

Press release based on an article published in *Acta Dermato-Venereologica*: Schut C, Mollanazar NK, Sethi M, Nattkemper LA, Valdes-Rodriguez R, Lovell MM, Calzaferri GL, Yosipovitch G. Psychological Stress and Skin Symptoms in College Students: Results of a Cross-sectional Web-based Questionnaire Study. *Acta Derm Venereol* 2016 [Epub ahead of print Nov 18, 2015]. <http://www.medicaljournals.se/acta/content/?doi=10.2340/00015555-2291&html=1>

## Temple Researchers Find Association between Stress Levels and Skin Problems in College Students

TEMPLE UNIVERSITY, PHILADELPHIA, USA

College is a stressful time in the lives of students, and a new study by researchers at the Lewis Katz School of Medicine at Temple University (LKSOM) and Temple University found that heightened levels of psychological stress are associated with skin complaints.

The study, published by the international, peer-reviewed journal *Acta Dermato-Venereologica* aimed to assess the relationship between perceived psychological stress and the prevalence of various skin symptoms in a large, randomly selected sample of undergraduate students. "Previous studies have demonstrated an association between stress and skin symptoms, but those studies relied on small patient samples, did not use standardized tools, are anecdotal in nature, or focused their analyses on a single skin disease," says Gil Yosipovitch, MD, Chair of the Department of Dermatology at LKSOM, Director of the Temple Itch Center, and corresponding author of the study.

The questionnaire-based, cross-sectional study was conducted at Temple University during the 2014 fall semester. Five thousand undergraduate students were invited to participate in a web-based survey in which they reported their perceived psychological stress and any skin complaints. Four hundred twenty-two students were included in the final sample size.

Respondents were divided into groupings labeled as low stress, moderate stress and high stress. Compared to low stress subjects, the high stress group suffered significantly more often from pruritus (itchy skin); alopecia (hair loss); oily, waxy or flaky patches on the scalp; hyperhidrosis (troublesome sweating); scaly skin; onychophagia (nail biting); itchy rash on hands; and trichotillomania (hair pulling). There was no association between perceived psychological stress levels and the presence of pimples, dry/sore rash, warts and other rashes on the face.

Despite study limitations (e.g., low response rate, absence of physical assessment of respondents), Dr. Yosipovitch says the results are important for dermatologists who treat undergraduate-aged patients. "Our findings highlight the need for health care/dermatology providers to ask these patients about their perceived levels of psychological stress. Disease flare or exacerbation while on treatment in the setting of increased stress may not necessarily reflect treatment failure." Dr. Yosipovitch adds, "These findings further suggest that non-pharmacologic therapeutic interventions should be considered for patients presenting with both skin conditions and heightened levels of psychological stress."