

# 4"ANNUAL RESEARCH SYMPOSIUM

New Dimensions in Nursing; Creating a Sustainable Health Care and Safety Net for All



Faculty of Nursing
University of Colombo



### **4**<sup>TH</sup> **ANNUAL RESEARCH SYMPOSIUM**

New Dimensions in Nursing; Creating a Sustainable Health Care and Safety Net for All

# **BOOK OF ABSTRACTS**

FACULTY OF NURSING UNIVERSITY OF COLOMBO

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#### Published by

Faculty of Nursing University of Colombo

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#### MESSAGE FROM THE DEAN - FACULTY OF NURSING

nnual research symposium is a significant much forward event of the Faculty of Nursing, University of Colombo. This year annual research symposium is held for the ▲ fourth time under the theme of "New Dimensions in Nursing: Creating a Sustainable Healthcare and Safety Net for All" which was especially adopted in order to emphasize and communicate the importance of exploring new dimensions for nursing that contribute to a sustainable health care safety network for nursing especially, considering the contemporary global health challenges. Today, all healthcare systems are strengthened by integrating new knowledge, technology, and innovations. Considering the current trends in nursing and the future health care challenges, we all nursing stakeholders have an inescapable responsibility to take initiatives to strengthen the nursing profession to face the present and future challenges by identifying sustainable evidence-based solutions for present and emerging problems through research and innovations. One significant area of focus today in the health care arena is safety in the health care systems. This issue has been further highlighted with the existing covid pandemic. Therefore, the annual research symposium 2021 in the Faculty of Nursing would be an ideal flatform to deeply discuss the theme of new dimensions of nursing with regards to creating sustainable health care and safety network for all. I hope Vice-chancellor, University of Colombo, senior professor Chandrika N Wijeratne, chief guest of the symposium, Keynote speaker Professor Martin Jens Persson, and the other plenary speakers would enlighten the nursing community on this important area and have an effective scientific discussion on the same topic at the end. Therefore, this symposium would be a wonderful learning experience for all the participants.

I take this opportunity to congratulate all the presenters and thank the Vice-Chancellor, keynote speaker, and other speakers for their great contribution to this research symposium. I also thank the conference chair and his dynamic team and all the other academic and non-academic staff of the Faculty of Nursing for their contribution to the annual research symposium 2021. I wish the 4<sup>th</sup> annual research—symposium 2021 would be a great success!

Prof. Sudath Warnakulasuriya

Dean

**Faculty of Nursing** 

**University of Colombo** 





#### MESSAGE FROM THE CHAIRPERSON – ARS 2021

irst of all, I am happy to be a Chairperson of the Annual Research Symposium, Faculty of Nursing for the second time. As the chairperson of the Annual Research Symposium – 2021 of the Faculty of Nursing, I take this opportunity to extend my warm welcome to you all to the 4th Annual Research Symposium.

Faculty of Nursing annually conducts the research symposium for disseminating the research activities of academics of the Faculty of Nursing, their students, nursing academics from other universities as well as the staff nurses. I am sure that Annual Research Symposium will provide a good platform for authors and the participants for sharing their research findings related to all areas of health especially non-communicable diseases, mental health, maternal and child health, nutrition, sexual health, and elderly care, with research experts, colleagues as well as with the stakeholders.

I thank all team members for their consistent effort to make this Annual Research Symposium - 2021 of the Faculty of Nursing an enormous success. I extend my sincere thanks to the Vice-Chancellor, the University of Colombo for initiating and encouraging the Annual Research Symposium in the faculty. Also, I sincerely express my gratitude to the Dean, Faculty of Nursing for his appreciation and encouragement for conducting a successful symposium.

I hope that the Annual Research Symposium -2021 of the Faculty of Nursing, will deliberate and discuss the health-related issues which would help to improve the health of our community as well as the stepping for further research.

I wish the Annual Research Symposium -2021 of the Faculty of Nursing, a great success. I wish good luck to all the presenters.

