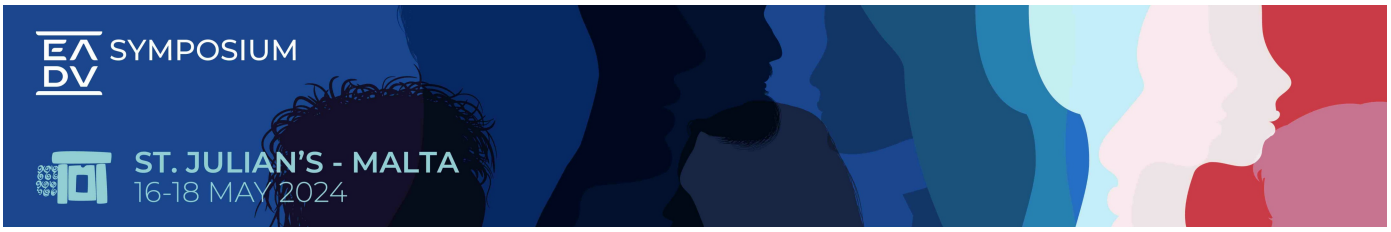


Abstract N°: 194

Knowledge of the risks of UV radiation, sun exposure attitudes and practices among university students in a Mediterranean country

Rym Afiouni[1], Josiane Helou-Mallat[1], Ibrahim Bou Orm[2]

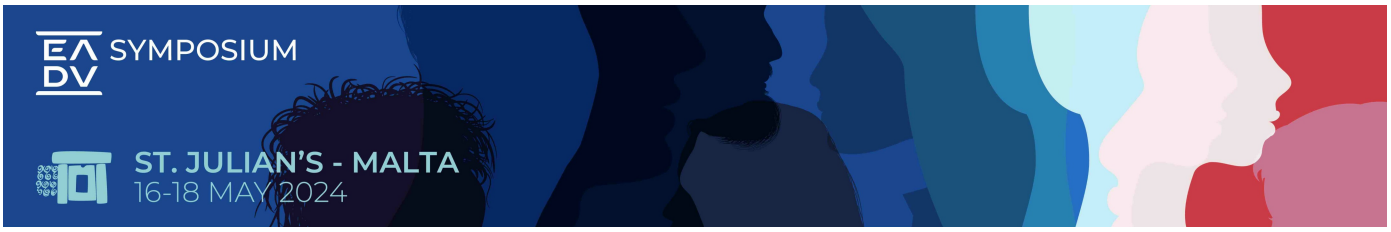
[1]Saint Joseph University, Dermatology, Beirut, Lebanon, [2]Queen Margaret University, Institute for Global Health and Development, Edinburgh, United Kingdom

Introduction & Objectives: Exposure to Ultraviolet radiation (UVR) from sun or sunbed exposure is a major risk factor for skin cancer. Data about UVR risk knowledge, exposure behaviors, and attitudes in the Lebanese population are scarce. Lebanon is a sea-level country with 300 sunny days per year. Tanning being a social trend, young adults are frequently exposed to the sun or sunbeds. The objective of this study is to evaluate the association between UVR risks knowledge, attitudes, and behaviors among Lebanese university students in the aim of promoting primary prevention of skin cancer.

Materials & Methods: A quantitative cross-sectional study was conducted. A self-administered online survey was sent to university students between January and March 2022. It consisted of 5 sections: sociodemographic data, skin and health status, UVR exposure and protection behaviors, attitudes towards UVR exposure and UVR risks' knowledge. A knowledge score and a protection score were calculated. Descriptive analysis was conducted, in addition to bivariate analysis. Statistical significance was defined as $p < 0.05$.

