

Poster presentation

Among police registrants at Survey Wave 2, 5–6 years after 9/11/01, four unique trajectories of probable PTSD symptoms were identified: resilient (83%), recovered (2.5%), delayed onset (11.2%) and chronic (5.3%). The current study documents the longitudinal trajectories of PTSD in police officers exposed to the WTC attacks at Wave 3 (2011–2012), over 10 years since the WTC attack.

Method We examined the prevalence of probable PTSD at the Wave 3 survey using a cut-off score of 44 or greater on the event-specific Posttraumatic Stress Disorder Checklist (PCL) and at least one re-experiencing symptom (DSM-IV criterion B), three avoidance or numbing symptoms (DSM-IV criterion C), and two hyperarousal symptoms (DSM-IV criterion D).

Results Probable PTSD was 14.4% (95% CI 13.0–15.9%) at Wave 2 and 12.9% (95% CI, 11.6–14.3%) at Wave 3. Significant predictors of chronic probable PTSD 10 years post-disaster ($n = 59/2241$, 2.6%) include age 45–69 (aOR 3.16, 95% CI, 1.7–6.0), number of stressful events witnessed on 9/11/01 (aOR 3.00, 1.6–5.8), five or more stressful life events since 9/11/01 (aOR 5.42, 1.9–15.2), and unmet mental health care needs (aOR 6.86, 3.3–14.1). Protective factors include social support (aOR 0.34, 0.1–0.97) and number of close friends or relatives (aOR 0.92, 0.87–0.98).

Conclusions Chronic probable PTSD among police responders continues to be a significant problem, associated both with intervening stressful life events and unmet mental health care needs.

0434 SHIFT-WORK AND CANCER RESEARCH: DEVELOPING A QUANTITATIVE APPROACH TO ASSESS CHRONODISRUPTION

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Objectives In 2007, IARC classified shift-work involving “circadian disruption” as probably carcinogenic [Group 2A]. Thereafter, 23 shift-work studies into a series of malignant endpoints provided additional epidemiologic evidence regarding chains of cancer causation, which appear biologically plausible when experimental data are considered. Since none of the studies specifically assessed “circadian disruption” or disturbed chronobiology, we ask the following: Does published research suffer from chronobiological errors? How could we assess circadian or chronodisruption [CD] in future epidemiological studies?

Method On the basis of chronobiological insights we develop a quantitative approach to assess CD for different chronotypes and for different shift-work regimens. We examine how chronobiological errors may have affected studies published so far with a focus on those which considered chronobiological information but were confined to night-work.

Results We illustrate that ignoring “internal time”, which is critically determined by an individual’s chronotype, may lead to what we propose to call “IT errors”. In addition, assessing biological effects associated with shift-work should also include associated activities and therefore temporal information beyond the nominal shift time. Such errors of truncating relevant “external time” information (activities at chronobiologically unusual times start before and do not end with the shift) we propose to coin “ET errors”. We propose methodologically *how* observational research may avoid potential chronobiological biases and *how* chronodisruption can be computed.

Conclusions Avoiding both IT and ET errors with regard to *any* – and not just night – shift work may be a prerequisite to assess causal links between shift-work and cancer which may remain otherwise masked.

Poster presentation

0005 COMPREHENSIVE ANALYSIS OF RESEARCH AND PROGRAM-BASED STUDIES ON OCCUPATIONAL HEALTH AND SAFETY IN THE PHILIPPINES

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Objectives This study looked into the state of occupational health and safety in the country. Specifically, the objectives were 1) to show the current condition of workers, both local and migrant, in terms of their workplace condition and hazard exposures; and 2) to present occupational diseases and illnesses in various industries and occupational groupings in the Philippines.

Method The methodology consisted of comprehensive analysis of records and statistics on occupational safety and health, and related variables from various institutions. Data were gathered from reviews of literatures, related research studies, and documentary research at the Occupational Safety and Health Centre. Analysis of data was done through a critical appraisal of the current status of occupational and health safety in the Philippines in terms of occupational diseases, injuries, and accidents, and existing occupational health and safety policies.

Results The study showed occupational hazards and health and safety conditions in various industries, occupational settings, and job groupings such as in the industrial sector, manufacturing, mining, agriculture, fishing, and cement manufacturing. It also looked into small scale and informal industries such as tanning, laundry shops, pyrotechnique manufacturing and the like. Special segments of the labour force including the women workers, child labourers and migrant workers were also covered. In all these sectors and industries, the study showed attendant occupational diseases and injuries arising from occupational hazards.

Conclusions The study showed more complete data on occupational health and safety in the Philippines considering that there is insufficient collection of OHS data by concerned government agencies.

0006 EFFECTS OF AGRICULTURAL WORK PRACTICES AND PESTICIDE USE ON OCCUPATIONAL HEALTH OF FARMERS

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Objectives This study aimed to identify the associated health symptoms between high and low exposed groups to pesticide, and to come up with an intervention pesticide program for our farmers in the vegetable industry.

Method Survey questionnaires were used to look into pesticide exposures and work practices of 534 farmers in the largest eggplant producing province in the northern Philippines. Physical health assessment was conducted by medical doctors to look into the