Dr. G Kisokanth
Senior Lecturer/Head
Department of Clinical Nursing
Faculty of Nursing
University of Colombo





#### **MESSAGE FROM THE SECRETARY – ARS 2021**

**Warm Greetings!** 

Symposium of Faculty of Nursing, University of Colombo" which will be held on 15<sup>th</sup> December 2021. This symposium with the theme of "New Dimensions in Nursing; Creating a Sustainable Health Care and Safety Net for All" is the ideal opportunity to discuss the safety approach which is vital with the patient care that must be dealt with by the nurses and other healthcare professionals. We planned to make this symposium worthwhile with the maximum contribution of the academics and students of our faculty and other institutions with the research activities related to communicable and non-communicable diseases, mental health, reproductive health, maternal and child health, elderly care, nutrition, nursing education, public health and COVID 19 pandemic.

I am very grateful to Senior Professor Chandrika N Wijeyarathne, Vice-Chancellor, the University of Colombo for encouraging us to conduct the Annual Research Symposium in the Faculty of Nursing. I extend my most sincere thanks to Prof. Sudath Warnakulasuriya, Dean of the Faculty of Nursing for giving me this valuable opportunity to actively serve and obtain experience as a secretary in this symposium. I also much appreciate the wise advice and the guidance of the Dean of the Faculty of Nursing throughout the organizing process. I must mention the excellent support by Dr. G. Kisokanth, Chairperson of the Annual Research Symposium 2021 for directing our team. I thank all the members of the organizing committee and subcommittees for their great dedication to making this event notable. I am sure the Annual Research Symposium 2021 will provide the opportunity to academics and researchers to discuss and share experiences with other research scholars. I wish good luck to all the presenters.

Dr. Thanuja Asurakkody

**Senior Lecturer** 

Department of Fundamentals of Nursing,

**Faculty of Nursing** 

**University of Colombo** 



### PROGRAMME OUTLINE

Time	Event

7.30am – 8.00am	Registration of the participants
8.00am- 8.15am	Inauguration of the Annual Research Symposium 2021
8.15am- 8.30am	Welcome Address by the Dean, Faculty of Nursing – Prof. S.S.P. Warnakulasuriya
8.30 am- 8.35 am	Introduction to the Chief Guest
8.35am- 8.45am	Address by the Chief Guest- Senior Professor Chandrika N. Wijeyaratne, Vice-Chancellor, University of Colombo
8.45am- 8.50am	Introduction to Keynote Speaker by Prof. S.S.P. Warnakulasuriya, Dean, Faculty of Nursing
8.50am- 9.20am	Keynote Speech by Prof. Martin Jens Persson, Kristianstad University, Sweden
9.20am- 9.25am	Introduction to the Plenary Speaker 1
9.25am- 9.50am	Plenary Speech 1 - "Role of the Nurse in Health Care Safety" Prof. S.S.P. Warnakulasuriya
9.50am- 10.05am	Vote of Thanks by the Secretary, ARS 2021- Dr. Thanuja Asurakkody
10.05am- 10.20 am	Refreshments
10.20am- 10.25am	Introduction to the Plenary Speaker 2
10.25am- 10.45am	Plenary Speech 2- "Effectiveness of Nurse Case Management in Improving Health Outcomes in Non-communicable diseases"  Dr. G Kisokanth
10.45am- 12.45pm	Technical Session 1- Oral Presentations
12.45pm- 1.30pm	Lunch
1.30pm- 2.30pm	Technical Session 2- Poster Presentations
2.30pm- 3.00pm	Awarding of Certificates for the presenters and closing the event