Results: A total of 385 students responded to our questionnaire with a mean age of 23.59 years. 62.1% reported at least one episode of sunburn during the last summer. The most common sun protective measure was applying sunscreen, although its frequency wasn't satisfactory (30% always applying it), particularly when taking into consideration the high knowledge level of UVR risks (mean knowledge score 7.78/10). The most frequent barrier into applying sunscreen was its expensive price (42.4%) which was worsened by the economic situation in the country. Only 6.2% always avoid sun exposure in mid-day (10 am to 4 pm). In addition, positive attitudes and misconceptions towards tanning, particularly among women, and sunbathing were high. Sunbathing makes 43.1% of students happier. 51.2% prefer being tanned and 49.4% consider that they are more attractive when they are tanned. 26% of students thought that a suntan protects them from the sun. 75.1% of students sunbathed for at least one day in the last summer. Finally, despite that 98% knew that UVR caused skin cancer, 84.4% of students have never seen a healthcare professional for a skin cancer screening.

Conclusion: Lebanese university students are aware of the risks of UV radiation exposure risks; however, sunburn and sunbathing are common and protective behaviors are often not applied. Future awareness campaigns for skin cancer and promotion of sun safety are necessary. These campaigns should be aimed at** enhancing the education about the correct use of sunscreen, correcting misconceptions about sun protection, restricting the use of sunbeds and regulating them as medical devices. In addition, body image perception often motivates sun exposure practices particularly in women. Therefore, future campaigns should also focus on reducing sun tanning behaviors by decreasing its cultural and social appeal. Finally, self-skin assessment and early detection for high-risk groups should be encouraged and educated.



Abstract N°: 698

Psoriasis in premenopausal and postmenopausal women from Mexico and the United States: A comparative demographic analysis of burden and trends, 1990-2019.

Rafael Cortorreal Javier*[1], Michelle Luis Sierra[1]

[1]UNIBE, Santo Domingo, Dominican Republic

Introduction & Objectives:

Psoriasis is a chronic inflammatory skin disease with a strong genetic predisposition and autoimmune pathogenesis. Autoimmune diseases are usually related to a greater extent with female sex and reproductive age. Our objective is to analyze and compare the burden and trend patterns of psoriasis in premenopausal and postmenopausal women from the United States and Mexico.

Materials & Methods:

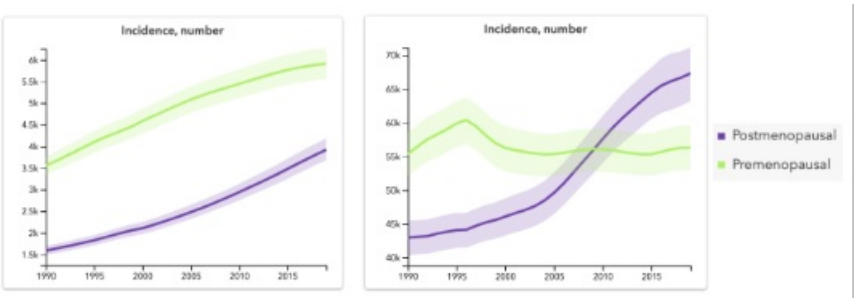
Data was extracted from Global Burden of Disease Study 2019. Incidence and prevalence numbers were analyzed and compared by premenopausal (25-49 years) state, postmenopausal state (50-74 years), year and location from 1990-2019 in the population of Mexico and the United States. To analyze the burden and its changing trend, annual percentage change (APC) was used.

Results:

