OHN has to be flexible and adaptive in order to meet the demands of this dynamic worker health environment. One solution to this complex health milieu is an integrated model of OH services in order to meet the difficulty of the health and wellness demands of workers in a complicated environment of risk.

[1,2]FN Eto*, [1]RS Santos, [1]ECP Melo, [3]RH Griep, [2]S Toivanen. [1]*National School of Public Health, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil*; [2]*Centre for Health Equity Studies, Stockholms Universitet, Karolinska Institutet, Stockholm, Sweden*; [3]*Laboratory of Health and Environment Education, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil*

Introduction Several international studies have used the allostatic load as an important multi-dimensional index to indicate chronic stress. Measurement of allostatic load has been done through parameters from various biological systems. Through its measurement, it's possible to assess the consequences of chronic stress on several systems, and also predict, prevent or delay chronic diseases that may occur later. Despite its importance, methodological issues regarding its operationalization remains. The aim of our study was to compare two approaches to scoring allostatic load.

Methods Data were obtained from the baseline of the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil). The sample included 10 965 active civil servants aged 34–74 years old. The allostatic load was measured based on 15 biologic parameters, including neurophysiological, metabolic, cardiovascular and inflammatory measurements. We compared two approaches to scoring allostatic load – based on clinical and risk quartile thresholds. Socioeconomic variables such as age, gender, skin colour and educational level were analysed. We performed descriptive analyses as mean, standard deviation and prevalence and conduced Student's t test, ANOVA and linear regression analysis. Data were analysed using R.

Results The findings showed that the percentage of individuals with high risk biologic parameters were different according to allostatic load scoring approaches. The mean values of the allostatic load clinically based were higher in all socioeconomic variables compared to the allostatic load quartile based. Nevertheless, in the linear regression model the magnitude of association observed was similar when comparing the both allostatic load scoring approaches.

Discussion This is the first Brazilian study that explores different approaches to scoring allostatic load. Besides, our study highlight the importance of studying the allostatic load at Brazilian context and how it can be used as a potential tool to occupational health and practice and contribute to prevent chronic diseases related to the chronic exposure to stress.

JS Marineli, NC Rodrigues, VR Silva, LAF Cardillo, LR Ferreira. *Centro Universitário das Faculdades Associadas de Ensino – FAE, São João da Boa Vista, Brazil*

Introduction Gastrointestinal diseases in Brazil can be responsible for work disability, making employees eligible to receive sick leave benefits. The aim of this study was to determine the gastrointestinal tract diseases causing the most frequent number of sick leave benefits from the National Institute of Social Security (INSS) and the profile of these workers to understand better the occurrence of these pathologies amongst workers.

Methods A retrospective study was conducted between January 2014 and February 2017. We selected 3260 patients diagnosed with gastrointestinal diseases, who had received temporary social security benefits from INSS. The samples were submitted to data collection including: sex, age, occupation, and international classification of diseases (ICD). Diseases with higher prevalence were analysed.

Results The study revealed that the most prevalent gastrointestinal disease included abdominal hernias (ICD K40-K42-K43) in 1328 workers, cholelithiasis (ICD K80) in 1298 patients, acute appendicitis (ICD K35) 634 cases. The results showed that 54% were males, with a mean age of 43 years. However, cholelithiasis affected mostly females. Amongst the hernias, the most prevalent was inguinal hernia followed by umbilical and ventral hernias. All of the workers received temporary sick-leave benefit, but only 0.05% had the benefit of disability retirement and 0.35% sick-leave benefit due to work-related accidents (associated with hernia).

Discussion The data obtained allowed us to evaluate that the most frequent gastrointestinal diseases associated with sick-leave benefits were those related to surgical management. The appearance of abdominal wall hernias may occur due to increased intra-abdominal pressure, associated with intense physical exertion made by some workers. Dietary habits are a risk factor for appendicitis, especially a diet with low fibre intake. Fatty foods, on the other hand, may influence the occurrence of cholelithiasis. These data may help understand the main factors associated with work disability due to gastrointestinal diseases.

DVS Vitor*, VR Batalini, RV Brito, CA Baptista, PI Scardovelli, LR Ferreira. *UNIFAE School of Medicine, São João da Boa Vista, São Paulo State, Brazil*

Introduction Diabetes mellitus is a disease that has a high prevalence around the world. In 2014, the World Health Organisation estimated that 422 million adults had the disease, worldwide. It is classified as being a chronic non-transmissible disease, and it is one of the main causes of disability, which can negatively affect productivity in active workers. In Brazil, the National Institute of Social Security (INSS) is responsible for granting benefits and salaries in cases of absenteeism due to illness.

Methods A retrospective study based on analysis of 184 patients who requested sick leave benefits due to diabetes mellitus from the Brazilian National of Social Security Institute (INSS), characterising the age, gender and employment situation through the ICD-10 (E10, E11 and E14) from January 2014 to February 2016.

