

(21)

健康台灣深耕計畫：守護兒童、拒絕傷害
臺灣兒童死因探討與青少年自殺的辨識與防治

Healthy Taiwan Sprout Project: Saving Young Lives
Childhood Mortality and Adolescent Suicide Prevention in Taiwan

時間：115年6月28日(星期日) 08:50~12:40

地點：臺北榮民總醫院 致德樓第一會議室

共同主辦：臺北榮民總醫院兒童醫學部、大數據中心、急診部、
精神醫學部、國立陽明交通大學急重症醫學研究所、
台灣兒童急診醫學會

08:50-09:00	Opening Remarks	侯明志副院長 Ming-Chih Hou 吳漢屏理事長 Han-Ping Wu
	座長：吳漢屏 理事長 (Han-Ping Wu) 鄭玫枝 主任 (Mei-Jy Jeng)	
09:00-09:35	解構臺灣五歲以下兒童死亡率，1996-2023 Decomposing Under-5 Child Mortality in Taiwan, 1996-2023	呂宗學教授 Tsung-Hsueh Lu
09:35-09:40	Discussion	
	座長：方麗容 主任 (Li-Jung Fang) 林建志 主任 (Chien-Chin Lin)	
09:40-10:10	致命兒虐專題：兒科醫師的守門角色與十年臨床經驗 Fatal Child Abuse: The Gatekeeping Role of Pediatricians and a Decade of Clinical Experience	呂立主任 Frank Leigh Lu
10:10-10:15	Discussion	
10:15-10:25	Coffee Break	
	座長：曾偉杰 醫師 (Wei-Chieh Tseng) 詹聖霖 主任 (Sheng-Ling Jan)	
10:25-10:55	臺灣重大兒童死亡個案的醫療觀點：從急診到住院 Medical Perspectives on Severe Pediatric Mortality Cases in Taiwan: From Emergency Care to Inpatient Management	李嶸主任 Jung Lee
10:55-11:00	Discussion	

座長：黃獻嶠 主任 (Hsien-Hao Huang)
羅宇成 主任 (Yu-Cheng Lou)

- | | | |
|--------------------|--|-----------------------------|
| 11:00-11:15 | 臺北榮總住院孩童之 15 年死亡案例分析
A 15-Year Analysis of Inpatient Pediatric Mortality at Taipei Veterans General Hospital | 曾思穎醫師
Szu-Yin Tseng |
| 11:15-11:20 | Discussion | |
| | 座長：劉英杰 主任 (Ying-Jay Liou)
李昱聲 主任 (Yu-Sheng Lee) | |
| 11:20-11:50 | 守護青少年心理健康：自殺風險辨識、介入與家庭支持
Safeguarding Adolescent Mental Health: Suicide Risk Identification, Intervention, and Family Support | 黃翔瑄醫師
Hsiang-Hsuan Huang |
| 11:50-11:55 | Discussion | |
| | 座長：陳俊佑 醫師 (Chun-Yu Chen)
曹珮真 主任 (Pei-Chen Tsou) | |
| 11:55-12:25 | 兒少逆境的早期警訊：臨床辨識與非自然死亡風險
Early Signals of Childhood Adversity: Clinical Recognition and Risk Of Non-Natural Death in Taiwan | 陳娟瑜教授
Chuan-Yu Chen |
| 12:25-12:30 | Discussion | |
| 12:30-12:40 | Closing Remarks | 鄭玫枝主任
Mei-Jy Jeng |

Decomposing under-5 child mortality in Taiwan, 1996-2023

解構臺灣五歲以下兒童死亡率，1996-2023

Tsung-Hsueh Lu

呂宗學

Department of Public Health, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ROC
國立成功大學醫學院 公共衛生學系

The Healthy Taiwan initiative aims to reduce the under-5 mortality rate from 5.3 deaths per 1,000 live births in 2023 to fewer than 4.0 per 1,000 by 2030. However, long-term trends indicate that although under-5 mortality declined substantially from 9.5 per 1,000 live births in 1998 to 4.4 in 2014, progress has since stagnated, reaching 5.3 in 2023. This stagnation is largely attributable to an increase in day 0 mortality, rising from 0.7 per 1,000 live births in 2013 to 1.5 in 2023, primarily due to changes in birth certification practices. In contrast, mortality rates at 1–6 days and 7–27 days—more robust indicators of neonatal care quality—have continued to decline steadily from 1996 to 2023.

