3rd International Conference on
Gerontology and Geriatric Medicine 2021

“Do Pandemics Change the Way We Address Age and Ageing?”

Book of Abstracts

20 - 21 November 2021 | Online

Academic Partner

International Institute on Ageing
United Nations - Malta

Organized By

iConferences
Breakthrough to Research Excellence

www.silverageconference.com
Book of Abstracts

The 3rd International Conference on Gerontology and Geriatric Medicine
(SilverAge 2021)

20th-21st November 2021 | Online

Committee of the SilverAge 2021
iConferences
Tel: +94(0) 11 2419433
info@i-conferences.com
Disclaimer

The responsibility for opinions expressed, in articles, studies and other contributions in this publication rests solely with their authors, and this publication does not constitute an endorsement by the SilverAge 2021 or iConferences of the opinions so expressed in them.

Official website of the conference

www.silverageconference.com
**Academic Partners:**
International Institute on Ageing, United Nations – Malta

**Organized By:**
iConferences

---

### SilverAge 2021 Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Position (silverage 2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR. SHIROMI MADUWAGE</td>
<td>(Conference Chair, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Consultant Community Physician, Youth, Elderly &amp; Disability Unit, Ministry of Health, Sri Lanka</td>
</tr>
<tr>
<td>DR. DATIN JACQUELINE WM WONG</td>
<td>(Keynote Speaker, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Honorary Advisor, Demensia Brunei</td>
</tr>
<tr>
<td>PROF. MARVIN FORMOSA</td>
<td>(Keynote Speaker, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Director, International Institute on Ageing, United Nations-Malta (INIA), Malta</td>
</tr>
<tr>
<td>DR. SHIVA NAGARATNAM</td>
<td>(Keynote Speaker, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>MD, CCFP, DABFM, FRSPH</td>
</tr>
<tr>
<td>DR. MALA KAPUR SHANKARDASS</td>
<td>(Keynote Speaker, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Sociologist, Gerontologist and Health Social Scientist; Retired Prof. University of Delhi, India</td>
</tr>
<tr>
<td>PROF. DR LOCHANA SHRESTHA</td>
<td>(Session Chair, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Head of Department, Community Medicine, Nepalese Army Institute of Health Sciences (NAIHS)</td>
</tr>
<tr>
<td>DR. NIDHI GUPTA</td>
<td>(Session Chair, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Senior Researcher, Department of International Health, Johns Hopkins Bloomberg School of Public Health (JHSPH)</td>
</tr>
<tr>
<td>MS. ROSETTE FARRUGIA BONELLO</td>
<td>(Session Chair, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Deputy Director, International Institute on Ageing, United Nations-Malta (INIA)</td>
</tr>
<tr>
<td>DR. NIDHI MISHRA</td>
<td>(Session Chair, SilverAge 2021)</td>
</tr>
<tr>
<td></td>
<td>Asst. Prof. Applied Psychology, GITAM (Deemed to be University), Visakhapatnam, India</td>
</tr>
</tbody>
</table>

iv
ASSOC. PROF. IR. TS. DR. FAKHRUL ZAMAN B. ROKHANI  
(Session Chair, SilverAge 2021)

Head of Gerontechnology Program, Malaysian Research Institute on Ageing (MyAgeing), Universiti Putra Malaysia

MS. THULAKSHANA LIYANAGE  
(Conference Convener, SilverAge 2021)

Conference Manager, iConferences, Sri Lanka

MS. NADEESHA LIYANAGE  
(Conference Secretariat, SilverAge 2021)

Conference Coordinator, iConferences, Sri Lanka

MS. SHEHARI JAYASOORIYA  
(Conference Secretariat, SilverAge 2021)

Volunteer, iConferences, Sri Lanka

MS. NAVINA WIJERATHNE  
(Conference Secretariat, SilverAge 2021)

Volunteer, iConferences, Sri Lanka
Dr. Shiromi Maduwage, **Consultant Community Physician, Youth, Elderly & Disability Unit, Ministry of Health, Sri Lanka**

*The Editorial Board is not responsible for the content of any research paper*

### Editorial Board - SilverAge 2021

Dr. Susan Wehry, **Chief of Geriatrics, Department of Primary Care, College of Osteopathic Medicine, University of New England**

Dr. Eliza Berezina, **Senior Lecturer, Department of Psychology, School Medical and Life Sciences, Sunway University, Malaysia**

Dr. Ooi Pei Boon, **Associate Professor of School of Medical & Life Sciences, Sunway University, Malaysia**

Dr. Ning Wang, **School of Social and Public Administration, East China University of Science and Technology, Shanghai, China**

Dr. Ponnusamy Subramaniam, **University Lecturer, Healthy Aging & Wellness Research Center (H-Care), Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Malaysia**

Dr. Shobha Sharma, **University Lecturer, Healthy Aging & Wellness Research Center (H-Care), Universiti Kebangsaan Malaysia, Malaysia**

Dr. Nor I’zzati Binti Saedon, **Senior Lecture, Geriatric Medicine, Internal Medicine, University of Malaya**

Dr. Khor Hui Min, **Medical Lecturer, Department of Medicine, Faculty of Medicine, University of Malaya, Malaysia**

Dr. Terence Ong Ing Wei, **Consultant Physician and Lecturer in Geriatric Medicine & General Internal Medicine, Faculty of Medicine, University of Malaya**

Assoc. Prof. Dr. Hayati Kadir Shahar, **Head of Medical Gerontology Laboratory, Malaysian Research Institute of Ageing (MyAgeingTM), Universiti Putra Malaysia**

Assoc. Prof. Ir. Ts. Dr. Fakhrul Zaman b. Rokhani, **Head of Gerontechnology Program, Malaysian Research Institute on Ageing (MyAgeing), Universiti Putra Malaysia**

Asst. Prof. Luis Octávio de Sá, **Institute of Health Sciences, Catholic University of Portugal, Portugal**

