

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1329	Community Health
<p><b>Authors</b> N.S.ZAINI<sup>1</sup>, J.M.WONG<sup>1</sup></p> <p><sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Effectiveness of Group Coaching in Lifestyle Behavioural Change</p> <p><b>Background &amp; Hypothesis</b> Group coaching can impact on health behaviour and embolden the adoption of a healthy lifestyle, however limited studies were done locally to evaluate the effectiveness of group coaching. This study aims to explore the effectiveness of Group Coaching on its impact on healthy lifestyle adoption in Singapore.</p> <p><b>Methods</b> Data was collected from 36 participants identified to have moderate falls risk from community fall screenings from February to May 2023. Group Coaching comprised of a 30-minutes nutrition and exercise education session with 60-minutes group discussion over 4 weekly sessions, facilitated by a Health Coach with individualized goal setting. A mixed study of pre- and post- programme questionnaire using Likert scale to evaluate the participant's health behavior and Stage of Change (SOC) interview were conducted.</p> <p><b>Results</b> Participants have a mean age of 74.0 years (n=36). 77.8% self-reported an improvement and 13.8% remain at maintenance stage in SOC by the 4th session. Mean consumption of protein and calcium increased by 5.1grams and 138.6mg respectively. 47.2% recorded an improvement in 150 minutes of exercise per week. Qualitative data was analyzed and 22.2% reported "Time" as the main barrier from making a lifestyle behavioural change.</p> <p><b>Discussion &amp; Conclusion</b> Group coaching has shown to be effective in improving nutrition and exercise related behavioural change in participants. Further studies with a longer period of follow-up and a larger group of participants can be done to understand the correlation between group coaching interventions and sustainable lifestyle behavioural in participants.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1353	Dermatology
<p><b>Authors</b> X.HUANG<sup>1</sup>, M.STEVEN<sup>2</sup>, W.K.NG<sup>2</sup>, A.H.LOH<sup>2</sup>, M.X.KHO<sup>2</sup>, R.WIJESINGHE<sup>1</sup> <sup>1</sup>National Skin Centre (Singapore), <sup>2</sup>National University of Singapore</p> <p><b>Title</b> Evaluation of a Dermatology Drug Information Service</p> <p><b>Background &amp; Hypothesis</b> Drug information services help to support clinical decisions and promote appropriate medication use by providing prompt and objective information for healthcare professionals. The aim of this study is to characterise the inquiries received and drug-related problems (DRPs) addressed by a dermatology drug information service.</p> <p><b>Methods</b> This is a retrospective analysis of all inquiries to the drug information service in an outpatient dermatological centre in Singapore from 17 May 2021 to 17 Nov 2021. The data were analysed using descriptive statistics.</p> <p><b>Results</b> A total of 648 drug information inquiries were analysed. Half of the inquiries were received from dermatologists (49.8%), followed by pharmacy technicians and staff (42.6%). The most common type of inquiries was dosing and route of administration (27.7%), followed by drug interactions (26.5%). The most frequently used reference was UpToDate (50.3%), followed by package inserts and medication information from drug companies (12.5%). Among the 112 identified DRPs, recommendations were made to monitor adverse drug reactions (36.6%), switch to the most effective medication, formulation and route (18.8%), as well as to substitute drug due to adverse drug reactions (13.4%).</p> <p><b>Discussion &amp; Conclusion</b> Interestingly, package inserts and information from drug companies were the second most frequently used reference. The need for the above references could have arisen from frequent formulation-specific queries for the sensitive skin population and inquiries on retail skincare products. This study reflects the high demand of a dermatology drug information service, and reinforces its vital role in preventing DRPs.</p>	

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<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1356	Psychiatry
<p><b>Authors</b> R.H.S. TAN<sup>1</sup>, S.S.H. CHANG<sup>1</sup>, N. CHANDWANI<sup>1</sup>, M. SUBRAMANIAM<sup>1</sup>, J. LIU<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Social support and emotion dysregulation serially mediate the relationship between child maltreatment and depressive symptoms in affective disorders</p> <p><b>Background &amp; Hypothesis</b> Exposure to child maltreatment increases risk for psychopathology in adulthood, and it is important to elucidate avenues for intervention. Past studies show that social support and emotion dysregulation each mediate the relationship between child maltreatment and psychopathology; however, these factors have not been examined simultaneously in an Asian clinical context. The present study investigated the dual roles of social support and emotion dysregulation in the pathway from child maltreatment to depressive symptoms in adulthood by testing three competing mediation models.</p> <p><b>Methods</b> A total of 200 participants (Mean age = 36.53; 78% Chinese ethnicity) with a primary diagnosis of affective disorder were recruited from a tertiary psychiatric hospital. Respondents completed self-report measures of child maltreatment exposure, depressive symptoms, perceived social support, and emotion dysregulation. Mediation analyses based on ordinary least squares regressions were conducted using the PROCESS 4.1 tool.</p> <p><b>Results</b> Higher exposure to child maltreatment was associated with lower perceived social support, greater emotion dysregulation, and more depressive symptoms. Mediation analyses revealed a significant indirect effect of child maltreatment on depressive symptoms via perceived social support and emotion dysregulation. This indirect effect was also significant for emotional neglect while controlling for other forms of maltreatment.</p> <p><b>Discussion &amp; Conclusion</b> Findings show conceptual support for the serial pathway involving social support and emotion dysregulation in the relationship between child maltreatment and depressive symptoms in Asian adult patients with affective disorders. This highlights the need to target both interpersonal and intrapersonal factors in the treatment of clinical populations with child maltreatment exposure, particularly those with childhood emotional neglect.</p>	

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<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1358	Public Health / Clinical Epidemiology
<p><b>Authors</b> PV ASHARANI<sup>1</sup>, K. YEN SIN<sup>1</sup>, R. TAN<sup>1</sup>, T. YOKE BOON<sup>1</sup>, S. GUNASEKARAN<sup>1</sup>, B. LIM<sup>1</sup>, L. T. CAR<sup>2</sup>, M. SUBRAMANIAM<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore), <sup>2</sup>Lee Kong Chian School of Medicine (Singapore)</p> <p><b>Title</b> Media reporting of suicides and subsequent copycat suicides and attempts in Asia: A systematic review of public health implications</p> <p><b>Background &amp; Hypothesis</b> Media reporting of suicide has a negative impact on suicide behavior among the public. This systematic review aims to examine the association between media reporting of suicide and subsequent copycat suicides and attempts in Asia.</p> <p><b>Methods</b> A systematic search was conducted in eight electronic databases (PsycInfo, MEDLINE, Embase, CINAHL, Web of Science, Ariti, China National Knowledge Infrastructure (CNKI), and OpenGrey) covering the period from January 2000 to May 2023. The data were grouped and compiled narratively. The review protocol was registered with PROSPERO (CRD42021281535).</p> <p><b>Results</b> Based on an analysis of 32 studies, more than half of the studies had moderate risk of bias. Most studies showed that media reporting of suicide was associated with an increase in copycat suicides (rate ratio: 0.96-1.20, n=15) and suicide attempts (rate ratio: 1.15-1.55, n=2). This association hold true across country, celebrity status, study design, media type, method of suicide, and follow-up period. Most suicides and attempts occurred within four weeks of media reporting. Individuals who were younger, female and share similar characteristics (age, gender) with the deceased in publicized suicides were more susceptible to copycat suicides and attempts. Media reports that provide details about the suicide method contributed to an increase in suicides using the same method among the public.</p> <p><b>Discussion &amp; Conclusion</b> Our findings suggest that media reporting of suicide can lead to an increase in copycat suicides in Asia. Policymakers should collaborate with media professionals to ensure adherence to reporting guidelines in order to mitigate the copycat effects at the community level.</p>	

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Abstract ID	Clinical Specialty
SHBC1359	Psychiatry
<p><b>Authors</b> J.LIU<sup>1</sup>, W.L.TEH<sup>1</sup>, N.CHANDWANI<sup>1</sup>, S.VERMA<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Latent Profiles of Emotion Dysregulation have Clinical and Transdiagnostic Utility to aid Trauma Assessment and Diagnostic Classification for Severe Mental Disorders in Singapore</p> <p><b>Background &amp; Hypothesis</b> Trauma and post-traumatic stress disorder (PTSD) are highly prevalent and overlap significantly with severe mental disorders (depression, bipolar disorder, and schizophrenia), creating significant challenges for diagnostic assessment. Accordingly, translating transdiagnostic factors – common processes across psychopathology – to clinically meaningful indicators is a key clinical priority. In this study, we focused on emotion dysregulation as transdiagnostic risk factor and investigated the clinical utility of latent profiles of emotion dysregulation and their associations with trauma and severe mental disorders in Singapore.</p> <p><b>Methods</b> 404 patients with depression, bipolar disorder, and schizophrenia (Mean age = 33.8 years; 51% females; 73.3% Chinese ethnicity) were recruited from the Institute of Mental Health (Singapore). Patients completed validated clinical scales on emotion dysregulation, trauma exposure, PTSD, and depression.</p> <p><b>Results</b> Latent profile analysis revealed four distinct profiles of emotion dysregulation; extreme (Profile 1; 15%); severe (Profile 2; 27.9%); moderate (Profile 3; 38.6%); and poor emotional awareness (Profile 4; 18%). Latent profiles were significantly associated with severe mental disorders; most depression cases were classified as Profiles 1 and 2, most bipolar disorder cases were classified as Profile 3, and most schizophrenia cases were classified as Profile 4. Latent profiles were linearly associated with trauma exposure, PTSD symptoms, and depressive symptoms; Profile 1 had the highest trauma exposure and PTSD/depressive symptom scores, while Profile 4 had the lowest trauma exposure and PTSD/depressive symptom scores.</p> <p><b>Discussion &amp; Conclusion</b> Overall, these findings suggest that latent profiles of emotion dysregulation have clinical and transdiagnostic utility to aid trauma assessment and diagnostic classification for severe mental disorders in Singapore.</p>	

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<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1390	Infectious Diseases
<p><b>Authors</b> W.M.KYAW<sup>1</sup>, J.Y.TAY<sup>1</sup>, LEO K. Y. LIM, ABDUL RAZAK NA<sup>1</sup>, DEBORAH HL NG<sup>1</sup>, JEFFERY L CUTTER<sup>1</sup></p> <p><sup>1</sup>National Centre for Infectious Diseases (Singapore)</p> <p><b>Title</b> Knowledge, attitude, and behavior of mandatory TB notification among clinicians in Singapore</p> <p><b>Background &amp; Hypothesis</b> Timely and accurate reporting of infectious diseases is essential for public health surveillance. Healthcare professionals' knowledge and attitudes towards infectious disease notification is important in ensuring that this information is collected and reported effectively.</p> <p><b>Methods</b> A multi-center, cross-sectional online survey was conducted using a standardized anonymous, self-administered questionnaire in March 2023 to assess the knowledge and attitudes of healthcare professionals in public hospitals towards tuberculosis (TB) notification.</p> <p><b>Results</b> Of the 68 clinicians participated, 28% specialized in respiratory and critical care medicine (RCCM), 25% in infectious diseases (ID); and 47% in another eight specialities. Most participants (79%) found it difficult to remember to submit treatment progress reports (MD117) every 4 weeks, especially when there was no change in treatment. RCCM/ID clinicians were more likely to agree that it was important to update MD117 when treatment was stopped (97% vs. 72%, p=0.016), although they found it difficult to remember to submit MD117 when the patient was hospitalized (83% vs. 50%, p=0.005). Compared to RCCM/ID clinicians, other clinicians were more likely to agree that notification (MD532) (94% vs. 69%, p=0.021) and MD117 (91% vs. 61%, p=0.040) should be collected based on input from clinicians. They found it difficult to remember to submit MD117 for foreigners who have left country while on the treatment (84% vs. 61%, p=0.038).</p> <p><b>Discussion &amp; Conclusion</b> There are challenges in TB notification that need to be addressed to improve reporting. Simplifying TB notification requirements and automating notifications when patients are hospitalised or have left the country, could help to address these challenges.</p>	

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<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1391	Public Health / Clinical Epidemiology
<p><b>Authors</b> B.W.Z.LIM<sup>1</sup>, E.H.TAY<sup>1</sup>, S.SHAHWAN<sup>1</sup>, S.GUNASEKARAN<sup>1</sup>, Y.B.TAN<sup>1</sup>, B.C.W.TAN<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup>, S.A.CHONG<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Social inclusion in Singapore: Findings from a cross-sectional mental health literacy study</p> <p><b>Background &amp; Hypothesis</b> The Mind Matters 2022-2023 study is an ongoing study that aims to evaluate the mental health literacy of Singapore's general population. This study aims to investigate the extent of social inclusion and its sociodemographic correlates amongst Singapore residents using the Social and Community Opportunities Profile-Short (SCOPE-S) questionnaire.</p> <p><b>Methods</b> We recruited 2252 Singaporeans and Permanent Residents aged 18-65 years who were randomly selected from a national database. Sociodemographic information was collected. The 41-item SCOPE-S instrument evaluated participants' perceived levels of social inclusion across eight domains: leisure, housing, work, finances, safety, education, health, and family &amp; friends. Participants' perceived availability of opportunities (PerOps) were rated on 5-point Likert scales (1=Extremely restricted, 5=Plenty), while satisfaction with their opportunities (SatOps) and overall social inclusion (OSI) were rated on 7-point Likert scales (1=Terrible, 7=Delighted). Weighted multivariable linear regressions were performed to examine sociodemographic correlates.</p> <p><b>Results</b> Participants perceived the education domain (79.6%) as having the most available opportunities (PerOps<math>\geq</math>4) and housing having the least (35.6%). They were mostly satisfied (SatOps<math>\geq</math>5) with their safety and opportunities for contact with their family (93.7%) while least satisfied with housing (37.0%). Most participants (76.6%) were mostly satisfied (rated<math>\geq</math>5) with OSI. Indian ethnicity and higher income were significantly associated with higher PerOps, SatOps, and OSI scores.</p> <p><b>Discussion &amp; Conclusion</b> Singapore residents were mostly happy with their safety, education opportunities familial contact, and felt socially included. However, they were largely unhappy with both their personal and the generally available housing opportunities. Future research can target improvements to housing opportunities, potentially increasing satisfaction amongst Singapore residents.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1398	Psychiatry
<p><b>Authors</b> H.P.TAI<sup>1</sup>, B.T.NG<sup>1</sup>, K.WEI<sup>1</sup>, E.ABDIN<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Long-Acting Injectable (LAI) Antipsychotic Usage and its associated Hospitalisations among Outpatients with Schizophrenia in a State Psychiatric Hospital Before and During the Covid-19 Pandemic.</p> <p><b>Background &amp; Hypothesis</b> Continuity of long acting injectable (LAI) antipsychotics are key to prevent relapses and hospitalizations for patients with schizophrenia. However, the Covid-19 pandemic and movement restrictions posed unique challenges as in-person visit was required for LAI administration. This study investigates the impact of the Covid-19 pandemic on LAI usage and its associated hospitalizations among outpatients with schizophrenia.</p> <p><b>Methods</b> LAI usage and admission data from electronic records of 1709 adult outpatients aged <math>\geq 21</math> years who received LAI for schizophrenia treatment in the Institute of Mental Health (IMH) during the pandemic were compared to pre-pandemic. Data were examined by month. Primary outcomes were difference in total LAI doses dispensed, LAI discontinuations and hospital admissions.</p> <p><b>Results</b> Statistically significant reduction was observed in the mean number of doses dispensed from <math>12.20 \pm 4.163</math> pre-pandemic to <math>11.65 \pm 4.600</math> (<math>t = 5.750</math>, <math>p &lt; 0.001</math>) of LAI doses during the Covid-19 pandemic. There was statistically significant increase in the proportion of LAI discontinuations (<math>n = 75</math> (4.4%) vs <math>n = 150</math> (8.8%), <math>p &lt; 0.001</math>) and reduction of 2.9% in patients hospitalized during the Covid-19 pandemic (<math>n = 223</math> (13.0%) vs <math>n = 173</math> (10.1%), <math>p = 0.002</math>). Overall, there was no statistically significant difference in hospital admissions (<math>t = 0.518</math>, <math>p = 0.604</math>). The odds of hospitalization for patients who continued LAI remained statistically significantly lower compared to those who discontinued LAI during the pandemic (AOR 0.180, 95% CI 0.118-0.272, <math>P &lt; 0.001</math>).</p> <p><b>Discussion &amp; Conclusion</b> A small decline in LAI usage did not increase hospitalizations but continuation of LAIs significantly reduced the odds of hospitalizations during the Covid-19 pandemic.</p>	