We further examined factors contributing to the stagnation in post-neonatal mortality rates (PNR) since 2012 and in mortality among children aged 1–4 years since 2016. The plateau in PNR was mainly driven by an increase in deaths due to respiratory diseases, with their proportion rising from 9.8% in 2008–2011 to 13.0% in 2012–2015. Child death review data suggest that many of these deaths were associated with unsafe sleeping environments.

For children aged 1–4 years, the stagnation since 2016 was primarily associated with respiratory diseases (particularly influenza and pneumonia) and disorders of the nervous system (notably cerebral palsy). Although the proportion of deaths due to external causes remained relatively stable—27.0% (n=198) in 2012–2015 and 25.6% (n=163) in 2016–2019—most of these deaths are considered preventable.

In conclusion, in response to certification-related artifacts, the Office of Statistics, Ministry of Health and Welfare, has introduced neonatal and infant mortality rates calculated with and without minimum gestational age thresholds of 22 and 24 weeks to improve comparability. Moving forward, targeted interventions are needed to reduce sleep environment-related sudden unexpected infant deaths in the post-neonatal period and preventable external causes among children aged 1–4 years.

Fatal child maltreatment: The gatekeeping role of pediatricians and a decade of clinical experience

致命兒虐專題：兒科醫師的守門角色與十年臨床經驗

Frank Leigh Lu

呂立

Division of Pediatric Pulmonology and Critical Care Medicine, National Taiwan University Children's Hospital, Taipei, Taiwan, ROC

Center for Child Protection Medical Care, National Taiwan University Children's Hospital, Taipei, Taiwan, ROC
臺大兒童醫院 兒童胸腔加護科 兒少保護醫療中心

Fatal child maltreatment represents one of the most severe and preventable tragedies in pediatric practice. Pediatricians are often positioned at the critical front line where early warning signs, unexplained injuries, neglect, medical delay, caregiver narratives, and inconsistencies in clinical findings may first become visible. This presentation focuses on the gatekeeping role of pediatricians in identifying, responding to, and preventing severe and fatal child abuse, based on more than ten years of clinical experience in a multidisciplinary child protection medical center.

Through real-world clinical experience, the lecture will examine how pediatricians can move beyond the traditional role of disease diagnosis and treatment to become active protectors of children's safety, dignity, and rights. Key topics include recognition of sentinel injuries, assessment of abusive head trauma and severe physical abuse, interpretation of medical findings in the context of developmental capacity and caregiver history, documentation standards, multidisciplinary communication, and collaboration with social welfare, law enforcement, forensic medicine, and the judicial system.

The presentation will also discuss the practical challenges faced by clinicians, including delayed reporting, fragmented information, uncertainty in diagnosis, pressure from caregivers or institutions, and the emotional burden of participating in medico-legal processes. Drawing from a decade of experience, the speaker will highlight the importance of establishing hospital-based child protection teams, standardized clinical pathways, expert consultation mechanisms, and integrated case review systems for fatal and near-fatal child maltreatment.

Ultimately, pediatricians serve not only as medical experts but also as essential gatekeepers within the child protection system. By improving early recognition, strengthening multidisciplinary collaboration, and translating clinical findings into actionable protection decisions, pediatricians can help prevent repeated harm, support vulnerable families, and contribute to a safer society for children.

Medical perspectives on severe pediatric mortality cases in Taiwan: From emergency care to inpatient management

臺灣重大兒童死亡個案的醫療觀點：從急診到住院

Jung Lee

李嶸

Division of Pediatric General Medicine, Department of Pediatrics, Chang Gung Memorial Hospital, Taipei, Taiwan, ROC

長庚紀念醫院 兒童一般醫學科

Background: Pediatric out-of-hospital cardiac arrest (OHCA) is a rare event but is associated with severe sequelae. The survival-to-hospital-discharge rate has improved from approximately 2–6% in earlier reports to 17.6–40.2% in more recent studies. However, only 1–2% of OHCA survivors achieve a favorable neurological outcome. This talk aims to report the characteristics of pediatric OHCA and to evaluate the pre-hospital and emergency department (ED) management associated with patient outcomes.

Objective: To investigate the characteristics, pre- and in-ED management associated with outcome in children less than 18 years old with OHCA in EDs and to identify factors for favorable outcomes.

Method: This was a retrospective review.

Results: This talk aims to report the characteristics, the trends in incidence, clinical management, and outcome of pediatric OHCA patients.

