

## **PP-47: Sun Avoidance Measures and Factors Associated with Low Outdoor Time among Healthcare Undergraduate Students, University of Jaffna**

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**Introduction:** Many people in Asian countries have Vitamin D deficiency, despite getting sunlight throughout the year. This study was carried out to evaluate the sun avoidance measures and factors associated with low outdoor time of healthcare undergraduates in Sri Lanka.

**Methods:** An institutional based descriptive, cross-sectional survey was carried out to evaluate the sun avoidance behavior and sun protection measures among the healthcare undergraduate (Medical, Allied Health Sciences and Indigenous Medical) students at University of Jaffna. Researcher developed, pre-piloted, self-administered questionnaire was used to collect data. SPSS (version 26.0) was used for statistical analysis.

**Results:** A total of 918 respondents were included. Two main reasons for avoiding the direct exposure were preventing the skin tanning (63.08%) and skin cancer (14.98%). Many (57.38%) students spent < 30 minutes/day between 9am and 3pm during the weekdays while it was significantly higher (65.90%) during weekends. Majority (73.07%) were used at least one method of sun avoidance measure. Seeking shade (58.20%), followed with usage of umbrella/hat (46.69%), wearing protective clothing (36.92%), and application of the sunscreen cream (23.02%) were the most common sun avoidance measures practiced by the students. The odds of having low outdoor time was higher for females (OR: 1.626, 95% CI:1.213,2.178,  $p < 0.001$ ), final year students (OR:2.049, 95% CI: 1.314, 3.194,  $p < 0.002$ ), Fitzpatrick skin type VI (OR: 2.513, 95% CI: 1.601, 3.944,  $p < 0.000$ ), ever tested serum 25-hydroxyvitamin D (OR: 2.043,95% CI: 1.314, 4.021,  $p < 0.039$ ), and those who consume vitamin D supplements (OR: 1.601, 95% CI:1.173, 2.187,  $p < 0.003$ ). In addition, course of the study was associated with low outdoor time (Indigenous medicine OR: 1.587, 95% CI: 1.136, 2.218,  $p < 0.007$ ).

**Conclusions:** Healthcare undergraduate students have low outdoor time while majority practiced at least one sun avoidance measure. Gender, course of study, academic year, skin type, vitamin D testing status, and vitamin D supplement intake were identified as factors affecting outdoor time. Support should be given to promote outdoor events to get adequate sun exposure.

**Keywords:** Sun avoidance, outdoor time, vitamin D, undergraduate healthcare students