

Professor Shelly TSE 謝立亞教授

Director, Centre for Occupational and Environmental Health Studies,
JC School of Public Health and Primary Care, The Chinese University of Hong Kong
香港中文大學賽馬會公共衛生及基層醫療學院職業及環境健康教研中心總監



Biography 講者介紹

Prof. Shelly Tse obtained her Bachelor of Medicine major in Prevention Medicine from Fudan University and then got PhD in Public Health at The Chinese University of Hong Kong. She received further training in the National Cancer Institute, National Institutes of Health of USA in 2012. Shelly's research interest includes circadian rhythm and health impact, occupational and environmental exposures and cancer epidemiology, and dust exposure and adverse health effects. In the past 10 years, Shelly has continuously awarded research grants from NCI/NIH of USA to support the breast cancer molecular epidemiology study, PI of several projects funded by the NSFC, GRF/RGC, HMRF projects, etc. Shelly is the key international collaborator of WHO/IARC on lung cancer SYNERGY project. In addition, Shelly received the Second Class Award of State Scientific and Technological Progress Award (SSTPA) in 2014 on industrial dusts, mechanisms and prevention (#4). Shelly serves as the National Secretary of ICOH of the P. R. of China (2022-2024), Chairman of the Quality Assurance Sub-committee (2020-2024), Visiting Professor of Nanjing Medical University Shanghai Jiaotong University, etc. Shelly received research grants more than HK\$42M as Principal Investigator and published research papers more than 200.

謝立亞教授畢業於復旦大學預防醫學專業並取得醫學學士學位，後獲香港中文大學頒授博士學位，並於美國國立衛生研究院國家癌症研究所醫學深造。謝教授現兼任國際職業衛生協會(ICOH)的中國國家秘書(2022-24)、香港職業安全健康局(OSHC)質素保證小組委員會主席(2020-24)、南京醫科大學及上海交通大學客席教授等重要服務職務。謝教授的主要研究興趣包括晝夜節律與職業健康、職業及環境癌症流行病學，以及粉塵暴露與健康的研究等。近10來謝教授持續獲得美國NCI/NIH資助合作乳腺癌項目。同時，謝教授亦主持過國家自然科學基金委(NSFC)、香港政府研究資助局(GRF/RGC)、醫療衛生研究基金(HMRF)，以及香港衛生署和醫管局等資助項目，謝教授亦是WHO/IARC肺癌SYNERGY研究項目的重要國際合作者。謝教授曾于2014/15年度榮獲國家科技進步獎二等獎(矽肺機制及防治,第四位)，主持的科研經費資助超過4200萬港幣，已發表英文學術論文近200篇。

Abstract 題目摘要

Spatiotemporal variation of working environment safety towards SARS-CoV-2 in Hong Kong, Nanjing and Wuhan 比較香港、南京和武漢三城市工作環境中對 SARS-CoV-2職安健時空變化的相關研究

This multi-city collaborative study aims to characterize spatiotemporal variation of working environment safety towards SARS-CoV-2 for non-healthcare workers in Hong Kong, Nanjing and Wuhan. During the first year survey from 07/2020 to 04/2021, 6684 non-healthcare workers were recruited from Hong Kong, Nanjing and Wuhan of China and responded a standard questionnaire of prevention measures towards infectious control. Workplace safety index towards SARS-Cov-2(WSI-SC2) was developed and validated using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The WSI-SC2 was validated in the second year survey among 12956 and the spatiotemporal variation of WSI-SC2 was examined from 3 cities in two different years. Fourteen variables were identified in the WSI-SC2 index, with three sub-indices named "Workplace infection control measures and prevention", "Company occupational safety and health management and commitment" and "Worker's personal preventive behavior and awareness towards infectious control". WSI-SC2 obtained a good internal consistency reliability (Cronbach's alpha coefficients ranged: 0.76-0.91), good composite reliability (composite reliability ranged: 0.70-0.95) and satisfactory fit of the model (GFI=0.95; SRMR=0.05; RMSEA=0.07). The novel index was stable in the second year independent survey of three cities. This multi-city large study developed a novel and validated tool that could horizontally measure the workplace safety towards SARS-Cov-2 in non-healthcare workers.

本項多城市合作旨在研究香港、南京和武漢的非醫護工作者對SARS-CoV-2的工作環境安全的時空變化。在2020年7月至2021年4月的第一年調查中，我們從香港、南京和武漢招募了6684名非醫護工作者並收集有關COVID-19預防措施的問卷，使用探索性因數分析（EFA）和驗證性因數分析（CFA）開發並驗證了針對SARS-CoV-2（WSI-SC2）的工作場所安全指數。在第二年的對12956名非醫護工作者的調查中驗證了WSI-SC2，並檢測了兩個不同年份來自3個城市的WSI-SC2的時空變化。在WSI-SC2指數中確定了14個變數，其中3個範疇指標分別為「工作場所感染控制措施和預防」、「公司職業安全與健康管理和承諾」和「工人的個人預防行為和感染控制意識」。WSI-SC2具有良好的內部一致性信度（Cronbach's alpha係數範圍：0.76-0.91）、良好的組合信度值（範圍：0.70-0.95）和令人滿意的模型擬合（GFI=0.95；SRMR=0.05；RMSEA=0.07）。該新指數在第二年對三個城市進行的獨立調查中保持穩定。這項多城市的大型研究創建了一種新的、經過驗證的工具，可以水準測量非醫護工作者對SARS-Cov-2的工作場所安全。