Prof. Nikander Riku, **Gerontology Research Center, University of Jyväskylä, Finland**

Dr. László Patyán, **Department of Gerontology, Faculty of Health, University of Debrecen, Hungary**

Dr. You Yee Xing, **Lecturer, Dietetics Programme, Center for Healthy Ageing and Wellness (H-CARE), Faculty of Health Sciences, Universiti Kebangsaan Malaysia**

### Scientific Committee - SilverAge 2021

Dr. Susan Wehry, **Chief of Geriatrics, Department of Primary Care, College of Osteopathic Medicine, University of New England**

Dr. Eliza Berezina, **Senior Lecturer, Department of Psychology, School Medical and Life Sciences, Sunway University, Malaysia**

Dr. Ooi Pei Boon, **Associate Professor of School of Medical & Life Sciences, Sunway University, Malaysia**

Dr. Ning Wang, **School of Social and Public Administration, East China University of Science and Technology, Shanghai, China**

Dr. Ponnusamy Subramaniam, **University Lecturer, Healthy Aging & Wellness Research Center (H-Care), Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Malaysia**

Dr. Shobha Sharma, **University Lecturer, Healthy Aging & Wellness Research Center (H-Care), Universiti Kebangsaan Malaysia, Malaysia**

Dr. Nor I’zzati Binti Saedon, **Senior Lecture, Geriatric Medicine, Internal Medicine, University of Malaya**

Dr. Khor Hui Min, **Medical Lecturer, Department of Medicine, Faculty of Medicine, University of Malaya, Malaysia**

Dr. Terence Ong Ing Wei, **Consultant Physician and Lecturer in Geriatric Medicine & General Internal Medicine, Faculty of Medicine, University of Malaya**

Assoc. Prof. Dr. Hayati Kadir Shahar, **Head of Medical Gerontology Laboratory, Malaysian Research Institute of Ageing (MyAgeingTM), Universiti Putra Malaysia**

Assoc. Prof. Ir. Ts. Dr. Fakhrul Zaman b. Rokhani, **Head of Gerontechnology Program, Malaysian Research Institute on Ageing (MyAgeing), Universiti Putra Malaysia**

Asst. Prof. Luis Octávio de Sá, **Institute of Health Sciences, Catholic University of Portugal, Portugal**

Prof. Nikander Riku, **Gerontology Research Center, University of Jyväskylä, Finland**

Dr. László Patyán, **Department of Gerontology, Faculty of Health, University of Debrecen, Hungary**

Dr. You Yee Xing, **Lecturer, Dietetics Programme, Center for Healthy Ageing and Wellness (H-CARE), Faculty of Health Sciences, Universiti Kebangsaan Malaysia**
MESSAGE FROM THE CONFERENCE CHAIR SilverAge 2021

I am honoured to pen down this message as the chairperson of the 3rd International Conference on Gerontology and Geriatric Medicine (Silver Age 2021) in Sri Lanka.

In 2021, theme of the conference is “Do pandemics change the way we address age and ageing” which is a very timely theme that requires active participation to achieve quality care for older persons during prevailing global pandemic. With the worldwide demographic and epidemiological transition, many consequences are related to ageing and aged care. In initiation and delivering services to overcome the consequences of ageing and to achieve healthy aged population in a holistic manner multisectoral team approach is very much important especially with the present pandemic situation. Implementation of Decade of Healthy Ageing activities need to be done in an equitable way leaving no one behind. Therefore, we all need to collaborate together to improve elderly friendly environments, long term care facilities, integrated care for the older persons and combating ageism to achieve the scope of Decade of Healthy Ageing irrespective of the challenges we face today with the global pandemic. Older persons were identified as a highly vulnerable group for the COVID-19 pandemic therefore it is a high priority to identify opportunities to foster healthy ageing during the pandemic.

Silver Age 2021 conference programme is enriched with many areas of Gerontology and Geriatric Medicine including thematic sessions, keynotes and research papers to share knowledge, opportunities and the best practices in providing better care for elderly. I am sure that session topics will be useful for all those who are in the field of Gerontology and Geriatric Medicine.

It is my pleasure to welcome all our international and national delegates who are participating the conference. I take this opportunity to pay my gratitude all speakers and presenters for their active participation. My heartfelt gratitude to the conference organizers for their untiring effort and specially for arranging this conference in a virtual manner during COVID-19 pandemic.

I wish the 3rd International Conference on Gerontology and Geriatric Medicine (Silver Age 2021), Online to be a success.

Dr. Shiromi Maduwage
Conference Chairperson - Gerontology and Geriatric Medicine (Silver Age) 2021
MESSAGE FROM THE ACADEMIC PARTNER SilverAge 2021

The International Institute on Ageing United Nations-Malta (INIA) is for the third consecutive year, the academic partner to SilverAge 2021 International conference, this year running under the theme **Gerontology and Geriatric Medicine: Do Pandemics change the way we address age and ageing?**

The COVID-19 pandemic disrupted the way we live. It has taken the world to a different dimension, to a world very different to what we were accustomed to. The pandemic has impacted our lifestyles and plans and we all had to adhere to lock downs, curfews and measures. It brought countries to a standstill and has taken away precious lives - leaving distraught families and loved-ones behind, without opportunities to say appropriate good byes. COVID-19 is causing an unprecedented public health crisis impacting healthcare systems, healthcare workers, and communities. Frontline workers are exhausted, mentally and physically. The social and economic systems worldwide have never been this challenged.

The outbreak of COVID-19 will have a long-term and profound impact on all of us, but most especially on older persons’ health and wellbeing. In almost every country battling with the COVID-19 outbreak, older people are being told to self-isolate and shut themselves off from other people who might risk infecting them. While these restrictions are legitimate during a time of crisis, these restrictions may have a significant negative impact on older adults’ mental health status, such as experiencing social isolation. Older people are a heterogeneous group and efforts to protect them should not overlook the many variables within this category. Unfortunately, ageism has never been so evident. The COVID-19 pandemic had operated as a magnifier of already existing vulnerabilities and discriminations amongst older persons. Once again, the full diversity of people within the older persons category during this journey has been ignored. Their incredible resilience, positivity and multiple roles, including caregiving and volunteering, were never acknowledged. There is a need to look at older persons as a diverse group. Moreover, it should be ensured that older persons worldwide will have their voice heard by getting the platform, space and time that they rightly deserve.

