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Phenotype and Comorbidity Assessment (COPPACA): an observational study of the prevalence, phenotype and health burden of psoriasis in the community

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Psoriasis affects 2% of the UK population and is associated with significant costs for individuals and society, along with multiple comorbidities including psoriatic arthritis, cardiometabolic disease, and anxiety and depression. Most psoriasis is managed in the community; however, there is wide variation in assessment, diagnosis, treatment and secondary care referral pathways. We sought to evaluate the extent of psoriatic disease managed in the community, primarily under primary care. The aims of the study were to describe the clinical pattern of psoriasis in the community, to describe the burden of psoriatic disease comorbidities, and to explore why patients with severe psoriasis are not referred to secondary care.

Participants were recruited over a 1-week period from a pop-up walk-in dermatology clinic run by dermatologists and rheumatologists in a city centre. Individuals who suspected they had psoriasis were invited to approach the study team. The presence or absence of psoriasis was then confirmed by a dermatologist. If psoriasis was confirmed, patients completed questionnaires including medical history, psoriasis treatment, Dermatology Life Quality Index (DLQI), Patient Health Questionnaire 9 (PHQ-9), Patient Needs Questionnaire 9, and Psoriasis Epidemiology Screening Tool (PEST). Clinical examination was documented using Psoriasis Area and Severity Index (PASI), body surface area and Physician's Global Assessment. Statistical analyses were performed using RStudio (R Foundation, Vienna, Austria).

Of > 300 patients screened, 140 were confirmed to have psoriasis. Overall, 46% (65) were male, the mean body mass index was 28.2 kg m^{-2}, and 19% (26) currently smoked. Most (92%) had plaque psoriasis; 36% had concurrent nail involvement. The mean PASI was 4.6, with 34% (48) having a PASI > 5. The commonest comorbidities were cardiovascular disease (41%), depression (31%), anxiety (29%) and psoriatic arthritis (9%). Patients reported significant psychosocial impact, with a mean

DLQI of 8.5, and 34% (48) scoring > 11 (severe or very severe impact). Similarly, the mean PHQ-9 was 8.1, with 35% (49) of patients scoring > 9 (moderate or severe depressive symptoms). In total, 73.6% were dissatisfied with their care, the commonest reason being lack of general practitioner appointments (31%). The team suggested a change of topical therapy to 84% (118) of patients and felt 29% (41) required referral to secondary care dermatology, including three urgent referrals.

This study demonstrates a high prevalence of undertreated psoriasis in the community and the significant psychosocial impact of the participants' skin disease. Going forward, improved communication between primary and secondary care services can enhance care for patients with psoriasis. Collaborative working between allied specialties, as demonstrated, can enhance research output and optimize patient outcomes.

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