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<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1399	Infectious Diseases
<p><b>Authors</b> W.M.KYAW<sup>1</sup>, DEBORAH HL NG<sup>1</sup>, LEO K.Y.LIM<sup>1</sup>, J.Y.TAY<sup>1</sup>, JEFFERY L CUTTER<sup>1</sup></p> <p><sup>1</sup>National Centre for Infectious Diseases (Singapore)</p> <p><b>Title</b> Factors associated with yield of contact tracing among relapse TB cases: Singapore's experience</p> <p><b>Background &amp; Hypothesis</b> Contact tracing (CT) and screening are key activities in Singapore's National TB programme. Contact tracing is typically focused on new cases, while CT for relapse cases are done on a case-to-case basis as they could have prolonged shedding.</p> <p><b>Methods</b> A retrospective cohort study was done on contacts screened for relapse TB cases notified between 2018 and 2022. Multivariable logistic regression models were constructed to identify factors associated with latent TB infection (LTBI) among contacts of relapse cases.</p> <p><b>Results</b> During the 5-year study period, a total of 3,192 contacts were identified, of which 67% (2,129) consented to screen for LTBI. Of these, 2,126 had a valid interferon-gamma release assay (IGRA) result. LTBI positivity was higher among contacts of relapse cases with Mycobacterium tuberculosis complex (MTC) culture positive compared to those who were only polymerase chain reaction (PCR) positive (14.8% versus 12.3%, p=0.383). On multivariate analysis, after adjusting for age and gender of the index, gender and existing co-morbidities of contacts, factors independently associated with LTBI were MTC positive relapse case (AOR 1.59, 95%CI 1.00-2.52), interval between first episode and relapse (AOR 0.99, 95%CI 0.98-0.99), contact's age (AOR 1.03, 95%CI 1.02-1.03), contacts who were not Singapore residents (AOR 1.88, 95%CI 1.35-2.62), and household contacts (AOR 1.73, 95%CI 1.11-2.68).</p> <p><b>Discussion &amp; Conclusion</b> Although the yield of screening was higher for those who were MTC positive compared to only PCR positive relapse cases, CT for only PCR positive cases may still be important in a country with moderate TB incidence, should resources allow.</p>	

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<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1401	Public Health / Clinical Epidemiology
<p><b>Authors</b> Y.T.LEE<sup>1</sup>, Q.YUAN<sup>1</sup>, P.Z.WANG<sup>1</sup>, F.DEVI<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Social Support and Depressive Symptoms Amongst Informal Dementia Caregivers in Singapore: The Mediating Role of Caregiver Burden</p> <p><b>Background &amp; Hypothesis</b> Caring for persons with dementia (PWD) can burden informal caregivers, increasing their risk for depressive symptoms. While social support is known to mitigate this negative consequence, how caregiver burden contributes to this interplay is not well-studied. This study aims to examine the relationship between social support and depressive symptoms, and the possible mediating role of caregiver burden in this relationship amongst informal dementia caregivers in Singapore.</p> <p><b>Methods</b> Data from 282 informal caregivers of PWD was used. Social support was measured through a scale by Pearlin and colleagues; caregiving burden was assessed by the Zarit Burden Interview (ZBI); and depressive symptoms were evaluated by the Center for Epidemiologic Studies Depression Scale (CES-D). Hayes' PROCESS macro was used to test for mediation effects, with indirect effects tested using bootstrapped confidence intervals (CI).</p> <p><b>Results</b> Means scores were 25.5 (SD = 4.00) for perceived social support, ZBI: 33.2 (SD = 16.00), and CES-D: 14.3 (SD = 11.0). After controlling for caregiver and caregiving characteristics, caregiver burden showed a partial mediation effect of -0.279 (95% CI -0.467 to -0.106, p &lt; 0.001) while the direct impact of perceived social support on depressive symptoms was -0.579 (95% CI -0.829 to -0.329, p &lt; 0.001).</p> <p><b>Discussion &amp; Conclusion</b> The findings suggest caregiver burden served as a mechanism through which social support influenced depressive symptoms, but the direct association between the two was still stronger. Accordingly, interventions to enhance the mental well-being of informal caregivers should focus on strengthening social support to target its direct and indirect pathways with depressive symptoms.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1403	Infectious Diseases
<p><b>Authors</b> W.M.KYAW<sup>1</sup>, LEO K.Y.LIM<sup>1</sup>, DEBORAH HL NG<sup>1</sup>, JEFFERY L CUTTER<sup>1</sup></p> <p><sup>1</sup>National Centre for Infectious Diseases (Singapore)</p> <p><b>Title</b> Extra-pulmonary Tuberculosis in Singapore (2003-2022); Epidemiology and Predictors for Mortality</p> <p><b>Background &amp; Hypothesis</b> Extra-pulmonary TB (EPTB) remains a challenge due to many factors such as difficulties in diagnosis which lead to delay in treatment as well as strategies on TB prevention and control.</p> <p><b>Methods</b> A historical cohort study was done in Singapore on patients who were notified to the National TB Registry between 2003 and 2022. Multivariable logistic regression models were constructed.</p> <p><b>Results</b> During the 20-year study period, 7705 EPTB cases were notified. Majority were Singapore residents (58%), aged between 20 and 59 (58%), male to female ratio of 1:1, and 62% were bacteriologically-confirmed. Lymph nodes were the most common site of EPTB (43%) followed by pleural TB (22%). Of 7543 cases with a final outcome, 70% completed treatment, 20% were transferred out or left country, 6% died during the study period and 4% stopped taking treatment for different reasons. On multivariate analysis, factors independently associated with all-cause mortality during the course of treatment compared to those with treatment completed were age&gt;65 years (AOR 7.15, 95%CI 5.60-9.13), male gender (AOR 1.48, 95%CI 1.18-1.86), bacteriologically-confirmed (AOR 1.63, 95%CI 1.28-2.08), existing co-morbidities of diabetes (AOR 1.62, 95%CI 1.24-2.11), end-stage renal failure (AOR 5.15, 95%CI 3.78-7.02) and any malignancy (AOR 3.77, 95%CI 2.59-5.49) after adjusting for registration year, ethnic group, residential status in Singapore, country of origin and history of previous TB.</p> <p><b>Discussion &amp; Conclusion</b> EPTB was more common in younger individuals. However, male patients, those aged &gt;65 years, bacteriologically-confirmed case and pre-existing medical conditions were identified as risk factors for unfavorable outcome.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1407	Public Health / Clinical Epidemiology
<p><b>Authors</b> Q.YUAN<sup>1</sup>, Y.T.LEE<sup>1</sup>, Y.J.ZHANG<sup>1</sup>, E.SAMARI<sup>1</sup>, R.GOVEAS<sup>1</sup>, L.L.NG<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> The preliminary evaluation of the Kampung Care App among informal caregivers of people with dementia in Singapore – a pilot randomised controlled trial</p> <p><b>Background &amp; Hypothesis</b> To better support informal caregivers of people with dementia, digital interventions are good options as they can be conveniently accessed. The current study aimed to evaluate the potential effectiveness of a mobile-based intervention named 'Kampung Care' in supporting informal dementia caregivers in Singapore.</p> <p><b>Methods</b> A randomised control trial design was adopted. Block randomization with a block size of 4 was used to randomly allocate participants in to either an intervention or a control arm. Those in the intervention arm was required to use the 'Kampung Care' app for one month. The app contains a few features including 1) Positive self-reflection journal, 2) Knowledge education, 3) Online peer support forum, 4) Self-monitoring via validated questionnaires, and 5) Resource list. Both arms were required to complete the pre- and post-assessments, which measured their knowledge on dementia, positive aspects of caregiving, caregiving burden, anxiety, and depressive symptoms.</p> <p><b>Results</b> As of 6 Jul 2023, a total of 19 caregivers had completed the study (8 in intervention, 11 in control.). Results show that there were small to medium effects, with the intervention arm showing gains in dementia knowledge (d=0.62), perceived positive aspects of caregiving (d=0.45), reduction of caregiving burden (d=0.29), as well as anxiety (d=0.25) and depressive symptoms (d=0.22).</p> <p><b>Discussion &amp; Conclusion</b> This study has provided preliminary evidence that 'Kampung Care' app may benefit informal dementia caregivers in Singapore, and it could be a good supporting tool for them. Future studies might further validate its value among a larger sample and over a longer duration.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1409	Dermatology
<p><b>Authors</b> G. CHUA<sup>1</sup>, X.L. HUANG<sup>1</sup>, R.WIJESINGHE<sup>1</sup>, B.K. LI<sup>1</sup>, Y.W. YEW<sup>1</sup></p> <p><sup>1</sup>National Skin Centre (Singapore)</p> <p><b>Title</b> Establishing Unique Pharmacist-led Clinics in a Specialized Dermatology Centre</p> <p><b>Background &amp; Hypothesis</b> A high patient load, limited number of dermatologists and inadequate appointment slots created opportunities for the establishment of pharmacist-led clinics in a dermatology setting.</p> <p><b>Methods</b> Planning involved collaboration with dermatologists to establish the scope of practice for pharmacists and draft practice agreements. Current gaps in care provision were discussed to match the skill-sets of pharmacists and needs of the site. American board-certified pharmacists who completed workplace-based assessments were credentialed and privileged to conduct clinics. Quality metrics tracked the clinical and value-driven impact of the clinic. Clinic managers were consulted on clinic room scheduling and appointment bookings. To ensure that revenue was generated, a new billing structure was created. Patient satisfaction surveys were also conducted after pharmacist visits.</p> <p><b>Results</b> The pharmacist-led clinic that was first established focused on referrals to see patients with chronic stable eczema and those newly initiated on dupilumab. Within 2 years, 66 dermatologist appointment slots were made available with a 45% cost savings to the patients. The recognition of this model by institutional leaders provided additional opportunities for pharmacists to review patients with acne, urticaria, psoriasis and alopecia, leading to the booking of another 32 pharmacist appointment slots. 93% of the responses for Patient Satisfaction Surveys were good, very good or excellent.</p> <p><b>Discussion &amp; Conclusion</b> Establishing new dermatology pharmacist-led clinics may be challenging due to limited information from the literature. Open communications and the trust built increased the success and showcased the importance of innovative pharmacist-led clinics which benefited the institution and patients in terms of healthcare resources optimisation and cost-savings, respectively.</p>	

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<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1418	Psychiatry
<p><b>Authors</b> J.M.LIM<sup>1</sup>, J. BARLAS<sup>2</sup>, D. KAUR<sup>2</sup>, P. M. Y. NG<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore), <sup>2</sup>James Cook University Singapore</p>	
<p><b>Title</b> Post-traumatic stress symptoms in caregivers: A scoping Review</p>	
<p><b>Background &amp; Hypothesis</b> This scoping review mapped the existing literature in relation to post-traumatic stress symptoms amongst adult caregivers of children and adults with neurodevelopmental, neurocognitive, and psychiatric disorders. Understanding violence, hostility, and stressful events affect caregivers is crucial, as these might negatively affect their mental wellbeing and ability to provide care.</p>	
<p><b>Methods</b> The scoping review was conducted using PRISMA-ScR guidelines and Arksey &amp; O'Malley (2005) five-stage methodology framework. Published and unpublished grey literature between 2005 and 2022 was included in the scoping review.</p>	
<p><b>Results</b> 9125 studies were identified and 22 studies were selected. Trauma and PTSS experienced by IDD caregivers were related to news breaking, NDD diagnosis, and behavioral issues. IDD caregivers with PTSS are at risk of psychosocial difficulties. The nature of PTSD and the possible causes were investigated in caregivers of individuals diagnosed with psychosis and schizophrenia. These caregivers reported aggression and violence as traumatic events.</p>	
<p><b>Discussion &amp; Conclusion</b> Recent studies have examined the wellbeing of IDD caregivers using traumatic stress frameworks. Ten to fifty-two percent of IDD caregivers are at risk for PTSS, and twenty-four to fifty-five percent of caregivers of individuals with schizophrenia and psychosis are at risk of PTSS. Cognitive appraisals are associated with post-traumatic stress symptoms in caregivers. There has been an increase in interest in traumatic stress in caregivers, and a recognition of the importance of trauma in caregiver mental health. Research should be expanded to examine the long-term impact of caregiving on these caregivers, and to include caregivers of adults with IDD.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1423	Psychiatry
<p><b>Authors</b> R.GOH<sup>1</sup>, R.ONG<sup>2</sup>, N.CHANDWANI<sup>1</sup>, S.K. YUNTING<sup>1</sup>, Y.M. MOK<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore), <sup>2</sup>Khoo Teck Puat Hospital (Singapore)</p> <p><b>Title</b> Use of Occupational Therapist-led cooking groups to implement Mediterranean Diet-based interventions in specialist inpatient setting for adults with Major Depression or Bipolar Disorder in Singapore.</p> <p><b>Background &amp; Hypothesis</b> To present the use of Occupational Therapist (OT)-led cooking groups to increase the knowledge of, and to model dietary changes, in line with the benefits of Mediterranean Diet (MD) on mood, for a group of adults in an inpatient setting in Singapore.</p> <p><b>Methods</b> Patients with depression or bipolar disorder were selected from a mixed gender inpatient unit. The existing two-part cooking groups were modified and conducted monthly, with up to eight patients, and led by an Occupational Therapist and a Dietitian. The first group session introduced concepts of MD and allowed patients to plan a dish to cook the following session. Concepts of MD were reinforced throughout the discussion. A budget was given to ensure ingredients selected remained affordable. The second group focused on preparing the ingredients and cooking the dish. Concepts of MD were reinforced. The recipe was recorded into a booklet. Feedback from patients were collected after each session.</p> <p><b>Results</b> All patients were able to list down the concepts of MD, indicated intention of using olive oil and increase their intake of vegetables and fruits. More than 50% of the patients aimed to consume fish at least twice per month, and reduce their fat and sugar intake following discharge from hospital. All patients indicated their confidence in replicating the dish following discharge.</p> <p><b>Discussion &amp; Conclusion</b> The use of OT-led cooking groups was effective in increasing the knowledge of, and to model dietary changes in line with the MD, for a group of adults in an inpatient setting in Singapore.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1427	Pathology & Laboratory Medicine
<p><b>Authors</b> J.TENG<sup>1</sup></p> <p><sup>1</sup>National Healthcare Group Corporate Office (Singapore)</p> <p><b>Title</b> Evaluation of effect of activated pyridoxal phosphate in aminotransferase assays</p> <p><b>Background &amp; Hypothesis</b> Pyridoxal phosphate, PYP, is active form of vitamin B6 and a coenzyme in a variety of enzymatic reactions. The serum aminotransferase may be decreased in Vitamin B 6 deficiency patients with insufficient endogenous PYP. Additional of activated PYP to test assay would overcome the concern and are evaluated during the assay change from Assay without to with PYP.</p> <p><b>Methods</b> Imprecision study, Linearity study and limit of blank, detection and quantification were conducted on both ALT and AST with activated PYP assays. Correlation studies were also conducted using ALT and AST assay without PYP and with PYP and with other lab using using PYP assays.</p> <p><b>Results</b> Both ALT and AST with PYP met the recommended manufacturer claims for imprecision, linearity and Limit of blank, detection and quantification. The correlation for ALT and AST assay yielded a positive bias result in assay with with PYP that were out of RCPA allowable limit at clinical decision levels and ALT: <math>y = 1.0018x + 5.4405</math>, R2 of 0.9990 AST, <math>Y = 0.9491x + 6.5941</math>, R2 of 0.9984</p> <p>The correlation with lab using same assay showed satisfactory results within allowable limits</p> <p><b>Discussion &amp; Conclusion</b> The evaluation outcomes are coherent with the claims and presented higher serum aminotransferase results as compared to assay without PYP. With such change, lab would need to consider revising normal reference ranges.</p>	



