intervals thereafter, where increase represents normal response. Age- and sex-adjusted regression models were used to examine trends in mean number of components across quartiles of area under the curve (AUC) salivary cortisol. Patterns of mean cortisol response were assessed by MetSyn status using repeated-measures analysis of covariance.

**Results** The study included 373 officers (74.0% men) with a mean age of 41.0 years. Prevalence of MetSyn was 25.7%. The mean count of MetSyn components decreased (1.89, 1.75, 1.55, 1.37; P < 0.01) across increasing quartiles of AUC salivary cortisol. The pattern of mean salivary cortisol decreased from baseline (5.55, 4.58, 4.47, 4.79, 4.75 nmol/L) in officers with MetSyn and increased (5.08, 5.82, 5.92, 5.82, 5.60 nmol/L) in their counterparts. The test for interaction between MetSyn status and sample timing was statistically significant (P < 0.001).

**Conclusions** A reduced cortisol response to a high-protein challenge may be associated with MetSyn. Future longitudinal studies could provide useful evidence for planning intervention studies on cardiovascular risk among police officers.

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**AN EPIDEMIOLOGY OF TRAFFIC ACCIDENT IN NORTHERN THAILAND**

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**Objectives** A cross-section study design aimed to explain the characteristics of traffic accident cases in northern Thailand.

**Method** A cross-section study design aimed to explain the characteristics of traffic accident cases in northern Thailand. The subjects were recruited from 8 hospitals and 7 police stations in the highest case accident areas from hospitals and police stations during 2009 - 2011. All medical records and police statements were used as the sources of data collection. All research procedures were approved by the committee for the protection of human subjects of Mae Fah Luang University.

**Results** Totally 35 925 cases had been recruited into the study from 8 hospitals during 2009-2011. 66.58% were female, 28.01% aged 16–25 years old, and main vehicle was motorcycle (78.85%). 29.31% of subjects had been admitted at the hospital, 28.01% aged 16–25 years old, 66.58% were female, 28.01% aged 16–25 years old, and main vehicle was motorcycle (78.85%). 29.31% of subjects had been admitted at the hospital, 28.01% aged 16–25 years old, 60.96% were married, 92.02% were Buddhism. The main type of vehicle was the cars (56.60%), 67.29% had their accident on the highways, and 60.66% had accidents on the day time (06.00 am.–06.00 pm.), and those 13.12% drank alcohol. Univariate analysis found alcohol used, types of vehicle, medical cost, and medical conditions were statistical difference between sex.

In 7 police stations, 2339 cases had been recruited into the analysis. 71.43% were females, 27.61% were aged 16–25 years old, 60.96% were married, 92.02% were Buddhism. The main type of vehicle was the cars (56.60%), 67.29% had their accident on the highways, and 60.66% had accidents on the day time (06.00 am.–06.00 pm.), and those 13.12% drank alcohol.

**Conclusions** Thailand needs the specific study for improving driving safety behaviours and also an effective regulation to control for traffic accident.

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**CONTRIBUTION TO THE PREVENTION OF OCCUPATIONAL STRESS**

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**Objectives** The objectives of this study were to assess the importance of the mental suffering of employees in the service sector of a city in western Algeria and to identify risk factors and moderators of this suffering in order to develop a protective prevention.

**Method** Standardised questionnaires were subjected to 753 employees in the tertiary sector. These questionnaires include three categories: A social and professional record (21 items), Maslach Burn Out Inventory: MBI (22 items), Job Personal Interaction Scale: JPII 35 questions on the perception of the work environment by the individual divided into 6 rubriques (workload and unpredictability, control, rewards, recognition and fairness at work, social support, conflicts and perceived value of work and training).

The data collected were anonymous and confidential. Data analysis was performed using SPSS (version 17.0). Univariate analysis was performed (chi-square Pearson correlations and a multivariate analysis (logistic regression).

**Results** The state of burn-out was 23.6% after logistic regression and psychological distress in the overall sample one taking medication to relieve pain (p = 0.0002) remained significant.

Regarding the determinants “professional” contact with the public and strong mode part of work were significant respectively (p = 0.0017 and 0.0042).

