color; and
3. clarify misconceptions regarding skin cancer in people of color and provide clinical information to guide nurses and nurse practitioners in promoting skin cancer awareness and early detection.

PROJECT SUMMARY

In 2018, a nurse-practitioner-led project at a Division I University in the southeastern United States was conducted to assess and improve female collegiate athletes' knowledge, attitudes, and behaviors regarding sun safety (Shue McGuffin et al., 2019). The athletes ($N = 81$) were administered a 26-item pretest before a 15-minute educational intervention on sun safety. This included discussion about the purpose and benefits of sunscreen and sunscreen application, including how often to apply it and the amount they should apply. As part of the project, coaches and athletic trainers were provided 30 sun protection factor (SPF) sport sunscreen for the athletes to use throughout their season. The same 26-item test was then administered immediately after the education. Three months later, athletes were surveyed again using a 19-item follow-up questionnaire that included

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questions to assess behavior changes. After the educational intervention, there were significant improvements in the athletes' knowledge, attitudes, and behaviors. A promising finding was that 3 months after the educational intervention, there were positive behavior changes, with 79% of the total athletes reporting that they applied sunscreen more often and 53% never experienced a sunburn in the 3 months after the intervention. Furthermore, 98.8% of the total athletes indicated they would continue to practice sun-protective behaviors (Shue McGuffin et al., 2019).

Of the 81 project participants, 60 of the athletes identified as persons of color, with most identifying themselves as Black. Before the intervention, most of these diverse athletes reported never applying sunscreen before outdoor sun exposure and most believed that sun-protective behaviors were unnecessary (Shue McGuffin et al., 2019). Specifically, the Black athletes described how they were frequently told by their families that they could not get skin cancer. They also shared that because “we do not burn, we get darker,” they believed they were not at risk for skin cancer like the non-Hispanic white athletes who described having had severe sunburns. Instead, they believed that their increased amount of melanin served as a protective mechanism to prevent them from developing skin cancer. Although the athletes were informed that every ethnicity can develop skin cancer from unprotected sun exposure, statements by Black athletes indicated they believed that the sunscreen was not necessary as they did not experience superficial burns—only a darkening of the skin. After the project's conclusion, the nurse practitioner lead was contacted by several of the Black athletes who wanted to discuss the probability of people of color developing a skin cancer. This lack of knowledge and participants' interest in gaining additional information highlights the importance of ensuring nurses and nurse practitioners are able to clarify misconceptions regarding skin cancer in people of color so they can provide tailored and specific education to improve prevention and early detection.

EVIDENCE SHOWING THE NEED TO FOCUS PEOPLE OF COLOR

Although the project focused on female athletes, findings were consistent with the literature, which shows that people of color generally believe they are not at risk for skin cancer (Buchanan Lunsford et al., 2018) and that sun protection is typically not a priority for Black individuals (Gohara, 2015). Studies have found that most Black individuals report sometimes, rarely, or never applying sunscreen (Buchanan Lunsford et al., 2018). Black individuals reported believing they have no personal risk of developing skin cancer because they are not “white” or because their family and friends had never been diagnosed with a skin cancer (Buchanan Lunsford et al., 2018). The primary reason Black individuals report avoiding sun exposure is because of a cosmetic darkening of the skin—not because of a concern for skin cancer (Buchanan Lunsford et al., 2018). These findings resulted in recommendations for education targeted to Black

individuals and all people of color (Buchanan Lunsford et al., 2018).

Skin Cancer in People of Color

According to DeSantis et al. (2019), Black individuals experience an overall higher incidence of developing any type of cancer and, conversely, experience the lowest survival rate. When patients consider their risk for a “cancer” diagnosis, many assume breast, lung, brain, or colon cancer to be the most common cancers. Often, people of color do not consider skin cancer to be a significant concern, believing they are far less likely to develop a nonmelanoma or melanoma skin cancer than the non-Hispanic white population (Kaufman & Alexis, 2017). Although nonmelanoma and melanoma skin cancers are more common in non-Hispanic whites, people of color and, specifically, Black individuals can develop skin cancer (Siegel et al., 2020).

Basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) affect more than 3 million Americans each year (American Academy of Dermatology/Milliman, 2017). The most prominent skin cancer in Black individuals is SCC, whereas BCC accounts for 80% of skin cancers and is the second most prominent skin cancer in Black individuals (Florez-Pollack & Taylor, 2019). Although with less frequency than non-Hispanic whites, Black individuals can also develop melanoma, with an estimated occurrence of 1.0–1.2 per 100,000 people (Mahendraraj et al., 2017). For Black individuals, the most common type of melanoma is acral lentiginous melanoma, which is not related to ultraviolet (UV) radiation. Acral lentiginous melanoma has a poor prognosis and a survival rate of less than 5 years once diagnosed (Davis et al., 2021).

Whereas the incidence of skin cancer is lower among people of color, and Black individuals specifically, the mortality rate of skin cancer is significantly higher for this population than for the non-Hispanic white population (Davis et al., 2021). The 5-year survival rate for melanoma among non-Hispanic whites is approximately 93%, whereas the 5-year survival rate for Black individuals is drastically lower at 69% (Chao et al., 2017). The mean time for melanoma treatment in non-Hispanic whites is 11.37 days, whereas the mean time for treatment in Black individuals is markedly longer at 20.37 days (Boczar et al., 2019). The deferred treatment is associated with atypical locations as well as the lack of knowledge of melanoma risk by patients, nurses, and healthcare providers (Chao et al., 2017). This healthcare disparity was highlighted by Cortez et al. (2021) who stated that patients are less likely to receive clinical skin examinations or education regarding melanoma because of their race or socioeconomic status. When melanoma is discovered in Black individuals, it is often advanced with thicker primary tumors on non-sun-exposed areas, ulceration, and distribution in the extremities and is typically greater than Stage II. Thus, when diagnosed, the prognosis is often poor (Boczar et al., 2019; DeSantis et al., 2019).

CLARIFYING MISCONCEPTIONS

On the basis of the project's findings and evidence from the literature, there is a need to clarify misconceptions regarding skin cancer in people of color. Clarifying misconceptions can help promote an increased focus on interventions that can help improve prevention and early detection. Misconceptions include melanoma risk, melanin protection, and sunscreen use.

Melanoma Risk: What Risk?

Cultural misconceptions exist regarding personal risk for skin cancer. Although socioeconomic factors and geographic location can influence misconceptions of skin cancer in people of color, culture can greatly impact skin cancer awareness (Cortez et al., 2021). Cultural beliefs, often passed on through families, can lead to neglecting sun-protective behaviors (Cortez et al., 2021). Although the overall risk for developing skin cancer is significantly less for people of color than for non-Hispanic whites, the risk still exists (Davis et al., 2021). Yet, people of color often do not perceive skin cancer as a significant concern (Kaufman & Alexis, 2017).

In Black individuals, the most common form of skin cancer is the acral lentiginous melanoma, which is also the deadliest form of melanoma (Agbai et al., 2014). Acral lentiginous melanoma is a type of melanoma that occurs on the palms of the hands or soles of the feet; however, although a melanoma, it is not associated with UV radiation (Kaufman & Alexis, 2017). Acral lentiginous melanomas typically begin as a small patch of discolored skin but will progress to grow deep within the dermis of the skin. They are often asymmetric, large in diameter, coarse, and dry and can bleed when manipulated (Hall & Rapini, 2020). Although acral lentiginous melanoma is a rare melanoma that can occur in all races, it is the most common subtype of melanoma in Black individuals (Davis et al., 2021). Therefore, patient education and thorough skin examinations are imperative to early diagnosis (Hall & Rapini, 2020).

Acral lentiginous melanoma is often misdiagnosed as benign acral nevi (Brazen et al., 2020). Then, when acral lentiginous melanoma is accurately diagnosed, the prognosis is often poor, with a 5-year survival rate of less than 50% in Black individuals (Davis et al., 2021). Melanoma is often overlooked in Black individuals because of misinformation regarding risk, location, and the difficulty in differentiating melanoma from the patients' natural skin color (Boczar et al., 2019). Furthermore, patients' lack of awareness regarding the risk of skin cancer for Black individuals often delays treatment, resulting in an increased likelihood of death when diagnosed (Hall & Rapini, 2020).

