

Increasing melanoma awareness among health and social care professionals in secondary care in an era of reduced skin cancer referrals due to COVID-19

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Introduction

- The early detection of melanoma is key to reducing melanoma mortality.⁽¹⁾
- HSE reported a 72% reduction in pigmented lesion referrals during the COVID 19 pandemic.⁽²⁾
- A recent study identified that 42.5% of 106 patients in the Cork and Kerry region with thick melanomas were seen in secondary care in the year prior to their melanoma diagnosis.⁽³⁾
- There are 16,600 health and social care professionals (HSCPs) in the HSE representing 25% of the total clinical workforce. Their role in melanoma detection has never been explored.⁽⁴⁾

Aims:

- To evaluate the awareness of HSCPs in secondary care of melanoma.
- To increase awareness of melanoma among HSCPs in secondary care.

Objectives:

- To assess HSCPs' level of education on melanoma, ability to identify concerning lesions and current melanoma detection practices.
- To determine if there is a relationship between the above variables.

Methods

- Cross sectional study design
- Ethical approval granted by the Clinical Research Ethics Committee of the Cork teaching hospitals
- Convenience sample of physiotherapists, occupational therapists and radiographers from CUH, MUH, SIVUH, UHK and BGH
- A new anonymous questionnaire was developed and piloted among a group of medical students
- Printed questionnaires were distributed to each department and collected following completion
- Responses were coded and cleaned and data analysis was carried out using IBM SPSS version 27
- Descriptive statistics used to analyse the data
- Chi-squared test and Kruskal Wallace H test used to test the relationships between the categorical variables
- Multinomial logistical regressions used to create a model to predict score
- Live online educational session facilitated by Dr. Quinlan outlining skin lesion assessment, skin cancer risk factors and referral pathways

Results

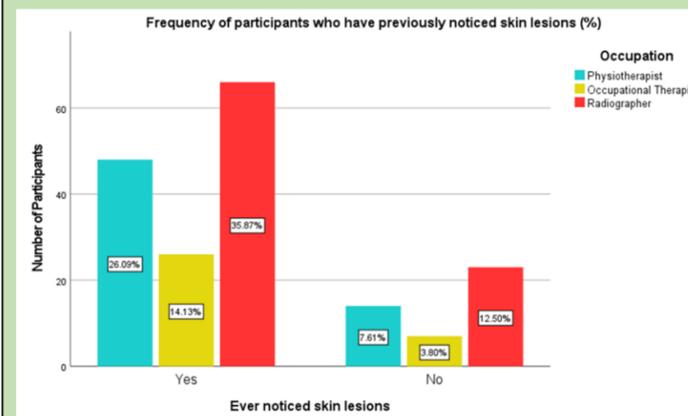
184 completed responses were received from participants.

Education

- Only 8% (n=15) of participants had received education on skin cancer during undergraduate training and 16% during postgraduate training.
- Statistically significant relationships between respondents having received postgraduate education on skin cancer and their level of comfort discussing skin cancer awareness ($p < 0.001$) and sun protection ($p < 0.05$) with patients.

Current Practice

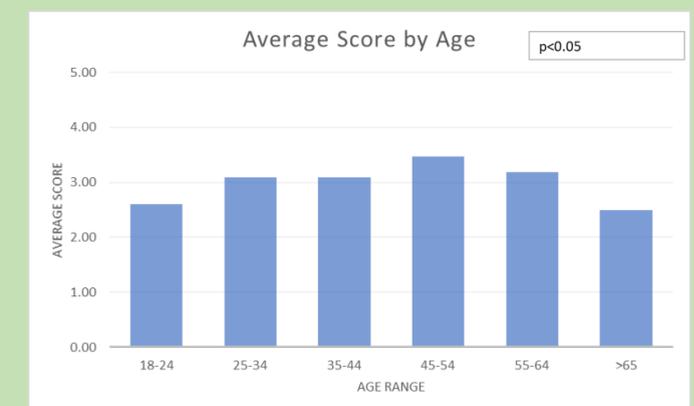
- All participants were exposed to patients' skin regularly
- 50% (n= 92) were exposed to all of : lower limbs, upper limbs, back, abdomen, chest and head and neck.
- Radiographers were exposed to the greatest mean number of body areas, with a statistically significant difference in the mean number of body areas seen by the professions in their daily practice ($p < 0.05$)
- 76% (n=140) reported that they had previously noticed skin lesions on patients.
- 47.1% (n=66) of those who noticed skin lesions on patients did not give them any advice.



Ability to Identify Concerning Lesions

The questionnaire contained 5 images of skin lesions, 2 of which were concerning. Participants were asked to identify the lesions as concerning or not concerning. Each participant's score was calculated with 0 points awarded for an incorrect answer and 1 point given for a correct answer.

- Scores ranged from 2 to 5, the mean score was 3.12.
- Radiographers had the highest mean score.
- There was a statistically significant difference in the mean scores of the different age ranges, which was confirmed with a Kruskal Wallace H test. ($p < 0.005$)
- A Kruskal Wallace H test was used to test for statistically significant differences between two or more groups of an independent variable and score (ordinal dependant variable).
- The results of this test were used to construct a statistical model using multinomial logistical regressions to predict score using a combination of these variables.
- The model statistically significantly predicted score, $\chi^2(18) = 41.123$, $p < 0.005$, $R^2 = 0.23\%$ using the variables of age range and comfort discussing sun protection.



Conclusions

- HSCPs have unique and valuable opportunities to identify atypical skin lesions due to their regular exposure to large areas of patients' skin.
- Even opportunistic partial skin examinations have been shown to be effective in detecting melanoma at an earlier stage in individuals >60 years.⁽⁵⁾
- Individual level of knowledge on melanoma has been found to be correlated with frequency of skin assessment among nurses⁽⁶⁾, therefore HSCPs should begin to receive training on skin cancer at an undergraduate and postgraduate level.

References

- Rastrelli, M.; Tropea, S.; Rossi, C. R.; Alaibac, M. Melanoma: epidemiology, risk factors, pathogenesis, diagnosis and classification. *In Vivo*, 28, n. 6, p. 1005-1011, Nov-Dec 2014.
- Staines M. Warning against ignoring symptoms amid significant drop in cancer screening. <https://www.Newstalk.Com/news/significant-drop-cancer-screening-1011559> (Accessed 25th September 2021)
- Quinlan, C.; McCracken, S.; Tierney, E.; Heffron, C. *Et al.* The need for increased melanoma awareness among non-dermatology secondary care colleagues. *Acta derm venereol*, 99, n. 7, p. 693-694, Jun 1 2019.
- HSE. Health & social care professions: HSE; [available from: <https://www.Hse.ie/eng/about/who/cspd/health-and-social-care-professionals/>] (Accessed 25th September 2021)
- Swetter, S. M.; Pollitt, R. A.; Johnson, T. M.; Brooks, D. R. *Et al.* Behavioral determinants of successful early melanoma detection: role of self and physician skin examination. *Cancer*, 118, n. 15, p. 3725-3734, Aug 1 2012.
- Maguire-Eisen, M. and Frost, C., 1994. Knowledge of malignant melanoma and how it relates to clinical practice among nurse practitioners and dermatology and oncology nurses. *Cancer Nursing*, 17(6), pp.457-463.