Results The peritoneal case in a 36-year-old man shows a peculiar characteristics long survival (more than 17 years). The patient was treated with cytoreductive surgery and hyperthermic intraperitoneal chemotherapy. Molecular analysis detected multiple chromosomal imbalances. The gains were prevalent. DNA copy number alterations (CNAs) observed loss at 1q21, 8p23.1 and gains at 3p22.2→3p22.1, 3p25.3→p25.1, 4q13.1 and Xq22.2. These are novel CNAs here identified and uncommon in malignant peritoneal mesothelioma.

The pleural case, a 74-year-old man, suffering from a familial Becker type muscular dystrophy, opted for chemotherapy (alimta + cisplatinum) with external hyperthermia. At follow-up in April 2017, about 2 years from diagnosis and 21 months from the beginning of chemotherapy treatments, he has left shoulder pain, general weakness but good respiratory expansion.

Both cases lived in apartments overlooking military barracks from 1963 to 1999.

Discussion Past intensive use of asbestos has implied severe public health consequences among Bari inhabitants. Our study showed that the presence of the asbestos cement factory, as well as the military barracks, have been related with the onset of malignant mesothelioma among the neighbouring resident population.

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AVOIDANCE OF UNDER-REPORTING AND SELECTION BIAS IN OCCUPATIONAL INJURY AND ILLNESS SURVEILLANCE SYSTEM

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Introduction Under-reporting of occupational injury and illness (OII) and accompanied selection bias have always been a difficult challenge for policy making and epidemiological studies in many countries, and each country has come up with various reporting mechanisms to obtain reliable data from different sources. The object of this study is reviewing reporting mechanisms in nine countries, including Taiwan, Japan, Korea, Singapore, Australia, the United States, the United Kingdom, Germany, and France, and concluding a generalised model for constructing an ideal OII surveillance system.

Methods We carry out institutional comparison of various reporting mechanisms in different countries, both quantitatively and qualitatively, based on yearly statistics on OII from each reporting mechanism, and searchable online information, including statutory laws, official webpages, government documents and journal articles, respectively.

Results We categorise various reporting mechanisms into four types, including OSH-Act-based, compensation-based, medical-practice-based, and health-examination-based, and all countries have more than two types of reporting mechanism. Each type has different reporting incentives, coming from fulfilling statutory reporting obligation by employer, claiming insurance benefit by employee, or seeking information feedback for clinical decision-making and clinical studies by physicians, and thus has its own unique strengths and weaknesses in reporting certain kinds of OII.

Discussion Due to different coverage of OII, each type of reporting mechanism has an irreplaceable role in OII surveillance. Thus, in addition to the operational effectiveness of

individual reporting mechanism, emphasis should be put on inclusion of all four types of reporting mechanism with close coordination and integration in constructing an ideal OII surveillance system. To avoid under-reporting and accompanied selection bias, researchers should also get familiar with characteristics and OII coverage of certain reporting mechanism before the utility of reported statistics from that mechanism, and pooling data from more than one reporting mechanisms may be necessary for a more comprehensive picture of OII.

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PREVALENCE OF BACK PAIN IN PROFESSIONAL DRIVERS IN ABU DHABI

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Aims

1. The principle aim of the study is to examine whether being a driver will lead to an increase in the risk of back pain from the general population by ascertaining the prevalence of back pain among the professional drivers in Abu Dhabi (UAE) and to compare it to the prevalence of back pain in the general population.
2. To investigate whether the type of vehicle driven is a risk factor for back pain by comparing the prevalence of back pain among taxi drivers to the prevalence of back pain among bus drivers and heavy vehicle drivers.

Method It is a cross sectional study that look into the following:

- Prevalence of back pain among professional drivers in Abu Dhabi.
- Comparing the prevalence of back pain between taxi drivers, bus drivers and heavy vehicles.
- All professional drivers attend Al Madina Occupational Health Centre (Abu Dhabi) for all types of medical assessments (Pre-employment, periodic, fitness to return to work or fitness for the extension of services) who agree to participate are included in the study.
- The study ran from January 2015 up to May 2015.
- The sample size was 499.
- Data was collected by a self-filled questionnaire, which has been modified from a validated New Zealand acute low back pain questionnaire (permission taken).

The questionnaire includes general demographic data, work details and back pain information.

Result The study was carried out in Abu Dhabi, UAE. The study population was 499 (the response rate was 92%). 27 questionnaires were excluded due to incomplete or missed information. The rest were 472 drivers, 141 of them disclose back pain in the previous 3.

12 month, giving prevalence of 29.9%. From those with back pain 92% deny any other health problems that affect their back. 82% of them described their pain as mild. 80.9% mentioned that minor physical activity does not make their pain worse. 87.2% declare that, they can do light work for an hour without pain being a problem.

In this study some occupational factors have been investigated with relation to back pain in professional drivers. It shows that, working hours >8 hours per day, working days >5 days per week and years of driving >10 years, are significantly associated with increased back pain in professional

drivers (p value 0.004) less than 0.05. It also shows that prevalence of back pain increases with long distance driving (p value 0.001). Other factors such as BMI >25 is also associated with increased risk of back pain in professional drivers. The study shows that smoking, marital status and psychological factors (yellow flags) have no relation with increased risk of back pain.

