protection and profit earning as well as sustainability, considering the effectiveness, utility and benefits of those policies. The situation in big firms is rather acceptable but small and medium sized enterprises and informal sector need more effort. Globally, around 4% of GDP is lost due to the costs of work related injuries and illness with global financial losses exceeding \$1250 billion. This cost is high compared with that of cancer or AIDS. The burden of occupational injuries and illness is also high when calculating Disability-Adjusted Life Years lost, or healthy years of life lost either from disability or premature death. This will hinder economic development and sustainability. So, all should be motivated towards cost effectiveness OHS programmes as a priority in their agenda. Occupational health literacy, unemployment, workers' behaviour, high risk group workers (children, women, and elderly and immigrants workers), inequity and inequality should be considered in OHS programmes. Society, workers, payers, and providers' perspectives must be investigated in facing challenges towards OHS and sustainability. Reallocation of resources, controlling of externalities, enforcement of regulations and encouraging of innovation are crucial elements for sustainable development and economic growth.

1643 OCCUPATIONAL SAFETY AND HEALTH IN AFRICA: STATE OF THE ART AND FUTURE CHALLENGES

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10.1136/oemed-2018-ICOHabstracts.854

Aim of special session This special session provides a forum for African Countries to show case, and share experiences on progress made in occupational safety and health in Africa. It presents an opportunity for Safety and Health practitioners to share research findings, practical skills and knowledge on best practices of how to address safety and health challenges and thus advance the safety and health culture for development.

Co-chair of Special Session: Diana Gagliardi

1643a OCCUPATIONAL PHYSICAL INJURIES AMONG WORKERS IN ONSHORE OIL DRILLING OPERATIONS IN TURKANA COUNTY, KENYA

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Introduction Onshore oil drilling involves use of heavy machinery and tools which contribute to occupational injuries. Onshore oil drilling attracts workers that operate in isolated locations coupled with harsh environmental conditions. Such conditions influence occupational hazards, that give rise to occupational injuries. The study sought to assess occupational physical injuries among workers in onshore oil drilling operations in Turkana County, Kenya.

Methods A cross-sectional descriptive study was conducted among 164 workers from October 2015 to February 2016. Convenience sampling and systematic random sampling were used to select study participants. Data were collected through

pre-tested semi-structured questionnaires. Data collected were analysed using SPSS version 20. Multivariate logistic regression analysis was used to assess the relative effect of independent variables on the outcome variable. The level of significance was set at $p < 0.05$.

Results 9.8% of workers experienced physical injuries. Duration worked in oil drilling industry ($\chi^2=11.557$, $df=4$ $p=0.021$), level of education ($\chi^2=8.273$, $df=3$ $p=0.016$), hazard awareness ($\chi^2=3.655$, $df=1$ $p=0.056$), worker awareness of activities at work that pose risks of injuries ($\chi^2=7.697$, $df=1$ $p=0.006$), awareness of occupational health and safety legal frameworks ($\chi^2=7.87$, $df=1$ $p=0.005$), worker participation in fire drills ($\chi^2=3.724$, $df=1$ $p=0.054$) and on job training ($\chi^2=1.359$, $df=1$ $p=0.038$) were associated with occurrence of physical injuries at bivariate analysis. Age (AOR=0.354, $p=0.014$, 95% CI: 0.154 to 0.811) and issues experienced while using Personal Protective Equipment (AOR=3.652, $p=0.053$, 95% CI: 0.984 to 13.553) were significant predictors to occupational physical injuries at logistic regression.

Conclusion There is a clear interplay between risk factors; socio-demographic factors, environmental factors, and behavioural factors with occurrence of physical injuries. This information could be tapped to formulate occupational health and safety specific intervention strategies for oil and gas industry.

1643b WHENCE OCCUPATIONAL HEALTH SERVICES IN SOUTH AFRICA?

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Abstract South Africa has a population of 55 million people, with 10 million employed in the formal sector, and around 3 million in the informal sector. Occupational health services are important for a working population and these are available unevenly in the country, being more developed in the private sector and poorly developed in the public sector. The country has published a White Paper and a Policy on universal health coverage, in the form of the National Health Insurance (NHI). Occupational health services are part of the package of primary health care services that the NHI will offer. This presentation will explore the possible models for the delivery of occupational health services under an NHI. A literature review of models of funding and delivery of occupational health services in developed (Australia, Canada and UK) and developing (Brazil, Chile and Zambia) countries was conducted. Interviews with experts in occupational health were also conducted. The models of provision in developed countries, with universal health coverage and private sector participation are contrasted with the models in developing countries like Zambia where the services are government-led and delivered. The key challenge was finding models for South Africa that lead to greater equity in service delivery across the private and public sectors. The introduction of the NHI in South Africa will lead to new models of delivery of occupational health services. An opportunity exists to bridge the current inequalities between the public and private health sectors and improve access to occupational health services for all workers.