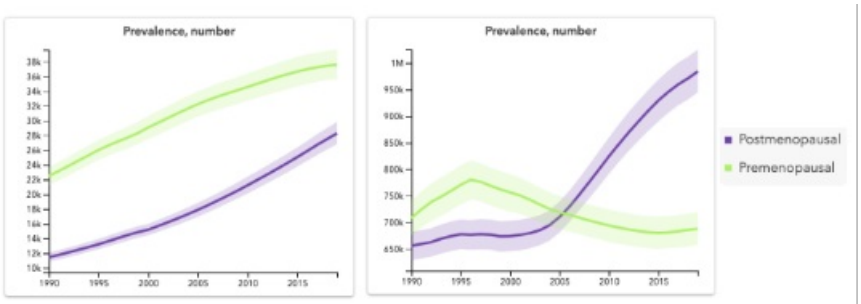
Overall incidence of psoriasis in premenopausal women from Mexico went from 3,552(95%UI:3,336-3,770) in 1990 to 5,909(95%UI:5,549-6,257) in 2019 with an APC of -3.32%; meanwhile postmenopausal women incidence went from 1,590(95%UI:1,488-1,698) in 1990 to 3,922(95%UI:3,675-4,180) in 2019 and an APC of -0.62%. On the other hand, incidence in premenopausal women from US went from 55,356(95%UI:52,150-58,547) in 1990 to 56,307(95%UI:52,975-59,599) in 2019 and an APC of -7.51; postmenopausal women went from 42,994(95%UI:40,358-45,454) in 1990 to 67,304(95%UI:63,183-71,154) in 2019 with an APC of -12.32%. Regarding the overall prevalence, in Mexico premenopausal women went from 22,479(95%UI:21,261-23,663) in 1990 to 37,591(95%UI:35,606-39,599) in 2019 with an APC of -9.48%; postmenopausal women went from 11,459(95%UI:10,863-12,090) in 1990 to 28,270(95%UI:26,833-29,810) in 2019 with an APC of -12.43%. The prevalence in US from premenopausal women wet from 708,029(95%UI:675,017-741,012) in 1990 to 687,729(95%UI:658,048-718,505) and an APC of -12.56%; postmenopausal went from 655,715(95%UI:628,642-6.81,881) in 1990 to 984,748(95%UI:945,414-1,025,863) in 2019 with an APC of -17.07%.

Conclusion:

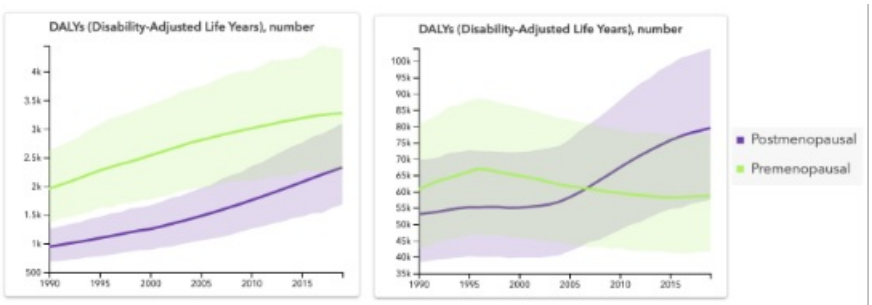
Results obtained show a greater burden of psoriasis in the US in both postmenopausal and premenopausal women compared to the population of Mexico, this can be justified by the fact that the US has a larger population than Mexico. In the data, we can notice that between both countries there is a demographic difference regarding the relationship of the burden of psoriasis between premenopausal and postmenopausal women, since in Mexico premenopausal women have a greater burden of psoriasis unlike in the US, where the greatest burden is found in the postmenopause. These results generate a possible direction for future research about how this disease manifests itself according to different geographical locations and if there is a different epidemiologic result of this disease related to the amount of population affected.



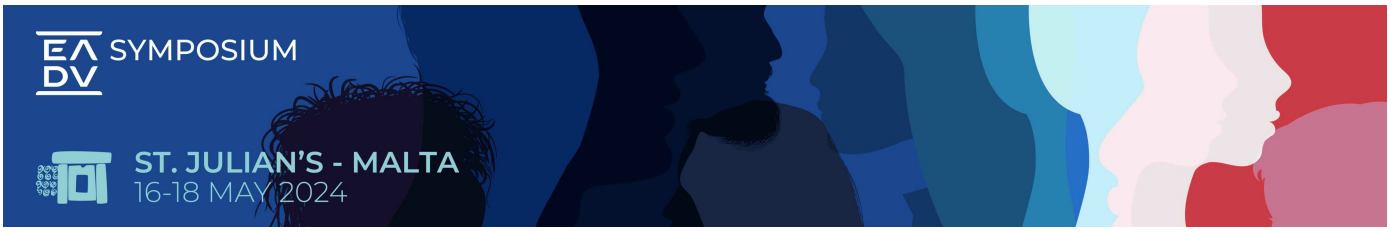
A. Incidence of psoriasis in premenopausal and postmenopausal women in Mexico(left) versus United States(right), 1990-2019.