### PROGRAMME OF THE TECHNICAL SESSION 1 – ORAL PRESENTATIONS

TECHNICAL SESSION 1 – ORAL PRESENTATIONS		
Time	Paper ID	Title and author/s of the paper
10.50 am	RS21-002: OP1	Knowledge, Attitude and Influencing Socio Demographic Factors Towards Childhood Attention Deficit Hyperactivity Disorder Among Primary School Teachers in Jaffna Education Zone  R.P.H.A. Udeshika, D. Thabotharan, S. Sivathas, P.A.D. Coonghe
11.05 am	RS21-006: OP2	Rapid Review of The Literature on Nursing Students' Perception and Experience During COVID-19 Pandemic  M.G.S. Nishara, H.M.H.I. Herath, J.M.L. Shavindi, P.P.M. Lakrandi, P. Thavalingaratinam, T.A.Asurakkody
11.20 am	RS21-007: OP3	Perceptions of Life Among Women After Hysterectomy in Kandy District Sri Lanka  N.P. Abeyrathna, J.M.N.P. Jayasundara, P.G.U.P.K. Peramuna, M.H.M.M.P. Mapa, L.Y.S.SKumari, E.W.A.I.M. Siriwardhana
11.35 am	RS21-009: OP4	Perceptions And Experiences of Stakeholders on Effectiveness of the Psychiatric Nursing Training Program of the College of Nursing Mulleriyawa  W.A.R.P. Menike
11.50 am	RS21-011: OP5	Assertiveness Among the Nursing Undergraduates in a Defence University, Sri Lanka  W.G.C. Kumara, S.S.P. Warnakulasuriya
12.05 pm	RS21-015: OP6	Undergraduate Nursing Students' Perception and Barriers Towards Online Learning in a State University, Sri Lanka: A Quantitative Study  H.R.B.K. Rahinduwa, T.S. Amarasinghe, N.T. Wijesinghe, D.R.T.S. Dasanayake, S.D.B.P.P. Samarasekara, A.U. Rathnayake
12.20 pm	RS21-016: OP7	Anti-Covid 19 Drug Candidates from Sri Lankan Natural Products: In-Silico Approach to Identify Inhibitors of SARS COV 2  S.M. Abdulla, G.A.S. Premakumara, P. Ranasinghe, C. Udawatte



### PROGRAMME OF THE TECHNICAL SESSION 2 – POSTER PRESENTATIONS

POSTER PRESENTATIONS – PANEL 01		
Time	Paper ID	Title and author/s of the paper
1.30 pm	RS21-003: PP1	Prevalence and Factors Associated with Masked and White Coat Hypertension Among the Residents in Sri Jayewardenepura Kotte Municipality Area – A Cross Sectional Study  K.H.A.Y. Kariyawasam, B.G.G.K. Somathilake, V. Daluwakgoda, A.I. Kamaladasa, H.R.T. De Silva, J.M.K.C. Jeewandara, D.A.S. Elvitigala
1.40 pm	RS21-005: PP3	Artistic and Scientific Components of Nursing: A Review and Evaluation of Evidence  J.N. Chathurika, K.H.C. Hansini, K.A.D.S. Kaushalya, Y.B. Wahala, T.A. Asurakkody

POSTER PRESENTATIONS – PANEL 02		
1.30 pm	RS21-014: PP7	A Quantitative Study Determining the Contribution Factors and Impact on Social Media Addiction Towards Depression Among Adolescent in Gampaha District-Sri Lanka  S.G. Kekiriwelagedara, H.N.L.V. Pathirana, M.A. Silva M, B.S.F. Warnakulasuriya, H.M.H.S. Heenkenda, P.A.A.C. Pitigalaarachchi, D.A.P.R. Weerasekara
1.40 pm	RS21-008: PP4	Attitude of Police Officers Towards Dealing with Individuals with Psychological Problems: A Sample from Selected Police Stations in Colombo District  T.L.A. Tennakoon, L. Ponnamperuma
1.50 pm	RS21-010: PP5	Job-Related Burnout During the Period of COVID-19 Pandemic Among Nurses at National Institute of Infectious Diseases; Sri Lanka D.D.V.N. Dewpura, S.H.N.M. Jayasena, E.A.C.M. Ekanayaka, E.A.P.S. Ekanayaka, A.G.Y.S. Kumari, A.R. Jayamaha, H.H.N.D. Dharmarathna





ABSTRACT OF THE KEYNOTE SPEECH
Prof. Martin Jens Persson,
Professor of Health Sciences,
Faculty of Health Sciences,
Kristianstad University,
Sweden

