

significant results were found in the two groups. Significantly lower muscle strength was observed in case of nulliparous women ($n = 18$) who have experienced vaginal wall laxity ($p = 0.004$) and in pregnant women. ($p = 0.0008$) Duration of PFM contraction was significantly worse in pregnant women ($p = 0.001$). Women who occasionally do some forms of physical activity showed a significantly better muscle strength ($p = 0.029$), and women who regularly do some physical exercise showed a significantly longer duration of maximum contraction ($p = 0.018$) than pregnant women doing occasional or regular exercise. Comparing only the results of pregnant women we found a significant difference in PFM strength of women doing occasional and regular exercise and almost significant results were found in women who never or occasionally do exercises. **CONCLUSIONS:** A significantly decreased maximum pelvic floor muscle strength and duration of maximum contraction could be observed in pregnancy compared to nulliparous young women doing regular or occasional physical exercise and experiencing vaginal wall laxity.

PIH5

EXAMINATION OF GAIT DURING THE TRIMESTERS OF PREGNANCY

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OBJECTIVES: Our aim was to prove the effects of physiological changes during pregnancy on gait as a manifestation of dynamic posture. **METHODS:** Our prospective non-random study was performed at the Department of Obstetrics and Gynaecology, Medical School, University of Pécs between 2008–2009 involving forty-two women: twenty-one were in the first, second and third trimesters and twenty-one were non pregnant (control group). Exclusion criteria included: pathological pregnancy, severe musculoskeletal, internal and neurological diseases. Allocation of patients was non randomized. MS Excel 2003 software was used for evaluation, data processing of stabilometric measurement results and Questionnaires. Measurement of parameters was performed by stabilometer. Statistical data were calculated according to mean, standard deviation, T-test methods and the results were considered to be relevant at $p < 0.05$. **RESULTS:** The gait of pregnant women proved to be slower than that of the control group ($p = 0.046$), but the duration of step-cycle decreased during the course of pregnancy. The duration of swing phase in the first trimester is shorter compared to the control group ($p = 0.040$). The rate of double-limb support to the total step-cycle showed an increase ($p = 0.023$) when comparing the third trimester with the control group. On examination of foot roll-over a significant difference was found ($p = 0.006$) when comparing to the first trimester. The foot angle of pregnant women in the first trimester was bigger than that of the control group ($p = 0.029$). Pregnant women's step width in the first trimester was smaller as compared to the control group ($p = 0.002$). Comparing step width of pregnant women in the first and third trimesters a significant increase was revealed ($p = 0.049$). **CONCLUSIONS:** Our study revealed that gait kinematics changed during pregnancy and showed a difference as compared to the control group.

PIH6

CHANGES OF HEART RATE VARIABILITY AFTER SHORT-TERM MEDITATION TRAINING IN COLLEGE STUDENT

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OBJECTIVES: Many clinical studies have shown that meditation have positive effects in anxiety disorders, depression, cardiovascular diseases. But types of meditation which had been used in the past studies were complex and long-term training programs. In this pilot study, we investigate changes of heart rate variability after short-term MBSR (mindfulness based stress reduction) respiratory meditation to understand its effects on autonomic nervous system. **METHODS:** We evaluated 34 healthy college students aged 25 to 35 from June 2008 to August 2008. All the subjects gave their informed consent, and the study was approved by Institutional Review Board of the Korean Society of Complementary and Alternative Medicine. The meditation program adopted here was a MBSR respiratory meditation. We surveyed informations concerning the past history, the amount of exercise by means of the self-questionnaire records and heart rate variability was measured to investigate the physiologic phenomena related with autonomic functions. **RESULTS:** There was no significant relationship between the stress response inventory and the changes of heart rate variability. The changes of the mean value of SDNN (The Standard deviation of Normal to Normal intervals), RMSSD (Square root of the mean of the sum of the square of differences between adjacent NN intervals), total power, entropy and LF (low frequency) were not significant. However, the mean value of RMSSD (Square root of the mean of the sum of the square of differences between adjacent NN intervals) were significantly decreased after meditation ($P = 0.000$). The decrease in systolic and diastolic blood pressure were also observed after meditation ($P < 0.05$). **CONCLUSIONS:** This results indicate that the meditation is positively correlated with the heart rate variability and parasympathetic nervous system can be intensified by the short-term MBSR meditation program.

