Results Over the 10-year period, there were 339 (5.6%) deaths out of 6101 admissions to the PICU. 67 (19.8%) out of a total of 339 deaths were associated with RVIs. Patients with RVI-associated mortality had a median age of 3 years (Q1 - Q3, 0 - 8). The majority were male (n=38, 56.7%). 23 (34.3%) of the patients were born preterm and 42 (62.7%) had co-morbid conditions. Influenza (22.7%), adenovirus (17.3%), respiratory syncytial virus (RSV) (16%) and rhinovirus (16%) were the most common viruses isolated. Eight patients (11.9%) had RVI coinfection. The most common documented cause of death in this cohort of RVI-associated mortalities was viral and/or secondary bacterial infections (76.1%) followed by cardiovascular causes (7.5%). The median hospital length of stay prior to death was 8 days (Q1 - Q3, 3 - 15).

Conclusions The burden of RVI-associated mortality is high among critically ill children. These data on the burden and age-specific distribution of RVI-associated mortality in children are critical in informing infection prevention practices among high-risk groups and immunization public health policies for RVIs. Efforts to improve influenza vaccination coverage especially in children with comorbidities or history of prematurity could have a significant impact in reducing this burden.

413 SCOPING REVIEW ON THE EFFECTIVENESS OF THE USE OF TECHNOLOGY FOR PSYCHOSOCIAL SCREENING OF ADOLESCENTS IN URBAN HEALTH CARE SETTINGS

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Background The number of adolescents presenting with psychosocial issues at urban hospital pediatric emergency departments have increased significantly since 2000. Early psychological intervention has been proven to prevent future disabilities. Consequences from missing or delayed diagnosis of psychosocial issues in adolescence include increased suicide incidences and potential harm from extensive and invasive investigations. However, there is limited time and resources to evaluate youth for psychosocial stressors in healthcare facilities (Emergency department, clinics). Commonly, medical concerns are addressed first. Furthermore, youths are reluctant to disclose threats to their mental and social well-being when reviewed.

Objectives The effectiveness of technology in psychosocial screening of adolescents in urban health care settings was examined. Specifically, the rate and scope of detection of psychosocial stressors. This would allow for better understanding on how mental health screening resources for adolescence should be allocated. Advancements in psychosocial technological screening can potentially prevent unnecessary consumption of healthcare resources.

Methods A scoping review was used to study scientific literature regarding screening methods for mental health disorders in adolescence. Arksey and O'Malley framework was used to review articles from electronic databases such as BMJ, Cochrane, EBM, Pubmed, Uptodate. The review included cohort and experimental studies of adolescents (12–18 years old) from urban areas who were screened for mental health disorders using different screening tools. A secondary reviewer was asked to do further analysist of the articles during the second round of screening of the articles. Analytical research methods were then used to compare the detection rates and time taken to detect mental health problems in adolescence, using the various screening tools, both online and face to face.

Results 113 search articles were identified. 79 articles were yielded to be utilised in the review. Journal articles were included in the review if they were in English, published after 2000, conducted in metropolitan areas. Youths included in the studies were those who sought help at healthcare facilities (bothemergency department or clinic) in densely populated cities with easy access to both healthcare facilities and technology. Screening tools studied included standalone screening specific softwares, internet based softwares, telephone applications. Most screening tools utilised questionnaires and 3 utilised games. Journal articles studied included 37 randomized controlled trials, 14 Meta-Analysis, 7 Systematic Review, 2 Cohort Studies.

59 articles reflected that online psychosocial tools reached a wider spectrum of youths. 43 indicated that number of youths willing to undergo screening increased when online psychosocial tests were utilised. Screening rates for psychosocial problems of the target population of adolescence increased 6%, compared with traditional face-to-face interview methods. Furthermore, youths were more willing to share openly on an online platform according to 5 research articles. As such, identification of mental disorders in youths was faster and more accurate when an online platform was utilised. Because of that, disclosure rate of the psychosocial stressors increased by 17% when online screening tools were utilised.

Conclusions It can be concluded that online screening tools are more effective, with regards to speed and scope of detection of mental health disorders amongst adolescence living in urban areas.

414 RISK FACTOR AND OUTCOME OF ACUTE KIDNEY INJURY AMONG CRITICALLY ILL CHILDREN

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Background Acute kidney injury (AKI) is an independent predictor of morbidity and mortality among critically ill children. However, epidemiological data in Asian paediatric populations remain scarce.

Objectives We presented the result of the interim analysis of an ongoing prospective cohort study on the epidemiology of AKI and electrolytes disturbances and their potential relationships with nephrotoxic medications (E-AKI-Drug) in a newly established paediatric intensive care unit (PICU).

Methods We enrolled all children aged 1 month to 18 years old admitted to the PICU of our hospital after June 2020. Those with pre-existing chronic kidney disease, impaired renal function for $\geq$3 months, immediate post-renal transplant and short stay in PICU <1 day with no blood taking would be excluded. Children without a urinary catheter would be excluded from urine calculation. AKI would be defined using the KDIGO criteria. The medication records from 14 days prior to PICU admission to PICU discharge would be retrieved and reviewed by an independent pharmacist. The results of the initial 4 months of data collected would be presented.