B. Prevalence of psoriasis in premenopausal and postmenopausal women in Mexico(left) versus United States(right), 1990-2019.



C. DALYs of psoriasis in premenopausal and postmenopausal women in Mexico(left) versus United States(right), 1990-2019.



Abstract N°: 918

Features of prevalence of skin diseases among peoples in Aral zone

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Introduction & Objectives: At present environmental aspects of region attracted studying prevalence of diseases. Objective of research was to study prevalence of skin diseases among population in the Khorezm region belonging to a critical zone of Aral.

Materials & Methods: Purposeful medical examination of 4474 subjects aged 1 to 78, residing the Khiva district of the Khorezm region has been carried out.

Results: We examined 462 patients with skin diseases aged from 7 to 48 years. Of these, 200 (43.3%) patients were males and 262 (56.7%) were females. According to clinical nosology, 137 (34.2%) patients were diagnosed with atopic dermatitis (AD), seborrheic dermatitis (SD) - 134 (33.4%), allergic dermatitis (ALD) - 144 (31.2%) and rosacea - 47 (10.2%) All patients underwent clinical (SCORAD, SEDASI, DISHS), microbiological and statistical studies. The control group consisted of 72 healthy individuals of the appropriate age.

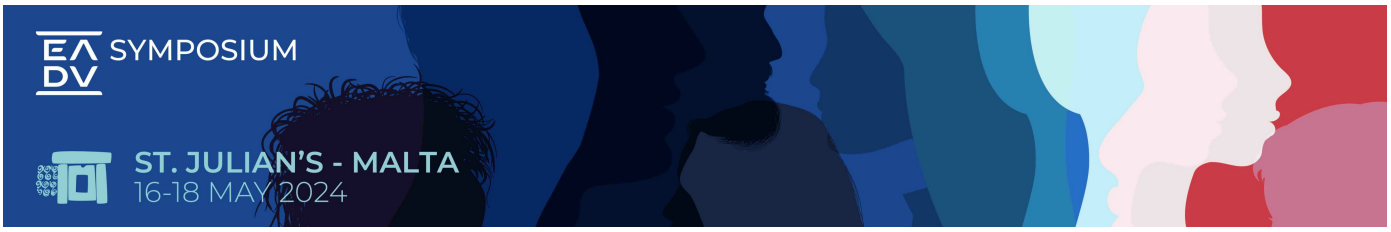
Of the subjects examined skin diseases were revealed in 709 (15,8%) subjects. The greatest number of patients were revealed at an age 15-19 – 30,5% , 1-14 – 26,9% and 20-29 – 20,2% respectively.

Of skin diseases fungal diseases were determined more often – 161 (22,7%), allergic dermatites – 159 (22,4%), acne agminata – 91 (12,8%), vitiligo – 91 (12,8%), pyoderma – 80 (11,2%).

Data of morbidity of population in Khiva district obtained were compared with matched indices in other regions of Uzbekistan. Index of skin morbidity varied from 10487 in Alty-Aryk district up to 15847 in Khiva district to 100.000 of population. Vitiligo (21,3%), mycoses (20%), photodermatoses (11,5%) were often established in population of Alty-Aryk district.

Thus, prevalence of skin diseases among Aral population is at an average 1,5 times more than in other regions of the Republic. One of the inauspicious environmental factors is contamination of drinking water. General origin of drinking water supply (Amudarya) is contaminated with collector drainage waters, indices of quality (dry residue, total rigidity, content of sulphates, chlorides) within the last 10 years were 1,5-2 times deteriorated, maximum permissible ration (MPR) of harmful substances 2-3 times exceeded a norm. All that contributed to a shift in skin PH, reducing local immunity, decreasing secretory IgA. In this connection skin diseases –allergic dermatitis, superficial mycoses, pyoderma are much more registered in Khiva region.