SilverAge 2021 will provide an ideal forum for discussing and debating the many issues related to ageing and gerontology, most particular how COVID-19 has impacted the world we know. This event will encourage academics and scholars to exchange ideas and views, provide an opportunity for renewing old acquaintances, making new contacts, networking, and facilitating partnerships across national and disciplinary borders.
With best wishes,

**Rosette Farrugia-Bonello**  
Deputy Director  
International Institute on Ageing United Nations-Malta (INIA)

The International Institute on Ageing, United Nations-Malta was set up by a resolution of the United Nations Economic and Social Council which recommended to the United Nations Secretary-General the establishment of such an Institute to meet the need of trained personnel in the field of ageing especially from low-income countries and from countries with economies-in-transition. The Institute was inaugurated on 15th April, 1988 by the then UN Secretary-General, H.E. Mr. Javier Pérez de Cuéllar. Since its founding, INIA has acquired unique experience and expertise in organising and conducting training programmes in various areas of ageing policy. INIA serves as a catalyst for governments to create bold and ambitious long-term policy frameworks for ageing societies. Whilst older persons constitute an important resource for contemporary societies, later life should be experienced as an age of opportunity.
# ABSTRACTS OF VIRTUAL ORAL SESSIONS

## ABSTRACTS OF KEYNOTE SPEAKERS

01 Living Longer and Covid-19: The Asia Pacific Perspective – Ageing, diversity, equality and creating solutions

*Wong J.W.M*

02

## OLDER PERSONS AND COVID-19 (A)

<table>
<thead>
<tr>
<th>A1</th>
<th>02</th>
<th>Stress and Resilience among Senior Citizens in the New Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>Dr. Nidhi M, Dr. D. Ravi S</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A2</th>
<th>03</th>
<th>The Dunkirk Revisited - Clinical Challenges, Innovations in Care and Lessons Learnt in COVID-19 Pandemic on an Older-Adult Psychiatric Inpatient Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>Giri Shankar V, Kapila A</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A3</th>
<th>04</th>
<th>Mediating Post-Pandemic Public Health Measures through A Socio-Spatial Lens for Geriatric Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>Suri A, Suri M</em></td>
</tr>
</tbody>
</table>

## MENTAL HEALTH (B)

<table>
<thead>
<tr>
<th>B1</th>
<th>05</th>
<th>Mental Health Problems Faced by Aged Inmates due to Overcrowding of Central Prison in Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>Srinivasan S, Dr. Ilango P, Dr. Rajavel N</em></td>
</tr>
</tbody>
</table>

x
The Effectiveness of Computerized Cognitive Training in Preventing and Delaying Dementia in People with Early Cognitive Decline: A Systematic Review and Meta-Analysis

*Li R, Geng J.W, Yang R.Z, Ge Y.M, Hesketh T*

An Observational Study of the Correlation of EFI Severity with Depression

*Rasheed R, Patel A, Shanthakumaran Y*

---

**DEMOGRAPHY (C)**

Advanced Care Planning Using the Comprehensive Geriatric Assessment (CGA) in Patients with Frailty and Dementia


Prevalence, Demographic, Clinical Characteristics and Outcomes of Elderly Patients with Community Acquired Pneumonia Admitted in A Tertiary Medical Center

*Bernal S.P, Santiaguel J, Lim-Teodoro A*

Demographic, Clinical and Angiographic Profiles of Elderly Patients Presenting with Acute Coronary Syndrome

*Chaudhary V, Singh P, Sihag B.K, Dahiya N*

---

**AGEING AND AGED CARE (D)**

The Psychosocial Benefits of ‘Graceful Ageing Program’ for Older Adults Living in Community

*Thiyagarajan A.V, Subramaniam P, Amit N, Ghazali S.E*

Gender Disparities In Healthy Aging: A Cross-National Comparative Study in the United States and South Korea

*Lanlan C, Angie L, Mary-Geneviene M, Kieu M.P*
<table>
<thead>
<tr>
<th>D3</th>
<th>13</th>
<th>The Sick Role of Elderly Cancer Patients in Sri Lanka: A Sociological Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Welgama W.M.J, Piumali, S.D</td>
</tr>
<tr>
<td>D4</td>
<td>14</td>
<td>Spatial Measures of Hypertension in Geriatric Population of Developing Countries; Nepal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Singh S</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ABSTRACTS OF VIRTUAL POSTER PRESENTATIONS (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>P2</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>P3</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
ABSTRACTS OF KEYNOTE SPEAKERS
LIVING LONGER AND COVID-19: THE ASIA PACIFIC PERSPECTIVE – AGEING, DIVERSITY, EQUALITY AND CREATING SOLUTIONS

Wong J.W.M

Honorary Advisor, Demensia Brunei

The 21st century will be defined by people living longer, and while longevity is a success story, ageing societies bring with it opportunities and challenges. Remarkable gains in life expectancy, declines in fertility and progression of large-sized cohorts to older ages have led to a rapidly global ageing population. However, the Covid-19 pandemic has highlighted the vulnerability of older adults, many with co-morbidities resulting in seriously diminished functional ability, cognitive impairment and mortality. At the same time, these concerns are exacerbated with further detrimental effects on the wellbeing of older adults caused by measures taken to mitigate the transmission of the Covid-19 virus. With ageing and prevalence of non-communicable diseases, dementia is the number one public health disease and will be the ‘most serious health crisis of the 21st Century’. Today, 57 million people are living with dementia in the world, and this is not yet including the number of people, families and communities affected by the disease. The number of people living with dementia will increase to 72 million by 2030, and 175 million by 2050. 70% will be in the low-middle-income countries. In 2020, the global economic cost of dementia is US$1.3 trillion. This will lead to cumulative costs of at least US$15 trillion in this decade, and US$48 trillion by 2050. Besides health expenses, the cost of care is undoubtedly a complex area. Regardless of how the costs are expressed and calculated, it is obvious that the contribution of informal carers, particularly from women (and young carers), is substantial. How will cost of informal care further impact economies during and in post-Covid-19? The session aims to inform, drive action and impact by engaging participants to shape conversations on: Covid-19 and ageing society, identify and scale up good practices required to better respond, and transform the experience of older adults to thrive during and after the pandemic.

