

Problem & PURPOSE

- Skin cancer is the most common cancer in the United States (Hasan et al. 2023)
- Many adults are unfamiliar with warning signs of suspicious skin lesions
- Limited patient education delays recognition and treatment (Fu et al., 2024)
- Purpose: Evaluate whether a brief provider-led educational intervention improves:
 - Patient knowledge of skin cancer warning signs
 - Confidence in identifying suspicious skin lesions

Available Knowledge & Rationale

- Early detection improves outcomes
- ABCDE and Ugly Duckling Sign aid detection
- Provider education improves patient understanding (Niu & Heckman, 2022)
- Iowa Model guided implementation

Methods

- Context
 - Private dermatology clinic in a Midwestern city
 - Adult patients (19 years and older)
 - Medical, surgical, and cosmetic dermatology practice
 - Education incorporated into routine full-body skin examinations
 - No disruption to clinic workflow
- Intervention
 - 3-5 minute provider-led education
 - Standardized teaching outline
 - Laminated visual educational aid
 - Skin cancer warning signs reviewed
 - Education individualized to patient skin type
- Study of Intervention
 - Quality improvement project
 - Pre/post intervention design
 - Adult patients receiving total body skin examinations
 - Participants completed: pre-survey, educational intervention, and post-survey
 - Survey matched using anonymous participant numbers
- Measure
 - Investigator-developed survey
 - Included: four multiple-choice knowledge questions and one confidence question (5-point Likert scale)
 - Measured: recognition of suspicious skin lesions and confidence performing skin self-examinations

Data Analysis

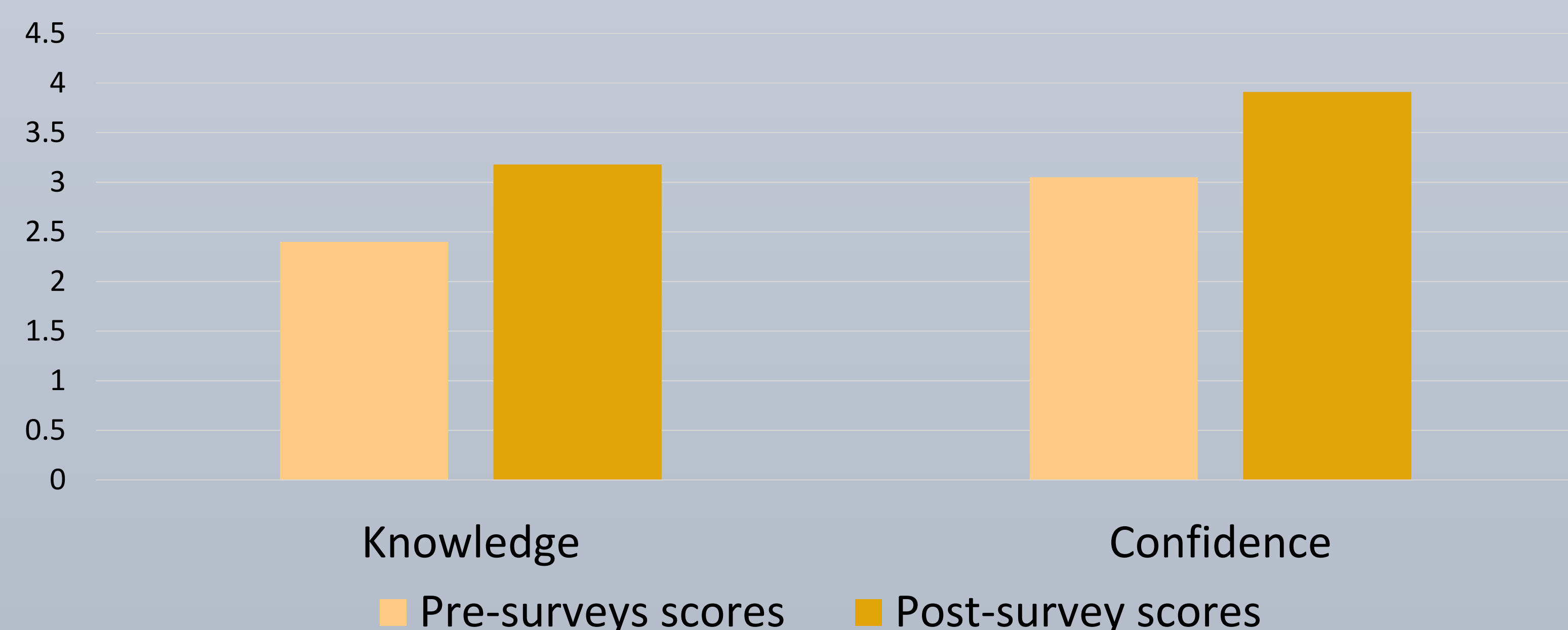
- Microsoft Excel
- Descriptive statistics
- Means
- Standard deviations
- Dependent- samples t-tests
- Statistical significance: $\alpha = 0.05$



Results

- Participants
 - N = 78 completed both surveys
 - 9 patients declined participation
- Knowledge
 - Pre:
 - Mean = 2.40
 - SD = 1.07
 - Post:
 - Mean = 3.18
 - SD = 0.68
 - $t(77) = -6.41, p < .05$
- Confidence
 - Pre:
 - Mean = 3.05
 - SD = 0.94
 - Post:
 - Mean = 3.91
 - SD = 1.07
 - $t(77) = 11.18, p < .05$