Melanin: The More, the Better

A misconception exists regarding melanin as a protective mechanism. It is true that people with darker skin tones do have significantly more melanocytes, which can provide more skin protection from the harmful, burning effects

of direct sun exposure (Gupta et al., 2016). Because of their darker skin tone, Black individuals have an intrinsic SPF of 13.4, whereas non-Hispanic whites have an intrinsic SPF of 3.3 (Tadokoro et al., 2003). Having higher melanin does actively filter UV radiation to serve as a protective mechanism; however, intrinsic photoprotection does not completely eradicate the risk of developing nonmelanoma and melanoma skin cancers (Davis et al., 2021; Solano, 2020).

There is a risk for all individuals when there is consistent sun exposure that causes subsequent damage to the skin's DNA (Boczar et al., 2019). Having darker skin does help prevent "burns" from being less visible, and this can result in people of color not recognizing their risk for developing skin cancer (Gupta et al., 2016). Furthermore, although people of color do not burn with the same frequency or intensity as non-Hispanic whites, repeated exposure can result in epidermal atrophy and dermal elastin damage (Gupta et al., 2016). Because of the slow progression of damage from consistent sun exposure, the damage is not easily detected; therefore, people of color often believe that they are unable to burn (Gupta et al., 2016). As dermatology nurses and nurse practitioners, we know that even one sunburn can result in the development of skin cancer (American Cancer Society, 2019). Clarifying this misconception with people of color is important to help improve adoption of sun safety behaviors.

Sunscreen: Do We Need It?

According to the Centers for Disease Control and Prevention (2020), a darkening of the skin, or a "tan," is associated with skin injury and is not a sign of optimal health. Yet, a desire for tanned skin is prevalent in our current culture (Buchanan Lunsford et al., 2018). Beauty product advertisements often display tanned men and women, which implies that tanned skin is healthy skin. In the 1920s, a cultural shift occurred and tanned women were seen as wealthy and "fashionable" (Martin et al., 2009). This has continued to be a cultural message, and because of the increased frequency of indoor tanning, the incidence of skin cancer is significantly higher in young adult women (Al-Dujaili et al., 2017). Whether intentional or not, repeated, unprotected sun exposure greatly increases the risk of developing skin cancer in all people, including people of color (Arnold et al., 2018).

In Black individuals specifically, engagement in sun-protective behaviors, such as applying sunscreen, is directly related to perceived personal risk (Buchanan Lunsford et al., 2018). If Black individuals do not perceive their risk to be significant, there is little incentive to consistently wear sunscreen. Although the incidence is less than in non-Hispanic whites, the prognosis and survival rates are significantly worse for Black individuals once diagnosed (Kaufman & Alexis, 2017). BCC and SCC often occur because of trauma, chronic inflammation, or radiation (Davis et al., 2021). In many cases, BCC and SCC in Black individuals occur because of a mutation that is caused by UVB radiation as a result of DNA

damage (Gupta et al., 2016). In addition to helping prevent skin cancer, Black individuals can minimize premature aging, hyperpigmentation, fine lines, and wrinkles by applying sunscreen daily (Buchanan Lunsford et al., 2018).

In addition to knowledge deficits, there are aesthetic barriers to using sunscreen (Buchanan Lunsford et al., 2018). On darker skin, sunscreen can create a white or ashen film on the skin. The Skin of Color Society is including marketing strategies targeted to people of color to help encourage sunscreen use (Onyejiaka, 2019). “Black Girl Sunscreen” and “Bolden Sunscreen” are companies that have created sunscreens specifically designed for darker skin tones (Onyejiaka, 2019).

IMPLICATIONS FOR CLINICAL PRACTICE

Increasing awareness about the common misconceptions and facts about skin cancer in people of color is important for skin cancer prevention and early detection. Furthermore, having accurate knowledge to dispel patients' misconceptions is vital for effective patient education, which is an emphasis of nursing practice. Dermatology nurses and nurse practitioners have a pivotal role in risk assessment and patient education, early detection of lesions, and promotion of community awareness of skin cancer (Lucas et al., 2016).

