

Socio-Professional and Biological concomitant of Sleep Disorders Complaint

Prevalence of sleep disorders complaint during healthcare checkup Socio-Professional and Biological Concomitant

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Primary healthcare checkup are regularly performed by French welfare centers. We report analysis of Sleep disorders complaint registered during 1997 and 1998 in Bordeaux-Cauderan and Cenon CPAM welfare centers. The prevalence of sleep disorders is estimated from a total of 38 101 checkup (19 206 during 1997 and 18 895 during 1998). The population is segmented by gender (male: 1997-8121, 1998-9605; female: 1997-11085, 1998-9290) and socio-professional activity (craftsman & traders: 1997-548, 1998-428; managers: 1997-678, 1998-820; foremen: 1997-3204, 1998-2485; office workers: 1997-3311, 1998-2300; workers: 1997-2325, 1998-2366; pensioners: 1997-2136, 1998-2610; idle peoples: 1997-4784, 1998-5547; out-of-work peoples: 1997-2220, 2339). During checkup, nurses take a blood sample for biological analysis (glycaemia, creatinin, cholesterol, triglyceride, gammaGT, and hematology). Statistical analysis was performed with Macintosh Statview software.

During 1997, 5109 peoples (27%) mention a sleep complaint (male: 1757, female: 3352), 4475 (24%) for 1998 (male: 1937, female: 2538). Specific treatment is done for 514 (3%) in 1997 (male: 174, female: 340) and 657 (3,5%) in 1998 (male: 245, female: 412).

The analysis of the segmentation by gender and age show significant differences ($p < 0,0001$), socio-professional activity show an significant higher prevalence ($p < 0,0001$) for out-of-work male peoples (51% higher than expected) and for female pensioners (25% higher than expected). Surprisingly there is no higher prevalence for managers, foremen, and office workers.

Biological analysis report some small but significant difference between the group with and without sleep disorders complaint. There is no difference for glycaemia, creatinin. Cholesterol and triglyceride where higher ($p < 0,03$) for people with sleep complaint (fig 1). Hematology show a higher level ($p < 0,024$) of lymphocyte (fig 2). Similar findings for cholesterol and triglycerides where reported by Mattiason & al (1), Knutson & al (2). Findings about hematology parameters and sleep disorders are not specifically reported but generally associated with markers of depression. The sociological concomitants of sleep disorders (e.g. unemployment) set the new task to determine if biological concomitants imply sleep disorders or if sleep disorders imply biological concomitants.

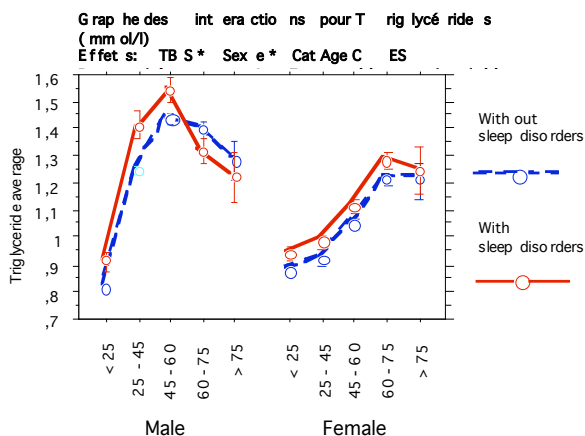


Fig 1 Triglyceride level

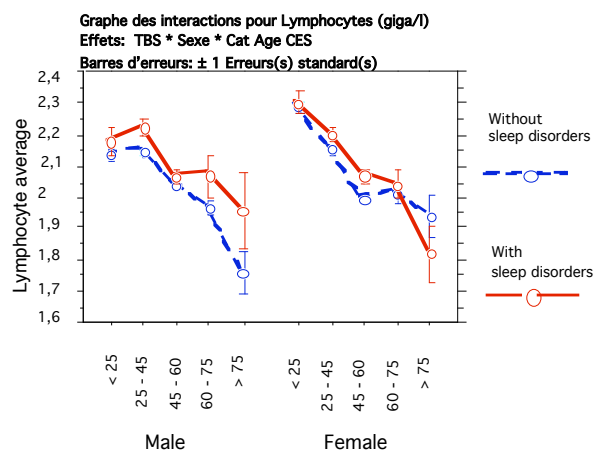


Fig 2 Lymphocyte level

1. Mattiasson I; Lindgärde F; Nilson JA; Theorell T. Threat of unemployment and cardiovascular risk factors: longitudinal study of quality of sleep and serum cholesterol concentrations in men threatened with redundancy. *BMJ*, 301(6750): 461-6 1990 sep 8.
2. Knutson A. Shift work and coronary disease. *Scan J Soc Med Suppl*, 44(): 1-36 1989.