#### **Body Image and The Psychological Impact – Healthcare Perspective**

Body image dissatisfaction, resulting from disfigurement or the consequence of perceived social pressure to conform to unrealistic and narrow beauty (and ageist) ideals, indiscriminately affects the mental and physical health of a significant and growing proportion in the world. Those with disfigurement also experience social discrimination that negatively impacts personal aspirations, education, and work opportunities. As medical advances improve the survival rates of those born with or who acquire a disfigurement, and the demand for cosmetic interventions and psychological support increases, professionals from diverse health and social care areas, such as nurses, for example, are increasingly being exposed to the challenges of identifying and addressing the needs of patients burdened by complex and unique psychosocial issues. These professionals are ideally placed to ameliorate these issues but report that they often lack the necessary expertise to help, and therefore, patient access to expert support is inadequate. At the same time, healthcare professionals express an interest in being trained to support patients with body dissatisfaction. A study that involved 718 healthcare professionals from five European countries found that 87% (n=706) wanted to know more about how to provide psychosocial support, and 70% (n=669) stated that they would, especially if the course focused on evidence-based best practice and practical skills rather than theory and models of care, attend a course in this area.

This lecture will highlight the complexity of these problems in a global context and introduce an innovative training approach for healthcare professionals that can be implemented in various settings – both clinical and educational.



#### ABSTRACT OF PLENARY SPEECH 1

#### **Role of the Nurse in Health Care Safety**

Prof. S.S.P. Warnakulasuriya,

Dean, Faculty of Nursing, University of Colombo

Safety is the first priority of any organization. Providing a safe work environment for employees and customers is a commitment shared by all of the employees. With regards to health care safety, the hospital environment should be a safe place for both patients and health care workers because it has inevitable hazardous factors. Among the health care workers, nurses represent a larger proportion, and they actively engage in maintaining patient safety and workplace safety. Safety in health care does address only the patient's safety issues and that includes all safety precautions taken to prevent patients and health care workers from major health hazards in the hospital environment including biological, chemical, physical, ergonomic-environmental, and psychosocial hazards. Usually, hospitals are more focused on the occurrence of adverse events and the level of adversity to the patient in the context of the costs of malpractice. Therefore, Nurses are a crucial part of any hospital's efforts to improve patient safety. As frontline health care worker who works and stays round the clock in the hazardous working environment nurses have a pivotal role with regards to health care safety. With the covid pandemic, the situation was raised last year, there was a special emphasis on health care safety ad today it has become a buzzword. My presentation will be based on sharing my thoughts with regards to nurses' role in health care safety.



#### **ABSTRACT OF PLENARY SPEECH 2**

### **Effectiveness of Nurse Case Management in Improving Health Outcomes in Non- communicable diseases**

Dr. G. Kisokanth

Head, Department of Clinical Nursing, Faculty of Nursing, University of Colombo

Nurses play a major role in providing care to individual patients with chronic illnesses. The concept of Nurse case management (NCM) has been in practice for caring for patients with chronic illnesses. NCM is a collaborative process and advocacy for the services to meet an individual's health needs through communication and available resources to promote quality cost-effective outcomes. As such, it is important to assess the effectiveness of NCM in improving the health outcomes of patients with common non-communicable diseases (NCDs) such as Diabetes Mellitus (DM), Coronary Heart Disease (CHD), Chronic Obstructive Pulmonary Diseases (COPD), Cancer.

A review of the literature on NCM conducted in different parts of the world had shown significant positive results on health outcomes in the management of common NCDs. An improved glycemic control, a positive impact on health and economic benefits, and enhanced self-reported health status are shown among patients with DM with the use of NCM. Also, it was observed that hospital and out-patient care utilization were significantly low among nurse case-managed patients with DM. Further, significantly more patients in the NCM group attained target LDL cholesterol levels through healthy lifestyle changes. In addition to that, hospital admission days, multiple readmissions, and inpatient costs were lower among patients with heart failure in the nurse case intervention group compared with the usual care group. Notably, unplanned readmission, depression, and wellbeing of patients were positively improved among nurse case-managed COPD patients. Further, days of hospital stay due to recurrent admission of patients with severe COPD were reduced while the quality of life has been improved by using NCM. Furthermore, NCM has promoted timely treatment in a reliable medical institute and assisted in the completion of treatment and follow-up among patients with cancer. At the same time, readmissions due to infection among cancer patients were reduced and many women with breast cancer accept breast-conserving surgery, adjuvant radiation therapy, and chemotherapy as a result of NCM.

