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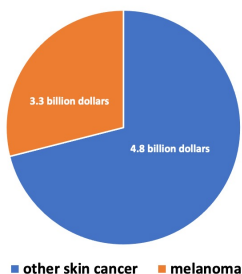
Introduction

- Melanoma is one of the fastest growing cancers in the United States (American Cancer Society, 2021b)
- When detected early, melanoma is treatable and curable (Cleveland Clinic, 2017)
- Current evidence-based guidelines do not recommend routine screening for skin cancer in the general population which creates a gap in healthcare (Wernli et al., 2016)

Background & Significance

- Patients diagnosed at later stages with metastatic melanoma have poorer prognoses with less than a 15 % chance of surviving five years after their diagnosis (Wernli et al., 2016)
- The United States is ranked third worldwide in cumulative incidences of melanoma after Australia and New Zealand (Shellenberger et al., 2017)
 - In 2021 there will be about 106,110 new incidences of melanoma and 7180 melanoma related deaths in the United States (American Cancer Society, 2021a)
- The lifetime risk of melanoma is about 2.6% for whites, 0.1% for Blacks, and 0.6% for Hispanics (American Cancer Society, 2021a)

Annual treatment costs of skin cancer treatment in United States



Economic Burden

- Melanoma is not only a health crisis but also presents as an economic crisis in the United States.

Current Practices

- Current practices are focused on primary prevention - sun safety education programs in schools to stop the endemic uptrend of skin cancer (World Health Organization, 2018)
- Full skin examination is the most common method for skin cancer screening in the primary care setting
 - However, the USPSTF concluded in 2009, 2016, & 2018 that there is insufficient evidence to support routine full skin examination due to its many limitations (Wernli et al., 2016)

References

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Needs Assessment

- Many studies indicate that early detection is the best approach to reduce melanoma mortality (Geller et al., 2015)
 - < 25% of Americans reported receiving a skin examination by a physician (Shellenberger et al., 2017)
 - Only 8-12% of annual clinician skin examinations performed in U.S. (Mayer et al., 2014)
- The Academy of Dermatology and the American Cancer Society encourage individuals to regularly examine their skin and visit a dermatologist when abnormalities are noticed (Fahrbach et al., 2020)
 - half of melanomas go undetected by self-skin examination due to difficult to see areas such as scalp, neck, and back (Black et al., 2017)

Clinical Question

Will educating nail technicians to identify abnormal skin lesions enable them to identify clients with suspicious skin lesions on their extremities and recommend they visit their healthcare providers for further information?

Method

- **Design** – Quasi-experimental, single group, pretest-posttest method
- **Setting** – small privately owned nail salon in Northern New Jersey
- **Sample:**
 - Men or Women over 18 years old
 - Currently performing nail services
 - English-speaking
- **Measures:**
 - Recruited all potential participants to participate in educational intervention
 - Intervention – 30-minute educational PowerPoint
 - 3 photo knowledge questionnaires: Pretest, Posttest, 6-week follow up test for longitudinal effects.
 - Daily client interaction log of number of clients scanned, identified, and recommended.
- **Analysis:**
 - Descriptive statistical analysis for counts and percentage of clients scanned, identified, and recommended

Results

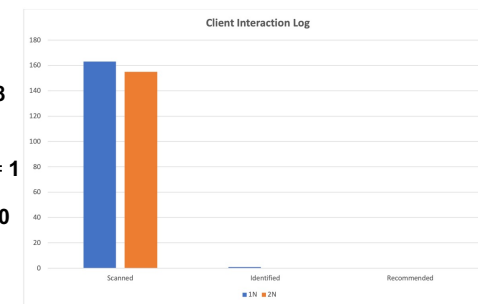
Questionnaires

- All 5 subjects presented to group educational session
- Total Participants = 2 nail technicians
- All participants revealed increased knowledge after intervention

Participant	Quiz #1 (Pre-test)		Quiz #2 (Post-test)		Quiz #3 (6-week post-test)	
	score	(%)	score	(%)	score	(%)
1N	3	(50%)	6	(100%)	5	(83%)
2N	2	(33%)	6	(100%)	6	(100%)

Client Interaction Log

- Total number of clients seen = 318
 - Nail Tech #1 = 163
 - Nail Tech #2 = 155
- Total number of clients identified = 1
 - (0.61%)
- Total number of clients referred = 0



Discussion

Implications

Clinical Practice & Healthcare Policy

- DNP project findings → nail technicians can identify suspicious skin lesions during normal nail services.
- Integration of identification of abnormal skin lesions into cosmetology programs
- Webinar CEU programs

Economic

- More screening opportunities → increase the earlier detection of skin cancers → reduce the economic burden related to advanced melanoma treatment costs.

Quality & Safety

- The cosmetologists are not healthcare providers and cannot diagnose their clients.
 - scan clients' skin and begin a discussion about skin lesions with their clients.
- Screening and early detection will improve life expectancy since skin cancers are often treatable and curable in the early stages (Cleveland Clinic, 2017).

Limitations

- Small sample size
 - Subject's fear of clients' response
- COVID 19 pandemic
 - Less staff at nail salon & less clients seen

Sustainability

- Standardize educational PowerPoint into new employee orientation

Conclusion

- Nail technicians can aid in early detection of melanoma by identifying abnormal skin lesions that clients may have missed on their self-examinations.