**Global Epidemiology of Hidradenitis Suppurativa (HS): A Systemic Review of Prevalence and Clinical Characteristics**

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| **Continent** | **Country** | **Reference** | **Study Period** | **Region** | **Case-finding method** | **Number of Cases (during the study population)** | **Prevalence per 100,000 (95% CI) year of study** | **Results** |
| **South America** |  |  |  |  |  |  |  |  |
|  | Brazil | Ianhez M., Schmitt, J.V & Miot, H.A., (2018) | January -June 2017 | 87 Brazilian municipalities | Random phone call survey | 6048 cases | prevalence of HS was 0.41% (CI 95%  0.32–0.50)  0.41% (CI 95% 0.32-0.50) | * HS more prevalent in adolescents and adults than children * Slight preponderance of female sex increased with age * Municipalities with greater Amerindian self-reported ancestry were associated with a marked lower prevalence for HS |
|  | Brazil | Andrade, T. C. P. C. de, et al., (2017) | August 2005- August 2015 | Bauru (SP) | Retrospective cross-sectional study, clinical records | 123 cases | -- | * Females 74% of cases * Age at dx 10-67 years * Association with DM (33%), obesity (55%), smoking (61%) * Hurley stage II most common at diagnosis * Onset of disease and dx – 9 years |
|  | Argentina | Zimman, S. et al., (2019) | July 2012-October 2017 | Buenos Aires | Retrospective cross-sectional study, clinical records | 66 cases | hih  0.02% | * Armpits, vulva, groin areas more affected * Male sex and perianal and gluteal locations were associated with severity * Most commonly recorded concomitant conditions – smoking, overweight, obesity |
| **Asia** |  |  |  |  |  |  |  |  |
|  | South Korea | Lee, J.H., et al., (2018) | January 2007- December 2016 | National | Retrospective cross sectional, Korean national health insurance database | 28516 cases | Period prevalence rate 0.06% (95% CI 55.1-56.4) per 100, 000 persons  Standardized prevalence rate (WHO standardization) 59.6 patients per 100, 000 persons  Males: prevalence 68.3 patients (95% CI 67.3-69.3) per 100,000  Females: prevalence 43.2 patients (95% CI 42.4-44.1) per 100, 000 females | * 61.3% male, 38.7% female * Predominance of male cases, female-to-male ratio 1:1.6 * 51% aged 15-35 years * HS association with ankylosing spondylitis was only observed in males (OR 1.542, 95% CI 1.145-2.077) and younger (<30 years) (OR 1.917, 95% CI 1.230-2.988) * Increased risk – RA, DM type 1, UC, DM type 2, HTN, hyperlipidemia, acne conglobate, pilonidal cysts, psoriasis, pyoderma gangrenosum, alopecia aretea, vitiligo |
|  | South Korea | Yang, J. H, et al., (2018) | May 2007 to April 2017 | 13 general hospitals in South Korea | Retrospective medical chart analysis | 438 cases | -- | * 71.1% male, 28.3% female * 23.9 (± 11.7) average age of disease onset in years * 98.5% no family history of HS * 47.7% of patients 10-19 years old * most prevalent associated skin disease = Acne 12.6% * Most prevalent associated systemic disease = 6.4% diabetes mellitus (DM) * Hurley stages I( 64.6%), II (30.1%), III (5.3%) |
|  | Singapore | Choi, E. et al., (2018) | January 2004-December 2016 | University Dermatology Clinic, National University Hospital, Singapore | Retrospective medical chart review | 58 cases | --- | * 58.6% male patients, higher male presentation * Most common site affected = axilla (85%), groin (43%), buttock (40%) * 57.1% Hurley stage II at presentation * 31% pediatric onset of HS (less than 16 years of age) * No significant difference in disease characteristics between male and female * Pediatric patients less likely to be overweight, obese, or smokers |
|  | Japan | Omine, T., et al., (2020) | April 2010 to March 2019 | Okinawa, Japan, University of the Ryukyus Hospital | retrospective, single‐center, case series study | 58 cases |  | * 72.4% male, male predominance, 27.6% female * Patient age rang: 15-76 years * Median disease duration 8.5 years * Median sartorius score = 49, no difference in score between male and females * The ratio of serum C‐reactive protein to albumin was significantly correlated with disease severity (rs = 0.64, P < 0.001) |
|  | Japan | Koremasa H., et al., (2020) | 2012-2014 | Nationwide, hospitals under certification of Japanese Dermatological Association | Hospital based survey | 300 cases | --- | * Male to female ratio 2.69:1 * Mean disease duration - 7.58 ± 0.56 years * higher incidence of Hurley stages II and III, (I [23%]; II [36.3%]; III [40.3%]) * higher PGA scores in patients with axillary lesions, PGA score (mild [33.3%]; moderate, [44.3%]; severe, [11.3%]; most severe ,[9.7%]) * fewer familial cases – 4% |
|  | Taiwan | Liang, Y.-T., et al., (2021) | 2000-2013 | Nationwide, National Health Insurance Administration (NHIA), Ministry of Health and Welfare in Taiwan | Retrospective medical chart review |  | 15  185.6/100,000 (95% CI 177.3-194.3) ,  Annual percent change –2.96% (95% CI, −1.73 to −4.17) | * female: male ratio = 0.92 in prevalent cases , male predominance * female-male ratio = 0.94 in incident cases * mean annual adjusted incidence rate 11.8/100 000 (95% CI, 11.2–12.5), with annual percent change of −4.65% (95% CI, −3.32 to −5.95) * 15- 24 years old most common age of onset * decreasing incidence and prevalence of HS was shown during 2000–2013 |
| **Australia** |  |  |  |  |  |  |  |  |