Keywords: Covid-19, living longer, ageing, diversity, equality
ABSTRACTS OF VIRTUAL ORAL SESSIONS
FREE PAPER SESSION (A)

OLDER PERSONS AND COVID-19
A1

[02]

STRESS AND RESILIENCE AMONG SENIOR CITIZENS IN THE NEW NORMAL

Nidhi M, D. Ravi S

GITAM School of Gandhian Studies, India

The challenges brought by the pandemic Covid-19 has impacted the quality of life of everyone, especially senior citizens who are not only suffering physically but also psychologically and socially. This in turn is bringing lots of stress in their life. Though some studies have been done to explore the quality of life of senior citizens in such a stressful situation. However, very limited efforts have been made to understand their stress and their resilience to deal with such stressful situations. The present study addresses this issue by exploring perceived stress and resilience among senior citizens. It further explores gender differences among them on both variables. A total of 103 senior citizens with a mean age of 65.15 from the states of Telangana and Andhra Pradesh in India participated in this study. Among them, there were 68 (70%) males and 31 (30%) females. This research study is a quantitative study where purposive survey method was used for data collection. The data were collected online using the two standardised tools “Perceived Stress Questionnaire” (PSQ) (developed by Levenstein and colleagues) and “Resilience Scale” (developed by Wagnild & Yung). Statistical analyses were conducted using SPSS 22. Descriptive statistics, correlations, inferential statistics, were done to see the association between perceived stress and resilience and to study the gender differences on these variables. The findings reported a negative association between perceived stress and resilience. Results also indicated insignificant differences between genders on resilience and perceived stress, here women scored lower than their counterparts on both variables. The findings have strong implications for designing gender specific gerontological counselling programs and planning of need-based intervention programs focussing on stress management and mental health promotion of senior citizens.

Keywords: Covid-19, pandemic, perceived stress, resilience, mental health, stress management, senior citizens
THE DUNKIRK REVISITED − CLINICAL CHALLENGES, INNOVATIONS IN CARE AND LESSONS LEARNT IN COVID19 PANDEMIC ON AN OLDER-ADULT PSYCHIATRIC INPATIENT SERVICE

Giri Shankar V, Kapila A

The Institute of Psychiatry, Psychology and Neuroscience, King’s College London and South London and Maudsley NHS Foundation Trust, United Kingdom

COVID19 pandemic posed unexpected challenges to the vulnerable, elderly psychiatric patient. It included risk of disengagement, lack of management guidelines for COVID19 and mental illness in those with significant co-morbidities, overlap of COVID19 symptoms with mental illness and loneliness. To highlight unique clinical challenges, innovations, outcomes and lessons learnt during the COVID19 outbreak in secondary geriatric psychiatry inpatient service. Patients with serious mental illness on the geriatric psychiatry ward tested COVID19 positive (n=12). This had to be managed on the psychiatric ward due to bed crisis. To overcome this, an innovative strategy was designed to provide maximum care with minimum risk. It included provision of customized prophylactic anticoagulation-hydration regimen, effective psychiatric management (including a strategy for Clozapine), creative bedside workouts to minimize venous thrombosis and monitoring vital signs. It was designed for an optimal duration in order to reduce transmission yet be meaningful. Discharge planning was adapted to include food delivery, interim accommodations, care-packages, alternative solutions to previous social hobbies, virtual community support/family visits and technology training to prepare for the pandemic era. No deaths occurred, no worsening in mental state and no complications despite their vulnerability. No staff were infected. All discharges post-outbreak were safe and successful. This extraordinary time exposed the vulnerabilities of geriatric mental healthcare, the need for sensitivity, cost-effective innovation and adaptability. These strategies could be refined into future guidelines. If anything, it presents an opportunity to reflect on the duality of mental and physical healthcare services and to re-imagine the future of geriatric mental health.

Keywords: Older adult psychiatry, geriatric psychiatry, mental illness, elderly, COVID19, SARS-CoV-2, pandemic
MEDIATING POST-PANDEMIC PUBLIC HEALTH MEASURES THROUGH A SOCIO-SPATIAL LENS FOR GERIATRIC POPULATIONS

Suri A1, Suri M2.

1Faculty of Architecture, TU Darmstadt, Germany
2Department of Physiology & Promotive Health, Institute of Home Economics, University of Delhi, India

The COVID-19 pandemic has generated a global public health crisis, leading to a worldwide response at various governance levels. Amongst the hardest hit is the geriatric population, with Asia and Europe possessing a majority of the world’s ageing populations. Earlier research into COVID-19 highlighted struggles to provide state of the art health care to older adults. The pandemic response also has a spatial focus with challenges emerging around everyday lived experiences for older adults. These challenges are further exacerbated with lack of spaces for telemedicine sessions and poor indoor quality ambient air. Thus, planners and public healthcare providers must collectively anticipate the need for delivering varied services. This review paper will discuss perspectives on a public health crisis through planning healthy living spaces for older adults. We emphasize appropriate socio-spatial measures rooted in public health guidelines which tackle everyday routines of the geriatric population. Through an in-depth literature review, we highlight everyday coping mechanisms used by older adults to negotiate their mental and physical well-being. Findings reveal the need for mental health management strategies in older adults. Conclusions emphasize that negotiating urban health crises through a socio-spatial lens can alleviate physical, emotional and cognitive challenges that come with ageing.