Patient Education Is Key: Risk Factors and Sun Safety Practices

In all acute and community-based healthcare settings, nurses influence patient outcomes through providing education on disease risk factors and actions for reducing risk (Lucas et al., 2016). Patient education is essential to improving knowledge of skin cancer risk and use of sun-protective behaviors in people of color (Chen et al., 2015). All patients, regardless of skin color, need to be assessed for and educated on skin cancer risk factors. Education should be tailored to directly address beliefs and behaviors that can increase their skin cancer risk.

Although patient education on increased skin cancer risk typically targets those with fair skin, freckles, inability to tan, and repeated sunburns (American Cancer Society, 2021), these risks are not pertinent when educating people of color. Rather, the education should specifically outline risk factors for people of color. They should be informed that the risk for skin cancer is present for all individuals. Furthermore, certain factors cause some individuals to have an increased risk. An important risk factor is a family history of skin cancer (American Cancer Society, 2021). As for modifiable risk factors, frequent and prolonged sun exposure increases risk, regardless of skin color. For athletes and outdoor occupational workers such as construction workers or farmers, the risk of skin cancer increases exponentially because of their frequent, prolonged exposure to UV radiation (Gupta et al., 2016). Dermatology nurses and nurse practitioners have an obligation to recognize risk

factors for skin cancer and to educate patients on strategies to minimize their risk. Nurses in all work settings have opportunities to assess skin cancer risk factors and educate patients when conducting health assessments. In the primary care setting, nurse practitioners should conduct thorough annual skin examinations and discuss the dangers of unprotected sun exposure with all patients, regardless of race or ethnicity (Dawes et al., 2016). Although uncommon, melanoma can occur in people of any age or race. As people of color are less likely to survive melanoma, prevention of skin cancer in this patient population is essential (Davis et al., 2021).

Patient teaching should not only center on risk factors but also include prevention strategies. According to the American Academy of Dermatology (2020), health promotion and prevention education should be provided to all patients regardless of skin color. Teaching points should be tailored to each patient based on their risk but should include the primary prevention strategies for all individuals, as outlined in Table 1. All patients, including people of color, should be advised to avoid direct sunlight between 10:00 a.m. and 4:00 p.m., which is when the intensity of the sun's rays peak. If they must be outdoors at this time, sunscreen, broad-brimmed hats, and long sleeves should be encouraged (Centers for Disease Control and Prevention, 2020). All patients should wear sunscreen while outdoors. A broad-spectrum, water-resistant sunscreen with a minimum of 30 SPF is necessary to block 97% of harmful UVA/UVB radiation (American Academy of Dermatology, 2020). To be most effective, 1 ounce of sunscreen should be applied to the entire body a minimum of 30 minutes before sun exposure and reapplied every 2 hours after excessive sweating or swimming (Chien, 2021). Reviewing these sun safety measures is essential to help increase knowledge and effect behavior change.

Know the “ABCDEs”: For Education and Early Detection

In addition to educating patients on skin cancer prevention, education is vital to promote early skin cancer detection and treatment in people of color, especially Black individuals (Chen et al., 2015). Black patients should be educated regarding the presentation of skin cancers and encouraged to perform full-body skin self-examinations monthly (Boczar et al., 2019). It can be helpful to instruct patients to schedule their skin self-examination on the first day of the month or on another day that they can easily remember. Patients can then set a reminder on their calendar or phone.

Dermatology nurses and nurse practitioners should teach patients how to perform skin self-examinations. General instructions to provide patients are found in Table 2. As difficulty in differentiating melanoma from the patients' natural skin color is a reason melanoma is often missed in people of color (Boczar et al., 2019), patients should be instructed to utilize good lighting when conducting their skin