Conclusion: For preventive measures, we have developed preventive recommendations, characterized by the prescription of silicon-containing external products (tonic, moisturizing creams) of the “Fatiderm” line from the natural resource of Uzbekistan.



Abstract N°: 1147

High altitude dermatology: the tip of the mountain

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[1]Hopital militaire d'instruction mohammed v , dermatology, rabat

High altitude dermatology: the tip of the mountain

Introduction & Objectives:

High altitude area refers to any elevated zone that is at least 1500 meters above sea level. This specific altitude confers unique climatic conditions such as higher exposure to ultra violet light, low temperatures in winter and less humidity with a lower oxygen rate air, which may affect multiple organs especially the skin. Dermatological consequences can be expressed by various symptoms and some characteristic entities that may define a field in dermatology : high altitude dermatology.

Materials & Methods:

Our study includes a pool of more than one thousand patients living in a rural high altitude area (1630 m) seen in dermatological consultations during a humanitarian mission that expends from 29.09.23 to 01.11.23. Patients were chosen randomly and based on any dermatological complain.

The database includes the patient's identification (name) gender, age and clinical conclusions or diagnosis.

Profession and patient's activities were listed as well (farmers, constructors, housewives)

The statistic calculations were obtained from Jamovi™ (2.4.11)

Results:

Several conditions occurred more frequently during consultations such as:

- Cold sore

- Cold related injury: frost bite, chilblains

- UV related skin disorders: heliodermia, sunburns, exacerbated photodermatoses

- Carcinomas

- Atopic conditions promoted by variable levels of xerosis

- Rosacea

- Infectious conditions secondary to animal contact (cutaneous leishmaniasis, tinea circinata, corporis).

Characteristics of the population and affections

Variables	N= 1192
Âge*	
Gender**	45 ± 8,5
Male	59,8 (712)
Female	40,2 (480)
Clinical diagnosis:**	0,83(10)
Skin carcinoma	21,7(259)
Atopic conditions	53,8(642)
Xerosis	7,04(84)
Infectious conditions	0,5(6)
Genodermatose	16,2(191)
Other***	
*Expressed by mean ± standard deviation **Expressed by sample percentage (sample size) ***Includes Rosacea, UV related skin disorders, cold bites and cold related injury	

Conclusion:

Results show that patients suffered mainly from Xerosis, atopic conditions, UV related conditions and low temperature affections.

Our study showed similar results to other studies performed on populations living in mountain regions[1][2] which can be highly impacting in case prevention methods and sensitization mesures were applied such as external photoprotection mesures (sunscreen or clothes), proper hydration of skin (emollients) and respecting the skin's physiological biofilm (avoiding frequent use of soap)

The poor education level of the population increased the difficulty of the treatment phase as several protocols weren't thoroughly followed by patients.

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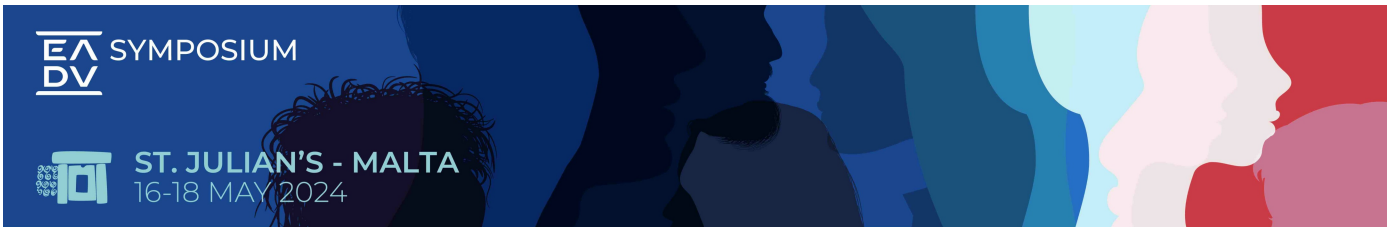
[2][Lt Col G K Singh](https://pubmed.ncbi.nlm.nih.gov/?term=Singh+LC&cauthor_id=28216727), Indian J Dermatol. 2017 Jan-Feb;62(1):59-65. doi: 10.4103/0019-5154.198050.