In conclusion, nurse case management improves successful self-management of chronic NCDs, increased functional and mental status, and risk-reducing behaviors which enhances the quality of life of individuals.



### **ABSTRACTS**



### **ABSTRACTS OF ORAL PRESENTATIONS**



RS21-002: OP1

#### Knowledge, Attitude and Influencing Socio Demographic Factors Towards Childhood Attention Deficit Hyperactivity Disorder Among Primary School Teachers in Jaffna Education Zone

R.P.H.A. Udeshika<sup>1#</sup>, D. Thabotharan<sup>1</sup>, S. Sivathas<sup>2</sup>, P.A.D. Coonghe<sup>3</sup>

<sup>1</sup>Department of Nursing, Faculty of Allied Health Sciences, University of Jaffna <sup>2</sup>Teaching Hospital, Jaffna. <sup>3</sup>Department of Community & Family Medicine, Faculty of Medicine, University of Jaffna.

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**Introduction:** Attention deficit hyperactivity disorder (ADHD) is a commonly studied neurodevelopmental disorder in children. Teachers are the first to identify children with ADHD and help to manage them.

**Objective:** To assess the level of knowledge and attitude on ADHD and its influencing sociodemographic factors among primary school teachers in Jaffna Education Zone.

**Methods:** Institutional based descriptive cross-sectional study was carried out among primary school teachers in Jaffna Education Zone. A self-administered questionnaire was used to collect data. The sample of 250 primary school teachers working in 29 government schools were selected by stratified random sampling technique. Data analysis was done using SPSS version 23. Chi-square test was performed to identify the relationship of the factors. Ethical clearance was obtained from the Faculty of Medicine, University of Jaffna.

**Results:** A total of 231 questionnaires of 250 distributed were returned (response rate 92%). The mean age of participants was 42 years. The majority had completed post basic diploma and more than sixteen years of working experience (48.0%). The total score of knowledge classified by taking percentages as less than 50.0% unsatisfactory and 50.0% and more were satisfactory. Results revealed that knowledge of teachers regarding childhood ADHD was unsatisfactory (44.2%) particularly regarding treatment and management. Their attitude was more favorable (90.0%). There was a statistically significant relationship between the knowledge and the highest level of educational qualification (p<0.05). The attitude was significantly influenced by age and the working experience.

**Conclusions:** Participated teachers' knowledge was inadequate, and it was influenced by their level of education. Results suggest greater efforts must be made to provide teacher training specifically in the identification and management of children with ADHD with the combination and participation of health care and education professionals.

**Keywords:** Attention deficit hyperactivity disorder, Attitude, Jaffna Education Zone, Knowledge, Primary school teacher



RS21-006: OP2

# Rapid Review of The Literature on Nursing Students' Perception and Experience During COVID-19 Pandemic

M.G.S. Nishara, H.M.H.I. Herath, J.M.L. Shavindi, P.P.M. Lakrandi, P. Thavalingaratinam, T.A.Asurakkody<sup>#</sup>

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**Introduction:** COVID-19 pandemic driven the world to a global emergency and fighting against the pandemic made an overwhelming demand for the health sector. As numerous impacts of the crisis, nursing students tried to view, justify and adapt to the pandemic on their perception.

**Objective:** To identify and synthesize available evidence on the nursing students' perceptions and experiences regarding the COVID-19 pandemic.

**Methods:** Rapid literature review was performed from 18<sup>th</sup> to 21<sup>st</sup> June 2021 on four databases; Google Scholar, Science Direct, PubMed, and Web of Science to identify the publications between 2019 and 2021. Findings were categorized under the five levels of Bronfenbrenner's ecological model.