Keywords: Geriatric, health, everyday experiences, wellbeing, socio-spatial inclusion
FREE PAPER SESSION (B)

MENTAL HEALTH
MENTAL HEALTH PROBLEMS FACED BY AGED INMATES DUE TO OVERCROWDING OF CENTRAL PRISON IN TAMIL NADU

S. Srinivasan, Dr. P. Ilango, Dr. N. Rajavel

Department of Social Work, Bharathidasan University, India

This research study mainly focused on mental health problems due to overcrowding in the prison. The goal of this study is to summaries what we now know about the worldwide over population crisis situation. In 2000, there were about 8.7 million people in prison around the world, presently there are more than 11 million. The constant increase in prisoner populations has resulted in chronic jail overcrowding in both developed and developing countries. Most countries’ prison systems are presently overburdened. Due to a refusal to invest in the additional workers, structures, and other resource required, millions of prisoners are currently living in conditions of extreme misery, with poor sanitation, healthcare, wellness and safety. Not only for the criminals and employees, but also for their families and larger communities, the health consequences are severe. When people enter prison, they are often in poor mental or physical health, which is exacerbated by the harsh confinement conditions. In addition, being in prison might lead to new mental or physical health issues. The overuse of criminal justice interventions endangers public health and safety. Other approaches to social injustice and health inequities have a higher likelihood of reducing crime and improving health outcomes. This paper examines the limited literature on prison overcrowding. Raising awareness of the issue among the international community and prison administrations, as well as allocating specific financial resources, are critical components in preventing this social welfare and health care deficit.

Keywords: Mental health, aged, overcrowding, central prison, health
THE EFFECTIVENESS OF COMPUTERIZED COGNITIVE TRAINING IN PREVENTING AND DELAYING DEMENTIA IN PEOPLE WITH EARLY COGNITIVE DECLINE: A SYSTEMATIC REVIEW AND META-ANALYSIS

Hesketh T¹, ², Li R¹, ², Geng, J.W², Yang R.Z², Ge Y.M²

¹Institute of Global Health, University College London, London, United Kingdom
²Centre of Global Health, School of Public Health, School of Medicine, Zhejiang University, Hangzhou, China

With no current cure for dementia, preventing and delaying its progression could significantly reduce the disease burden and improve the quality of life for dementia patients. Computerized cognitive training (CCT) has recently become a potential instrument for improvement of cognition. However, evidence for its effectiveness remains limited. This systematic review aims to: 1) assess the effects of CCT in delaying and preventing the process of dementia for people with cognitive impairment; 2) analyze the relationship between the characteristics of CCT interventions and cognition-related health outcomes. A systematic search was conducted using MEDLINE, Cochrane, Embase, Web of Science, and Google Scholar. Full text of randomized controlled trials (RCTs) of CCT published in English journals between 2010 and 2021 amongst adults with cognitive decline were included. Overall global cognitive function and domain-specific cognition (executive function, working, episodic, verbal, and visual memory) were pooled using a random-effects model. Sensitivity analyses were performed to determine reasons for heterogeneity and to test the robustness of results. Subgroup analyses were conducted to identify the relationship between the characteristics of CCT interventions and cognition-related effectiveness. In addition, we constructed a post-hoc meta-regression model to test the continuous linear dose–response gradients between duration and frequency of CCT intervention and global cognitive function. A total of 21 studies with 1200 participants were included in the review. According to the meta-analysis, CCT intervention provided a significant but small increase in global cognitive function compared with controls (SMD=0.59, 95% confidence interval, 0.39 to 0.79, I=50%). CCT intervention also resulted in a marginal improvement for people with cognitive decline in executive function, working memory, episodic memory, and verbal memory compared to the control groups, with moderate heterogeneity. Subgroup and meta-regression analyses showed that duration of CCT treatment and intensity of CCT sessions are correlated with effective CCT delivery. This systematic review suggests that CCT interventions could improve global cognitive function. Considering the relatively small sample size and short treatment duration in all included studies, more comprehensive trials are needed to quantify the impact of CCT on progression to cognitive decline, especially in the longer term, and to establish whether CCT should be recommended for use in clinical practice.

Keywords: Dementia, mild cognitive impairment, computerized cognitive training
AN OBSERVATIONAL STUDY OF THE CORRELATION OF EFI SEVERITY WITH DEPRESSION

Rasheed R, Patel A, Shanthakumaran Y

The Chapel Street Surgery, Rigg Milner Medical Centre & Corringham Health Clinic, United Kingdom

Patients with high frailty indices experience poor mental health due to multiple co-morbidity and social isolation. This was a retrospective observational analysis that studied the correlation of Electronic Frailty Indices (EFI) and General Anxiety Depression (GAD) scores in a rural population. An annual frailty assessment is offered to elderly patients and we screen routinely for anxiety and depression using the GAD (General Anxiety Depression) score and PHQ-9 score. This was an observational study examining the correlation of the Electronic Frailty Indices (EFI) with depression and anxiety scores. Of the 118 patients ranging from mild to severe frailty, we found a positive correlation of the EFI with the depression and anxiety scores. Within the data set, the correlation coefficient of EFI scores and PHQ-9 scores was found to be 0.819. Similarly within the same data set, we found a correlation coefficient of EFI and GAD scores of 0.651. The higher the EFI the greater was the scale of dependency and comorbidity and this correlation was consistent across the data set with depression and anxiety. We believe physical impairment, loss of independence, social isolation and cognitive decline are associated with loss of self-esteem. Our study found a positive correlation between frailty severity based on EFI scores and depression and anxiety severity. Early detection in deterioration of mental health will enable supportive measures and targeted treatment strategies. Our study shows the strong correlation of EFI severity scores with worse mental health.