PIH7

MORTALITY ACCORDING TO THE DAY OF ADMISSION IN INTENSIVE CARE UNITS AND MATERNITY WARDS IN HUNGARY

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OBJECTIVES: Many international literatures have evaluated the quality of health care of patients hospitalized on different days of the week, during non-office hours and at

night. The time of admission can usually not be chosen by the patient in two wards: in the Intensive Care Unit (ICU) and the maternity ward. The aim was to examine whether the time of admission had any influence on the mortality in Hungary. **METHODS:** The figures of the ICUs and the maternity wards were evaluated between 2000 and 2008. Data were derived from the financial database of the National Health Insurance Fund Administration, the only health care financing agency in Hungary. **RESULTS:** Mortality of 15.3% of patients admitted to the ICU on Monday decreases to 12.5% of those admitted on Friday, then increases to 20.3% on Saturday and 25.3% on Sunday. On the other hand neonatal mortality above 2500 gms is between 0.09% and 0.11% during the week. It is 0.1% on Saturday and 0.11% on Sunday. Examining the admissions by the hours of the day, in the ICU the potential to survive is the highest with patients being admitted at the beginning of office-hours, at 8 o'clock, with 6.6%. After that mortality is continuously increasing until reaching its peak of 22.6% at 2 o'clock in the morning. Results can be explained by saying, employees have the least working capacity or patients being admitted to the ICU at night hours are in severe condition having less chance to survive. **CONCLUSIONS:** The health care on the weekend and night differs in quality from the rest of the week and the day. Whether it is due to schooling or the number of staff needs further evaluation. These data confirm that quality of health care of different wards can also be characterized by the mortality depending on the time of admission.

INDIVIDUAL'S HEALTH – Cost Studies

PIH8

A BUDGET IMPACT ANALYSIS OF DIENOGEST IN TREATING ENDOMETRIOSIS ASSOCIATED PELVIC PAIN IN GERMANY

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OBJECTIVES: To evaluate the budget impact to a health plan after introducing dienogest (2 mg) as a treatment option for endometriosis-associated pelvic pain (EAPP) patients. **METHODS:** The analysis was conducted from a German payer's perspective over a five-year time horizon. The budget impact model (BIM) specifically considered women with EAPP. This included women with newly diagnosed endometriosis and women who have previously failed other medical treatment for EAPP. A recently developed cost-effectiveness (CE) model for endometriosis provided the estimates of average treatment duration. This CE model compared different treatment pathways for women with EAPP and used a 50% improvement in pelvic pain as a definition of a treatment responder to elicit treatment duration. After combining epidemiological data, market uptake assumptions from market research forecasting, and current GnRH-a drug treatment costs, and average treatment duration, the BIM estimated the incremental budget impact after adopting dienogest as a treatment option at the expense of GnRH-analogues. The model assumed that during the first year, 5% of EAPP patients receive dienogest at the expense of GnRH-analogues. After 5 years, it was assumed that dienogest would capture 15% of the EAPP market. A plausible range of parameter values were considered in the sensitivity analysis. **RESULTS:** In the hypothetical health plan approximately 0.54% of members were estimated to be diagnosed with EAPP and receiving medical intervention. In the year after introduction of dienogest, the overall budget used to treat EAPP was estimated to decrease by up to 4% with the budget saving estimated to increase to around 11.0% by Year 5. **CONCLUSIONS:** In patients with EAPP, the budgetary impact of adding dienogest to a health plan, in Germany, at the expense of the GnRH-analogues was estimated to result in a budgetary cost saving.

PIH9

PREVALENCE AND BURDEN OF ILLNESS OF MENOPAUSE:**A CANADIAN OBSERVATIONAL STUDY**

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OBJECTIVES: An observational study was performed to determine the prevalence and economic burden for 3 stages of menopause: pre-menopause, perimenopause and post-menopause. **METHODS:** A prospective, primary care practice based, multicenter, observational study was conducted in Canada to determine the prevalence and burden for each stage of menopause as listed above. Women age 48–54 were asked to recall their expenses of the past 6 months for physician visits (general practitioners and specialists), hospital ward and emergency room (ER), pharmacotherapy and productivity loss (absenteeism, or missed work, and presenteeism or work with reduced productivity). Resource utilisation was costed as per standard costing sources in Canadian dollars (CAD\$). Sample size calculations were done with a confidence level of 95% and power of 80%, allowing for 10% precision with 3% drop-out rate. Statistical analyses were performed on demographics, prevalence rates and the total costs for each stage and overall. Results were compared using Kruskal-Wallis tests with Dunn's post-hoc procedure to identify differences. **RESULTS:** A total of 403 female subjects were recruited from 11 primary practices in 4 provinces, 60% of whom were employed and 63% had completed college; 22% were pre-menopausal, 33% were perimenopausal and 45% were post-menopausal. The mean 6-month cost was \$261 (SD = \$586) for pre-menopause (\$1.45/woman/day), \$690 (SD = \$2120) for perimenopause (\$3.83/woman/day) and \$403 (SD = \$797) for post-menopause (\$2.24/woman/