Moderators of stress for the multivariate analysis recognised two subscales of bad training (p < 0.01) and conflicts of values and perceived value (p = 0.02).

**Conclusions** Preventive actions to reduce or eliminate risk factors directly affect the environment and source of work: training more relevant, better organisation of work, especially the riding tasks and recognition of work done.

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**EVALUATION OF THE PREVALENCE OF URINARY INCONTINENCE SYMPTOMS IN ADOLESCENT FEMALE SOCCER PLAYERS AND THEIR IMPACT ON QUALITY OF LIFE**

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**Objectives** To evaluate the prevalence, reliability and severity of symptoms of urinary incontinence (UI) in adolescent female soccer players and the impact of those symptoms on quality of life.

**Method** The present work is a cross-sectional study of 59 female adolescents divided into a group of athletes, which included 35 adolescent amateur soccer players aged between 12 and 19 years (15.6 ± 2.0), and a control group, which included 24 adolescents aged 11 to 19 years (14.8 ± 2.4) who did not practice any sports. The International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF), the pad test and King’s Health Questionnaire (KHQ) were used for evaluation.

**Results** The athletes displayed 62.8% positivity the pad test and the ICIQ-SF, whereas the control group exhibited 25% positivity. A medium agreement of 0.45 was found between the applied evaluation scales, as assessed with Cohen’s kappa coefficient. In terms of quality of life (as assessed with the KHQ), the athletes exhibited a score of 35.2 in the General Health domain, 37.3 in the Emotions domain and 26.5 in the Sleep/Energy domain.
Conclusions: In the present study, a high prevalence of UI symptoms was found in soccer athletes, with moderate reliability between the pad test and the ICIQ-SF; mild UI was found in both groups. The athletes had the highest scores on the General Health, Emotions and Sleep/Energy domains, which are considered to have the highest impact on quality of life.

**0021** LIFE QUALITY IN WORKERS WITH RELATED MUSCULOSKELETAL DISORDERS

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**Objectives** Analyse the quality of life of workers of administrative department who carry out repetitive functions in a medical certification central.

**Method** This study was carried out in a transversal analytical approach. The sample was constituted by 62 workers of the administrative sector of a medical certification central in the state of São Paulo. As an instrument of gathering the data the used questionnaires were: Anamnesis Questionnaire with personal and professional data, Nordic Questionnaire, Job stress scale, SF-36 Quality of Life Questionnaire. The characteristic of the sample was obtained through descriptive statistics, where test t and correlation of Pearson test were applied.

**Results** According to the results of the analysis of the Nordic questionnaire, 33, 87% mentioned feeling pain in the wrists and hands. In the correlation made among the data of SF-36 and Nordic questionnaire, it was showed that they presented complaints about the Nordic, minor was the score in the variables of SF-36: limitation by physical aspects, pain, vitality, emotional aspects and mental health.

**Conclusions** It is concluded that the most affected segments were wrists and hands, with 33, 87%, followed by anklebone and feet with 16, 13%.

**0022** COMPARATIVE STUDY ABOUT QUALITY OF LIFE BETWEEN WOMEN PRACTICING DANCE AND SEDENTARY WOMEN

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**Objectives** This study aimed to compare Quality of life (QOL) of women who practice Jazz compared to sedentary women, in the Sports Centre-414 SESI in São Paulo - SP

**Method** We carried out a cross-sectional study, with women between 50 and 85 years old, divided into two groups: Activity Group (GA, n = 14) and Sedentary Group (GS, n = 14). QOL was assessed by the SF-36.

**Results** The GA had a significant improve in 6 domains of SF-36 compared to GS (p < 0.05).

**Conclusions** The results of this study suggest an improvement in the QOL of practitioners of jazz, especially in the physical and emotional aspects, compared to sedentary women.

**0023** ASSESSMENT AND ESTIMATES OF EXPOSURE TO SYNTHETIC AMORPHOUS SILICA AT FIVE GERMAN PRODUCTION PLANTS

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**Objectives** Synthetic amorphous silicas (SAS) are nanostructured polymers of silicon dioxide. We compared two different exposure assessments.

**Method** This study estimated cumulative exposure to inhalable SAS dust in 484 male workers from five German SAS producing plants. Two procedures (P1, P2) were applied. P1 was based on...