Conclusions: Physicians and specialists in occupational health are the main actors involved in the provision of occupational health services. The key to success in this area is initiating, maintaining and enhancing interdisciplinary collaboration between occupational health and primary health care services, and the consolidation of occupational health services.

Key-words: occupational health, employees, primary health care.

229. ADOLESCENT MOTHERHOOD AND ITS PUBLIC HEALTH IMPLICATIONS

Ioana Georgescu, Mihaela Roxana Huhu, Maria-Luiza Butoi, Octavian Ioghen, Madalina Preda, Mihaela Stefanescu, Mircea Ioan Popa

Scientific adviser: Anca Doina Plesca MD, Professor, Medicine Dean, *Carol Davila* University of Medicine and Pharmacy Romania, Bucuresti.

Introduction. Adolescent pregnancy and parenting are considered social and public health issues. For most of the adolescents, pregnancy and childbirth are neither planned nor wanted. Early motherhood increases the risks for both mothers and their babies. One goal of our study is to evaluate this risk.

Materials and methods. A total of 238 infants whose mothers were between 15 and 30 years old at the moment of birth were included in the study. All infants were hospitalized in „Dr. Victor Gomoiu" Children's Clinical Hospital, Bucharest during August - October 2015. We collected data from the patients' charts and compared the education level, living area, birth weight and smoke exposure of the adolescent mothers (<20 years old) with the mothers in the 20-35 age group (control group) using EpiInfo 7.1.4.0.

Results and discussion. Among all infants included in the study group 15.99% have adolescent mothers. A percent of 68.42% of the adolescent mothers had only primary education compared with 14.50% of the control group. Of the adolescent mothers, 5.26% have secondary school compared with 15% of the mothers from the control group. None of the adolescent mothers have university studies while 9% of mothers in the control group were graduated of an university. Pregnant teens and teen mothers should be encouraged and helped to continue schooling.

The risk of child neglect and maltreatment is higher among teenage mothers. In our study, smoke compared with 47.36% of the mothers in the control group. Adolescents are more likely than older women to have a low or very low birth weight infant. Twelve percent of the mothers in the control group had children with low birth weight or very low birth weight compared to 21.05% of the adolescent mothers. Twenty one percent of the mothers ranged in the control group are living in rural areas compared to 47.37% of the adolescent mothers. Educational programs that give teen mothers the skills to be better parents and provide for their child financially and emotionally should be designed and implemented.

Conclusions. Adolescent motherhood is more likely in uneducated and rural communities. Most of the teen mothers have only primary education. Adolescent mothers and their babies have unique health

risks. Newborns born to adolescent mothers are more likely to have low or very low birth weight, with the risk of long-term effects. Infants born to teen mothers and are at higher risk of being exposed to cigarette smoke. Adolescent motherhood remains a public health issue. Adolescent mothers should be provided with psychological and financial support and should be encouraged to continue the school.

Key words: adolescent, motherhood, public, health.

230. CIRCADIAN DESYNCHRONY IN SHIFT WORK

Cristina Mandric, Garbuz Alexandru

Nicolae Testemitanu State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

The circadian clock is one of the most important mechanism of human body that coordinates biological rhythms with environmental changes in the day-night cycle. It influences hormones, behavior, cognitive function, metabolism, cell proliferation, apoptosis and response to genotoxic stress.

The earliest recorded account of a circadian process dates from the 4th century B.C.E., the next dates was in Chinese medical texts dated to around the 13th century, but near our days discovered the first mammalian circadian clock mutation using mice in 1994. In circadian literature, synchronization means that rhythms display a 24 h period but may not necessarily be in the right phase, for example, abnormally delayed or advanced. We are diurnal species, so we are active during the day and sleep during the night. But exist specific categories of people with morning diurnal preference (larks) and evening preference (owls). Their internal biological clock adapted and work in own specific mode. Deviation from the normal mode leads to desynchronization of the circadian clock, for example among shift workers. Shift work is work that takes place on a schedule outside the traditional 8 am – 6 pm day. It can involve evening or night shifts, early morning shifts, and rotating shifts. Many reviewers have been published regarding the subjective perceptions, health, performance and psychological aspects of shift work. Of course it is Associated with a number of health problems. This research concentrate on shift work in relation to desynchrony of biological clock and it's impact on the function of the liver. Through the physiologic and biologic methods I obtained that the level of glucose in blood through 24 hours changes concerning the schedule of work. Presumably, permanent shift work causes hypoglycemia. This causes metabolic disorders and finally diabetes. In this study how future propose is to evaluate the health and circadian rhythm of medical workers. It is necessary to evaluate the schedule of shift work in medical service. The most numerically important shift work conditions in medicine are irregular night shifts (sometimes nights and sometimes days) and rotating schedules. Most permanent or long-term night shift workers in medicine can not adapt their circadian system to the imposed work schedule. A recent meta-analysis of 6-sulphatoxymelatonin rhythms in permanent night workers indicates that only a small percentage (<3%) shows complete circadian adaptation, information by Josephine Arendt, Centre for Chronobiology, Faculty of Health and Medical Sciences, University of Surrey, Guildford. Thus, the vast majority of shift workers in medical service will be working during their circadian time-off and trying to sleep during periods of maximum alertness. The curtailment of sleep when taken during the day in shift workers is well documented and is a cause of sleep deprivation, that need to evaluate better.