

required to answer SF36 questionnaire at baseline to determine their HRQOL status after accident. However only those in the intervention group were given coaching, which was delivered concurrent to usual care. The effectiveness of this intervention was measured after all respondents in both groups had finished intervention and usual care respectively-they were required to answer SF36 questionnaire once again.

Results The follow up stage is still ongoing. However, the result will be ready at the time of this conference. Potential results are the mean of HRQOL will be reduced more significantly among those in the intervention group compare to those who are only receive usual care. Low self-esteem among these survivors will be improved as this intervention provides support to regain self-confidence that has lost due to the injury.

Conclusions We are absolutely convinced that the module in this intervention is able to assist injured person to improve their emotional wellbeing. Therefore the combination of biopsychosocial coaching intervention with usual care is believed to give synergistic effect to the positive changes on HRQOL status.

791 INCIDENCE, COSTS AND OUTCOMES OF NON-UNION, DELAYED UNION AND MAL-UNION FOLLOWING LONG BONE FRACTURE

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10.1136/injuryprev-2016-042156.791

Background The management of long bone fractures is complex and the risk of healing complications persists. Previous studies have reported widely varying incidence and cost estimates for fracture healing complications, with the majority focusing on small cohorts with specific fracture types and treatment methods. Also, there is a lack of research on patient outcomes. The aim of this study was to describe the incidence, inpatient costs and 12-month outcomes of readmissions for healing complications following long bone fracture.

Methods All humeral, tibial and femoral fractures registered by the Victorian Orthopaedic Trauma Outcomes Registry over a 5-year period were linked with hospital data to identify 2-year readmissions for non-union, delayed union or mal-union. Study outcomes for patients with complication readmissions included hospital length of stay, inpatient costs, function (Extended Glasgow Outcome Scale), work status and quality of life (EQ-5D) measured 12 months post-injury. Cases with and without complications were compared using univariable and multivariable methods.

Results Of the 3908 patients included, 9% were readmitted for healing complications within 2 years of their index fracture. The most common complication type was non-union (77% of complications). Admissions for fracture healing complications incurred an extra 3 days in hospital and costs of up to AUD \$25,000 per patient (AUD \$5.4 M in total). Patients with healing complications reported worse function, quality of life and return to work rates 12 months post-injury. After adjusting for key confounders, patients had higher odds of developing complications if they were older, receiving compensation or had multiple fractures.

Conclusions Patients who develop complications have poorer outcomes and place additional burden on healthcare and compensation systems. As such, there is a need to prioritise future research aimed at preventing fracture healing complications and improving patient outcomes.

792 MANAGEMENT OF STRESS & MUSCULOSKELETAL DISORDERS IN THE WORKPLACE BY YOGA, MEDITATION AND THERAPEUTIC REFLEXOLOGY

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10.1136/injuryprev-2016-042156.792

Problem In the modern work environments of today, we have started putting strain on our systems as a whole- due to physical, mental and emotional demands far surpassing what our systems can bear. These exposures are going against the natural laws of nature and often done without conscious awareness of the longer-term damage. There is an extended list of occupational disorders that exist, nowadays, due to the upright skeletal position of the man, and more so because of the uninvited pressures that he has put onto the skeletal structure as a whole. The result equals the vertebral column being unable to withstand the stresses of prolonged standing or sitting down, especially when unsupported.

Description of problem Musculoskeletal disorders and diseases are common occupational problems all over the world. They are a result of the previous research of author¹ "Health hazards in Small and Medium Enterprises garment industries in developing countries" has been taken for this further study. The previous study was conducted in Delhi from August-2014 to December-2014. The database and result of the study with respect to Indian population has been chosen for this further study. The study revealed that musculoskeletal problems (54%) were the commonest health problem in India. The objective of the study is to design an effective program to create an awareness surrounding the management of stress, Musculoskeletal problems as well as an effective management of pain related symptoms by using Yoga, meditation and Therapeutic Reflexology and Meridian Therapy.

Result After an intervention by Yoga and Meditation therapies for prevention and cure of Musculoskeletal problems, as well as Reflexology treatments for an on-going maintenance of immediate pain relief, it is found that 27% workers suffering from acute musculoskeletal problem and 83% workers suffering from moderate Musculoskeletal problems are no longer experiencing chronic symptoms or completely cured of pain. The Study period is January 2015 to July 2015.

Conclusion Yoga and Meditation is a philosophy and practice that connects the body, breath, and mind to energise and balance the whole system in our body and Reflexology works on the premise that disease is caused by blockages along the meridians, and therefore the treatment is conducted to increase the circulation within the body, clear congestions along the pathways and stimulate the body's own healing potential. Yoga and Meditation can be used for managing Musculoskeletal problems and furthermore, there is vast scope of research for inclusion of Reflexology and Meridian therapy sessions for immediate and maintained pain relief results in this program.

793 ANALYSIS OF THE EMERGENCY MEDICAL SERVICES' RESPONSE TO ROAD TRAFFIC INJURIES IN MEXICO

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10.1136/injuryprev-2016-042156.793

Background Emergency Medical Services (EMS) provide effective and coordinated care to people in need due to a medical emergency, in both hospital and pre-hospital settings. A proper and opportune care is associated with less mortality and disability. In Mexico, no information is available about the association of the opportunity of EMS response and its results in terms of health outcomes.