TABLE 1. Prevention Strategies**Prevention Strategies**

- Avoid direct sunlight
- Seek shade while outdoors from 10:00 a.m. to 4:00 p.m.
- Wear sun-protective clothing:
 - Hats
 - Sunglasses
 - Long-sleeve shirts
- Apply a broad-spectrum, water-resistant sunscreen while outdoors
 - UVA/UVB, 30 SPF or higher
 - Always wear sunscreen while outdoors
 - Apply enough sunscreen to cover the body, including the feet, hands, neck, ears, and head (enough to fill a shot glass)
- Reapply sunscreen every 2 hours, or after swimming or sweating
- Avoid indoor tanning beds
 - Use a self-tanner with sunscreen as opposed to intentional tanning
- Exercise caution around snow, sand, or water: The reflective surfaces can greatly increase the chance of a sunburn.
- Perform monthly full-body skin examinations

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self-examination. In addition, understanding that the most common and dangerous form of skin cancer in Black individuals is acral lentiginous melanoma, which occurs on non-sun-exposed areas, teaching should stress that patients should examine all skin, not only sun-exposed, areas. Melanoma may occur on the palms of hands, between toes, on the soles of feet, on the groin, under the fingernails, on buccal mucosa of the mouth, and in the eyes (Brazen et al., 2020). Depending on the patient situation, full-body examination will require use of mirrors. In addition, a family member can assist with examining difficult-to-see areas (such as the back; Simon, 2020).

When educating people of color on performing full-body examinations, it is important to tailor the education to them specifically. In non-Hispanic whites, BCC and SCC occur in sun-exposed areas and may have pink, pearly appearances (Alexis, 2020). In people of color, specifically Black individuals, BCC and SCC may appear pigmented and occur in non-sun-exposed areas such as the scalp, lips, lower extremities, and anogenital regions (Davis et al., 2021). To identify a potential cancer, all patients should be taught the “ABCDEs” of melanoma (see Table 3) so that they can recognize what is normal and abnormal (Boczar et al., 2019). The “ABCDEs” of melanoma acronym stands for asymmetry, border irregularity, color variation, diameter (larger than 6 mm), and evolving lesions (Simon, 2020). For Black individuals, additional teaching should include describing the appearance of acral lentiginous melanomas that occur on non-sun-exposed areas. These lesions often start as patches instead of evolving from a mole, are often asymmetric, are large in diameter, and can be dark colored (blue to black). They can also ulcerate and bleed (Hall & Rapini, 2020).

The “ABCDEs” of melanoma acronym can also be used by dermatology nurses and nurse practitioners to identify

abnormal lesions, aiding in early detection and treatment. When conducting a skin assessment, nurses should first ask the patient about their risk factors, sun behaviors, and any worrisome or bothersome skin issues. Next, they should visually assess the skin, take measurements, and palpate the area of concern to elicit a change in texture or sensation. In addition to knowing the “ABCDEs” of melanoma, it is important to be aware of additional warning signs that could indicate skin cancer so nurses can ask about and look for them during the examination. Warning signs include itching, bleeding, crusting, swelling, and pain on palpation (Simon, 2020). If the patient can answer “yes” to any of these warning signs or the “ABCDEs” indicate a suspicious lesion, the provider may biopsy the lesion, surgically remove the lesion, or administer FDA-approved drug therapy, immunotherapy, chemical peel, or radiation and chemotherapy (PDQ Adult Treatment Editorial Board, 2002).

Raising Awareness Beyond the Clinical Setting

Dermatology nurses and nurse practitioners have an opportunity to spread awareness of skin cancer risk among people of color by encouraging sun-protective behaviors during annual or routine examinations. In addition to teaching proper self-care, patients can also be encouraged to share this information with family and friends. Nurses can participate in community initiatives such as a sun safety awareness campaign. The American Academy of Dermatology (2020) has identified May as “Skin Cancer Awareness” month, whereas the National Council on Skin Cancer Prevention declared the Friday before Memorial Day as a “No Fry Day” to encourage sun-protective behaviors while enjoying the outdoors. Pamphlets, handouts, and graphics are available on the American Academy of

TABLE 2. Instructions for Self-Skin Examinations**Instructions to Provide Patients: Conducting a Self-Skin Examination**

Conduct a self-skin examination every month

- It can be easier to remember if you pick a specific day each month (such as the first day of the month) or if you set alerts on your phone.
- Ensure there is good lighting when you perform the self-skin examination

When you perform a self-skin examination, it is important to:

- Look at every mole, freckle, or age spot, taking note of any changes
 - Changes to look out for include a change in size, shape, color, or texture or other symptoms such as itching or bleeding
- Call a dermatology specialist for further evaluation of suspicious changes

Examine your body from head to toe in a full-length mirror:

- Examine the forearms, underarms, and palms of the hand
- Examine the backs of the legs, feet, in between the toes, and the soles of the feet

Use a hand mirror, or ask a partner, to:

- Examine the neck and scalp
- Examine the back and buttocks

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Dermatology and the National Council on Skin Cancer Prevention's websites for healthcare professionals to use to promote sun safety with patients (American Academy of Dermatology, 2020; National Council on Skin Cancer Prevention, 2020). Nurses can also become legislative advocates for skin cancer awareness by writing to or meeting with state and federal legislators to encourage their support of legislation banning indoor tanning for minors as well as funding for melanoma research (Melanoma Research Foundation, 2020). These are only a few examples of skin cancer initiatives. By visiting the website for the Skin Cancer Foundation (2020) and the American Academy of Dermatology (2021), nurses can learn more about spreading awareness of skin cancer and prevention strategies.

Other opportunities include supporting the expansion of marketing and skin cancer awareness campaigns (Kaufman & Alexis, 2017). Skin cancer awareness campaigns should include people of color, not only fair-skinned persons. It is important to include more images of people of color in sun safety campaigns to encourage people of color to perform self-skin examinations, engage in sun-protective behaviors, and learn about their personal risk (Chen et al., 2015). It is particularly important for campaigns to reach individuals with increased skin cancer risk such as outdoor workers and athletes who play outdoor sports (Davis et al., 2021). Education for high school, collegiate, and professional athletes is an opportunity to prevent athletes from developing a skin cancer. Because of their frequent sun exposure, athletes who play outdoor sports (such as soccer, golf, track, cross country, softball, baseball, football, etc.) are at an increased risk for developing skin cancer (Hobbs et al., 2014). The project discussed in this article showed that education can improve knowledge and attitudes as well as behaviors of athletes (Shue McGuffin et al., 2019). Nurses and nurse practitioners can collaborate with team trainers and coaches to provide

education and monitor sun exposure to promote prevention of skin cancers (Shue McGuffin et al., 2019; Woodmansee et al., 2018).

ADDITIONAL RECOMMENDATIONS

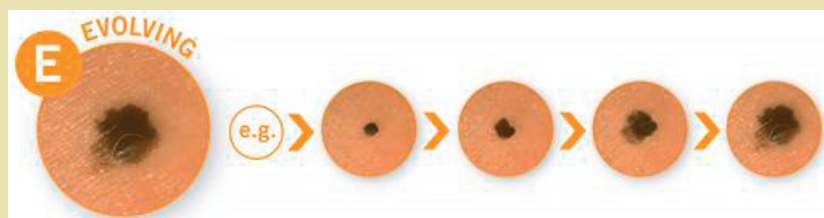
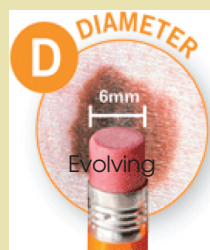
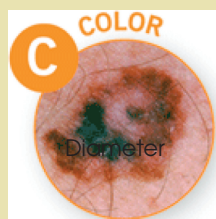
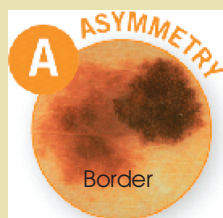
The delay in evaluation or treatment for people of color occurs because of the lack of awareness of personal risk as well as other factors such as lack of access to care (Cortez et al., 2021). Without insurance coverage, patients may not seek annual evaluations in primary care or dermatology specialty care (Cortez et al., 2021). To increase opportunities for early detection, it is imperative that skin examinations and patient education be integrated across various healthcare settings and in all patient encounters (Lucas et al., 2016). Inpatient and outpatient nurses cannot assume that a skin assessment and education will occur in a primary care setting (Davis, 2020). All nurses and nurse practitioners should be able to recognize a normal lesion from an abnormal lesion using the "ABCDEs" of melanoma and be able to educate all patients on the dangers of sun exposure (PDQ Adult Treatment Editorial Board, 2002). While obtaining a blood pressure or listening to the lungs, nurses and nurse practitioners in any healthcare setting can quickly scan the ears, neck, head, and face for signs of skin cancer and intervene as appropriate.