Results: Thirty-five articles were eligible from the initial search strategy of 1076 studies. Of these, the USA has the highest contribution (17.14%). Upon the organization of evidence into levels, major and subcategories; intrapersonal level included knowledge (COVID-19), health distress (anxiety, nervousness, fear, physical discomfort), experiences (clinical, online learning), skills (confidence), and attitudes (pride of profession). Family burden and teamwork were categorized under the interpersonal level. The institutional level consisted of classroom and clinical learning. Social relationships and policy development subsisted under the community and public policy levels respectively. Findings revealed that positive experience ([40%] confidence, pride of the profession) strengthens as frontline health care workers. Negative experiences ([77.14%] increased anxiety, physical discomfort, isolation, and fear of descendants' contamination) have adversely affected. Reformation of academics to online and continuing clinical learning were devastating factors during the pandemic.

**Conclusions:** Nursing students have both positive and negative perceptions and experiences towards the COVID-19 pandemic. University administration, Deans, Department heads had gained a chance to prepare an advanced crisis plan that could be rapidly and effectively implemented, considering new trends in nursing education. Further, enhance knowledge on pandemics and computer literacy among nursing students are vital mechanisms during a pandemic.

Keywords: Nursing students, Education, Perceptions, Experiences, COVID-19 pandemic



RS21-007: OP3

#### Perceptions of Life Among Women After Hysterectomy in Kandy District Sri Lanka

N.P. Abeyrathna<sup>1</sup>, J.M.N.P. Jayasundara<sup>1</sup>, P.G.U.P.K. Peramuna<sup>1</sup>, M.H.M.M.P. Mapa<sup>1</sup>, L.Y.S.S..Kumari<sup>2#</sup>, E.W.A.I.M. Siriwardhana<sup>3</sup>

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**Introduction**: Hysterectomy remains as the most commonly performed gynecological surgery in the world. It is a stressful and unpleasant experience for women which can critically influence on their physical, psychological and sexual life.

**Objective:** To explore the experiences of patients who had hysterectomy in Teaching Hospital, Kandy.

**Methods:** In this quantitative descriptive study, 192 women who had hysterectomy during the year 2000 to 2018 at the Teaching Hospital, Kandy were conveniently recruited. Data were collected over the phone using a validated interviewer-administered questionnaire. Ethical approval was obtained from the same hospital. Data were analyzed by descriptive statistics using SPSS 22 version.

**Results:** About two thirds of the participants (118) were belonged to the 41-50 years age category and 75% of the study participants were married. About half of the participants (102) knew very little or merely not known about hormonal therapies. Around 60% of the women indicated that their body weight dramatically increased after the surgery and 30% reported that it took 1-4 months to commence day to day activities after hysterectomy. Majority (about 90%) believed that a womb is needed for the completeness of a woman, and they are worrying about the loss of the womb. Among the participants, approximately one fourth expressed their displeasure of the inability of having children hereafter. About 78% of the participants reported increased vaginal dryness after hysterectomy. Furthermore, about half of them (96) mentioned that more than six months were taken for resume their sexual activities and about 40% reported notable reduction in the number of times of sexual activity after hysterectomy.

**Conclusions**: The presence of psychological and emotional stress was evident in this study. Therefore, exploring patient's experience immediately after hysterectomy can be used to arrange tailored post-operative interventions for the patients to cope with their discomforts thus patients will enable to live a quality life after recovery.

**Keywords:** Hysterectomy, Physical effects, Psychological disturbances, Sexual impairments



#### RS21-009: OP4

#### Perceptions And Experiences of Stakeholders on Effectiveness of the Psychiatric Nursing Training Program of the College of Nursing Mulleriyawa

W.A.R.P. Menike

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**Introduction:** The psychiatric nursing training program conducted in the College of Nursing Mulleriyawa (CNM) is the only training available in Psychiatry for the student nurses in Colleges of Nursing, Ministry of Health in Sri Lanka. There is no previous research study conducted to explore the effectiveness of this program.