Results The results showed that diabetes mellitus represented 34.2% of all sick leave requests associated with endocrine

diseases (n=538). Considering just the diabetes ICDs, Insulin-dependent diabetes mellitus (E10) represented 63.6%, followed by non-insulin-dependent Diabetes (E11) with 24.4% and unspecified diabetes mellitus (E14) with 12%. The majority of beneficiaries were male (71.7%), associated with urban jobs (46.7%) especially administrative posts, ranging from 50 to 64 years old (63%).

Discussion The profile of workers who have requested benefits due to diabetes mellitus showed that the majority of beneficiaries were male adults, working in urban jobs ranging from 50–64 years old, mainly affected by Insulin-dependent diabetes mellitus disease. In addition, these beneficiaries can be more susceptible to workplace thermal conditions, stress and other issues inherent to the disease, such as hypo or hyperglycemia. These data should help in the implementation of strategies and measures to prevent the work disability caused by diabetes involving Brazilian workers and improve the worker's quality of life.

| 72 | ASSESSMENT OF CHILD LABOUR IN AGRICULTURE AMONG SYRIAN REFUGEES IN LEBANON |

RR Habib. *Department of Environmental Health, American University of Beirut, Lebanon*

Introduction The Syrian war, ongoing since 2011, has had numerous implications on Lebanon's precarious infrastructures and labour economy. Over 1 million Syrians have sought refuge in Lebanon, and with laws prohibiting working of displaced Syrian adults, many Syrian families and Lebanese employers have become dependent on working Syrian children particularly in the agricultural sector.

Methods This research study employs mixed methods, both quantitative and qualitative approaches. A household survey will be carried out with 1409 families in Syrian refugee communities located near agricultural areas in Lebanon to assess child labour practices among the displaced children and their families. Stakeholder focus group discussions will also be conducted, made up of members of the displaced community and a number of local and government institutions involved in the management of the refugees' livelihood. Data and trends from the qualitative and quantitative analysis will be triangulated to develop a holistic understanding of Syrian child labour in the Lebanese agricultural sector. Findings will be stratified by age, gender, refugee camp, and other variables.

Results The study will provide contextualised analysis of the nature and dynamics of the precarious involvement of Syrian children in the agricultural labour force, via focusing on both the living and working conditions of Syrian working children, as well as on the socioeconomic processes and environment in which children work. The study will also suggest recommendations for intervention at the field, family, community, and policy levels.

Discussion Enriched understanding of the underlying socioeconomic factors that drive refugee children to participate in the agricultural labour force will better guide the development of evidence-based interventions that support child education and address underlying issues of familial financial instability. This research can be used to inform labour policies and guidelines that will have positive, tangible impacts on the lives of displaced children and their families.

| 398 | EXCHANGE AND COOPERATION: OCCUPATIONAL HEALTH SURVEILLANCE IN THE BELT AND ROAD OF CHINA |

Q Hou, ZB Wang. *Shanghai Institute of Occupational Disease for Chemical Industry, Shanghai, China*

Background Occupational health and safety is highly related with economic activities in the country. As the economic globalisation grow and expand in China, such as the belt and road, this may result in high occupational health and safety services demand face new problems.

Objective To introduce the current situation of Occupational Health surveillance in China,compare Occupational health surveillance policy in different countries. To explore the problems and challenges that occupational health surveillance may face under the economic globalisation.

Findings Occupational health surveillance is an important part of occupational health and safety, which purpose is, from medical health examination and health related data collection, continuously monitoring the health status of workers, analysis of the relationship between occupation hazards and workers' health changes and contacts, in order to take intervention measures to protect workers health.Since 2002, China has legislateed, promulgated and revised 'People's Republic of China occupation disease prevention law', 'occupation health surveillance management regulation' 'occupation health surveillance technical standard', which has promoted occupation health surveillance work more legally and regularly. However, there are still some problems in occupational health surveillance, many large state-owned enterprises in China have established the occupational health and safety management system, but small and medium-sized enterprises generally lack occupational health care management. Occupational health monitoring is still at a low level. Through literature search, we collected the relevant laws and regulations of the United States, the United Kingdom, Australia, Canada, Finland, Japan, Southeast Asian countries and international organisations. There are great differences in occupational health surveillance management in different countries, Such as occupation health surveillance basic theory, management personnel and institution, occupation medical examination type and cycle, employer or enteprise responsibility.

Conclusions As the largest developing country, China has basically established a complete system of occupation health, occupation health surveillance work has achieved remarkable results. Economic globalisation provides a good opportunity for the management and research of occupational health care in China, we need more exchange and cooperation of occupation health and safety.

| 1644 | SMOKE FREE CABS: ASSESSMENT OF IMPACT ON CAB DRIVERS AND COMMUTERS; AND TOBACCO CESSATION FOR CAB DRIVERS |

Gauravi A Mishra*, Sharmila A Pimple, Parishi Majmudar, Vasundhara V Kulkarni. *Professor and Physician, Dept. of Preventive Oncology, Tata Memorial Hospital, Mumbai, India*

Objectives Tobacco epidemic is one of the biggest public health threats, killing nearly seven million people annually. With implementation of smoke free public places legislation,