**SHBC 2023 SCIENTIFIC COMPETITION  
ACCEPTED ABSTRACTS  
ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1433	Podiatry
<p><b>Authors</b> C.G.NG<sup>1</sup>, S.W.L.HO<sup>1</sup>, K.ANUAR<sup>1</sup>, M.F.M.FARHAN<sup>1</sup> <sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Effectiveness of specifically optimized prefabricated insoles for managing mechanical foot pains in the subtle cavus foot: A Series of 10 Cases</p> <p><b>Background &amp; Hypothesis</b> The Subtle Cavus Foot (SCF) – clinically characterized by the “peek-a-boo” sign and a positive Coleman block-test – is associated with patients suffering from Mechanical Foot Pains (MFP). There is limited evidence supporting the use of prefabricated insoles for managing SCF patients. This retrospective case series aims to investigate the effectiveness and tolerability of Specifically Optimized Prefabricated Insoles (SOPI) in managing SCF patients experiencing MFP.</p> <p><b>Methods</b> Ten patients with clinically diagnosed SCF and MFP were fitted with SOPI using an in-office modification technique. The primary outcome measure was the self-reported 10-point Visual Analogue Scale (VAS) for pain, assessed before and after the introduction of SOPI, with tolerability being monitored.</p> <p><b>Results</b> Eight females and two males, with a mean age of 61 years were included. The ethnic distribution included eight Chinese, one Indian, and one Others. Three had Plantar Fasciitis, two had Achilles tendinopathy, two had Peroneal Strain, two had Metatarsalgia, one had Stress Fracture. The median follow-up period pre- and post-SOPI was 9.80 weeks. Before using SOPI, the median VAS pain score was 5.0, which significantly decreased to 0.0 after fitting of SOPI (P=0.005, Wilcoxon signed-rank test). All patients reported the SOPI to be comfortable, with no intolerance reported.</p> <p><b>Discussion &amp; Conclusion</b> This study provides preliminary evidence supporting the use of SOPI in managing MFP in patients with clinically identified SCF. Since SOPI can be easily replicated in-office, it offers a cost-effective, readily available, and clinically viable foot orthotic solution for patients presenting with SCF and MFP. Further prospective studies are warranted to validate these findings.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
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**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1438	Psychiatry
<p><b>Authors</b> C.S.LING<sup>1</sup>, S.H.CHAN<sup>1</sup>, N.CHANDWANI<sup>1</sup>, A.MOK<sup>1</sup>, Y.M.MOK<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Two-year outcomes of a Dance and Movement Therapy group intervention on a specialised inpatient mood disorder unit in Singapore</p> <p><b>Background &amp; Hypothesis</b> The authors report the outcomes of a single 60-minute Dance and Movement Therapy (DMT) group intervention within a specialised inpatient mood disorders unit in Singapore. The DMT session involves guided and improvised dance and movement activities, group games and circle dance, self-regulatory techniques, relaxation and breathing practice, as well as verbal discussion.</p> <p><b>Methods</b> 323 inpatients, aged 19 and above, with a diagnosis of Major Depression or Bipolar Disorder participated in a weekly, mixed-gender, open DMT group over a two-year period between 2020 to 2022. Pre- and post-session assessment was conducted using the Heidelberg State Inventory (HSI). The reported scores were grouped into three categories - Depression, Vitality and Affect. Mean HSI scores in all three categories, as well as their statistical significance, were calculated using t-test.</p> <p><b>Results</b> All 3 categories of the HSI scoring showed a statistically significant improvement over a single session of DMT group. The result of the scores were analysed using the paired sample t-test revealed that the differences were significant. HSI-Depression <math>t(322) = 16.80, p &lt; 0.01</math>; HSI-Vitality <math>t(322) = 15.53, p &lt; 0.01</math>; and HSI-Affect scores <math>t(322) = 14.97, p &lt; 0.01</math>.</p> <p><b>Discussion &amp; Conclusion</b> Two-year outcomes from a specialised mood disorder unit in Singapore show that a single session of an inpatient DMT group intervention resulted in significant short term improvements in Depression, Vitality and Affect scores in patients with major depression or bipolar disorder. DMT intervention, along with art and music therapy, offers patients with mood disorders an expressive therapy treatment option, in order to work through non-verbal, or difficult-to-articulate issues.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1443	Rehabilitation Medicine
<p><b>Authors</b> U.R.POTTURI<sup>2</sup>, VAIKUNTHAN R<sup>1</sup>, C. U. UBEYNARAYANA<sup>1</sup></p> <p><sup>1</sup>Khoo Teck Puat Hospital (Singapore), <sup>2</sup>Woodlands Health (Singapore),</p> <p><b>Title</b> Effects of Mental Imagery and bedside activity tool kit on activity engagement and functional mobility in comparison to standard physiotherapy alone among hospitalized older adults: Interim report of an experimental study</p> <p><b>Background &amp; Hypothesis</b> Acute hospitalization among older adults is a significant risk factor for Hospital Associated Deconditioning. Bed rest and inactivity is noted to occupy up to 95% (83% in bed, 12% in chair) of hospital inmate's time in a day. Deleterious effects of bed rest and inactivity during hospitalization are well documented. Multiple factors influence the inactivity, such as medical condition, ward environment, manpower resources in the ward setting. Aim: To provide proof of concept by evaluating the effectiveness of mental imagery and bedside activity toolkit on functional mobility and activity engagement of older adults during acute hospitalization.</p> <p><b>Methods</b> A randomized controlled trial with participants assigned to one of control group, Mental Imagery group, Mental Imagery and Bedside Activity Toolkit group. Outcomes (Modified Barthel Index, Timed Up and Go, 30 sec Chair stand test, Activity log sheet) were measured on admission (T1) and at end of 5 sessions (T2).</p> <p><b>Results</b> Out of 60 participants recruited, 2 were withdrawn, 7 couldn't complete 2nd assessment. The results show there is significant difference between 3 groups for MBI, compared to initial assessment vs assessment after 5 sessions. (Chi-square =7.702, df= 2, p&lt;0.05). More specifically, compared to control group, participants in Mental Imagery group and Bedside Activity Toolkit group showed significant improvement in functional mobility and activity engagement of older adults during acute hospitalization.</p> <p><b>Discussion &amp; Conclusion</b> Adding bedside activity toolkit and self-practice of mental imagery of functional movements to standard ward based activities have shown significant improvements in functional mobility and activity engagement of older adults during acute hospitalization.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1450	Psychiatry
<p><b>Authors</b> A.JEYAGURUNATHAN<sup>1</sup>, E.ABDIN<sup>1</sup>, V.SEET<sup>1</sup>, S.C.TAN<sup>1</sup>, M.I.S.KHALID, K.C.WE<sup>1</sup>, Y.M.MOK<sup>1</sup>, S.A.CHONG<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Impact of severity of anxiety disorders on functional disability in a tertiary hospital setting</p> <p><b>Background &amp; Hypothesis</b> The Singapore Mental Health Study reported a significant increase in the prevalence of lifetime generalized anxiety disorder (GAD) (0.9% to 1.6%). Disability is a multi-dimensional concept which encompasses impairment as well as the social or environmental barriers that limit the individual's participation in society and independence. The study aimed to investigate the extent of functional disability (FD) and its association with severity among those with anxiety disorders (AD).</p> <p><b>Methods</b> The World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) was used to measure disability in six domains (cognition, mobility, self-care, social interaction, life activities and participation), including work-loss days. Anxiety severity was measured using GAD-7 questionnaire. GAD-7 has a score range of 5-9 (mild anxiety), 10-14 (moderate anxiety), and 15-21 (severe anxiety). Multivariable linear regression analysis was conducted.</p> <p><b>Results</b> Among 194 participants, 35.6% (n=69) had mild anxiety, 26.8% (n=52) had moderate anxiety, and 37.6% (n=73) had severe anxiety. The mean overall WHODAS score was 14.2 (SD=9.0). Compared to those with mild anxiety patients with severe anxiety had higher disability scores in overall WHODAS scores, and domains of cognition, mobility, getting along, life activities and participation scores. Severe anxiety was also significantly associated with higher absenteeism of 4.9 days compared to mild anxiety.</p> <p><b>Discussion &amp; Conclusion</b> Our results demonstrate that AD was significantly associated with higher FD and identified the domains that were most impacted. This study also shows that patients with severe AD have serious disability which should be recognized early and managed using psychosocial and occupational therapy.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
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**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1462	Allied Health
<p><b>Authors</b> M.X.Y.NG<sup>2</sup>, L.L.C.Tan<sup>1</sup>, Q.C. TANG<sup>1</sup>, J.G.X.KOH<sup>1</sup>, H.Mohamed<sup>2</sup>, B.L.L.SOON<sup>1</sup>, W.L.Teoh<sup>1</sup>, X.Y.LAM<sup>1</sup></p> <p><sup>1</sup>Khoo Teck Puat Hospital (Singapore), <sup>2</sup>Yishun Community Hospital (Singapore)</p>	
<p><b>Title</b> Creating a palliative ready rehabilitation team – effectiveness of a tiered training program</p>	
<p><b>Background &amp; Hypothesis</b> Palliative training is important for rehabilitation therapists providing care for patients with palliative needs. Most training programmes have focused on knowledge improvement using didactic lectures. To account for the different learning needs of therapist caring for patients at different expertise level, a tiered training programme was created. This prospective study sought to investigate the impact of this programme on the knowledge, attitude and confidence (level 1 and 2 Kirkpatrick model) of therapists.</p>	
<p><b>Methods</b> 38 therapists from the acute and community settings were recruited for the study. Therapists in the “All” group (n=16) received e-learning; those in the “Some” group (n=14) had additional advanced training and case discussions; those in the “Few” group (n=8) had specialist training and continued clinical mentorship. Knowledge, attitude and confidence levels were assessed at baseline, post 6 months (T1) and 12 months (T2).</p>	
<p><b>Results</b> Mean knowledge score improved for the “All” and “Some” groups at T1 but not for the “Few” groups which had higher baseline mean score. The improvement was sustained in the “Some” group at T2. Attitude scores improved for all 3 groups at T1 and only continued for “Few” group at T2. Confidence mean scores improved significantly across all groups at T1 and were sustained at T2.</p>	
<p><b>Discussion &amp; Conclusion</b> Our findings suggest that e-learning can help improve knowledge, attitude and confidence towards palliative care. However, continued mentorship is required for a sustained improvement in attitude. A tiered model of training is an effective model and should be considered for other medical disciplines beyond rehabilitation therapists.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION  
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ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1465	Public Health / Clinical Epidemiology
<p><b>Authors</b> W.M.KYAW<sup>1</sup>, N.A. ABDUL RAZAK<sup>1</sup>, LEO K. Y. LIM<sup>1</sup>, DEBORAH HL NG<sup>1</sup>, JEFFERY L CUTTER<sup>1</sup></p> <p><sup>1</sup>National Centre for Infectious Diseases (Singapore)</p> <p><b>Title</b> Predictors of All-cause Mortality: Review of TB notifications in Singapore, 2003-2022</p> <p><b>Background &amp; Hypothesis</b> Disease surveillance is the first segment in prevention of infectious diseases. The National TB Programme in Singapore conducts public health surveillance for Tuberculosis (TB).</p> <p><b>Methods</b> A retrospective cohort study was done on patients notified to the Registry between 2003 and 2022. Multivariable logistic regression models were constructed to identify predictive factors for all-cause mortality.</p> <p><b>Results</b> A total of 54,580 cases (new, 93.4%; relapse, 6.2%; reinstatement, 0.4%) were notified during the 20-year study period. Majority were Singapore residents (57%), aged between 20 and 59 years (68%), and male (61%). Most common site of disease was pulmonary (86%), followed by lymph nodes (8%) and pleural (6%). Of all cases, 63% was bacteriologically-confirmed. Of 53,194 cases (97%) with an outcome, 65.6% completed treatment, 26.2% left country, 7.8% died during the study period and 0.4% stopped taking treatment. On multivariate analysis, compared to residents who completed treatment, factors independently associated with residents who died during the course of treatment were age&gt;65 years (AOR 5.89, 95%CI 5.44-6.38), male gender (AOR 1.40, 95%CI 1.28-1.53), having existing co-morbidities of end-stage renal failure (AOR 4.45, 95%CI 3.85-5.15), any malignancy (AOR 3.90, 95% CI 3.46-4.39), being on steroid therapy (AOR 1.97, 95%CI 1.61-2.42), relapse case (AOR 1.25, 9%CI 1.11-1.40) and bacteriologically-confirmed pulmonary TB (AOR 1.98, 95%CI 1.78-2.21) after adjusting for ethnic group and other co-morbidities of diabetes and HIV status.</p> <p><b>Discussion &amp; Conclusion</b> Older patients, co-morbidity and bacteriologically-confirmed pulmonary TB are independently associated with mortality. Active TB screening should be considered for elderly residents with co-morbidities.</p>	