**Objective:** To explore the effectiveness of the psychiatric nursing training program conducted in CNM.

**Methods:** Descriptive qualitative research was conducted using focus group (FG) discussions among nursing tutors of CNM (N=06), nursing officers and nurse managers (N=07) of the National Institute of Mental Health (NIMH). The participants with more than 05 years of experience in the field were included in the study using purposive sampling. A topic guide prepared using the CIPP model (Context, Input, Process, and Product) was used to collect data. Qualitative content analysis was used to analyze data. Ethical approval was obtained from the NIMH, Sri Lanka.

**Results:** The study participants perceived the following concerns. The theme 'Context' -The program will be more effective if the revised curriculum includes the country's community needs and social changes. The theme 'Input' - Inadequacy of human and physical resources are the main barriers to the smooth process of the program to have effective outcomes. The theme 'Process'-The program will be more effective if the duration of the program is extended. The theme 'Product' - The nursing students get a considerable change in their attitudes and skills for caring the Psychiatric patients due to this training.

**Conclusions:** Stakeholders have perceived that the psychiatric training program at CNM is beneficial and effective for the nursing students in Sri Lanka for caring for psychiatric patients. The policymakers should initiate strategies to revise the curriculum and fulfil the physical and human resources to improve the program's effectiveness.

**Keywords**: Context, Curriculum, Input, Nursing, Evaluation



#### RS21-011: OP5

#### Assertiveness Among the Nursing Undergraduates in a Defence University, Sri Lanka

W.G.C. Kumara<sup>1#</sup>, S.S.P. Warnakulasuriya<sup>2</sup>

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**Introduction:** Assertiveness is considered a valuable skill in the nursing profession as it contributes to Strengthen inter-professional relationships, preventing workplace violence, reducing occupational stresses, minimizing negligence, and improving nurses' leadership ability, job satisfaction, professional autonomy, and professional efficacy. Therefore, assertiveness is an important skill that should be developed from the beginning of nursing studentship. However, there is a dearth of studies conducted on assertiveness among nursing students in Sri Lanka.

**Objective:** To assess the assertiveness and its relationship with the socio-demographic variables among the BSc. Nursing undergraduates at the Kotelawala Defence University (KDU), Sri Lanka.

**Methods:** The study was conducted as a descriptive cross-sectional study among all (n=147) nursing undergraduates of KDU. A pretested self-administered questionnaire was used to assess socio-demographic data and validated Sinhalese version of the assertiveness scale developed by Begley and Glacken, 2004 to measure the level of assertiveness. The study instruments were shared online once informed consent was obtained. The data were analyzed using SPSS 23.0, using the descriptive statistics followed by the independent sample t-test and the one-way ANOVA test.

**Results:** The mean assertiveness of the study population was  $81.35\pm6.51$ . The majority (74.8%) of the study participants was females. Many participants have revealed that they had attended leadership programmes (85.7%) and assertiveness training programmes (19.7%) conducted by the University and other institutes. It was observed that the assertiveness is not significantly different within the associated factors such as gender, marital status, nationality, parents' assertiveness, age group, number in the family, academic year, English proficiency, childhood trauma, the assertiveness of closed peers, interest in the nursing profession and other course work (P>0.05).

**Conclusions:** The results showed a greater assertiveness score among the nursing undergraduates enrolled to KDU. However, there were no statistically significant mean differences found on assertiveness among socio-demographic variables.

**Keywords:** Assertiveness, Nursing undergraduates, Sri Lanka



#### RS21-015: OP6

# Undergraduate Nursing Students' Perception and Barriers Towards Online Learning in a State University, Sri Lanka: A Quantitative Study

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**Introduction:** Nursing is a skill-based discipline. The effectiveness of online learning methodologies has not been well examined prior to adoption at many institutions. The sudden transition of physical classes into online classes may have an impact on nursing students' usual learning process. To get a better understanding of how these learning technologies impact students' learning, it is essential to assess the students' perceptions and barriers towards effective online learning for nursing education.