A 15-year analysis of inpatient pediatric mortality at a Taipei Veterans General Hospital

臺北榮總住院孩童之 15 年死亡案例分析

Szu-Yin Tse

曾思穎

Department of Pediatrics, China Medical University Hsinchu Hospital, Hsinchu, Taiwan, ROC

PhD Program, Institute of Emergency and Critical Care Medicine, College of Medicine, National Yang Ming Chiao Tung University, Taiwan, Taiwan, ROC

中國醫藥大學附設醫院新竹分院兒科

國立陽明交通大學醫學院急重症醫學研究所博士班

This study aims to conduct a comprehensive analysis of pediatric mortality at Taipei Veterans General Hospital over a 15-year period, spanning from January 2011 to December 2025.

The primary objective is to investigate the distribution of major causes of death and the shifting trends in mortality rates among children and adolescents aged 0 to 18 years. Building upon previous clinical research regarding pediatric intoxication and accidental injuries, this analysis places a significant emphasis on identifying both medical and external risk factors—such as age group, gender, and pre-existing underlying diseases—that contribute to fatal outcomes.

The research focuses on a specific patient population consisting of pediatric cases who were either confirmed deceased or underwent compassionate discharge (critical AAD) during their hospitalization. By examining variables such as the final diagnosis leading to death and the involvement of palliative care consultations, the study seeks to highlight critical gaps in injury prevention and clinical management.

Ultimately, this retrospective analysis of longitudinal big data is intended to provide evidence-based insights into pediatric survival, particularly regarding the prevention of preventable deaths caused by poisoning or accidents, thereby informing future public health strategies and hospital intervention protocols.

Safeguarding dolescent mental health: Suicide risk identification, intervention, and family support

守護青少年心理健康：自殺風險辨識、介入與家庭支持

Hsiang-Hsuan Huang

黃翔瑄

Department of Psychiatry, Taipei Veterans General Hospital, Taipei, Taiwan, ROC

臺北榮民總醫院 精神醫學部

Adolescent suicide has emerged as one of the most pressing public health concerns worldwide, with rising rates of self-harm and suicidal behaviors among youth populations. This presentation addresses the critical need for early identification of suicide risk factors, evidence-based intervention strategies, and the pivotal role of family support systems in safeguarding adolescent mental health.

The presentation begins by examining the current epidemiological landscape of adolescent suicide, highlighting key risk factors. Screening tools and structured assessment approaches are reviewed to equip clinicians with practical strategies for early detection of at-risk youth.

Evidence-based interventions are discussed, including psychotherapeutic approaches and safety planning. Emerging pharmacological treatments with rapid-acting antisuicidal properties are also reviewed, with attention to their potential applications and safety considerations in adolescent populations.

Finally, the role of family involvement in suicide prevention is discussed. Approaches to improving parent-adolescent communication, reducing family conflict, and training family members to recognize warning signs and facilitate access to professional care are explored.

Early signals of childhood adversity: Clinical recognition and risk of non-natural death in Taiwan

兒少逆境的早期警訊：臨床辨識與非自然死亡風險

Chuan-Yu Chen, Yi-Nuo Lee, Tan-Wen Hsieh

陳娟瑜 李以諾 謝丹雯

Institute of Public Health, National Yang Ming Chiao Tung University, Taipei, Taiwan, ROC

Center for Neuropsychiatric Research, National Health Research Institutes, Miaoli, Taiwan, ROC

國立陽明交通大學 公共衛生研究所

國家衛生研究院 神經與精神研究中心

Childhood adversity and maltreatment are major contributors to preventable morbidity and mortality among children and adolescents. Healthcare encounters may provide critical opportunities to identify children living in high-risk environments early. However, clinical recognition, reporting processes, and the long-term outcomes of these children remain incompletely understood.

This presentation synthesizes findings from several population-based studies in Taiwan examining the continuum from medical recognition of maltreatment-related injuries to reporting processes and subsequent mortality outcomes. Using linked national administrative databases, including birth records, healthcare utilization data, child protection reports, and death registries, we addressed three related questions: (1) the prognosis of infants diagnosed with maltreatment-related injuries, (2) the gap between physician diagnosis and reporting to child protection systems, and (3) the long-term risk of non-natural mortality among children reported for maltreatment.

Preliminary analyses suggest that maltreatment-related injuries identified in healthcare settings may represent early signals of vulnerability among children. However, inconsistencies appear to exist between clinical recognition and formal reporting to child protection systems, indicating potential gaps in the response pathway. In addition, children who come to the attention of child protection systems may experience elevated risks of adverse outcomes, including non-natural causes of death.

These findings highlight the critical role of healthcare professionals in recognizing early warning signs of adversity and strengthening collaboration between medical and child protection systems. Improving detection and reporting pathways may help reduce preventable mortality among vulnerable children.