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**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1467	Podiatry
<p><b>Authors</b> B.KOH<sup>1</sup>, A.HU<sup>1</sup>, A.C.LEONG<sup>1</sup>, J.KOK<sup>1</sup></p> <p><sup>1</sup>Ng Teng Fong General Hospital (Singapore)</p> <p><b>Title</b> The experiences of podiatrists in Singapore in the delivery of routine foot care and toenail self-management</p> <p><b>Background &amp; Hypothesis</b> Podiatry management of toenails includes active treatment and educating the patient on knowledge and skills to manage their condition. This study aims to explore the experiences of Singapore's podiatrists in the provision of foot care and to identify gaps in promoting self-care to their patients.</p> <p><b>Methods</b> This study adopted a qualitative research paradigm comprising semi-structured interviews with 16 podiatrists from diverse clinical settings and varying experiences, in February to May 2023. The data was analysed inductively to develop themes.</p> <p><b>Results</b> Four themes emerged from the data : 1) Provision of nail care service 2) Perceived reasons for referral for podiatric nail care, 3) Self-management with various patient sub-groups and 4) effectiveness of self-management, all from our participants' perspective. Podiatrists agree that pathological nails and high risk feet warrant continual podiatry care. However, the majority are ambivalent towards providing care for non-pathological nails. Fear, indifference, lack of social support and physical limitations were referral reasons for non-pathological cases. Interviewees reported the importance of managing patients' expectations on the role of podiatry in nail care from the first visit to avert potential over-reliance on the service. Clear explanations and equipping patients with the appropriate tools were helpful in promoting self-management.</p> <p><b>Discussion &amp; Conclusion</b> The demand for podiatry nail care service is complex and this paper highlights this from the view of the podiatrists in Singapore. Effective communication with patients is vital to establish the purpose of podiatry and also in the management of toenail care with the aim to provide sustainable healthcare in years to come.</p>	

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<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1468	Diagnostic Radiology
<p><b>Authors</b> I.LIM<sup>1</sup>, K.Q.TENG<sup>1</sup></p> <p><sup>1</sup>NHG Diagnostics (Singapore)</p> <p><b>Title</b> Achieving consistent and comparable BMD results for patient's mobility in NHG primary healthcare and beyond</p> <p><b>Background &amp; Hypothesis</b> DXA scanners are the gold standard in measuring BMD for bone health screening and monitoring changes over time. However, inherent difference within each scanners prevents comparisons of scans of the same patient performed on different machines. This limits patients to the same scanner for every follow-up. The project aims to establish cross-calibrated status for all DXA scanner in NHGD, increasing patients' flexibility for follow-up scans done at multiple sites with comparable BMD results.</p> <p><b>Methods</b> The exercise referenced The International Society For Clinical Densitometry (ISCD) Official position 2019 for cross-calibration of DXA scanner of same make and model. An index scanner was identified and a Spine phantom was shuttled and scanned daily on both index and target DXA machines for 20 days. Each day the scan results were analysed for deviation. When the mean BMD difference exceeds 0.5%, engineers are activated to correct the calibration factors. This process of was repeated daily until the target DXA machine achieved a consistent reading which is almost identical to the index DXA machine.</p> <p><b>Results</b> The percentage difference of mean BMD of all scanners to index scanner in NHGD is 0.01%, 0.19% and 0.11% respectively, within the 0.5% limit defined by the ISCD Official Position.</p> <p><b>Discussion &amp; Conclusion</b> All NHGD DXA scanners are cross-calibrated and all results for patients and communities are available for comparisons across machines. This study may provide an insight and be initiator for the greater cross-calibration exercise among multiple BMD facilities within NHG or nationwide towards more mobility of patients between primary and tertiary healthcare institutions.</p>	



**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1477	Podiatry
<p><b>Authors</b> W.C.CHAN<sup>1</sup>, C.G.NG<sup>1</sup>, C.CHEONG<sup>1</sup>, M.PHUA<sup>1</sup>, S.W.L.HO<sup>1</sup>, K.ANUAR<sup>1</sup></p> <p><sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Threshold values of the 10g monofilament test used in diabetic foot screenings for a multi ethnic Asian population</p> <p><b>Background &amp; Hypothesis</b> There is currently no consensus on the optimal threshold for monofilament testing to determine diabetic peripheral neuropathy (DPN) during diabetic foot screening (DFS). The objective of our investigation is to determine the optimal number of insensate sites required to determine the presence of DPN.</p> <p><b>Methods</b> We retrospectively analysed 10g monofilament test and neurothesiometer vibration perception threshold (VPT) test results of 1451 patients who attended DFS from January 2017 to December 2017.</p> <p><b>Results</b> Differences in proportion of patients presenting with DPN for 10g monofilament thresholds of <math>\geq 1/10</math> and <math>\geq 4/10</math> insensate sites were statistically significant (<math>P &lt; .001</math>, 95% CI: 26.9-31.8). Further analysis demonstrates that when utilising threshold of <math>VPT &gt; 25V</math> as the reference test to determine DPN, <math>\geq 3</math> insensate sites produced the most ideal sensitivity (0.90, 95% CI: 0.88-0.91) and specificity (0.90, 95% CI: 0.80-0.98). Minimal agreement was found for the monofilament thresholds of <math>\geq 3</math> (<math>k=0.30</math>, <math>P &lt; .001</math>) and <math>\geq 4</math> (<math>k=0.35</math>, <math>P &lt; .001</math>) insensate sites and no agreement was found for the monofilament threshold of <math>\geq 1</math> (<math>k=0.08</math>, <math>P &lt; .001</math>) insensate site.</p> <p><b>Discussion &amp; Conclusion</b> Our results suggest that the optimal threshold for the 10g monofilament test to indicate neurothesiometer determined DPN (<math>VPT &gt; 25V</math>) is <math>\geq 3</math> insensate sites out of 10 sites for a multi-ethnic population. This threshold should be used during monofilament testing in DFS to improve the accuracy of patient risk stratification, potentially resulting in better allocation of healthcare resources in the face of rising healthcare costs.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1480	Public Health / Clinical Epidemiology
<p><b>Authors</b> 1A.H.AUNG, L.J.A. LI<sup>1</sup>, W.M.KYAW<sup>1</sup>, W.Y.LIM<sup>1</sup>, H.ANG<sup>1</sup>, L.P.A.CHO <sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> VALIDATING RECORDED CONTACT TIME FROM REAL TIME LOCATING SYSTEM WITH DIRECT OBSERVATION IN AN EMERGENCY DEPARTMENT</p> <p><b>Background &amp; Hypothesis</b> Traditionally, contact tracing is done retrospectively by interviewing patients, which is time consuming and also prone to recall bias. Digital tracking tools such as Real Time Locating System (RTLS) could be an alternative. However, validations are still required for fast-paced and crowded clinical settings, like the emergency department (ED). In this study, we compared contact durations identified by RTLS with those identified via direct observations in a busy ED during pandemic.</p> <p><b>Methods</b> This multi cross-sectional study included 80 interactions identified from continuous direct observations in ED of Tan Tock Seng Hospital during December-2020 to April-2021. Interactions with malfunctioned RTLS tags were excluded. Contact durations identified by observations and RTLS were rounded up to closest minute for comparison, using linear regression.</p> <p><b>Results</b> Among 80 observed interactions, RTLS detected 74 (92.5%) (Regression coefficient 1.032, p&lt;0.001). Among them, 33 (44.6%) had the same contact durations as the records from observations. 20 (27.5%) had 1-minute difference, and 13 (17.6%) had 2-5 minutes' difference. Among the remaining 8 interactions which had &gt;5 minutes' differences (range 6-18 minutes), 7 were detected by RTLS to have a longer contact time than directly observed. Overall, the six interactions (7.5%) missed by RTLS were observed to be transient which lasted for 1-4 minutes. Direct observation identified 44 prolong (≥5 minutes) contacts, for which RTLS detected with an average difference of 2.18 (SD 3.82) minutes.</p> <p><b>Discussion &amp; Conclusion</b> RTLS can be used to confidently identify contacts with contact durations of ≥5 minutes in the busy ED to prevent nosocomial transmission of infections.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1481	Podiatry
<p><b>Authors</b> C.G.NG<sup>1</sup>, C.CHEONG<sup>1</sup>, W.C.CHAN<sup>1</sup>, H.LIEW<sup>1</sup>, S.W.L.HO<sup>1</sup>, M.PHUA<sup>1</sup>, K.ANUAR<sup>1</sup></p> <p><sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Ankle-brachial index and toe-brachial index in people with and without diabetic peripheral neuropathy</p> <p><b>Background &amp; Hypothesis</b> The effect of diabetic peripheral neuropathy (DPN) on ankle-brachial index (ABI) and toe-brachial index (TBI) is unclear. We aim to investigate the relationship between ABI and TBI and analyse their difference (ABI – TBI) in people with and without DPN.</p> <p><b>Methods</b> We conducted a retrospective, observational study of diabetic foot screening results from a tertiary hospital. Data collected include ABI, TBI, 10-gram-monofilament test, Vibration Perception Threshold Test (VPT) and demographic data. DPN was defined as either presence of at least one insensate site with the 10-gram-monofilament or VPT <math>\geq 25V</math>.</p> <p><b>Results</b> 1393 patients were included with 724 (52.0%) males and mean age <math>62.8 \pm 12.3</math> years old. We observed 480 (34.5%) patients with DPN and 913 (65.5%) without. There was a moderate-positive correlation between ABI and TBI in patients with or without DPN respectively (<math>r=0.43</math>, CI: 0.35–0.50, <math>P&lt;.001</math>, <math>r=0.41</math>, CI: 0.36–0.47, <math>P&lt;.001</math>). Analysis between patients with and without DPN over a range of ABI values was performed: TBI was significantly lower in patients with DPN for <math>1.1 &lt; ABI \leq 1.2</math> (<math>P=0.023</math>) while ABI was significantly higher in patients with DPN for <math>ABI &gt; 1.2</math> (<math>P=0.003</math>). ABI – TBI was significantly higher in patients with DPN for <math>1.1 &lt; ABI \leq 1.2</math> (<math>P=0.04</math>) and <math>ABI &gt; 1.2</math> (<math>P=0.002</math>).</p> <p><b>Discussion &amp; Conclusion</b> There is a moderate positive correlation between ABI and TBI in people with or without DPN. Our results show that TBI may be less susceptible to be falsely elevated when <math>ABI &gt; 1.1</math> in patients with DPN. Thus, it may be useful to conduct TBI for all patients with DPN to identify PAD early.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1483	Public Health / Clinical Epidemiology
<p><b>Authors</b> H.GUO<sup>3</sup>, Z.J.HILDON<sup>1</sup>, L.H.WONG<sup>3</sup>, T.CHUA<sup>2</sup>, B.H.TEO<sup>2</sup>, A.CHOW<sup>3</sup></p> <p><sup>1</sup>National University of Singapore, <sup>2</sup>Singapore Veterinary Association, <sup>3</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Understanding factors influencing appropriate antibiotic prescribing for pet cats and dogs in veterinary clinics in Singapore: Application of the VALUE model</p> <p><b>Background &amp; Hypothesis</b> Understanding factors influencing inappropriate antibiotic prescribing for pets can inform future interventions to prevent spillover of antimicrobial resistance (AMR) to humans. However, little is known, especially in Singapore.</p> <p><b>Methods</b> We conducted interviews with 19 veterinary practitioners (VPs) of different decision-making roles in clinics in Singapore (January–July 2022) on factors influencing antibiotic prescribing for cats and dogs. Thematic analysis was performed according to the VALUE model (Guo et al. 2021).</p> <p><b>Results</b> VP antibiotic prescribing behaviours were shaped at three touchpoints: Veterinary clinic – While AMR is not a core value in clinics, VPs, especially younger ones, personally Valued AMR. Clinic operations were Aligned with decision-making VPs’ own AMR Values and good antibiotic practices were proactively shared with co-workers and pet owners. VPs held autonomy for antibiotic decisions but with Alignment to clinic protocols. At diagnosis – Antibiotic decisions were guided by clinical findings, diagnostic test results, VPs’ personal experiences and existing guidelines. At prescribing – Liaison with pet owners through trusting relationships, though intended for business reasons, could address appropriate antibiotic use. Shared decisions on antibiotics were driven by owner’s compliance to feed and willingness to pay for diagnostic tests. Use of monitoring and Evaluation data to ensure prudent antibiotic use was desired but manpower/resource constraints were highlighted.</p> <p><b>Discussion &amp; Conclusion</b> Clinic valuing of AMR needs to be formalised to align with VPs’ personal AMR values. Existing mechanisms on building trusting VP-pet owner relationships for business reasons are potential leverages for promoting appropriate antibiotic prescribing. Monitoring support can help ensure appropriate antibiotic use in pets.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
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**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1496	Geriatric Medicine
<p><b>Authors</b> C.S.TAN<sup>1</sup>, Y.S.M.HO<sup>1</sup></p> <p><sup>1</sup>Khoo Teck Puat Hospital (Singapore)</p> <p><b>Title</b> Effectiveness of A Trans-disciplinary Dietetic Intervention for Malnutrition Prevention (TDIMP) Protocol in Singapore Nursing Home</p> <p><b>Background &amp; Hypothesis</b> The lead time for a nursing home (NH) resident to be assessed and intervened by a dietitian is approximately one month. With TDIMP protocol, NH nurses can provide early nutrition intervention for residents at risk of malnutrition while waiting for a dietitian. It is hypothesised that TDIMP Protocol (i) effectively prevents deterioration in nutritional status and (ii) is feasible to implement in NH. The study aims to assess the effectiveness of the TDIMP protocol.</p> <p><b>Methods</b> Residents on TDIMP protocol were identified from NH's electronic medical records. Residents' body weight was collected at baseline and after implementation of TDIMP protocol. Nurses' feedback was collected using a questionnaire before study completion.</p> <p><b>Results</b> 58 residents were on TDIMP protocol from August 2018 to February 2022. Of 30 residents who provided informed consent, the average body weight on initiation was 41.53±10.80kg and 42.33±10.45kg after 6 months (p&gt;0.05). The average weight loss before was 1.58±1.97kg vs 0.16±2.95kg after TDIMP initiation (p&lt;0.05). 37% had less hospitalisation after TDIMP initiation (p&lt;0.05). Feedback was collected from 25 NH staff. More staff now look out for residents at risk of malnutrition (before: 68%; after: 80%). 80% found the protocol easy to use and have more confidence in initiating nutrition support. More than 90% agreed the protocol successfully prevents malnutrition, the NH should continue implementing, and other NH should adopt it.</p> <p><b>Discussion &amp; Conclusion</b> TDIMP protocol is effective in detecting, preventing and managing malnutrition by empowering nursing staff and healthcare assistants with the skills and confidence to provide oral nutrition support.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION  
ACCEPTED ABSTRACTS  
ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1497	Public Health / Clinical Epidemiology

**Authors**

B.C.W.TAN<sup>1</sup>, S.SHAHWAN<sup>1</sup>, Y.B.TAN<sup>1</sup>, S.GUNASEKARAN<sup>1</sup>, B.W.Z.LIM<sup>1</sup>, E.H.TAY<sup>1</sup>, S.A.CHONG<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup>

Institute of Mental Health (Singapore)

**Title** Examining the interaction between sociodemographic characteristics and attitudes to seeking professional psychological help

**Background & Hypothesis**

The Singapore Mental Health Study 2016 revealed that 13.9% of the general population develop a mental health condition in their lifetime but less than 15% sought help. Help-seeking attitudes are influenced by personal beliefs and sociodemographic factors and understanding these can help mitigate delayed help-seeking. This study aims to investigate the sociodemographic correlates of help-seeking attitudes.