To investigate if type of vehicle will increase the risk of back pain, the study showed that, prevalence of back pain differs between the different types of drivers. The number of taxi drivers participating in this study were 231 drivers, 65 disclose back pain in the previous 12 month giving the percentage of 28.1%. For Bus, drivers the participant were 189 out of these 49 disclose back pain in previous 12 month giving the percentage of 25.9%. On the other hand heavy vehicle drivers participant were 52, those disclose back pain in previous 12 month, were 27 drivers giving percentage of 51.9%. If we compare the 3 types of the drivers we will notice that heavy vehicle drivers have high percentage of back pain compare to others. It means that heavy vehicle increase the risk of back pain compared to taxi and bus.

The study show that, pain location in different types of drivers is differ according to the vehicle.

- Heavy vehicle drivers feel pain in their lower back were 63% compared to those felt pain in upper back including shoulder and neck, which were 33%. (11.1%+22.2%)
- While bus drivers who feel pain in lower back were 40.8% compared to those felt it in the upper back, shoulder and neck, which were 26.5%. (6.1%+14.3%+6.1%)
- In Taxi drivers those who feel pain in lower back were 27.7% while those feel pain in upper back, shoulder and neck were 67.6%. (21.5%+21.5%+24.6%)

If we compare the pain location in the 3 types of the drivers (taxi, bus, heavy vehicle) we will notice that taxi drivers feel pain more in upper back, shoulder and neck, while bus and heavy vehicle drivers feel pain more in their lower bac.

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OCCUPATIONAL HEALTH IN INDIA: PRESENT SCENARIO, CHALLENGES AND WAY FORWARD

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Introduction Health, safety and well-being of the employees is important for country's development. Of country's 500 million workers only less than 10% of are covered by some health and safety legislation. Epidemiologists have estimated an annual 36,700 fatalities, 1,83,00,000 injuries and 18,50,000 diseases related to occupational hazard.

Methods Extensive literature review suggests access to occupational health services (OHS) is non-existent for a majority (85%) of Indian workers in unorganised sector. Of the global 1.9 million cases (17%) are contributed by India. The adverse occupational factors cost 2%–14% of the gross national product (GNP). Heavy burden and poor concern for OH disease is reflected in high attack rates foreg: Silicosis, 4.1%–54.6% among miners and Byssinosis, 28%–47% in textile workers.

Result India has a huge abundance and variability among different occupations. Therefore a standard policy framework regulating OHS is redundant. Additionally there is no formal regulating body and lack of competence-based training and specialist registration. Except few public and private industries occupational safety is usually ignored. Occupational research remains neglected despite the ever growing need for e.g: child labour, vast informal sector; industrial hygiene and OH surveillance.

Discussion Its highly pertinent to increases awareness on OSH through appropriate partnerships. The need for best OHS practices, coordinated research and optimal resource allocation to be highlighted through activism and advocacy. Setting up of national task force and a central regulating body is the need of hour.

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A NON-COMMUNICABLE DISEASES AND RISK FACTORS AMONG POLICE PERSONNEL IN JODHPUR, INDIA

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Introduction Non-communicable diseases (NCDs) are on the rise among vulnerable occupations like: Law enforcement. These NCDs share common behavioural risk factors, namely, tobacco use, harmful use of alcohol, unhealthy diet and physical inactivity etc.

Methods A cross-sectional study was conducted among policemen for 2 months (August–September 2016). A total 5 camps were conducted to cover 280 study participants from all 23 stations/posts. The standard WHO-STEP wise approach for NCD surveillance was incorporated as data collection strategy. Data collection included: An interview, physical and biochemical measurements and health promotion session. Multivariate logistic regression analysis done to test significant risk association.

Result Participants had mean age of 39.09 years, most 266 (95.0%) were men and more than half 162 (57.8%) were college educated. Risk assessment revealed high burden of: Tobacco 83 (29.6%) and Alcohol 94 (33.6%) intake, inadequate fruit-vegetable intake 243 (86.8%) and high salt intake 29 (10.4%), inadequately physically activity 212 (75.8%) and obesity 116 (44.3%) and past history of disease i.e. CVDs 21 (7.5%), Hypertension 82 (14.64%), Hypercholesterolemia 16 (21.62%) and Diabetes 29 (10.59%). The mean BP reading was 115.8±11.5 mmHg (Systolic) and 80.4±4.9 mmHg (Diastolic). Screening suggested 82 (29.28%) and 213 (76.1%) had Hypertension and Pre-Hypertension respectively. Hypertension was significantly associated with tobacco (OR: 3.7, $p=0.045$) and alcohol (5.2, 0.023), obesity/overweight (5.2, 0.022), lower education (3.9, 0.041) and diabetes (5.9, 0.014).

Discussion Present study reflects a heavy burden of Hypertension and risk factors among the law enforcement personnel coupled with poor awareness and lifestyle and treatment seeking behaviour. Study participants had poor knowledge and health behaviour in respect to NCDs and risk factors. Poor awareness and practices hamper primary and secondary prevention strategies for averting NCDs.