Abstract N°: 1231

Syphilis in Central Latin America and the Caribbean: A comparative geographical analysis of temporal trends and burden related to gender, 1990-2019.

Rafael Cortorreal Javier*[1], Michelle Luis Sierra[1]

[1]UNIBE, Santo Domingo, Dominican Republic

Introduction & Objectives:

Syphilis is a sexually transmitted disease that in recent decades has experienced patterns in its burden trend worldwide that generates concern and constitutes a public health alert which demands scientific attention, especially in low-income and middle-income countries. The objective of this research is to identify and compare the differences that exist between syphilis trends in the regions of Central Latin America and the Caribbean, with attention to differences related to gender.

Materials & Methods:

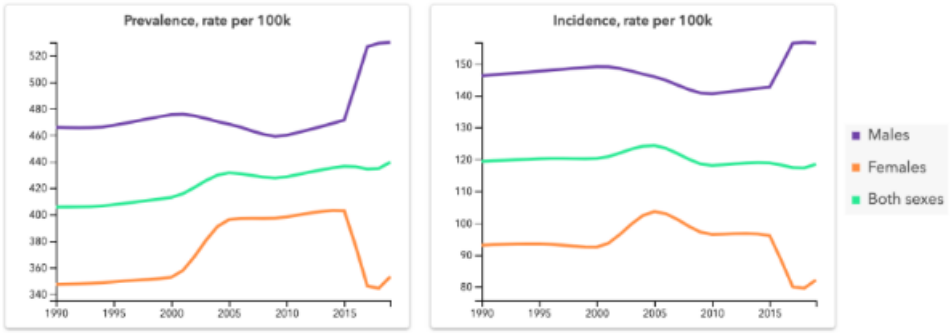
Data was extracted from Global Burden of Disease Study 2019. Incidence and prevalence rates per 100,000 habitants were analyzed and compared by gender, year and location from 1990-2019 in the population from Central Latin America and the Caribbean. To analyze the burden and its changing trend, annual percentage change (APC) was used.

Results:

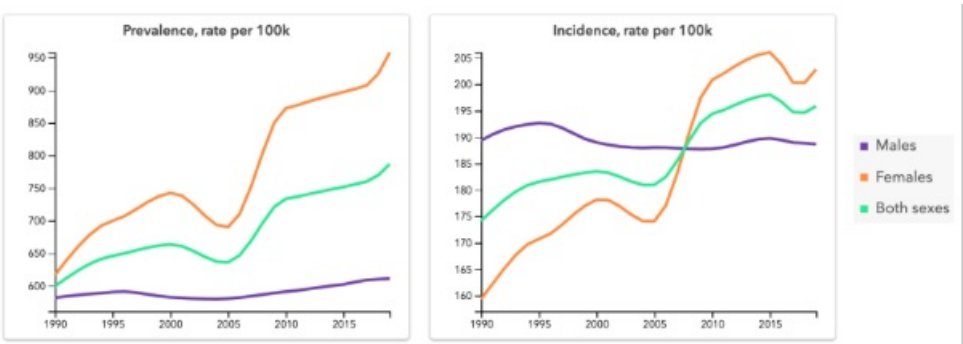
In the Caribbean male incidence had a rate per 100,000 of 189(95%UI:141-249) in 1990 to 188(95%UI:144-246) in 2019 with an APC of 0.00(95%UI: -0.06-0.06); meanwhile women had a rise in the rate from 159(95%UI:114-214) in 1990 to 202(95%UI:165-244) in 2019 with an APC of 0.27(95%UI:-0.01-0.66). In Central Latin America, incidence rate in males grew from 146(95%UI:107-192) in 1990 to 156(95%UI:117-207) in 2019 with an APC of 0.07(95%UI:0.02-0.14); womens incidence rate went from 93(95%UI:67-125) in 1990 to 82(95%UI:64-103) in 2019 with an APC of -0.12(95%UI:-0.21-0.00). Regarding prevalence in the Caribbean, males went from a rate of 581(95%UI:442-782) in 1990 to 611(95%UI:470-811) in 2019 with an APC of 0.05(95%UI:-0.02-0.12). On the other hand, womens rate grew from 616(95%UI:451-869) in 1990 to 958(95%UI:883-1,042) in 2019 with an APC of 0.55(95%UI:0.16-1.02). In Central America, the male prevalence rate in 1990 was 465(95%UI:347-637) and 530(95%UI:402-716) in 2019 with an APC of 0.14(95%UI:0.07-0.21); womens rate went from 347(95%UI:252-494) in 1990 to 353(95%UI:279-432) in 2019 with an APC of 0.02(95%UI:-0.13-0.20).