**Methods**

An ongoing nationwide study was conducted with 2252 Singapore residents aged between 18-65 years. Respondents were administered a questionnaire that included demographic information and the Attitudes Toward Seeking Professional Psychological Help (ATSPPH) scale to measure personal attitudes towards professional help-seeking. Attitudes are recategorized into openness to seeking professional help, value in seeking professional help and preference to cope on one's own. Multiple linear regressions were conducted to examine associations of ATSPPH.

**Results**

The analyses revealed an interaction between sociodemographic and ATSPPH factors. No significant associations were found between sociodemographic factors and openness, suggesting that openness to help-seeking is stable across the general population. Those aged 18-34 and students valued seeking professional help less while females valued seeking professional help more. Preference to cope on one's own was higher among those with PSLE, Secondary, O/N level and Polytechnic/ITE education as compared to those with university education but was lower among females and retirees.

**Discussion & Conclusion**

Our study found that youths and students saw less value in professional help-seeking. Mental health education campaigns conducted in schools can highlight the importance of seeking professional help and facilitate awareness of the efficacy and availability of youth-friendly psychological help avenues.

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1513	Intensive Care Medicine
<p><b>Authors</b> A. LI<sup>2</sup>, I. M. H. WOO<sup>2</sup>, N. K. E. LOW<sup>2</sup>, J. LEONG<sup>2</sup>, K. GRIVA<sup>1</sup>, J. P. L. CHUA<sup>2</sup> <sup>1</sup>Lee Kong Chian School of Medicine (Singapore), <sup>2</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Understanding caregiver stress and coping perceived by family caregivers of ventilator-assisted individuals (VAIs)</p> <p><b>Background &amp; Hypothesis</b> This study aims for an understanding on the stress and coping perceived by VAIs' family caregivers in Singapore.</p> <p><b>Methods</b> Family caregivers of VAIs were engaged in one-on-one face-to-face interviews with a semi-structured interview guide. Interviews, audio-recorded, were transcribed verbatim. Reflexive thematic analysis was adopted for data analysis.</p> <p><b>Results</b> Findings reported in this presentation were drawn from data collected from five caregivers including parents, husband, and children of VAIs suffering from Amyotrophic Lateral Sclerosis, Myasthenia Gravis and Muscular Dystrophy. Length of caregiving varies from 2 to 21 years. Participants shared that care of VAIs is a life-changing event, and their coping intertwines systemically with VAIs' coping and illness trajectory across the bio-psycho-social-spiritual levels. Distress was intensified whenever crisis hit. Caregiving was most intolerable when VAIs' mental capacity became non-assessable. Lack of nuanced understanding of VAIs and their caregivers by developers of health product design, healthcare service and financing system as well as members of larger society impeded caregivers from seeking help and contributed to poor coping. Participants drew strength from their bond with VAIs and actively sought for positive experiences by constructing new meanings and perspectives in life, which seems to have positive effect in caregivers' coping with bereavement after VAIs' demise.</p> <p><b>Discussion &amp; Conclusion</b> Findings suggest a need for family lifespan perspective in planning services for VAIs to mitigate stressors experienced by family caregivers, coupled with nuanced understanding on systemic effects. Healthcare professionals may be well advised to focus on possibilities instead of VAI's debilitating illness trajectory when supporting the caregivers.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1514	Public Health / Clinical Epidemiology
<p><b>Authors</b> A.H.Y.HO<sup>1</sup>, G.TAN-HO<sup>1</sup>, S.H.W.MA<sup>1</sup> <sup>1</sup>Nanyang Technological University (Singapore)</p> <p><b>Title</b> Mindful Compassion Art-Based Therapy for Dementia Care (MCAT-DC): Results from a Waitlist Randomized Control Trial in Singapore</p> <p><b>Background &amp; Hypothesis</b> Mindful-Compassion Art-based Therapy for Dementia Care (MCAT-DC) is developed to alleviate caregiver stress and burnout as well as foster resilience and self-care among family dementia caregivers. It is a multicomponent, group-based psycho-socio-spiritual intervention that integrates mindfulness meditation, creative expression, and reflective awareness in four weekly 2.5-hour standardized sessions delivered virtually via the Zoom platform.</p> <p><b>Methods</b> This study adopted a waitlist randomized controlled trial design to test the effectiveness of MCAT-DC. 100 family dementia caregivers were recruited and randomized into either the treatment group (n=46) or waitlist control (n=44).</p> <p><b>Results</b> Between-group analysis with Mann-Whitney U test revealed significant reduction in perceived stress [z=-2.34, p=.019, r=.247], and significant enhancement in resilience [z=-2.02, p=.044, r=.213], and Hope [z=-1.96, p=.050, z=.207] among caregivers in the treatment group as compared to waitlist control immediately post-intervention. Friedman test with follow-up Wilcoxon Signed Rank test with caregivers in the treatment group showed significant decrease in caregiving burden and anxiety, as well as significant increase in overall spiritual wellbeing and sense of peace immediate post-intervention with maintenance effect at 3-months and 6-month. Furthermore, caregiver in treatment group experienced elevated life meaning and faith at 3- and 6-month post intervention.</p> <p><b>Discussion &amp; Conclusion</b> These findings reflect MCAT-DC's robust efficacy in safeguarding family dementia caregivers' wellbeing and promoting healthy, sustainable caregiving. MCAT-DC is also highly accessible and scalable with its virtual delivery format. Experiential narratives of caregivers will be shared with a discussion on practice implications.</p>	