Keywords: Electronic Frailty Indices, depression, frailty
FREE PAPER SESSION (C)

DEMOGRAPHY
ADVANCED CARE PLANNING USING THE COMPREHENSIVE GERIATRIC ASSESSMENT (CGA) IN PATIENTS WITH FRAILTY AND DEMENTIA


The Chapel Street Surgery, Rigg Milner Medical Centre & Corringham Health Clinic, United Kingdom

Dementia and frailty often co-exist and the Comprehensive Geriatric Assessment (CGA) tool is suitable to use for on-going and advanced care planning by scoping the health and social care needs of patients with dementia. A quality improvement project was undertaken to institute proactive care planning in patients with dementia to prevent hospital admission and ensure care plans, emergency care plans and end-of-life planning was done during the COVID-19 pandemic. The practice population of 12,000 patients, 117 identified dementia patients underwent a CGA incrementally over a period of six months in order to assess the health and social care needs to prevent unwarranted hospital admissions and distress to patients. During the COVID-19 pandemic, patients that were vulnerable, elderly with cognitive decline and dementia were shielded. This meant they were not able to reach out as effectively for their health care needs to the practice. Conducting a CGA assessment enabled care planning to reduce admission during the COVID-19 pandemic. This also reduced unplanned visits or call outs by patients as their needs were assessed, met and deterioration was detected at an early stage. We would advocate using the Comprehensive Geriatric Assessment to assess the health and social care needs with an elderly health assessment and a FRAT tool for early assessment of patients who present with frailty and cognitive decline or a diagnosis of dementia. This enables structured advanced care planning and ensures unmet need was uncovered and enables a tracking tool to be able to measure deterioration.

Keywords: Comprehensive Geriatric Assessment, dementia, frailty
PREVALENCE, DEMOGRAPHIC, CLINICAL CHARACTERISTICS AND OUTCOMES OF ELDERLY PATIENTS WITH COMMUNITY ACQUIRED PNEUMONIA ADMITTED IN A TERTIARY MEDICAL CENTER

Bernal S.P, Santiaguel J, Lim-Teodoro A
Quirino Memorial Medical Center, Philippines

Community Acquired Pneumonia is among the leading causes of mortality in the elderly in the Philippines however there are limited studies among this population. To determine the prevalence, demographics, clinical characteristics, microbiological profile, clinical outcomes and risk factors of mortality among elderly with Community Acquired Pneumonia. This study was a retrospective cohort analysis utilizing data from January to December of 2018 among 159 elderly patients admitted with Community Acquired Pneumonia in a tertiary hospital. Demographics, clinical characteristics, microbiologic profile was assessed using percentage and frequency. Chi-square test was used to compare factors to age group. Risk factors of mortality were determined using binary logistic regression analysis. Overall prevalence of elderly admitted with Community Acquired Pneumonia was 5% and was noted to be higher in females (55.35%) than males (44.65%). Majority belonged to ages 65-74 years (36.5%). The most common pathogen identified was Escherichia coli (17.24%) and Streptococcus parasanguinis (17.17%) in blood and sputum culture, respectively. Risk factors significantly associated to mortality were history of alcoholic drinking, renal disease, oxygen saturation <90% upon admission, decrease sensorium, hypotension, lung findings of retractions and decreased breath sounds, Escherichia coli in blood culture and mixed bacterial coinfection in sputum culture (p < 0.05). Community Acquired Pneumonia is a common problem with clinical impact to elderly. The study was able to provide prevalence, demographics and clinical characteristics associated with mortality among elderly admitted with Community Acquired Pneumonia. This study can guide clinicians and hospital personnel in infection control and management strategies.

Keywords: Community acquired pneumonia, elderly
DEMOGRAPHIC, CLINICAL AND ANGIOGRAPHIC PROFILES OF ELDERLY PATIENTS PRESENTING WITH ACUTE CORONARY SYNDROME

Chaudhary V, Singh P, Sihag B.K, Dahiya N

Post Graduate Institute of Medical Education & Research (PGIMER), India

The profiles of the acute coronary syndrome in elderly patients differ from that of younger patients in many aspects. The elderly patients with acute coronary syndrome (ACS) largely remain an understudied population. Study was aimed to evaluate the various clinical and angiographic factors affecting CAD characteristics in elderly patients with ACS. It was a prospective observational study conducted in the elderly patients (aged >75 years) with ACS. A total of 100 patients with ACS were enrolled and studied for their demographic, clinical and angiographic profiles. Novel markers of atherosclerosis were also assessed. Short term outcomes were studied, with 3 months of follow-up. The majority of patients were males (69%) with an average age of 80.03 ± 3.46 years. Hypertension was present most commonly (61%) followed by diabetes mellitus (22%). STEMI was most common presentation (53%). Multivessel involvement (62%) was more common than single vessel involvement (31%). LAD was the most common artery involved. Serum homocysteine and serum hs-CRP levels were higher in patients with multivessel disease (p <0.05). Serum homocysteine levels of 16.63± 5.26 µmol/L, LVEF <35%, presence of mitral regurgitation (MR), involvement of left main (LM), LCx, or right coronary artery (RCA) and triple vessel disease (TVD), correlated significantly with mortality (p < 0.05). Elderly patients with ACS, more commonly had multivessel disease. The serum homocysteine and hs-CRP levels correlated significantly with CAD severity. The important predictors of short term mortality were the left ventricular dysfunction, MR, LM-involvement, RCA/LCx involvement, TVD, and serum homocysteine levels.

