School of Medicine & Health Sciences
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Primary Hyperhidrosis and Sensitive Skin Syndrome: A National Pilot Survey

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BACKGROUND:

- Sensitive skin syndrome (SSS) is a condition of subjective cutaneous hyperreactivity to innocuous stimuli, affecting ~50% US population[1]
- Primary hyperhidrosis (HH) is a disorder of excessive sweating caused by abnormal cholinergic signaling and is the most common eccrine gland disease
- Eccrine pathology and/or cholinergic stimulation may contribute to SS flares[2]

OBJECTIVES:

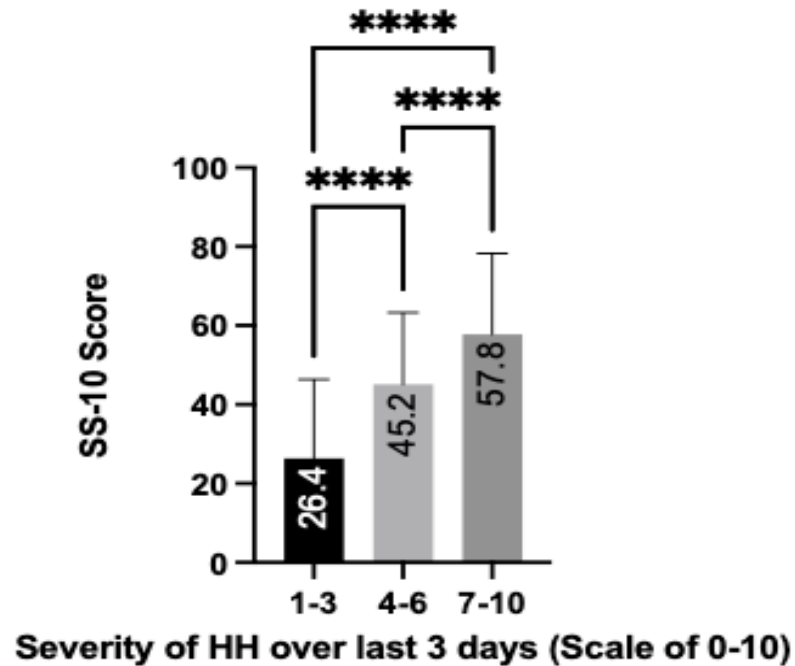- Evaluate the frequency, quality, and location of SSS in an HH population

METHODS:

- An IRB-exempt survey was disseminated by the International Hyperhidrosis Society to their membership
- Statistical analyses were performed using GraphPad Prism
- A predictive classification model for SSS was built using random forest machine-learning algorithms

637/1668 (38.19%) of respondents suffered from HH

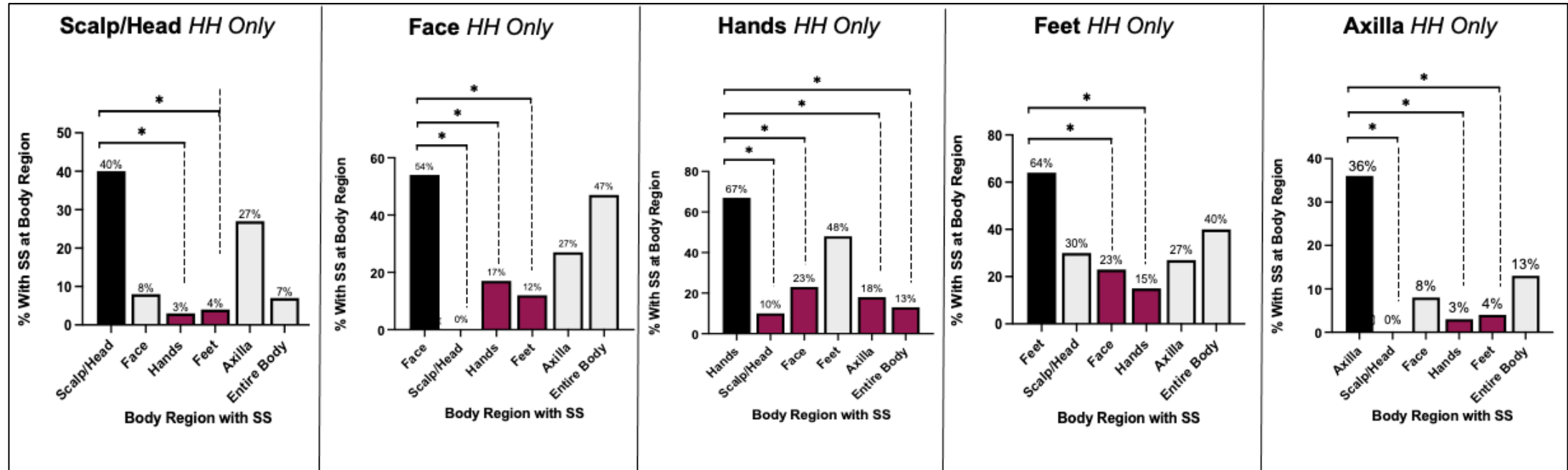Of these, 89% self-reported skin sensitivity

Comparisons of SS-10 Scores by Hyperhidrosis Severity Score

Primary HHS

75% of respondents believe HH impacts their skin sensitivity

More severe HH was correlated with higher SS-10 scores (p<0.0001)

Predictive modeling designated SS-10 scores as the most predictive feature of SSS in this cohort

SSS occurred frequently in body regions both affected and unaffected by HH

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⭐ These data are the first to <u>propose and support a relationship between SSS and HH</u>

In a survey of a large HH cohort...

- <u>SSS occurred more frequently</u> than the general population
- <u>SSS occurred in areas unaffected</u> by HH and/or sweat, suggesting sweat is not the sole causative link

⭐ <u>Screening HH patients for SSS may be warranted</u>

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