chronic diseases. Most often PA is self-reported while measures of the aerobic capacity are more seldom measured in subjects with chronic pain.

Objectives: The aims were to investigate if physical activity (both self-reported and aerobic capacity) in people with chronic pain classified as regional or widespread and to compare the findings with a group that report no pain.

Methods: From the 2016 follow-up of the Swedish population based Epipain cohort (n=1321), 146 subjects were invited to a clinical assessment where the aerobic capacity was assessed by using a submaximal bicycle test, the Ekblom-Bak test, together with assessment of the Borg scale for perceived exertion (RPE). Aerobic capacity was also classified as low, average or high according to data from the general population. Self-reported physical activity was coded as MVPA%, if recommended levels of PA was reported (physically active on a moderate level: ≥150 min/week (MPA) or on an vigorous level: ≥75 min/week (VPA) or not). The Fear Avoidance Beliefs Questionnaire for PA (FABQ-PA, 0–24 best to worst) and for work (0–48 best to worst) were also assessed. The participants were classified as having chronic widespread pain (CWP), chronic regional pain (CRP) or no chronic pain (NCP) based on a pain mannequin presenting 0–18 pain regions and if pain had lasted for 3 months or more. Chi2 and Kruskal-Wallis tests were performed to study differences between the three pain groups.

Results: 141/146 (97%) subjects (mean (SD) age 59.4 (8.2) years) whereof 61% were women, could be classified into pain groups; 43 as CWP (84% women), 43 as CRP (42% women) and 55 as NCP (58% women). The group with CWP was slightly older than those with CRP (mean (SD) age 57.0 (7.6) years vs. 61.9 (6.9) years, p=0.02). The CWP group also had lower aerobic capacity (mean (SD) 2.2 (0.5) l/min vs. 2.6 (0.6) l/min, p=0.03), and a larger proportion was classified as having low aerobic capacity (CWP 21%, CRP 7% and NCP 10%, p=0.04). The proportion of MVPA% did not differ between the groups; CWP 70%, CRP 81% and NCP 74% (p=0.5). There was neither a difference between the groups in BMI, RPE or in sitting hours/week (p=0.6). However, differences were found in the FABQ where in the PA scale those with CRP had worse scores compared with NCP (mean (SD) 11.2 (7.3) vs. 6.0 (6.0), p<0.001), the difference between CWP and mean (SD) 8.9 (6.7) and NCP was p=0.06. In the work subscale of FABQ, CWP had worse scores compared with CRP (mean (SD) 18.9 (15.7) vs. 10.5 (12.5), p=0.002) and CRP had worse scores compared to those with NCP (mean (SD) 10.0 (12.5) vs. 6.5 (9.1), p<0.001).

Conclusions: In this sample of subjects with chronic pain or no pain, having widespread pain tended to affect the aerobic capacity negatively while self-reports of physical activity level and recommended levels of physical activity did not differ between groups. Fear avoidance in relation to physical activity and especially in relation to work was more noticeable in subjects with chronic pain compared to those with no pain. Measures of aerobic capacity and information of fear avoidance beliefs might help health professionals to better tailor the non-pharmacological treatment for subjects with chronic pain.

Disclose of Interest: None declared


SAT0739-HPR OCCUPATIONAL EXPOSURE TO PESTICIDES INCREASES THE RISK OF RHEUMATOID ARTHRITIS: RESULTS FROM THE MALAYSIAN POPULATION-BASED CASE-CONTROL STUDY

C.L. Too,1 L.K. Tan,2 A.F. Nurul Ain1,3 L.S. Lau1,4 M.L. Nor Asiah5, S. Salsabil6, H. Heselyn6, S. Nor Shuhaila7,2 S. Wahhuddin8,2 S.C. Gun8,2 B. Easthway9,2 M. S. Mohd Sheharti10, M. Ainin11, R. Azmilla11, O. Muhaini12,2 B. Camilla13, L. Padyukov9,2 L. Alfredsson9,12 L. Klareskog8,12 M. Shahnaz14,15,16,17,18 Allergy and Immunology Research Center, Institute for Medical Research, Jalan Pahang, Malaysia; 2Department of Medicine, Rheumatology Unit, Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden; 3ImmuneRegulatory Unit, Allergy and Immunology Research Center, Institute for Medical Research, Jalan Pahang, Malaysia; 4Department of Medicine, Selangor General Hospital; 5Institute of Public Health, Allergy and Immunology Research Center, Institute for Medical Research, Kuala Lumpur, Malaysia; 6Department of Medicine, Putrajaya Hospital, Wilayah Persekutuan Medical Research Centre, Institute for Medical Research, Kuala Lumpur, Malaysia; 7Department of Medicine, Perak Hospital, Ipoh; 8Department of Medicine, Hospital Tunku Ja'afar Seremban, Seremban; 9Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Center, Wilayah Persekutuan; 10Department of Medicine, Hospital Tunku Jaafar Seremban, Seremban; 11Department of Medicine, Hospital Kuala Lumpur, Malaysia; 12Department of Medicine, Kuala Lumpur Permanum Banir, Perak, Malaysia; 13Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; 14Level 12th, Block E7, Parcel E, Federal Government Administrative Centre, Ministry of Health Malaysia, Kuala Lumpur, Malaysia

Background: Several studies have suggested farming occupation with exposure to pesticides as risk factor for rheumatoid arthritis (RA).

Objectives: We investigated the association between pesticides exposure and risk of RA subsets in the Malaysian population.

Methods: Data from the Malaysian Epidemiological Investigation of Rheumatoid Arthritis (MyEIRA) population-based case-control study involving 1055 early RA cases, 1357 age, sex, and racial and ethnic matched controls were analysed. All study subjects answered a structured questionnaire on a broad range of issues including occupational exposures to pesticides. The self-reported information on ever/never occupationally exposed to pesticides was used to estimate the risk of developing ACPA-positive and ACPA-negative RA. Association between pesticide exposure and the HLA-DRB1 shared epitope (SE) was evaluated.

Results: The proportion of ACPA positivity in the RA patients was 64.4% and 19.1% in the normal controls. The presence of HLA-DRB1 SE alleles in RA patients was 40.2% and 15.8% in the normal controls. Our data demonstrated that occupational exposure to pesticides was significantly associated with an increased risk of developing RA in the Malaysian population (OR 2.31, 95% CI 1.12–4.73, p=0.03). The association between occupational exposure to pesticides and risk of RA was observed with ACPA-positive RA (OR 3.10 95% CI 1.49–6.47, p=0.003), but not with ACPA-negative RA. A dramatically increased risk for ACPA-positive RA was seen in individuals who both exposed to pesticides occupationally and carried SE alleles (OR 28.06, 95% CI 3.58–220.09, p<0.0001).

Conclusions: This study demonstrates that occupational exposure to pesticides is associated with an increased risk of ACPA-positive RA in Malaysian population.

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