Conclusion:

Central Latin America and the Caribbean are geographically neighboring regions that share many social and cultural factors, but in this study we have found that regarding the gender-related epidemiology of syphilis disease they do not share the same results. In the Caribbean, this disease manifests with a greater burden of incidence and prevalence among women than among men, but when we study the same parameters in Central Latin America we can observe that men have a marked predominance over the burden of the disease and the women even experience a negative annual percentage change rate relative to incidence. These results reflect a reality that demands future research that allows for a better understanding of the cause of these differences in trends, to develop strategies according to the needs of the population.

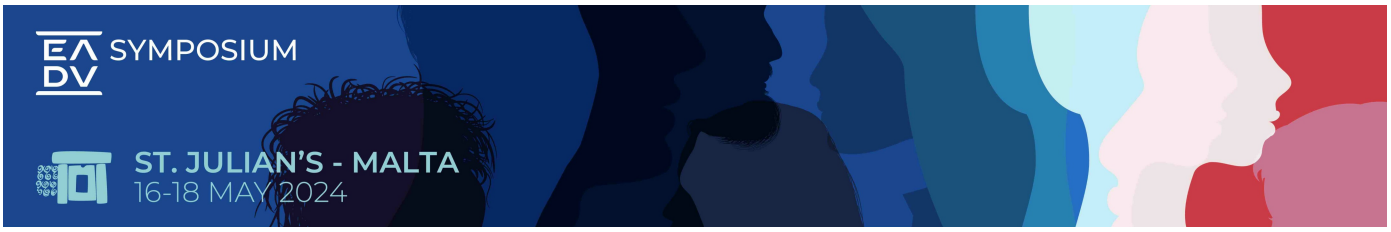


A. Trends of syphilis in Central Latin America, 1990-2019.



B. Trends of syphilis in the Caribbean, 1990-2019.

C. Sex-wise burden of new cases per 100,000 due to syphilis in Central Latin America and the Caribbean.



Abstract N°: 1515

Sun Exposure Among University Student-Athletes: Assessing Practices and Sun Safety Awareness

Nora Bensellam[1], Madeline Fitzhugh*[1], Ananya Munjal[1], Mary Crompton[1], Jacqueline Smart[1], Jennifer G. Powers[1]

[1]University of Iowa

Introduction & Objectives:

In the dynamic arena of college sports, student-athletes invest a substantial portion of their collegiate journey to intensive training, exposing themselves to direct and repeated UV exposure, which is known to increase the risk of non-melanoma skin cancers (NMSC). NMSC incidence has been rising in younger populations over recent years2,3, and we propose student-athletes are at increased risk1.

Our research aims to investigate sun exposure, sun safety behaviors, and dermatological health awareness among 53 University student-athletes at a state-funded public University in the United States. Our results aim to inform targeted interventions and educational initiatives to improve sun protection behaviors among University student-athletes.

Materials & Methods:

We created a 29 question IRB-approved survey instrument to study sun exposure and prevention habits of student-athletes at a state-funded University (n=53).