Methods Information from all patients with Road Traffic Injuries (RTI) was collected through an epidemiological surveillance system between 2012–2014 in two general hospitals located in two Mexican cities. A multinomial logistic regression model explored the association between health consequences (0 = received care in hospital emergency rooms <24 hrs, 1 = was hospitalised, 2 = was permanently disabled and 3 = died) with opportunity of EMS (quantified in terms of time since the injury occurred until they received EMS care) adjusting by different covariables of interest: sex, age, Injury Severity Score, received pre-hospital care (PHC), type of road user, use of safety devices, alcohol consumption 6 hrs previous to the event.

Results 2,575 people injured received EMS in both hospitals. Of them, 64% required care in hospital <24 hrs, 27% were hospitalised, 6% suffered permanent disability and 3% died. About 47% received PHC in León and 38% in Guadalajara. Time to access EMS was 32 min in Guadalajara and 38 in León; those who received PHC had lower times compared to those who did not in both cities. Opportunity of EMS was only associated to being hospitalised: the lower the time, the lower the likelihood of being hospitalised adjusting by covariables of interest. According to our data, opportunity of EMS was not statistically associated to disability and death.

Conclusions Authorities should promote strategies to comprehensively evaluate and improve quality as well as opportunity of EMS care in both cities.

Fire Safety and Burn Injuries

Post Tue 2.20

794 EVALUATING DISABILITY IN ADULT BURN INJURY PATIENTS TREATED AT A TERTIARY-CARE BURN UNIT IN KARACHI, PAKISTAN: A LONGITUDINAL STUDY USING WHO DISABILITY ASSESSMENT SCHEDULE II

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10.1136/injuryprev-2016-042156.794

Background Disability after burn injury is not assessed in the context of Pakistan. This study assesses disability among adult burn injury patients presenting to a burn unit in Karachi, Pakistan.

Methods This longitudinal study was conducted at a burn centre in Karachi, Pakistan. Adult patients (>18 years) who were discharged after 24-hour admission were enrolled from August 2014–March 2015. Baseline assessment before discharge and follow-up at 2, 6 and 12 weeks after discharge via telephone was done using 12-item WHODAS 2.0 (5 -point likert-scale; 1 = none; 2 = mild; 3 = moderate; 4 = severe; and 5 = extreme)

related to cognition, mobility, self-care, getting along, life activities and participation. The score range was 12–60 with higher score being worse. Ethical approval was taken from collaborating and participating sites.

Results Of the 59 eligible patients, 53 completed all follow-ups. There were 69.8% males. Mean age of all patients was 36.8 ± 14.0 years, 71.7% were married and 17.0% had no/informal education. About half the patients were breadwinners. More than half of burn incidents occurred at home. Flame burns (50.9%) and scalds (17%) were the most common type of burns. The average surface area burnt was $43.0 \pm 14.2\%$. The mean-scores for all patients at baseline, 2-week, 6-week and 12-week were 13.9 ± 4.9 , 35.3 ± 13.8 , 26.8 ± 11.9 and 20.1 ± 9.1 , respectively. The mean-scores for males were lower than that of females for the four assessments (Males: 13.5 ± 1.8 , 34.2 ± 14.1 , 25.3 ± 10.7 , 19.2 ± 8.4 and females: 16.1 ± 8.5 , 37.3 ± 13.3 , 30.5 ± 14.4 , 22.1 ± 10.6). The two-week score was higher for those with >15% burn (36.7 ± 13.9) compared to those with ≤15% burn (34.6 ± 14.2) while the score were similar at 12-week follow-up.

Conclusions This analysis shows that the burn injury patients tend to recover from their injury over a period of 12 weeks after discharge. Future work should focus on larger group of patients and long term follow-up at one and two years after burn injury.

795 GENDER-RELATED CHARACTERISTICS OF BURN INJURY PATIENTS PRESENTING TO DESIGNATED BURN CENTRES IN SOUTH ASIA

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10.1136/injuryprev-2016-042156.795

Background Burn injury causes more than three-fourth deaths in Africa, Eastern Mediterranean and South-East Asia regions affecting females more than males. This study assesses the gender-related burn injury characteristics in South Asia.

Methods This prospective study was conducted at two main burn centres in Dhaka, Bangladesh and Karachi, Pakistan from October 2014 – January 2015. All adult (>17 years) burn injury patients were included in the analysis. Gender differences in patient demographics, burn injury characteristics and outcome were compared using Chi-square test for categorical and t-test for continuous variables. Ethical approval was taken from all collaborating and participating sites.

Results Of 1470 adult patients, 57.3% were males. Mean age of females was 36.85 ± 14.61 years and of males 33.49 ± 13.52 years. Among females, 81.6% were married and 63.7% among males (p-value<0.001). About 35.2% of females had no/informal education. Eighty% females were housewives and most males were manual-labourers (23.2%). For females, burns were common in kitchen (72.8%) while cooking (49.4%) and for males, industrial area (29.5%) during work (40.5%). Females suffered from flame (52.9%) and scalds (42.6%) while males had electrical burns (17.2%) in addition to flame (38.1%) and scalds (29.8%). Hot liquid was the common cause of burn in females (42%). Total body surface area(%) burnt was more in females (16.88 ± 20.85) compared to males (12.89 ± 17.47) (p-value<0.001). Around one-third of males and females were