Fatigue is the most prevalent symptom in Systemic Lupus Erythematosus (SLE) as it is present in up to 90% of patients; it is considered to be the most disabling symptom in around half of the patients [1,2]. Its aetiology is multi-factorial and there is conflicting evidence on the relationship between fatigue and SLE disease activity, and between fatigue and vitamin D deficiency. The Ad Hoc Committee on Systemic Lupus Erythematosus Response Criteria for Fatigue recommended the Fatigue Severity Scale (FSS) for the measurement of fatigue in SLE [2,3].

Objectives: The aim of the study was to characterise the relationship between fatigue and other factors, including disease activity, vitamin D level, pain, depression, anxiety, sleep quality and exercise in SLE. Moreover, the prevalence of fatigue in the Maltese population of SLE patients was established.

Methods: 92 SLE patients, who fulfilled the SLICC classification criteria for SLE, gave informed consent to participate in the study. This consisted of an interview, blood and urine tests, and filling the questionnaires: Fatigue Severity Scale (FSS), visual analogue scale (VAS) for fatigue, Hospital Anxiety and Depression Scale (HADS), VAS for pain, Pittsburgh Sleep Quality Index (mHAQ) and modified Health Assessment Questionnaire (mHAQ). SLE disease activity was measured by SLE Disease Activity Index-2K (SLEDAI-2K). Approval to carry out this study was obtained from the University Research Ethics Committee.

Results: The mean age of the cohort studied was 46.9 years. 92.4% were females and the median disease duration was 13 years. 56.5% had an abnormal level of fatigue (FSS >3.7) and the median FSS was 4.17. Fatigue measured by FSS, had a significant correlation with VAS Pain (R=0.536, p<0.001), HADS-D (R=0.535, p<0.001), HADS-A (R=0.395, p<0.001), PSQI (R=0.551, p<0.001) and mHAQ (R=0.435, p<0.001). VAS fatigue had a significant correlation with SLEDAI-2K (R=0.247, p=0.018). There was no significant relationship between fatigue and vitamin D level or regular exercise. ANCOVA analysis showed that fatigue measured by FSS and VAS fatigue was significantly dependant on depression measured by HADS-D (p<0.001) and VAS pain (p<0.001).

Conclusion: In our patients, unlike that reported in the literature, lymphoma diagnosis was in SLE with longer duration of the disease, and all cases were female. Most frequent subtype was NHL, and all patients had previous haematological manifestations. Regarding previous SLE treatments, 5 patients had been exposed to immunosuppressants.