**SHBC 2023 SCIENTIFIC COMPETITION**  
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**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1517	Public Health / Clinical Epidemiology
<p><b>Authors</b> G.M.J.TOH<sup>3</sup>, E.J.LIM<sup>3</sup>, H.GUO<sup>3</sup>, Z.J.L.HILDON<sup>1</sup>, T.Chua<sup>2</sup>, B.H.Teo<sup>2</sup>, A.Chow<sup>3</sup></p> <p><sup>1</sup>National University of Singapore, <sup>2</sup>Singapore Veterinary Association, <sup>3</sup>Tan Tock Seng Hospital (Singapore)</p>	
<p><b>Title</b> A Cross-Sectional Study of the Knowledge and Antibiotic Practices of Pet Owners for their Pets in Singapore</p>	
<p><b>Background &amp; Hypothesis</b> Poor antibiotic practices, due to poor knowledge, drive antimicrobial resistance (AMR). However, assessment of these concepts in relation to companion animals has been sparse despite a rich literature body of that in humans. Therefore, this study sought to assess pet owners' knowledge of antibiotic use and AMR, and their antibiotic practices for their pets and themselves.</p>	
<p><b>Methods</b> We administered a cross-sectional survey on 380 pet cat and dog owners from 7 veterinary clinics in Singapore from March to June 2023. Respondents were assessed for their knowledge of antibiotic use and AMR (WHO Antibiotic Resistance Multi-Country Public Awareness Survey), and antibiotic practices (Guo et al 2022) for their pets and themselves. Questions were contextualised to the veterinary setting.</p>	
<p><b>Results</b> The 380 pet owners were predominantly younger in age (median: 37 (IQR=18) years), female (63%), Chinese (73%) and have a higher education level (87%). Only 49% of respondents displayed good knowledge of antibiotic use in pets. Contrastingly, 62% demonstrated good knowledge of antibiotic use in humans. Only 2 (0.5%) respondents were knowledgeable about AMR in pets while 15 (4%) respondents were knowledgeable on AMR in humans. Whilst over half (56%) of pet owners reported appropriate antibiotic practices for themselves, only one-third (34%) reported appropriate antibiotic practices for their pets.</p>	
<p><b>Discussion &amp; Conclusion</b> The knowledge of antibiotic use and AMR, and appropriate antibiotic practices for pets are inadequate, and discrepant with similar concepts for humans. There is an urgent need to address this gap through pet owners' education on antibiotic use and AMR in the veterinary setting.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1518	Anaesthesiology
<p><b>Authors</b>  A.CHIA<sup>2</sup>, E.SEET<sup>2</sup>, I.CAI<sup>2</sup>, S.LOW<sup>2</sup>, T.SUBRAMANIAM<sup>1</sup>, S.C.LIM<sup>2</sup>  <sup>1</sup>Admiralty Medical Centre (Singapore), <sup>2</sup>Khoo Teck Puat Hospital (Singapore)</p> <p><b>Title</b> An intervention study on the effectiveness of compression stocking on overnight fluid shift and obstructive sleep apnea</p> <p><b>Background &amp; Hypothesis</b>  Rostral fluid shift at night contributes to worsening of obstructive sleep apnoea(OSA). As leg fluid volume decreases overnight, neck fluid volume increases correspondingly. Neck fluid volume increase predisposes to upper airway collapse and OSA. We investigated (1)if simple non-invasive intervention of compression stocking worn during day-time reduces leg swelling and body water distribution, and attenuates OSA, and (2)tolerability of wearing compression stocking.</p> <p><b>Methods</b>  We conducted before-and-after study of 24 patients with moderate-high risk OSA(STOP-Bang score<math>\geq</math>3) or mild excessive to severe excessive daytime sleepiness(Epworth sleepiness scale 11-24 points). The participants wore below-the-knee compression stock for 2 weeks. Assessment of body water distribution through bio-impedance analysis, measurement of calf circumference, and measurement of oxygen desaturation index (ODI) in sleep test were performed before and 2 weeks after compression stocking wearing. Paired t-test or Wilcoxon signed-rank test was used to compare pre-and post-intervention parameters.</p> <p><b>Results</b>  Mean age was 53.1<math>\pm</math>8.8 years. Extracellular-to-total body water (ECW/TBW) ratio was reduced from 0.386<math>\pm</math>0.009 to 0.382<math>\pm</math>0.009(p=0.017). Reduction of ECW/TBW ratio was more pronounced in lower limbs(left 0.393<math>\pm</math>0.011kg to 0.386<math>\pm</math>0.009kg, p=0.010; right 0.388<math>\pm</math>0.011kg to 0.384<math>\pm</math>0.013kg, p=0.039) than upper limbs. Calf circumference was reduced from 41.4<math>\pm</math>4.9cm to 40.3<math>\pm</math>4.5cm (p=0.004). ODI improved with reduction from 5.0 events/hr(IQR 2.1-15.9) to 3.5 events/hr (IQR 1.6-7.2) (p=0.033). 79.2% of participants reported comfort level score <math>\geq</math>8.</p> <p><b>Discussion &amp; Conclusion</b>  Compression stocking was effective in improving body water distribution, calf swelling and ODI. The tolerability of wearing compression stocking is high. Compression stocking is potentially useful for ameliorating OSA.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION  
ACCEPTED ABSTRACTS  
ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1524	Public Health / Clinical Epidemiology
<p><b>Authors</b> G.M.J.TO<sup>3</sup>, H.GUO, Z.J.L.HILDON<sup>1</sup>, T.CHUA<sup>2</sup>, B.H.TEO<sup>2</sup>, A.CHOW <sup>1</sup>National University of Singapore, <sup>2</sup>Singapore Veterinary Association, <sup>3</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Shared Decision Making between Pet Owners and Veterinary Practitioners in Singapore: A Cross-Sectional Investigation with Empowerment</p> <p><b>Background &amp; Hypothesis</b> Shared-decision making (SDM) on treatment decisions for companion animals between pet owners and vets is not well understood. Empowerment could be an associated factor. Therefore, we sought to explore empowerment factors influencing pet owners' engagement in SDM during veterinary consultations for their pets.</p> <p><b>Methods</b> We conducted a cross-sectional survey on 380 pet owners at 7 veterinary clinics in Singapore from March to June 2023. SDM was assessed using the SDM-Q9 scale (Kriston 2010) and empowerment was assessed using the HCEQ-10 scale (Gagnon 2006). The questions were adapted for the veterinary setting. Multivariable logistic regression models were constructed.</p> <p><b>Results</b> The median age of respondents was 37 (IQR=18) years, with the majority being female (63%), Chinese (73%) and having a higher educational level (87%). 20% and 43% of respondents whose pets received (N=147) and did not receive (N=233) antibiotics, respectively, engaged in SDM. For pets which received antibiotics, pet owners who were empowered to interact with their vets (AOR=16.38, 95% CI [2.99, 89.68]) were more likely to engage in SDM with their vets, after adjusting for potential confounders. For pets which did not receive antibiotics, pet owners who were empowered to have control over treatment decisions (AOR=2.41, 95% CI [1.24, 4.68]) were more likely to engage in SDM with their vets, after adjusting for potential confounders.</p> <p><b>Discussion &amp; Conclusion</b> Under different circumstances warranting different treatments, empowering pet owners in interaction with their vets and control over treatment decisions, respectively, can enhance their engagement in SDM. Interventions targeting SDM between pet owners and vets should be contextualised.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
Abstract ID	Clinical Specialty
SHBC1527	Geriatric Medicine
<p><b>Authors</b> C.S.TAN<sup>1</sup>, K.H.LEE<sup>2</sup></p> <p><sup>1</sup>Khoo Teck Puat Hospital (Singapore), <sup>2</sup>SingHealth Community Hospitals (Singapore)</p> <p><b>Title</b> Nutritional gaps of older adults in community after discharge from hospital: A qualitative study</p> <p><b>Background &amp; Hypothesis</b> Older adults have a higher malnutrition prevalence rate and continue or even deteriorate after hospital discharge. The nutritional care of patients discharged to community is not well established. The study aims to explore nutritional care gap of undernourished older patients when return to the community after episode of acute hospital care.</p> <p><b>Methods</b> This is a descriptive qualitative study. Audio-recorded semi-structured phone interviews were performed with nine patients after they were discharged home. The questions focused on how older adults perceived their nutritional status after discharging home, nutritional care at home and the experience of transition between hospital and home. The data were analysed using inductive content analysis.</p> <p><b>Results</b> Eight themes emerged from this study. In Singapore, family, self-care, and community resources support older adults after discharge home. Self-perception as a burden to family and uncertainty of suitable food to consume have affected older adults' post-discharge. Barriers to post-discharge nutritional care are misconception of nutrition and underlying health conditions, unresolved physiological or medical causes affecting oral intake, poor understanding of malnutrition and unable to recall the recommendations given. Apathy in nutrition impedes older adults in nutrition optimisation post-discharge.</p> <p><b>Discussion &amp; Conclusion</b> Low awareness of undernutrition, misconception of nutrition and underlying health conditions, and unresolved anorexia are factors to consider when designing a post-discharge care model. These issues must be addressed to mitigate the gaps in the nutrition care transition when older adults are discharged to community. A person-centred post-discharge nutrition care plan is essential to ensure the care is impactful and adds value to older adults.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1543	Psychiatry
<p><b>Authors</b> J.A.VAINGANKAR<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup>, B.C.W.TAN<sup>1</sup>, S.S.H.CHANG<sup>1</sup>, B.Y.W.TAN<sup>1</sup>, E.SAMARI<sup>1</sup>, B.Y.CHUA<sup>1</sup>, E.ABDIN<sup>1</sup>, S.SHAFIE<sup>1</sup>, R.SAMABASIVAM<sup>1</sup>, C.Y.Z.TANG<sup>1</sup>, Y.P.LEE<sup>1</sup>, S.A.CHONG<sup>1</sup>, S.VERMA<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Resilience is positively associated with self-esteem and perceived social support in youths: Results from a national survey in Singapore</p> <p><b>Background &amp; Hypothesis</b> Resilience offers long-term benefits to youth mental health and is linked to other protective psychosocial factors. This study aimed to estimate the level of resilience among youths in Singapore and examine its association with self-esteem (SE) and perceived social support (PSS) adjusting for socio-economic factors and body mass index (BMI). It was hypothesized that resilience would be positively and significantly associated with SE and PSS.</p> <p><b>Methods</b> A total of 2600 youths aged 15-35 years participated in this cross-sectional household survey. They were assessed on the self-administered Connor-Davidson Resilience Scale (CDRS), Rosenberg Self-Esteem Scale (RSES), Multi-dimensional Scale of Perceived Social Support (MSPSS), and sociodemographic and health background questionnaires. Total scores and BMI were calculated. Weight-adjusted descriptive and multivariable linear regression analyses were conducted.</p> <p><b>Results</b> Participants' mean age was 25.8 years, and they comprised 71.5% Chinese, 16.4% Malays, 9.1% Indians and 3.1% Other ethnic groups. The mean (SD) CDRS score was 66.9 (16.1) (range: 0-100). Higher CDRS score was associated with being men (vs women), Malay and Indian (vs Chinese) ethnicity, secondary-junior college (vs university) educated, married (vs single) and middle household (vs low) income. Upon adjusting for confounders, CDRS scores were positively and significantly associated with RSES (<math>\beta</math>:2.22,95% CI:2.11-2.36,<math>p&lt;0.001</math>) and total MSPSS (<math>\beta</math>:6.73,95% CI:6.00-7.50,<math>p&lt;0.001</math>) scores.</p> <p><b>Discussion &amp; Conclusion</b> The findings suggest that resilience in youths varies by socio-economic factors and is strongly linked to their SE and PSS. It indicates that interventions for improving resilience of adolescents and young adults need to focus on building their SE and SS resources.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1552	Public Health / Clinical Epidemiology
<p><b>Authors</b> W-Y.LIM<sup>1</sup>, M.Y.LIM<sup>1</sup>, H.P.PHUA<sup>1</sup>, W.LIAN<sup>1</sup>, K.O.KONG<sup>1</sup>, H.L.H<sup>1</sup></p> <p><sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Association between uric acid levels and cardiovascular and renal outcomes among incident gout patients in Singapore</p> <p><b>Background &amp; Hypothesis</b> We investigate the independent relationship between baseline uric acid (UA) level with Acute Myocardial Infarction (AMI), Stroke, End Stage Renal Failure (ESRF) and mortality among individuals with an incident gout diagnosis seen at the specialist outpatient clinics (SOCs) of an acute care tertiary hospital in Singapore.</p> <p><b>Methods</b> A retrospective hospital-based cohort of incident gout patients diagnosed between 2007-2017, identified through (i) primary discharge diagnosis, (ii) diagnosis from the Rheumatology SOC (iii) patient history at Rheumatology SOC plus use of urate- lowering therapy/colchicine. Exposure was defined by baseline UA quartile. Outcomes were ascertained through data linkage with the National Registry of Diseases Office. Cox proportional hazards and Weibull regression models were used to estimate HR and 95% CI, with adjustment for age, gender, race, Charlson Comorbidity Index score, and presence of hypertension, hyperlipidaemia and diabetes.</p> <p><b>Results</b> The final cohort consisted of 2,866 individuals. Post follow-up, there were 800 deaths and 362, 218 and 191 incidences of AMI, ESRF and stroke respectively. Referencing against the lowest UA quartile, being in the highest UA quartile was associated with a significantly increased risk of mortality (HR:1.49, 95% CI:1.23-1.81), incident ESRF (HR:2.82, 95% CI:1.89-4.20), and a non-significantly increased risk of incident AMI (HR:1.33, 95% CI:0.99-1.78). The p-trend for all 3 outcomes was significant (&lt;0.001, &lt;0.001, and 0.033 respectively). No significant association was found between UA quartile and risk of incident stroke.</p> <p><b>Discussion &amp; Conclusion</b> This study found a higher risk of mortality and ESRF in incident gout patients with higher baseline UA level.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1576	Public Health / Clinical Epidemiology
<p><b>Authors</b> Y.B.TAN<sup>1</sup>, B.TAN<sup>1</sup>, B.LIM<sup>1</sup>, S.SHAFIE<sup>1</sup>, S.GUNASEKARAN<sup>1</sup>, S.SHAHWAN<sup>1</sup>, S.A.CHONG<sup>1</sup>, M.SUBRAMANIAM<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Causal beliefs about different mental illnesses among the general public: comparisons with the first mental health literacy study</p> <p><b>Background &amp; Hypothesis</b> The 2014-2015 mental health literacy study in Singapore established a three-factor structure of causal beliefs about mental illnesses (MI) among the public: physical, personality, and psychosocial causes. This study aims to examine changes in these causal beliefs between the 2014-2015 and the ongoing 2022-2023 study.</p> <p><b>Methods</b> A vignette approach was used in the first (N=3006) and second (N=2252) study to elicit people's beliefs about MI. Participants were read a vignette on depression, schizophrenia, obsessive-compulsive disorder, alcohol addiction, or dementia, and were asked how likely different causes resulted in the symptoms. Chi-square tests and multiple logistic regression were used to compare attribution levels of different factors between the two timepoints.</p> <p><b>Results</b> In 2022-2023, MI were most attributed to psychosocial causes (94.4%), followed by personality causes (59.9%), and physical causes (20.0%). Regression analyses found that current participants were less likely to attribute MI to physical (OR=0.59,95%CI:0.47-0.73), personality (OR=0.27,95%CI:0.22-0.34) and psychosocial causes (OR=0.33,95%CI:0.20-0.56) than past participants. As compared to alcohol addiction, current participants were more likely to attribute depression to physical (OR=2.10,95%CI:1.55-2.84), personality (OR=1.42,95%CI:1.02-1.98), and psychosocial causes (OR=5.24,95%CI:1.52-18.0). Dementia was less likely to be attributed to personality (OR=0.64,95%CI:0.47-0.87) and psychosocial causes (OR=0.44,95%CI:0.21-0.91).</p> <p><b>Discussion &amp; Conclusion</b> Our findings suggest a positive shift in public perceptions of the causes of MI. However, despite the lower likelihood of attributing MI to physical and personality causes as compared to 2014-2015, the relatively high attribution to personality causes remains a concern given its association with stigmatizing beliefs.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1577	Public Health / Clinical Epidemiology
<p><b>Authors</b> M.I.S. KHALID<sup>1</sup>, E. ABDIN<sup>1</sup>, V. SEET<sup>1</sup>, A. JEYAGURUNATHAN<sup>1</sup>, S.C. TAN<sup>1</sup>, Y.M. MOK<sup>1</sup>, S. VERMA<sup>1</sup>, M. SUBRAMANIAM<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Impact of changes in depression on functional impairment in patients with depression seeking treatment in a tertiary hospital.</p> <p><b>Background &amp; Hypothesis</b> Current literature shows a correlation between functional impairment and depression, where patients who score lower on depression severity have lower functional impairment. The current study investigates the impact of symptom severity on functioning over a 1-year period amongst patients with depression in Singapore.</p> <p><b>Methods</b> Participants (n=210) were recruited from the Institute of Mental Health's outpatient clinics. Socio-demographic information were collected from the patients, and they were assessed on the Patient Health Questionnaire (PHQ8) and the World Health Organization Disability Assessment Schedule (WHODAS 2.0); where a higher score denotes higher symptom severity and impairment respectively. Participants were recontacted 6-months and 1-year after initial recruitment to complete the same survey inventory.</p> <p><b>Results</b> Over one year, the proportion of patients meeting the clinical cut-off for depression caseness (PHQ <math>\geq 10</math>) significantly decreased from 61.5% (n=171) to 42.4% (n=89) (p &lt; 0.001). Similarly, the mean scores of functioning significantly decreased from 13.5 (SD=8.5) to 11.3 (SD=8.3). A generalized linear regression (GLS) analysis showed that changes in depression caseness over time was significantly associated with the changes in functioning (<math>\beta = 6.7</math>, p &lt; 0.001). Random-effects GLS technique found that ethnicity, education and employment status were also significant predictors of functional impairment.</p> <p><b>Discussion &amp; Conclusion</b> The findings are in line with current literature, highlighting the connection between changes in depression and functional impairment. They underscore the need for further research on the importance of monitoring and addressing symptoms of depression in patients to mitigate functional impairment and the need for interventions that consider socio-demographic characteristics to optimize patient care.</p>	



**SHBC 2023 SCIENTIFIC COMPETITION  
ACCEPTED ABSTRACTS  
ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1581	Public Health / Clinical Epidemiology

**Authors**

W.Y.LIM<sup>1</sup>, M.LIM<sup>1</sup>, H.L.HTUN, W.X.LIAN<sup>1</sup>, H.P.PHUA<sup>1</sup>, T.P.L.QUEK<sup>1</sup>, D.E.K.CHEW<sup>1</sup>

<sup>1</sup>Tan Tock Seng Hospital (Singapore), <sup>2</sup>University of Monash (Australia)

**Title**

Visit-to-visit HbA1c variability and one-year risk of all-cause and potentially avoidable hospitalisations among adult Type 2 Diabetes Mellitus (T2DM) patients: A cohort study

**Background & Hypothesis**

We examined the association between visit-to-visit HbA1c variability and the one-year risk of all-cause hospitalizations and Potentially Avoidable Hospitalizations (PAH).

**Methods**

A retrospective closed cohort study was conducted on adult type 2 diabetes patients managed in outpatient clinics of a tertiary hospital (TTSH) with  $\geq 3$  HbA1c tests over two years, measured between 2009-2017. PAH and its subgroups were defined using Agency of Healthcare Research and Quality criteria. HbA1c variability was assessed using intra-individual visit-to-visit Coefficient of Variation (COV) and Variation Independent of Mean (VIM), divided into quartiles. Modified Poisson regression was used to assess the relationship between HbA1c variability and subsequent hospitalization.

**Results**

The cohort comprised 14923 patients (mean age: 62.9 $\pm$ 12.8 years; 55.2% men). Compared to the lowest COV quartile, patients in the highest quartile had higher relative risks (RR) for all-cause hospitalization (RR: 1.19, 95%CI: 1.09-1.30), overall PAH (RR: 1.37, 95%CI: 1.16-1.61), diabetes-related (RR: 2.15, 95%CI: 1.51-3.05), non-diabetes-related (RR: 1.22, 95%CI: 1.01-1.47), acute (RR: 1.42, 95%CI: 1.08-1.86) and chronic PAH (RR: 1.36, 95%CI: 1.11-1.66). The linear p-trend values were significant for all associations except non-diabetes-related PAH. Compared to the lowest quartile for VIM, patients in the highest quartile had higher RR for all-cause hospitalization (RR: 1.15, 95%CI: 1.07-1.24), overall PAH (RR: 1.19, 95%CI: 1.04-1.37), diabetes-related (RR: 1.81, 95%CI: 1.39-2.36) and acute PAH (RR: 1.29, 95%CI: 1.02-1.63). The linear p-trend for all these associations were also statistically significant.

**Discussion & Conclusion**

Higher HbA1c variability was associated with higher subsequent risks of all-cause hospitalization, and PAH.