1643c OCCUPATIONAL HEALTH SOUTHERN AFRICA: A JOURNAL FOR THE REGION AND BEYOND

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10.1136/oemed-2018-ICOHabstracts.857

Introduction Occupational Health Southern Africa is the only occupational health journal in southern Africa. It is published bi-monthly and its purpose is to keep occupational health practitioners (doctors, nurses, hygienists and others) informed about current local research, views of experts, and developments in occupational health (including occupational medicine and occupational hygiene), and to provide a publishing platform for both novice and experienced researchers in the region.

Methods The issues of the Journal from 2012 to 2017 were perused (n=36). The countries of origin of the first and contributing authors were reviewed, and the experience of the first authors was classified as 'student' or 'established' researcher. Papers that had been rejected in the 6 year period were also analysed, using the same metrics.

Results The majority of papers published were by authors from South Africa; less than 5% were by authors outside of that country. Less than 1% of published papers were by authors outside of Africa. The proportions of papers published by novice and established authors were similar. Most of the rejected papers were by novice authors or by those outside South Africa.

Discussion Papers published in Occupational Health Southern Africa by authors from southern African countries other than South Africa are greatly underrepresented. There is a need to more widely publicise the Journal and encourage young researchers from the region to submit papers. This local journal is the ideal platform for students and novice researchers to disseminate their research results.

1643d STATUS OF REGULATIONS ON HEALTH AND SAFETY IN MINING IN KENYA SINCE ENACTMENT OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 2007

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10.1136/oemed-2018-ICOHabstracts.858

Introduction Large and small scale mining in Kenya has been in practice for 100 years. This includes mining of minerals like soda ash, gold, flourspar, gemstones, quarrying. As an occupation with varied risks, regulations have been used to ensure the health, safety and welfare of workers. There have been various regulations governing some aspects of mining including health and safety. Such laws included Mining Act CAP 306 and 1951 for the Factories Act CAP 514 whose purpose was to make provision for health, safety and welfare of persons employed in factories and other places.

Methods A systematic review was conducted after setting the research questions. Online databases and sources were identified to conduct the review. The articles under review were limited to provisions on health and safety in mining laws. Online sources used included law reports database, Extractives Baraza, Ministry of Labour and Ministry of Mining Website.

Results Health and safety Laws and Regulations in mines were repealed on enactment of the Occupational Health and Safety Act, 2007. The current Mining Act of 2016 recognises small

scale mining as a legal mining activity. However, there are no specific regulations on the health and safety provisions for this group of workers. Kenya has not ratified a number of International Labour Organisation (ILO) conventions on health and safety.

Conclusion Kenya has taken notable steps in ensuring mining industry has regulations that govern its operations. Having artisanal and small scale mines recognised as a legal activity are indicative of these steps among others. The findings also indicate the need to have rules that are specific to the industry.

1667 OSH IN ASIA: STATE OF THE ART AND FUTURE CHALLENGES

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Aim of special session This Special Session dedicate to Asia region to allow representatives from different Asian countries to present the results achieved in improving occupational health and safety in their country as well as to discuss about emerging issues or challenges in the coming time. This session will expect to include 4–6 speakers from Asian Countries that will present their experiences in implementing occupational health at national/regional level.

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1667a BETTER HEALTH CARE FOR WORKERS IN VIETNAM

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Vietnam is a developing country in Southeast Asia and the population is 91.7 million in 2015, of which 54 million people are working age, accounting for 58.8%. In 2015, the Law on Occupational Safety and Health (OSH) was promulgated and went into effect from July 1, 2016. This legislative document is a legal basis for implementing better health care for workers in Vietnam. This paper reviewed achievements of better health care activities and challenges faced while implementing this OSH law

The health care system for workers has been well organised and coordinated by the health sector from the central to local levels. The legislative documents are almost completed to cover all health care activities for workers both in formal and informal sectors. There are several activities have been done to ensure better health care for workers. The working