Mean Pre- and Post- Intervention Knowledge and Confidence Scores

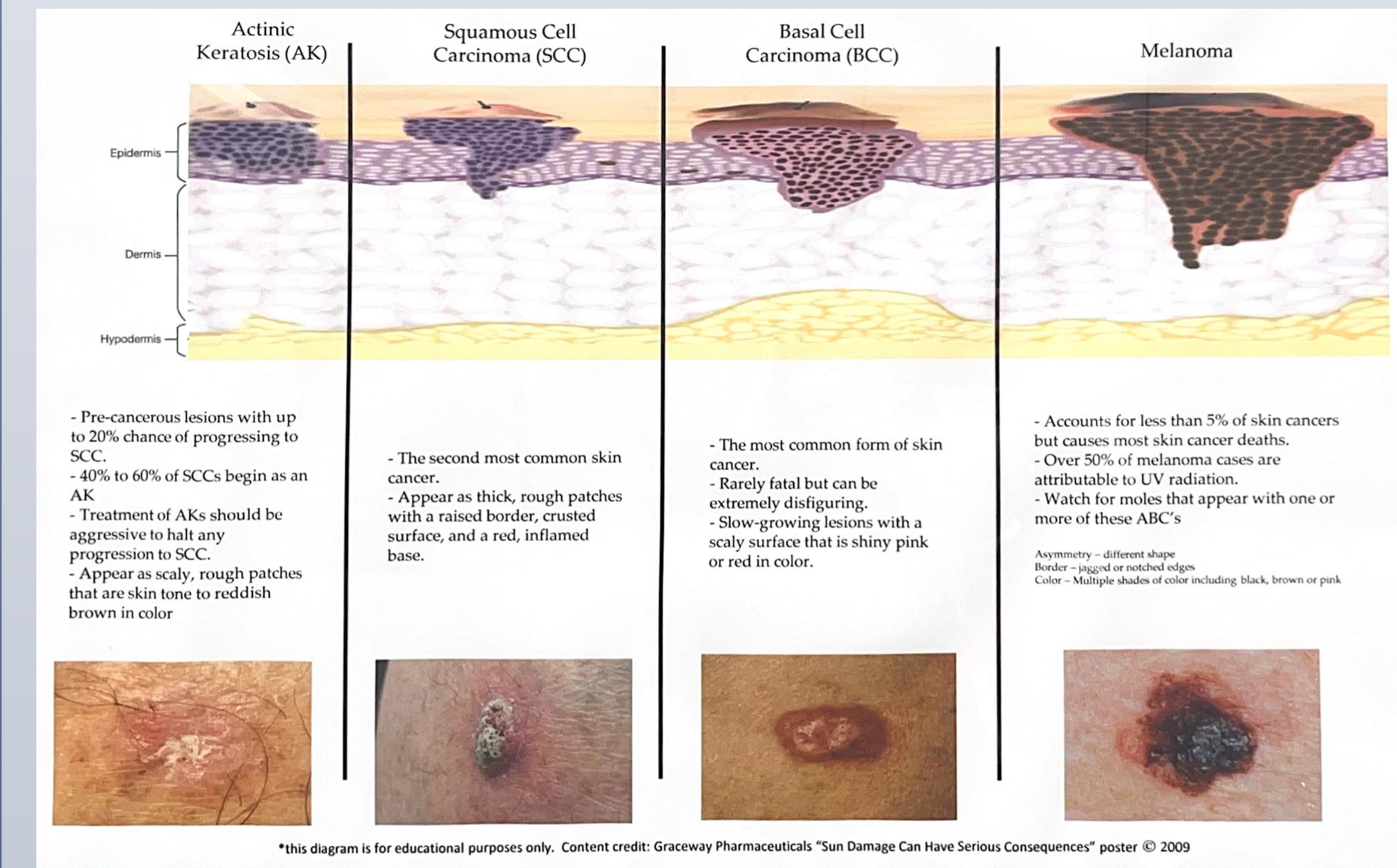


Discussion

- Knowledge and confidence significantly improved
- Education required only 3-5 minutes
- Easily incorporated into routine clinic visits
- Visual examples likely enhanced learning
- Low-cost and sustainable intervention
- May encourage earlier recognition and evaluation of suspicious lesions

Conclusions

- Improved knowledge and confidence
- Low-cost, sustainable intervention
- Easy integration into clinic workflow
- Adaptable across healthcare settings
- Supports preventative patient education
- Future studies: long-term outcomes



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- Study participants

References

- Fu, S., Kim, S., & Wasko, C. (2024). Dermatological guide for primary care physicians: full body skin checks, skin cancer detection, and patient education on self-skin checks and sun protection. *Baylor University Medical Center Proceedings*, 37(4), 647–654. <https://doi.org/10.1080/08998280.2024.2351751>
- Hasan, N., Nadaf, A., Imran, M., Jiba, U., Sheikh, A., Almalki, W. H., Almuji, S. S., Mohammed, Y. H., Kesharwani, P., & Ahmad, F. J. (2023). Skin cancer: understanding the journey of transformation from conventional to advanced treatment approaches. *Molecular Cancer*, 22(1), 1–70. <https://doi.org/10.1186/s12943-023-01854-3>
- Niu, Z., & Heckman, C. J. (2022). Digital educational strategies to teach skin self-examination to individuals at risk for skin cancer. *Journal of Health Communication*, 27(11–12), 790–800. <https://doi.org/10.1080/10810730.2022.2157910>