Results:

Majority of respondents (63%) were Caucasian/White, 73% were female, and median age was 20 years old. The most represented sport was Cross Country (n=19). Our study demonstrated 76% of student-athletes have experienced sunburns during their athletic careers, 32% of which blistered, similar to a nationwide poll of young adults4. Despite this, majority reported "Never/Rarely" using sunscreen, or shade structures (66% and 41% respectively). Varied susceptibility to sunburns among groups was evident ($\chi^2(df=1) = 4.36$, $p < 0.05$), pointing to potential difference in sunburn risk and sport/athlete category. A significant association emerged between awareness of skin cancer risk and sunburn incidence ($\chi^2(df=1) = 7.41$, $p < 0.05$).

Conclusion:

Sunburn risk awareness can decrease likelihood of sunburns; thus highlighting need for improved educational initiatives to cultivate a more uniform understanding of sun safety in University student athletes, some of which participating in Division I sports, in the United States. This research serves as a pivotal step towards enhancing health and well-being of student-athletes by addressing current sun protection practices and identifying gaps in knowledge, education, and availability of protective equipment or sunscreen across different demographics and sports.

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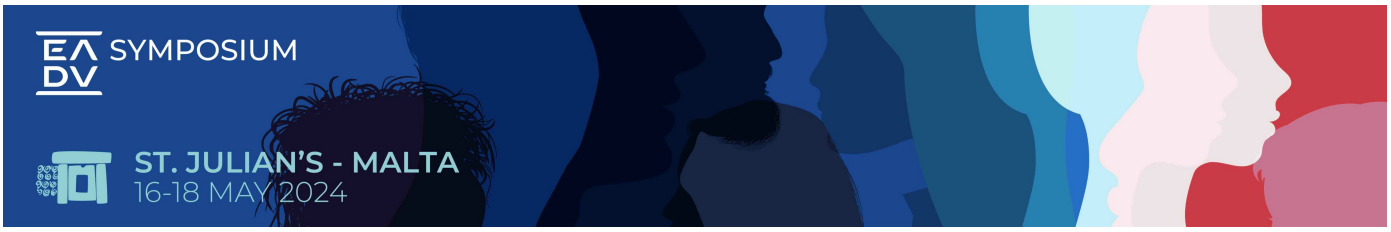

Abstract N°: 1676

Seborrheic keratoses – from diagnosis challenges to clinical impact

Nicholas Kormos*[1], Carina Petrenciu[1], Antonela Maria Chiuzbaian[2], Adrian Lucian Baican[1], Corina Andra Rusu[3]

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Introduction & Objectives: Seborrheic keratosis (SK) is considered to be one of the most common benign skin tumors, a sign of skin aging, and a condition that rarely presents itself as more than a cosmetic issue. However, despite its ubiquitous presence, it is often misdiagnosed as a malignant tumor. The aim of our study was to determine the incidence of SK misdiagnosis and factors that could promote clinical errors.

Materials & Methods: A single-center, retrospective, descriptive study was performed. The extraction was conducted from a pool of 3059 excisions completed between 2016 and 2022, out of which 185 cases with a conclusive histopathological diagnosis of SK were selected. A total of 8 patients were excluded due to incomplete recorded data. A value of $p<0.05$ was considered statistically significant.

Results: Out of the 185 included lesions, 134 were obtained from single lesion surgeries accounting for 4.4% of the total procedures in our lot. 79 (42.7%) lesions were localized on the head or neck area and 4 (2.1%) lesions were clinically diagnosed as melanoma. The main clinical misdiagnosis was made with nevi (31%), basal cell carcinomas (23%), and squamous cell carcinomas (10%). The clinical diagnosis was correlated with the histopathological diagnosis in 85 (45.9%) cases out of which 12 (14.0%) cases presented with collision lesions that also included an SK. There was no statistical significant difference between the two teams with the most surgical experience ($p=0.1849$) but there was a significant difference between more experience and less experienced half ($p=0.0242$).During the first year of the COVID-19 pandemic, there was a 42.1% drop in the number of excised SK compared to the average of the previous 3 years, from 36 to 21 cases, in line with the reduction in total cases.

Conclusion: Although a daily finding in clinical practice, SKs can pose a diagnosis challenge that can only be solved through excision or biopsy. But this solution can often leave a visible scar and increase the workload in a dermatosurgical unit and the financial strain on public healthcare services