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**PAIN THRESHOLD COMPARISON IN THE HSEEU «UMSA»
LEFT- AND RIGHT-HANDED STUDENTS FROM MOROCCO,
EGYPT, IRAN, IRAQ AND SUDAN**

Typological aspects attract the scientists attention all over the world, in different branches of Science about Human Being.

Ethnic aspect can be illustrated by the works about blood pressure determination and medical competence [12, 1087-1092], smoking of patients with cardio-vascular and respiratory diseases [7, 671-677], diabetes management [20, 410-414], immunohistochemical and molecular analysis role in Duchenne and Becker Muscular Dystrophy [4, 325210], environmental geography in leukocytes of Moroccan Amazighs [15, 1000052], *Borrelia lusitaniae* isolates characterization [27, 1587-1593].

Ethno-age aspect is illustrated in the article about age-dependent association between pulmonary tuberculosis and special gene region in the 25-year-old Moroccans [10, 407-414]. In part, ethno-age aspect is reflected in the works on dentistry for example in the one about craniomandibular dysfunction and malocclusions in the students with no connection between craniomandibular dysfunctions and certain malocclusions in the student population at the Casablanca Faculty of Dental Medicine [5, 170-180].

Ethno-age aspect plus emphasizing about rural conditions is described by the works about worse health and worse adaptation in children non attending school comparatively to the ones who attend, about the child labor in the artisan sector [17, 31-43]. Urban milieu in ethno-age aspect is emphasized in the works about Moroccan adolescents [11, 253-262], prevalence of intestinal parasitic infections (protozoa and helminthes) in Moroccan urban primary school students [26, 40-45].

Next typological aspect is ethno-gender-age. It is represented in the works about male and female students smoking (male rate is bigger) among Moroccan students and anti-smoking campaign [3, 30-32], females prevalence among the schoolchildren in public medical schools in Casablanca [24, 219-228], lower attendance rates for

breast cancer screening in Netherlands among Dutch women born in Turkey and Morocco than among native Dutch [13, 349-353], work about smoking prevalence and demographic factors in 15-90-year-old Moroccans taking into account gender (current smoking was 31,5% for males and 3,1% for females [21, 447-451], about socioeconomic status and tobacco expenditures (28,5% of men and 2,8% of women smoke, the participants age is 15 years and older) [25, 334-339], motivational factors mediating the association between acculturation and participation in sport among Moroccan and Turkish women (aged 15-30) in Netherlands [14, 95-100].

Ethno-gender aspect is described in the work according to which prevalence of current smoking was inversely associated with level of education in men and increased with educational level in women. Illiterate males tended to have a higher probability of being current smokers than males with university-level education [8, 1327-1332]. Moroccan migrants (men and women) use health care services comparatively to the Turkish ones [9, 332], health practices in Moroccan immigrants (men and women) [22, 379]. Breast cancer and its treatment may lead to significant difficulties with sexual functioning and sexual life [23, 29]. This aspect in dentistry is also present: bimaxillary protrusion in young males and females in Morocco [16, 430-434].

Ethno-gender-age aspect is also distributed in part in Moroccan literature. For both boys and girls, the results show lower height and BMI z-scores than the WHO reference values [18, 481-494]. Adolescents whose parents have a low educational level have lower height/age and BMI/age z-scores than those whose fathers have a high educational level. No differences are observed in total daily energy intake depending on fathers' educational level, but the energy provided by lipids is higher in adolescents whose fathers have a high educational background. The quality of fats consumed (MUFA+PUFA/SFA) is better among those boys whose fathers have low education, but no differences are observed for girls. The present study suggests that the bones mineral density of the spine and hip decreases with an increasing number of pregnancies, and this situation shows variations in different age groups (in postmenopausal women in part) [2, 392-398]. However, there was no correlation between parity level and peripheral fractures. Ethno-gender-age aspect is also reflected in dentistry. For example, significant sexual dimorphism was found in tooth sizes, the regression equations elaborated for males and females (approximately 21-23 years) were used as a basis for establishing an orthodontic prediction table for Moroccan children [6, 5-10].

Ethno-gender-age aspect with rural area emphasizing is in the work of Moroccan authors the main results of which are as follows as: sun protection is better in women, rural residents and students [1, 422-424].

We met the work about coping with the cold in macaques [19, 20130428] but not humans.

Pain sensitivity study is paid big attention nowadays. New mechanisms and influencing factors are discovered at various pain types in the Earth different areas. Pain threshold is the informative index of pain sensitivity assessment. Assessing physiological features in people from different countries can help in their abilities better expression and in their easier natural and social adaptation (to education, the professional one). It is especially actual because of Bolon's education system presence, for-

eign students exchange between countries, as well as few data on ethnophysiology in part in Iran and Arabic countries. It is known that sensitivity is different on both arms, in dexters and sinisters. Tactile sensitivity is usually higher on the dominant extremity and the noceceptive one is higher on subdominant extremity. But we did not meet the data about sensitivity varieties in the representatives from different countries, in part in Morocco especially taking into account their dominant extremity. Face halves are undergone to significant influence from brain hemispheres side in part in asymmetry aspect. Dexters have more developed right masticatory muscle because of chewing on the right side and left hemisphere influence dominance, sinisters – left masticatory muscle, left temporal-mandibular joint and right hemisphere dominance. But the data about sensitivity (pain in part) differences on two face halves are practically absent in scientific literature.

We have performed our investigations in HSEEU «UMSA» students of all courses both of medical and dental faculties from Iran (54), Iraq (18), Morocco (18), Egypt (18) and Sudan (18). We took into account only dominant extremity of the examined without taking into account dominant finger, leg, eye, probe with applauding and Napoleon's pose. There were 80 left-handers and 46 right-handers among the examined students. We did not take into account unreal and hidden sinisters and took only real dexters (who have both parents right-handed) and real sinisters (whose mothers and father were left-handers).

Pain threshold was the lowest in the Iranians, then follow the students from Sudan, the Moroccans, the students from Iraq, the Egyptians. Independently on the country left-handers possessed less pain threshold than the right-handers and this difference was maximally valuable in the Iranians. Also the left-handers had less pain threshold on their face left half while the dexters – on the right ones. This difference was maximally valuable in the students from Iraq.

We do hope that given data can help in stress assessment in students from different countries (because pain can be considered as a stress marker), in their better adaptation to new life conditions, new mental and physical regimens.

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