To ensure nurses and nurse practitioners are prepared to improve skin cancer awareness and outcomes, universities should incorporate more skin cancer education into undergraduate and graduate curricula (Woodmansee et al., 2018). In undergraduate and graduate nursing programs, education regarding skin assessments, recognition of atypical lesions, and prevention strategies should be emphasized (Shue-McGuffin & Powers, 2022). To maximize ability to detect abnormal lesions and educate patients, programs can utilize simulations of dermatologic examinations in addition to didactic teaching (Wingo & Baker, 2018). Research

TABLE 3. ABCDEs of Melanoma

ABCDEs of Melanoma

Asymmetry



Key Findings

Imagine a line being drawn down the center of the mole. If you could fold the mole at the crease of the line, and the two sides would not match, the mole would then be considered asymmetric. Most malignant skin cancers are asymmetric.

Normal, or benign, moles are typically round. If the border is scalloped, or notched in appearance, it would be classified as an uneven border. An uneven border is typical with skin cancer.

Benign moles are typically a brown or black color throughout. With skin cancer, multiple colors may be evident. With melanoma specifically, the colors may include black, red, white, blue, and brown in one lesion.

If the lesion is greater than 6 mm in diameter, it should be investigated further. To better understand the size, 6 mm is approximately the size of a pencil eraser.

Any change in the size, shape, color, texture, diameter, or elevation should be investigated further. This is why annual skin examinations and monthly self-examinations are imperative to early detection.

Asymmetry: To determine whether a mole is asymmetric, nurses and patients can imagine a line being drawn down the center of the mole. If you could fold the mole at the crease of the line, and the two sides would not match, the mole would then be considered asymmetric. Most malignant skin cancers are asymmetric.

Border: Normal, or benign, moles are typically round. If the border is scalloped, or notched in appearance, it would be classified as an uneven border. An uneven border is typical with skin cancer.

Color: Benign moles are typically a brown or black color throughout. With skin cancer, multiple colors may be evident. With melanoma specifically, the colors may include black, red, white, blue, and brown in one lesion.

Diameter: Benign and malignant lesions often vary in size; if the lesion is greater than 6 mm in diameter, it should be investigated further. To better understand the size, 6 mm is approximately the size of a pencil eraser.

Evolving: Most melanomas begin as small moles. Any change in the size, shape, color, texture, diameter, or elevation should be investigated further. This is why annual skin examinations and monthly self-examinations are imperative to early detection.

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has shown practice educating patients on prevention strategies through use of standardized patients can improve nurse practitioner students' knowledge and confidence (Shue-McGuffin & Powers, 2022). Undergraduate and graduate nursing students should also be instructed to incorporate skin assessments and sun safety education into every clinical learning experience to reinforce integration of this vital aspect of patient care into their practice. This simulation and clinical experiential learning should include performing proper skin assessments on diverse individuals to ensure students are prepared to provide this needed care to all patients (Shue-McGuffin & Powers, 2022; Woodmansee et al., 2018). In addition, continuing education is important as research with practicing nurse practitioners has shown a lack of skin cancer knowledge and desire for more education on melanoma (Roebuck et al., 2015).

SUMMARY

The incidence of melanoma and nonmelanoma skin cancers is increasing in people of color, specifically among Black individuals (Siegel et al., 2020). Misconceptions regarding risk and need for sun-protective behaviors can result in delayed diagnosis of skin cancer, which correlates to a higher mortality rate among Black individuals than is seen in the non-Hispanic white population (Davis et al., 2021; DeSantis et al., 2019). Nurses and nurse practitioners can ensure all patients, including people of color, are educated on skin cancer risks and prevention strategies. By performing thorough skin examinations, rates of early detection and treatment can be improved (Woodmansee et al., 2018). Furthermore, dermatology nurses can participate in and lead sun safety campaigns to promote skin cancer awareness in an effort to improve health outcomes in people of color (Kaufman & Alexis, 2017).

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