Keywords: Elderly, Acute Coronary Syndrome, profile, mortality
FREE PAPER SESSION (D)

AGEING AND AGED CARE
THE PSYCHOSOCIAL BENEFITS OF ‘GRACEFUL AGEING PROGRAM’ FOR OLDER ADULTS LIVING IN COMMUNITY

Subramaniam P, Thiagarajan A.V, Amit N, Ghazali S.E

Clinical Psychology & Behavioural Health Program, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Malaysia

Rapid ageing population is a worldwide phenomenon. Therefore, meaningful activities to accommodate the well-being of ageing population is required. This study aims to explore the effectiveness of module based psychosocial activities “Graceful Aging Program” for older adults living in community. A total 97 healthy older adults aged 60 to 88 years old (Mean: 69.9±6.9) were recruited in this study. The intervention was conducted in three locations for 7 weeks, each group session lasted for 2 hours. There were five variables embedded in this study which were physical activity, quality of life, reminiscence, life satisfaction and psychological well-being. This study has used quasi experimental study design with pre-test and the post-test assessment. The experimental group assigned to the Graceful Ageing Program (n = 63), and the control group (n = 34). The analysis of variance (ANOVA) results showed that the participants in Graceful Ageing Program reported greater improvements compared to the control group participants. The statistical outcome scores are Life Satisfaction F (1.95) = 1.07, p > 0.05, Physical Activity F (1, 95) = 1.97, p > 0.05, Psychological Health domain of Quality of Life F (1, 95) = 4.94, p < 0.05, Reminiscence F (1, 95) = 2.71, p > 0.05 and Psychological Well-Being F (1, 95) = 5.68, p < 0.05. The findings showed that the Graceful Ageing Program is effective to induce psychosocial benefits for older adults. Thus, the implementation of the Graceful Ageing Program could be meaningful activity for older adults but more well-designed research is needed to confirm its usefulness.

Keywords: Graceful Aging, effectiveness, psychological well-being, older adult
GENDER DISPARITIES IN HEALTHY AGING: A CROSS-NATIONAL COMPARATIVE STUDY IN THE UNITED STATES AND SOUTH KOREA

Lanlan Chu, Angie Lor, Mary-Geneviene Moisan, Kieu My Phi
St. Catherine University, USA

The global population and life expectancy in both countries are growing exponentially. With the rapid increase in the aging population, a particular concern has become the issue of healthy aging. Using the 2018 wave of Health and Retirement Study and Korean Longitudinal Study of Aging, this study explores the gender disparities in the health of older adults in the United States and South Korea. Health aging is measured using an overall healthy aging index, defined as a dichotomous variable based on four dimensions: no major chronic diseases, free of physical functional impairment, free of cognitive impairment, and no depressive symptoms. A logit model is adopted to explore the association of demographic characteristics, socioeconomic status, and healthy lifestyles with the likelihood of aging healthily among American and Korean older adults. After controlling for other covariates, this study indicates that older females in the United States and South Korea are more likely to age healthily than their male counterparts. These results are verified using a variety of robustness check techniques. We further explored the heterogeneities in the gender disparities in healthy aging across age groups and educational years. These findings suggest both similar and distinct patterns of healthy aging in the two countries. Results of this study can help improve the understanding of the determinants of health and quality of life of older adults and provide insights for policymakers to establish targeted aging policies.

Keywords: Aging, cross-national, gender, health
THE SICK ROLE OF ELDERLY CANCER PATIENTS IN SRI LANA: A SOCIOLOGICAL ANALYSIS

Welgama W.M.J, Piumali S.D

Sabaragamuwa University of Sri Lanka

Sick role is not an outdated concept in the analysis of obligations and rights of patients. Globally pervasive reality of population aging naturally increases the vulnerability and welfare costs incurred by cancer corresponds the different levels of economic development across the world. Being the fastest aging nation in South Asia, Sri Lanka encounters unique challenges assuring the welfare of elderly cancer patients. The aim of the paper was to see the impact of demographic factors of elderly cancer patients on their sick role while explaining the sick role behavior of elderly cancer patients in state sector health care. This study incorporated the mixed method. In the first phase, twenty interviews and ten case studies enabled capturing the sick role behavior of elderly cancer patients in ‘emic’ perspective later analyzed using NVivo tool. The study employed a questionnaire (n=262) on in-house and clinical patients in National Institute of Cancer and oncology clinics in five districts of Sri Lanka. Some demographic factors impact on the sick role of elderly cancer patients. A majority of patients remain disengaged (72.9%) being exempted from normal duties. More than 88% of elders had a positive attitude towards all forms of health care workers. Approximately 78.8% solely rely on biomedical model seeking treatments. Education, employment status and living sector impact on the sick role while gender indifference noted accepting the sick role. Bond with family members as carers, accepting the legitimate authority of health care workers and goodwill on state sector heath care system are highly reflected in the sick role of elderly cancer patients. Small proportion of elders do not accept the sick role for internal and external reasons. For many, old age appears to ease the process of self-acceptance as a cancer patient.

Keywords: Senior citizens, elderly, sick role, cancer, Sri Lanka
Elderly people are more prone towards the chronic disease as hypertension and associated co-morbidities which adds cost to them as well as country health care system. Lack of health care resources particularly in developing countries necessitate wiser use of these resources. The usage and relevance of geospatial applications in elderly health care is significantly increasing. GIS can significantly improve chronic health management of geriatric population and provide cost-effective and timely-fashioned services to aged residents of Developing countries. However, Geospatial research on elderly healthcare are not sufficient; therefore, validation and applicability of GIS are significant for developing countries. The objective of this study is to identify the potential use of Geospatial application and the core aspects related to accessibility as a geospatial parameter for elderly health care in developing nations and examine the applicability of GIS in the study of geographical access to management of hypertension in elderly health care services and the disparities that exist. As a model of developing countries, the research is based on selected areas of Nepal geriatric population and to review the existing spatial/non-spatial frameworks in health and relevant sources. The research will be conducted methodologically on the available datasets using Primary and secondary research and relevant publications at selected study site with the Geospatial design. By applying the GIS to the elderly, we can track the vulnerable population needing healthcare services from multi-dimensions including social aspect to real health care services. A pre-intervention and post-intervention evaluation will clearly explore the potential of GIS applicability in context to health care improvement to elderly and this approach can be a role model and replicated in other developing countries. Focused on developing countries Nepal as exemplar, it has unique features juxtaposed with poor health access, most often distribution of health access center is limited to government centers in rural areas and this is the only the source for poor elderly people who cannot afford expensive health facilities located in Cities. This research proposes to increase such health service centers for elderly people by certain number and establish each of the center as elderly care unit in one of the selected study area in Nepal which is also in government recent policy.

