「尤德爵士紀念基金研究生獎學金」得主研究醫療環境中的「人為因素」

Sir Edward Youde Memorial Fellowship recipient studies the "Human Factor" in medical settings

香港擁有世界級醫療系統，卻仍不時發生醫療事故；這提醒我們還要努力保障病人安全。心理學碩士研究生謝文琪說：「我們過去一直認為科技意味技術的推進，但其實醫院裡與科技有關的醫療事故時有發生。這境況啟發我對醫療科技安全問題進行研究。」謝文琪是2017/18年度「尤德爵士紀念基金研究生獎學金」得主之一；全港共有五位優秀研究生獲頒此項獎學金。

文琪目前正進行一項模擬研究，比較麻醉師以自動化方式和人手方式記錄數據對多方面的影響，包括麻醉師的警覺性、對病人狀況的覺察程度，以及精神負荷問題。究竟是什麼觸發文琪對研究「人為因素」產生興趣呢？她說：「我深受論文導師李有為教授啟發。他過去所做的研究，有助優化人的工作表現及減少人為錯誤。」借助李教授與一所醫院的麻醉師的聯繫，文琪得以有數個月時間在手術室內觀察麻醉師的工作。

麻醉師一般均十分依賴資訊科技，這是普遍的做法，例如，他們會利用麻醉資訊管理系統，在手術室記錄病人的生命體徵。然而，文琪提出了這樣的問題：究竟資訊科技是否會妨礙人的工作表現，甚至使人容易犯錯？她說：「由於李教授曾在類似環境下進行研究，他給予我許多寶貴的意見。」

針對「人為因素」的研究，在香港來說屬於新的研究領域，雖然如此，這方面的研究似乎可應用於在本地的醫療環境。文琪說：「我希望能夠把我對『人為因素』的知識應用在我將來的工作上，提高公眾對病人安全重要性的關注。」她渴望畢業後在醫院工作，並繼續研究病人的安全問題。

Hong Kong has a world-class healthcare system, but occasional medical accidents remind us that more can be done to ensure patient safety. "We used to think technology is a synonym for progress, but technology-related medical incidents do happen in hospitals. It drove me to research the safety of medical technology," said MPhil student Tse Man-kei, who is one of the five postgraduate research students in Hong Kong receiving the Sir Edward Youde Memorial Fellowships in 2017/18.

Man-kei, from the Department of Applied Psychology, is currently carrying out a simulation study to compare automated and manual charting methods for anesthesiologists' alertness, awareness of changes in patients' conditions, and mental workload. What sparked her interest in the study of the "Human Factor" in modern medicine? "I was inspired by my thesis supervisor Prof Simon Li, whose research helps to optimise human performance and reduce human error," she said. With Prof Li's introduction to anesthetists at a local hospital, she had the chance to observe them in the operation room for several months.

While it is a common practice for anesthetists to rely heavily on information technology such as the Anesthesia Information Management system, which records patients' vital signs in the operating room, Man-kei asked whether IT might hinder human performance or even predispose humans to make mistakes. "Prof Li has provided me with a lot of valuable advice on my study because he had done research in similar settings," she explained.

Despite being a new research area in Hong Kong, "Human Factor" studies appear to have useful applications in the local healthcare environment. "I hope I can apply my 'Human Factor' knowledge in my future job and raise public awareness of the importance of patient safety," she said. She aspires to work in a hospital after graduation and continues her research on patient safety issues.