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1614	Public Health / Clinical Epidemiology
<p><b>Authors</b> Y.HAO<sup>2</sup>, VPX.LIEN<sup>1</sup>, MPHS.TOH<sup>2</sup> <sup>1</sup>MOH Holdings Pte Ltd (MOHH) (Singapore), <sup>2</sup>National Centre for Infectious Diseases (Singapore)</p> <p><b>Title</b> High COVID-19 vaccination coverage among healthcare workers despite having reservations to be vaccinated</p> <p><b>Background &amp; Hypothesis</b> COVID-19 vaccine was rapidly developed within months and was offered free to all healthcare workers (HCW). Some HCW were concerned about safety and efficacy of the novel mRNA vaccine. Our study aims to understand the concerns of HCW on the new COVID-19 vaccination, their motivation for vaccination and eventual coverage.</p> <p><b>Methods</b> All HCW working at the National Centre for Infectious Diseases were invited to participate in an anonymous online survey from July to August 2022. Participants were asked about their concerns and reservations on the COVID-19 mRNA vaccine, and motivational factors to be vaccinated. Comparison was made between family groups of HCW. Significance testing of proportions was carried out using One-way ANOVA and Chi-square test, where a p value less than 0.05 was considered significant.</p> <p><b>Results</b> There were 207 completed responses (response rate of 29.8%). Coverage with COVID-19 vaccination was 99%, though 22.7% of them had initial reservations about the COVID-19 vaccine. Most were concerned about short- and longer-term side effects and efficacy of a new vaccine. The main motivators for vaccination among those without reservations were 'confidence in the drug approval process and safety profile' (70.0%), 'better understanding of the vaccines' (63.3%) and 'fear of illness or disease' (61.3%). For those with reservations, the main motivators included 'pressure from workplace' (61.7%), 'vaccine differentiated measures' (40.4%).</p> <p><b>Discussion &amp; Conclusion</b> Despite having reservations about the new COVID-19 vaccine, almost all HCW were vaccinated. Continued situational updates and efforts to address concerns can reduce vaccine hesitancy among HCW.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1625	Endocrinology
<p><b>Authors</b> B.K.LIM<sup>2</sup>, M.C.MOH<sup>2</sup>, M.K.YONG<sup>2</sup>, S.N.SHAHUL HAMEED<sup>2</sup>, B.PANDIAN<sup>2</sup>, A.M.H.LIM<sup>2</sup>, T.Y.LEE<sup>1</sup>, M.MAHADI<sup>1</sup>, S.K.M.LOW<sup>2</sup>, Y.M.LUAH<sup>1</sup>, S.Y.J.HAN<sup>2</sup>, V.V.SEOW<sup>2</sup>, C.C.B.LAM<sup>2</sup>, S.TAVINTHARAN<sup>2</sup>, C.F.SUM<sup>1</sup>, S.C.LIM<sup>2</sup> <sup>1</sup>Admiralty Medical Centre (Singapore), <sup>2</sup>Khoo Teck Puat Hospital (Singapore)</p> <p><b>Title</b> Preliminary experience of the effectiveness of an intensive calorie restriction-based diabetes remission programme on multi-ethnic Asians with obesity and type 2 diabetes</p> <p><b>Background &amp; Hypothesis</b> Type 2 diabetes (T2D) can potentially go into remission through intensive diet control, but the performance of such intervention in the Asian phenotype of T2D is unclear. We assessed the effectiveness of a tri-phasic very low-calorie diet-based Diabetes Remission Programme on weight loss and diabetes remission among multi-ethnic Asians.</p> <p><b>Methods</b> Adults with body mass index (BMI) of 27-45 kg/m<sup>2</sup> and recently-diagnosed T2D (duration 0–6 years) were enrolled into the programme since July 2022. The 2-year programme comprised three phases: total diet replacement (TDR), food reintroduction (FR), and weight maintenance (WM). Percentage total weight loss (%TWL) was calculated. Diabetes remission was defined as HbA1c&lt;6.5%, fasting plasma glucose&lt;7 mmol/L and off glucose-lowering medications</p> <p><b>Results</b> Currently, 16 individuals (age:34±7 years, 68.8% men, BMI:35.1±4.2 kg/m<sup>2</sup>, HbA1c:6.94±1.40%) have participated, of which 12 and 11 have completed TDR and FR, respectively. WM results are pending. A 5% TWL was observed in the first month of TDR. Body weight reached nadir on TDR completion, achieving 8.5% TWL (from baseline 103.2 to 94.0 kg, P=0.003). Seventy-five percent (n=9/12) of participants attained diabetes remission. During food reintroduction, weight re-gained from 94.0 to 98.4 kg (P=0.003; 4.3% TWL) and remission decreased to 63.6% (n=7/11), attributed to one case of diabetes relapse. Two participants shifted from ≥10% TWL category to 5-9.9% TWL category, but remained in remission. Remitters had a greater weight loss than non-remitters.</p> <p><b>Discussion &amp; Conclusion</b> Asians responded favourably to the programme, achieving a high diabetes remission rate despite variable magnitude of weight loss.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1632	Dermatology
<p><b>Authors</b> A.UTAMA<sup>1</sup>, R WIJESINGHE<sup>1</sup></p> <p><sup>1</sup>National Skin Centre (Singapore)</p> <p><b>Title</b> The dawn of a new era for the treatment of vitiligo: JAK inhibitors</p> <p><b>Background &amp; Hypothesis</b> With recent advancements in understanding the pathology of vitiligo, several studies have been conducted with Janus Kinase Inhibitors (JAKi), showing promising results. This scoping review aims to assess the emerging field of JAKi for vitiligo.</p> <p><b>Methods</b> A systematic literature search was conducted on databases Medline and EMBASE using the terms ‘JAK inhibitor’ OR ‘Janus Kinase Inhibitor’ AND ‘vitiligo or hypopigmentation or hypomelanosis.’</p> <p><b>Results</b> Twenty-three observational (case reports/series) and 11 experimental trials were selected for review, involving 1380 patients. Topical ruxolitinib 1.5% cream was studied in 853 patients leading to its approval in the US and EU for the treatment of non-segmental vitiligo in patients &gt;12 years of age. Another 364 patients showed accelerated improvement when given a loading dose of oral ritlecitinib 200mg followed by a maintenance dose of 50mg. Oral tofacitinib was studied in 100 patients and more often in observational studies with 5-10mg doses given up to twice-daily. Topical tofacitinib 2% twice-daily was dosed in combination with phototherapy or topical steroids in 35 patients. Other JAKi studied included oral baricitinib, upadacitinib, ruxolitinib and topical delgocitinib. Study durations ranged from minimally 12 weeks in case reports, and up to 52 weeks in experimental studies. Overall, facial vitiligo responded more robustly to JAKi in 40.9% of patients compared to other parts of the body. However, methods to assess efficacy varied.</p> <p><b>Discussion &amp; Conclusion</b> Therapeutic options for vitiligo are expanding with the approval of topical ruxolitinib. Nevertheless, the evidence for efficacy to recommend other JAKi were limited due to inadequate power of the studies.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1636	Dermatology
<p><b>Authors</b> R. WIJESINGHE<sup>1</sup>, A. UTAMA<sup>1</sup></p> <p><sup>1</sup>National Skin Centre (Singapore)</p> <p><b>Title</b> Are Janus Kinase inhibitors effective in vitiligo patients with skin of color?</p> <p><b>Background &amp; Hypothesis</b> Vitiligo patients with skin of color can be particularly distressed by the appearance of depigmented patches causing a starker color contrast than lighter skin types, leading to social stigmatization. For physicians, the management approach for darker Fitzpatrick skin types (FST) graded IV-VI, can be specially challenging. This scoping review aims to assess the current evidence of the effectiveness of Janus Kinase inhibitors (JAKi) in the treatment of vitiligo in patients with skin of color.</p> <p><b>Methods</b> Medline and EMBASE databases were searched using the terms 'JAK inhibitor' OR 'Janus Kinase Inhibitor' AND 'vitiligo or hypopigmentation or hypomelanosis.'</p> <p><b>Results</b> Ruxolitinib 1.5% cream which was studied in 674 patients leading to its approval for vitiligo, found that it restored pigment in about one-third of patients, but demographic diversity was limited with only 27.9% of subjects having a FST <math>\geq</math> IV. Five patients with FST <math>\geq</math> IV improved more than those with lighter skin types with tofacitinib 2% cream however, concomitant treatment was allowed. A pilot study with tofacitinib 5mg tablet daily in combination with phototherapy showed only a 10% repigmentation in one patient and no improvement in another. Contrastingly, another case reported almost complete repigmentation with tofacitinib 5mg twice-daily with concomitant phototherapy.</p> <p><b>Discussion &amp; Conclusion</b> FST IV has the second highest prevalence of vitiligo worldwide, with an occurrence rate of 0.4%, and Indian subcontinent having the highest proportion geographically at 9.98%. However, it was observed that fewer patients with skin of color are enrolled in JAKi clinical trials limiting representativeness, and concomitant treatment in reported cases, clouding assessment.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

<b>Abstract Details</b>	
<b>Abstract ID</b>	<b>Clinical Specialty</b>
SHBC1642	Public Health / Clinical Epidemiology

**Authors**

MPHS.TOH<sup>2</sup>, VPX.LIEN<sup>1</sup>, Y.HAO<sup>2</sup>

<sup>1</sup>MOH Holdings Pte Ltd (MOHH) (Singapore), <sup>2</sup>National Centre for Infectious Diseases (Singapore)

**Title**

Willingness of healthcare workers to receive annual COVID vaccines and variant-specific boosters

**Background & Hypothesis**

Multiple sub-variants of SARS-CoV-2 have emerged since 2020. New COVID vaccines were developed rapidly and showed effectiveness to prevent serious COVID infection. Some healthcare workers (HCW) are concerned about safety and efficacy of new mRNA vaccines. Our study aims to assess HCW's willingness to receive annual COVID vaccine or variant-specific booster.

**Methods**

An anonymous online survey inviting all HCW at NCID to participate in July 2022. Participants responded if they had reservation to the COVID-19 mRNA vaccine and their willingness to receive annual or variant-specific boosters in future. Comparison was made between family groups of HCW. Significance testing of proportions was carried out using One-way ANOVA and Chi-square test, where a p value less than 0.05 was considered significant.

**Results**

Of the 207 respondents, though with 99% coverage of COVID-19 vaccination, 22.7% had initial reservations about the COVID-19 vaccine. Most were concerned about short- and longer-term side effects and vaccine efficacy of a new vaccine. About 80.2% indicated acceptance of yearly COVID-19 vaccine or variant-specific boosters if available in future. Younger respondents <40 years old were more likely to accept the new vaccines compared to those 40+ years (85.5% vs 65.6%, p=0.011). There was no significant difference across job groups.

**Discussion & Conclusion**

Most HCW received primary course of COVID-19 vaccine despite some having reservations about vaccine efficacy and safety, and expressed willingness to receive variant-specific COVID vaccines in future. Concerns of older HCW need to be addressed to increase acceptance and coverage of future variant-specific boosters.

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1644	Public Health / Clinical Epidemiology
<p><b>Authors</b> MPHS.TOH<sup>2</sup>, VPX.LIEN<sup>1</sup>, Y.HAO<sup>2</sup> <sup>1</sup>MOH Holdings Pte Ltd (MOHH) (Singapore), <sup>2</sup>National Centre for Infectious Diseases (Singapore)</p> <p><b>Title</b> Fear of COVID-19 among healthcare workers and their response to receive primary course of COVID vaccine</p> <p><b>Background &amp; Hypothesis</b> Healthcare workers (HCW) were at-risk of being infected by patients with SARS-CoV-2. New COVID vaccines were developed rapidly and HCWs were invited to receive them. Our study assesses HCW's degree of fear of COVID-19 infection and response to be vaccinated with primary course of COVID-19 vaccine.</p> <p><b>Methods</b> HCWs at NCID were invited to an online anonymous survey in July 2022. Participants rated their fear of COVID infection before the availability of COVID-19 vaccine and time taken to register for first vaccine after being eligible. Comparison was made between family groups of HCW. Significance testing of proportions was carried out using Chi-square test, where a p value less than 0.05 was considered significant.</p> <p><b>Results</b> Of 207 respondents, 31.9% were "afraid" or "very afraid" of COVID infection prior to vaccine availability. Those with exposure to patients or laboratory samples were more likely to express fear (<math>p=0.021</math>). Proportion who remained fearful decreased after vaccine was available. There was no association between fear of COVID-19 and time to register for primary vaccine course: 36.7% registered within 1 week of being eligible, 33.3% (1 week to 1 month), and 8.7% (after 3 months). Eventually 99% of respondents were vaccinated.</p> <p><b>Discussion &amp; Conclusion</b> HCW with direct patient contact expressed more fear towards COVID-19 prior to COVID-19 vaccine availability and level of fear decreased after vaccination was introduced. Majority was eventually vaccinated though some took longer to respond. Understanding and addressing the concerns of HCW towards new vaccine may reduce hesitancy to be vaccinated.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1648	Psychiatry
<p><b>Authors</b> L.H.LING<sup>1</sup>, V. THAMBYRAJAH<sup>1</sup>, J. W. B. LIM<sup>1</sup>, M. S. Q CHNG<sup>1</sup>, N. F JUMARI<sup>1</sup>, H. MOHAMMED SIDEK<sup>1</sup>, Y. J TAN<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Maintaining Therapeutic Engagement with Patients Reduce Appointment Default Rates</p> <p><b>Background &amp; Hypothesis</b> Case Managers had observed that the likelihood of illness relapse, unnecessary hospitalization and suicide risk can be greatly reduced when there is support and rapport with patients. In this paper, data collected showed that appointment default rates can be reduced by maintaining good therapeutic engagement with patient.</p> <p><b>Methods</b> Between June 2022 to May 2023, the appointment default rates were monitored and collated in North region of Singapore. Appointment type was categorized into First Visit (which includes Emergency First Visit after visited Acute &amp; Emergency Service and First Visit after patient discharged from the ward) and Repeated Visit when patients continue their follow up after their first appointment. Case Managers will monitor the patient's appointment, provide telephonic follow up and medication compliance as well as providing psychoeducation on their issues and psychiatric condition.</p> <p><b>Results</b> Result shows that 52 patients out of 112 patients have defaulted their First Visit appointments and 239 patients out of 1219 patients have defaulted their Repeated Visit appointments. The result revealed that the underlying non-compliance behaviors were unintentional such as forgetfulness and sickness. The result also showed that through building rapport with patients does reduce the appointment default rates. However, there is still a group of patients who refused treatment or uncontactable that contributed to the appointment default rate.</p> <p><b>Discussion &amp; Conclusion</b> Case Managers continue to address the importance of appointment and medication compliance which greatly increase the insight of the patients. The therapeutic engagement between the Case Managers and patients have allowed many patients benefited, thus reducing the appointment default rate.</p>	