Keywords: Elderly care, GIS, hypertension, Nepal
ABSTRACTS OF VIRTUAL POSTER SESSION
METABOLIC DISORDERS IN LONG-LIVING PATIENTS WITH CORONARY ARTERY DISEASE

Topolyanskaya S1, Eliseeva T2, Balyasnikova N2, Sanina A2, Vakulenko O2, Dvoretski L1

1I.M. Sechenov First Moscow State Medical University (Sechenov University), Hospital Therapy Department, Russia
2War Veterans Hospital, Russia

Very limited data are available on metabolic disorders in centenarians; therefore, we investigated these pathologies in long-living patients with coronary artery disease (CAD). The study enrolled 225 patients > 90 years, hospitalized with CAD diagnosis. The majority of patients (67.6%) were women. The mean age of patients was 92.5 (+/-2.2) years. Blood levels of uric acid, lipids, glucose and body mass index were determined. Obesity was registered in 31.5% of patients, but grade III obesity – in 1 patient. Overweight was found in 39.1% of patients, normal BMI – in 28.9%, and underweight – in 1 patient. Increase in the blood concentration of triglycerides was noted in 11.2% of patients. Decrease in the HDL cholesterol level was registered in 12.7% of patients. Blood concentration of LDL cholesterol < 2.0 mmol / l was observed in 23.3% of cases. Hyperuricemia was detected in 37.3% of patients – in 41.4% of women and 28.8% of men. Increase in the serum creatinine level was registered in 45% of patients. Only 16.5% of patients had glomerular filtration rate > 60 ml/min. Women had more frequent hyperuricemia, dyslipidemia and azotemia. Increase in fasting blood glucose level was found in 23.1% of patients, but only 0.9% of patients had glucose >14 mmol/l. Study results indicate some clinical features of metabolic disorders in long-living patients with coronary artery disease. High proportion of patients with overweight or obesity was found. Frequent hyperuricemia but relatively low levels of atherogenic lipids and glucose were registered.

Keywords: Metabolic disorders, centenarians, diabetes mellitus, obesity
The purpose of this study was identification of the risk of development cognitive impairments in the elderly. It was a questionnaire-based cross-sectional study. 385 elderly people (60-74 years old) randomly selected throughout Kazakhstan took participation in the study. Then, the survey participants were asked to take a small test that determines the absence of cognitive impairment or the risk of developing cognitive impairment. The test consisted of 3 tasks: 1) name 11 words with the letter “F”; 2) name the current date, month, year, day of the week, country and city; 3) name 5 words that the respondent was asked to remember at the beginning of the test. The maximum score is 12. The results of the test were distributed as follows: 54.5% (n = 210) of respondents received 10 or more points, while 45.5% (n = 175) scored less than 10 points, which may indicate risk of cognitive impairment in them. According to the results of our study, a statistically significant relationship was found between cognitive impairment and the variables marital status ($p = 0.000$), education ($p = 0.016$), current work ($p = 0.000$), smoking ($p = 0.019$), alcohol consumption ($p = 0.000$), reciting namaz ($p = 0.002$), going to church and reading prayer ($p = 0.004$). Thus the main risk factors for the development of cognitive impairments in our study were marital status, education, current work, smoking, drinking alcohol, reciting namaz, going to church, and reading prayers.

Keywords: Cognitive impairment, elderly people, detection, risk factors
RELATIONSHIPS BETWEEN OSTEOPOROSIS AND ANEMIA IN LONG-LIVING PATIENTS WITH CORONARY ARTERY DISEASE

Topolyanskaya S1, Eliseeva T2, Sanina A2, Vakulenko O2, Dvoretski L1

1I.M. Sechenov First Moscow State Medical University (Sechenov University), Hospital Therapy Department, Russia
2War Veterans Hospital, Russia

Limited and controversial data are available on relationships between osteoporosis and anemia; therefore, we evaluated bone mineral density and its relationship with erythropoiesis in patients with coronary artery disease (CAD) over 90 years of age (long-livers). This work was cross-sectional study performed in the War Veterans Hospital. The study enrolled 197 patients (138 women and 59 men) aged 90 to 106 years (mean age 92.4 ± 2.3 years) hospitalized with CAD. Bone mineral density (BMD) was analyzed by dual-energy X-ray absorptiometry. Patients with osteoporosis had lower hemoglobin and erythrocyte counts compared to patients with normal BMD: hemoglobin - 117.3 and 125.9 g/l, respectively (p=0.003), erythrocytes - 3.8x10^{12}/l and 4.1x10^{12}/l (p=0.04), MCV - 88.7 and 93.5 fl (p=0.02), MCH - 30.6 and 31.0 pg (p=0.07). Patients with anemia had lower total BMD (973 and 1036 mg/cm^3, p=0.001), BMD of upper (772 and 845 mg/cm^3, p=0.001) and lower (956 and 1059 mg/cm^3, p=0.0003) extremities, BMD of trunk (805 and 851 mg/cm^3, p=0.004), ribs (607 and 642 mg/cm^3, p=0.005), pelvis (889 and 935 mg/cm^3, p=0.03) and spine (973 and 1034 mg/cm^3, p=0.02). Correlation analysis revealed significant direct relationships between hemoglobin level and all BMD parameters (r=0.3; p=0.00003). Significant correlations were also established between all BMD parameters and erythrocytes MCV (r=0.27; p=0.0001) as well as MCH (r=0.22; p=0.002). Significant direct relationships between blood iron concentration and all BMD parameters were found (r=0.28; p=0.003). The study results indicate presence of relationships between bone mineral density and erythropoiesis in centenarians.

Keywords: Anemia, bone mineral density, osteoporosis, hemoglobin, Ferrum.