|  | Australia | Calao, M., et al., (2018) | August 2015-December 2015 | 10 Australian dermatology clinics | In person survey/interview | 88 cases | 0.67% (95% CI 0.53-0.84) | * 25.6% patients did not see clinicians regarding systems but screened for suspected HS dx * HS patients more likely to be female, young, obese, smokers, unemployed or at home duties, lower annual personal income in comparison to not suspected of having HS |
| **Europe** |  |  |  |  |  |  |  |  |
|  | Germany | Schneider-Burrus, S., et al., (2020) | 2010-2012 | Nationwide | German nationwide statutory health insurance (SHI) | 2650 confirmed HS cases | 0.09% confirmed HS patients with or without drug therapy  Men: 0.084%  Women: 0.102% | * Maximum HS prevalence age range * M (25-34 y), W (25-49 y) * Highest prevalence of misdiagnosis in adolescence * HS less chronic in men * 8.09% frequency of potentially misdiagnosed patients * 20% of patients only treated with recommended HS guidelines medication |
|  | Germany | Kirsten, N., et al., (2020) | 2014-2017 | 343 German companies | Cross-sectional whole-body examinations working people by trained dermatologist | 57 cases | Point prevalence 0.3%  prevalence of 3.0% for inflammatory and non-inflammatory hidradenitis suppurativa-related lesions | * 61.4% male * Highest prevalence of HS (0.4%) found in people with phototype IV * Abscess most frequent dermatological finding |
|  | Denmark | Theut Riis, P., et al. (2018) | 1995-2015 | Nationwide | National Patient Register and Survey data from Danish blood donor data | 500 cases | 1.8% (CI 95% CI 1.6-2.0) | * Blood donors with HS reported characteristics similar to hospitalized HS patients 🡪 higher BMI, higher smoking status, lower SES |
|  | Turkey | Yüksel, M., & Basım, P. (2020) | June 2012-July 2017 | Istanbul, Medipol Mega University Dermatology | Retrospective medical chart review | 208 cases | -- | * 68.3% male, 31.7% female * 56.7% Hurley stage II * Median age of onset: male 25 years old, women 26 years old * Most commonly involved regions = axilla (62%), groin (50.5%), and gluteus (15.9%) * 46.6% accompanying systemic disease * 75.6% no family history present * Male patients had 1.67 times higher risk of the severe stage disease than women * The patients with groin involvement, high body mass index (BMI), and low education level (0-8 years) had higher risk of severe disease stage (odds ratio=1.63, 8.91, and 1.51, respectively) |
|  | Malta | Mintoff, D., (2020) | January 1,2019 – December 31, 2019 | Nationwide | Sir Paul Boffa Hospital, SPBH, national medical chart review | 37 cases | 1.82 (95% CI 1.24-2.40) | * 72.97% male, 27.03% female * 83.78% smokers |
|  | Ireland | Delany, E., et al., (2017) | 2015 – 6-month period | Nationwide | epidemiologic, non‐interventional, cross‐sectional (single‐visit), multicenter study | 221 cases | 1.4%; 95% CI, 1.24–1.62) | * \* based on 150 cases that gave consent for further study participation\* * 70.0% female, 95.3% white * Average age at dx = 31.3 years (SD = 10.1) * Male patients were older at diagnosis compared with female patients (34.8 vs. 29.9 years; P = 0.022 * Hurley stage at dx: I (55.4%), II (32.4%), III (12.2%) * Most common HS-PGA at dx = 40.9% mild * 81.8% overweight or obese * 56.0% current smoker * 34.7% family history of HS |
|  | Sweden | Killasli H., et al., (2020) | 2001–2014 | Nationwide | A registry-based cross-sectional study | 13,538 cases | 0.14 (0.08–0.20) | * HS patients were more often women, unmarried (36 vs. 44% married), and had lower education (68 vs. 82% with an upper-secondary school degree or higher) and lower income (39 vs. 16% made SEK <100,000 a year) |
|  | France | Canoui-Poitrine, F., et al., (2009) | March 2005 | Nationwide | Two case-control survey studies- one population based with self-reported data, second medical chart review | 67 self-reported cases  , 302 medical chart cases | 1% of French population | * strong association with current smoking in self-reported (odds ratio = 4.16, 95% confidence interval [2.99-8.69]) and in medically assessed (odds ratio = 12.55 [8.58-18.38]) populations. |
| **Middle East** |  |  |  |  |  |  |  |  |
|  | Saudi Arabia \* | Shirah, B. H., & Shirah, H. A. (2017) | January 2004 - December 2013 | Medina city, Al Madinah Al Monawarrah region | Retrospective chart review | 1369 cases | -----  -- | * 45.87% males, 54.12% females * Female to male ratio = 1.18:1 * incidence rate of axillary hidradenitis suppurativa = 0.07% * mean age was 25.5 years, range 14–37 years * Hurley stage: I (68.73%), II (31.26%), III (0.0%) |
| **Africa** |  |  |  |  |  |  |  |  |
|  | Tunisia | Mebazaa A., et al., (2009) | January 1985 -December 2008 | La Rabta hospital, Tunis | Retrospective chart review | 1. cases | -----  -- | * marked male preponderance, sex ratio (M/F) of 10/1 * mean age of 35.2 years (range 21–53 years) * average age of disease onset = 23.9 years |
|  | Ghana | Hagan, P. G, et al. (2020) | ---- | Holy  Family Hospital (HFH) in Berekum, Brong Ahafo, Ghana, West Africa - representative of tropical rural Ghana | exploratory, cross sectional, descriptive study, screening questionnaire | 502 cases | 0.8% (4/502), 95% CI 0.2-2.0 | * no differences in sex, age, BMI and tobacco smoking amongst HS-positive and HS-negative or between screen-positives and screen-negatives |

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