**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1649	Rehabilitation Medicine
<p><b>Authors</b> M. S. QUEK<sup>2</sup>, C. W. OEI<sup>2</sup>, Y. H. GOH<sup>2</sup>, P. L. ONG<sup>2</sup>, C. CHUNG<sup>2</sup>, P. W. KONG<sup>1</sup>, D. CHUA<sup>2</sup>, X.ZHANG<sup>2</sup>, K. H. LEO<sup>2</sup></p> <p><sup>1</sup>Nanyang Technological University (Singapore), Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Deployment of a predictive model for prognosticating prosthetic ambulation ability in early post-operative lower limb amputees</p> <p><b>Background &amp; Hypothesis</b> This study aims to develop a prognostication model in the early post-operative phase to predict an amputee's ability to ambulate with a prosthesis post rehabilitation, with the goal of deploying an application to assist the multi-disciplinary team's decision making.</p> <p><b>Methods</b> A retrospective study was conducted on patients with lower limb amputation and received rehabilitation in a tertiary public hospital, from June 2018 to June 2020. Features collected as prognostic factors included patient demographics, amputation-related features, Functional Comorbidity Index (FCI) score and components, functional status at the early post-operative phase and more. Recursive Feature Elimination was first employed for feature selection. Machine Learning algorithms were then used to train the model. The best performing model was deployed as an application.</p> <p><b>Results</b> The 2-class model predicts a patient's functional status post rehabilitation to be either non-ambulant or ambulant with prosthesis. The model selected 5 predictive factors including age, ethnicity, FCI score, pre-morbid ambulatory status and level of amputation. The model showed good performance, with accuracy and AUROC being 0.817 and 0.810 respectively.</p> <p><b>Discussion &amp; Conclusion</b> The 2-class model is currently embedded into an application to collect both the multi-disciplinary team's and model's prediction for further validation and model tuning. The model prediction also aids in right siting of patients to appropriate rehabilitation settings for prosthetic rehabilitation.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION  
ACCEPTED ABSTRACTS  
ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1651	Community Health
<p><b>Authors</b> Q.J.ANG<sup>1</sup></p> <p><sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> The role of link workers in social prescribing among pre-frail and frail community dwelling adults in Singapore.</p> <p><b>Background &amp; Hypothesis</b> Link workers, such as Community Care Integrators (C2is) deployed from the Agency of Integrated Care (AIC) to Tan Tock Seng Hospital's Community Health Team, social prescribe individuals to community resources to complement holistic well-being. This study aims to review the utility of C2is in right siting community resources for pre-frail and frail community dwelling adults.</p> <p><b>Methods</b> Data was collected from 250 adults referred from Polyclinics to C2is over a period of 11 months. Mean age was 76 with CFS scores ranging 2 to 4. They received care interventions from C2is over an enrolment call, social prescribe as deemed required and a follow-up interview or home visit was conducted at 1 month post enrolment to review actualization of care plans. Demographic data, self-reported lifestyle and behavioral information were collected.</p> <p><b>Results</b> 52.8% (n=250) of patients contacted accepted lifestyle recommendations. Of them, 91% (n=132) was referred to community exercise programmes and/or social activities referrals to an Active Ageing Centre (AAC). 9% was referred to Community Health Post (CHP) for health coaching. Of the 47.2% (n=250) drop-outs, 30% reports constraints of work, 11% for personal reasons, 8% due to social issues and 30% reported independent and active in the community while 21% express no interest in the available programmes.</p> <p><b>Discussion &amp; Conclusion</b> This study accentuates the need for a link worker to connect community resources in complementing holistic well-being. While the value of C2i in social prescribing and care coordination addressed the current practice care gaps, future studies can examine health outcomes impacted by link work.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION**  
**ACCEPTED ABSTRACTS**  
**ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1662	Cardiology
<p><b>Authors</b> TH.CHUANG<sup>1</sup>, KFC. LI<sup>1</sup>, JH. CHAI<sup>1</sup>, NK. WILKINSON<sup>1</sup>, HH. HO<sup>1</sup></p> <p><sup>1</sup>Tan Tock Seng Hospital (Singapore)</p> <p><b>Title</b> Report on the Reduction of Radiation Dose by Using Optimized C-arm Angulation in Invasive Cardiac Laboratory.</p> <p><b>Background &amp; Hypothesis</b> In this report, we aimed to test the practical application of this theory by using optimized C-arm angulation in our invasive cardiac laboratory. Our goal was to adhere to the ALARA (As Low As Reasonably Achievable) principle for the benefit of patients and medical staff.</p> <p><b>Methods</b> Radiation dose data, specifically dose-area product, were collected from a database of 205 diagnostic catheterizations and 244 percutaneous coronary interventions performed by two different radiographers. One radiographer followed the usual practice (Control arm), while the other used optimized C-arm angulation (Intervention arm).</p> <p><b>Results</b> All the results showed a reduction in mean DAP/min in the intervention arm. The DCs group exhibited a 44% reduction, and the PCIs group exhibited a 14% reduction in the mean radiation dose (Figure 1). These findings illustrate that cine acquisition was more sensitive to changes in angulation compared to fluoroscopy. Additionally, there was a trend towards reduction in radiation dose for PCIs performed on the left coronary arteries. However, the radiation reduction for PCIs performed on the right coronary artery was inconclusive due to the large standard deviation (Figure 2). The positive results regarding PCI to the left coronary arteries suggest a greater reduction in radiation with shallow cranial-caudal projection compared to oblique projection.</p> <p><b>Discussion &amp; Conclusion</b> Despite some discrepancies between previous research and this study, optimized C-arm angulation still demonstrated its potential in reducing radiation dose in the catheterization laboratory. Our study suggests avoiding unnecessary extreme C-arm angulations. Although the results generally showed a reduction in radiation dose.</p>	

**SHBC 2023 SCIENTIFIC COMPETITION  
ACCEPTED ABSTRACTS  
ABSTRACT CATEGORY: Allied Health**

Abstract Details	
Abstract ID	Clinical Specialty
SHBC1669	Psychiatry

**Authors**

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<sup>1</sup>Institute of Mental Health (Singapore)

**Title** Ensuring Patient-Centred Care through Reviewing the Needs and Risks Assessments (NARA) scores

**Background & Hypothesis**

The Hougang-Serangoon-Community-General Practitioner Programme (HOUSE CGP) started since 2020. The team consists of Doctors, Nurses and Allied Health Professionals (e.g., Case Managers and Medical Social Workers), who meet annually to discuss/moderate the Needs and Risks Assessment (NARA) scores of patients living in high-profile areas. This helps to monitor the risk profiles of these patients over time and intervene immediately if their risks escalate.

**Methods**

Data mining was done for patients whose NARA scores were reviewed from 2020 to 2023. The results were processed using Microsoft Excel.

**Results**

42 patients were reviewed. There are 29 females and 13 males, following country's racial distribution, majority are Chinese. Age profiling shows that ~21% are 18-30 years old, ~62% are 31-60 years old and ~17% are aged >61 years old. The annual NARA review resulted in a 70% and 45% decrease in high and moderate risk cases respectively. The team also arranged virtual and face-to-face meetings with community partners to build relationships. This helped in supporting the patients. The Case Manager also psycho-educated patients and caregivers, to ensure adherence to follow-up appointments and medication compliance. This resulted in a 9.5% readmission rate and 76.2% actualization rates in future appointments. Two patients (4.7%) were also successfully referred to our Mental Health General Practitioner-Partnership Programme.

**Discussion & Conclusion**

The HOUSE CGP team connects regularly with community partners to support patients with high risks and ensure treatment compliance. This is important because treatment compliance is crucial to ensure recovery for persons with mental health issues (Roe & Davidson, 2017).

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1671	Endocrinology
<p><b>Authors</b> T.K.KWAN<sup>1</sup>, S, J.J.LIU<sup>1</sup>, K.ANG<sup>1</sup>, C.U.UBEYNARAYANA<sup>1</sup>, S.LOW<sup>1</sup>, F.F.M.CHONG<sup>2</sup>, S.C.LIM<sup>1</sup> <sup>1</sup>Khoo Teck Puat Hospital (Singapore), <sup>2</sup>NUS Saw Swee Hock School of Public Health-Singapore Institute for Clinical Sciences (SICS) (Joint)</p> <p><b>Title</b> Association of PURE healthy diet score with cognitive frailty in Singapore's Type 2 Diabetes population</p> <p><b>Background &amp; Hypothesis</b> The PURE study developed a healthy diet score (PHDS) that is associated with health outcomes. Physical frailty and cognitive impairment are common non-vascular complications in patients with Type 2 Diabetes (T2D). This study aims to explore the relationship between PHDS and cognitive frailty in Singapore's T2D context.</p> <p><b>Methods</b> This cross-sectional study includes 1145 T2D participants from the SMART2D cohort (mean age 61.9±11.5yrs). PHDS scores the intake of 6 food groups assessed via Food Frequency Questionnaire above or below the median. Frailty score is derived from the FRAIL scale, and cognitive function using the Mini-Mental State Examination(MMSE). The participants are stratified into 5 groups based on PHDS, from group 1-5 (least healthy to healthiest diet). <math>\chi^2</math> test and ANOVA are applied to analyse the differences in cognitive frailty across groups.</p> <p><b>Results</b> MMSE (<math>p&lt;0.001</math>) and frailty score (<math>p&lt;0.023</math>) differ significantly across PHDS quintiles. Handgrip strength (<math>p&lt;0.001</math>), skeletal muscle mass (<math>p=0.008</math>), and bone mineral content(<math>p=0.003</math>) are associated with PHDS. Participants from group 1 have poorer cognitive function compared to group 5 (<math>p&lt;0.001</math>). The primary difference is observed between groups 1 and 3 (<math>p=0.011</math>), 4 (<math>p&lt;0.001</math>) and 5 (<math>p&lt;0.001</math>). Participants from group 1 are more frail as compared to group 5 (<math>p=0.009</math>). The primary difference is observed between groups 1 and 4 (<math>p=0.027</math>) and 5 (<math>p=0.029</math>).</p> <p><b>Discussion &amp; Conclusion</b> Higher PHDS is associated with lower risk of cognitive frailty. Further longitudinal studies are warranted to determine whether a healthy diet may effectively mitigate the risks of frailty and cognitive function decline in the T2D population.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1672	Mental Health (Aftercare Service)
<p><b>Authors</b> W.C.TAN<sup>1</sup></p> <p><sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Re-inventing Aftercare Service Model: A collaborative approach with stakeholders (community partners) and caregivers and its impact on patients' wellbeing and recovery.</p> <p><b>Background &amp; Hypothesis</b> The Mental Health Blueprint initiative in 2007 helped revamp the community mental healthcare services which was fragmented and kickstarted a movement towards these services, with the outset of community-based programmes since 2001 (Chong, 2007, p. 88-89). With ageing population, individuals face more hurdles in managing complex medical needs and social concerns. The elderly with physical and mental disabilities faces ageism against them in their contribution to the workforce (Teo et al., 2006, p. 66-67). The Community Mental Health (CMH) Masterplan in 2012 aims to improve accessibility to mental health care, strengthening capability in these service providers and accelerate early detection and access to care, especially for persons with Dementia (MOH, 2022). The study examines the service utilization of patients, caregivers and the the collaboration with stakeholders within Ang Mo Kio and Sin Ming estates since 2014. It serves to enhance the mental health and care of individuals.</p> <p><b>Methods</b> We use Microsoft Excel to process the study data. CSQ, GAF &amp; CGI were used to determine patients' satisfaction with the service and mental wellbeing. Consent and feedbacks were gathered.</p> <p><b>Results</b> 642 patients were enrolled into the program; 116 patients received co-management with stakeholders, 493 caregivers were deemed supportive. The overall outcome saw a reduction in visits to emergency service, improved satisfaction from clients and amongst healthcare providers, longer review intervals, and reduced the burden of care for individuals and institutions.</p> <p><b>Discussion &amp; Conclusion</b> The Aftercare Service successfully bridges the gap between social and healthcare, supported the stakeholders in building capabilities and improved mental health for individuals.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1684	Renal Medicine
<p><b>Authors</b> Z.T.LIM<sup>1</sup>, M.C.KONG<sup>1</sup>, C.C.CHAH<sup>1</sup>, E.K.LIM<sup>1</sup>, C.R.LEONG<sup>1</sup>, Y.L.LIU<sup>1</sup></p> <p><sup>1</sup>Khoo Teck Puat Hospital (Singapore)</p> <p><b>Title</b> Role of renal vascular coordinator in dialysis access management: improving patency rate and reducing urgent interventions</p> <p><b>Background &amp; Hypothesis</b> Interventional nephrology (IN) is an emerging subspecialty focusing on dialysis access management. The role of a renal vascular coordinator (RVC) is novel in Singapore. In Khoo Teck Puat Hospital (KTPH), RVC performs basic ultrasound assessment and assists in reviewing direct referrals about dysfunctional arteriovenous fistula/graft (AVF/AVG) from community dialysis centres and plans for appointments with IN and vascular surgeons.</p> <p><b>Methods</b> We conducted a prospective study from April 2020 to December 2022 to evaluate the referral-to-intervention time (RIT) and patency rate (PR) of dialysis access interventions. One hundred eleven patients were referred to the RVC and offered thrombectomy or angioplasty. Eighteen patients were excluded from the analysis (admitted without RVC assessment (13), defaulted (4), or bypassed an RVC appointment to their first intervention (1)).</p> <p><b>Results</b> The mean time from referral to their first RVC visit was 5.07 days. The mean RIT (6 for thrombectomy and 87 for angioplasty) was 17.07 days (8.6% within 48 hours). None required emergency interventions. The 6-month and 12-month post-intervention PR was 70.9% and 61.3%, respectively. Fifty-one out of 93 patients had previous procedures done to their AVF before April 2020 without RVC involvement. The RIT was 7.93 days (28.6% within 48 hours, <math>p=0.001</math>). 64.3% of patients were admitted for urgent interventions. The 6-month and 12-month post-intervention PR for these non-RVC interventions was 28.6% (<math>p&lt;0.00001</math>) and 0% (<math>p&lt;0.00001</math>), respectively.</p> <p><b>Discussion &amp; Conclusion</b> RVC helps streamline the referral process, significantly improves the post-intervention patency rate, and potentially minimises urgent interventions. Promotion of RVC service nationwide is essential.</p>	

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Abstract Details	
Abstract ID	Clinical Specialty
SHBC1703	Public Health / Clinical Epidemiology
<p><b>Authors</b> C.M.TAN<sup>1</sup>, E. H TAY<sup>1</sup>, S.M. SHAHWAN<sup>1</sup>, Y. B. TAN<sup>1</sup>, S. Gunasekaran<sup>1</sup>, B.W.Z LIM<sup>1</sup>, S. SHAFIE<sup>1</sup>, S. A. CHONG<sup>1</sup>, M. SUBRAMANIAM<sup>1</sup> <sup>1</sup>Institute of Mental Health (Singapore)</p> <p><b>Title</b> Preferences and sociodemographic correlates of options for help for common mental illnesses in Singapore</p> <p><b>Background &amp; Hypothesis</b> This study aimed to ascertain the general population's preference for mental health services and informal help based on different mental disorders. The likelihood of endorsing types of help according to sociodemographic characteristics was also examined.</p> <p><b>Methods</b> A nationally representative cohort (n=2252), aged 18–65, was interviewed from September 2022 to June 2023 in a mental health literacy survey in Singapore. Using a vignette-based approach, beliefs about whom one should seek help from for alcohol-use disorder, dementia, depression, obsessive-compulsive disorder, schizophrenia, gambling disorder and depression with suicidality were investigated. Eight help sources were rated 'helpful' or 'neither/unhelpful'. Weighted prevalence stratified by vignettes and multivariable logistic regressions were performed.</p> <p><b>Results</b> Seeking counselling was most frequently rated 'helpful' for gambling disorder (95.96%), depression (95.13%) and alcohol-use disorder (93.16%). Across all vignettes, informal sources of help from family (78.96%) and friends (73.79%) were considered less helpful compared to mental health professionals, except for "seeking counseling over the phone (from a counselor)" which was rated least frequently as 'helpful' (59.98%). Males were also less likely to rate help from psychologists (OR=0.612) and close friends (OR=0.676) as helpful compared to females. Additionally, the age group 35-49 (OR= 0.426) was less likely to rate psychiatrists as helpful compared to those aged 18-34 years.</p> <p><b>Discussion &amp; Conclusion</b> Face-to-face help was considered more helpful than over the phone professional help, highlighting the continued need for a personal touch in mental health services today. Key gender and age-group specific correlates of help-seeking perceptions surfaced and interventions to improve help-seeking beliefs can target these groups.</p>	