**Objective:** To determine the undergraduate nursing students' perception and barriers towards online learning studying in a state university, Sri Lanka

**Methods:** The study was conducted as a quantitative, descriptive cross-sectional study using researcher-developed validated Google form circulated via social media and email groups. One hundred seventeen (117) nursing undergraduates registered for all academic years at the University of Peradeniya participated in the study. Data were analyzed for percentages, frequencies and associations.

**Results:** Among total participants 30.8% were males. The number of students in 1st, 2nd, 3rd, and 4th years was 45, 36, 16 and 20 respectively. Students who had a positive perception (52.13%) towards online learning seemed to accept and adapt to online learning. The majority were perceived lack of motivation in online classes (53.8%), lack of interaction with the lecturer (54.7%), and lack of peer interaction (55.6%). The majority of participants (51.3%) preferred physical classes over online classes. A significant association was not identified with gender, year of study, and monthly income of the family. Of the total participants, 62.4% were disagreed with conducting exams online. Troubles with the internet connection (79.5%), computer literacy (63.2%), physical discomforts (59.8%), and getting distracted (51.3%) were the major drawbacks reported.

**Conclusions:** Even though students were faced with several issues, the perception of online learning was relatively good. However, there should be frequent assessments to evaluate adoption levels among students to online nursing education.

**Keywords:** Online learning, Undergraduates, Nursing Students, Perception, Barriers



#### RS21-016: OP7

## Anti-Covid 19 Drug Candidates from Sri Lankan Natural Products: In-Silico Approach to Identify Inhibitors of SARS COV 2

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**Introduction:** The development of potent antiviral drugs against COVID-19 is of utmost importance. In this context, computational pharmacology may play a lead role. This study aimed on in-silico screening of Sri Lankan natural products by molecular docking (MD) and molecular dynamics studies against SARS-CoV-2 main protease Mpro responsible for multiplication.

**Objective:** To identify plant-derived compounds of Sri Lankan flora as antiviral agents with protease inhibitory potential against SARS-CoV-2 pandemic.

**Methods:** Four hundred & eighty molecules isolated from Sri Lankan natural resources were virtually screened for anti-viral activities against SARS-CoV-2 main protease Mpro. Binding energies were calculated using Auto Dock Vina and the active site of SARS-CoV-2 was defined using data from literature studies. The results were compared with that of a synthetic construct of N3, a peptidomimetic inhibitor of coronavirus main protease. The complexes with favorable binding interactions were filtered and subjected to molecular dynamic studies using AMBER with GPU acceleration where the dynamic behavior of protein-ligand complex at different time scales was determined. Visual Molecular Dynamic (VMD, version 1.9.4) was used to study the atom trajectories and the Root Mean Square Deviation (RMSD) of each of the protein ligand complex. The RMSD of the SARS-CoV-2 and drug complex was analyzed through a 100ns trajectory and results were compared with that of N3. Further, the ADME parameters, pharmacokinetic properties and the druglike nature of identified compounds were studied.

**Results:** One of the natural products, SLNP\_012, showed favorable interactions with the binding pocket of Mpro as compared to that of N3. SLNP\_012 showed up to 5 possible H-bond with the active site residues. It also showed favorable physiochemical properties for oral bio availability with a very high gastrointestinal absorption and blood brain barrier permeation.

**Conclusions:** Sri Lankan plant derive natural product SLNP\_012 could be a potential anti-viral agent for SARS-CoV-2 infection.

**Keywords:** SARS-CoV-2, Molecular docking, Molecular dynamics, Sri Lankan Natural Products.



### **ABSTRACTS OF POSTER PRESENTATIONS**



#### RS21-003: PP1

# Prevalence and Factors Associated with Masked and White Coat Hypertension Among the Residents in Sri Jayewardenepura Kotte Municipality Area – A Cross Sectional Study

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**Introduction:** Masked hypertension (MH) and white coat hypertension (WCH) are clinically misdiagnosed as Sustained Normotension (SN) and Sustained Hypertension (SH), respectively, only relying on clinical BP values of the patients. This practice leads to overmedicate and under medicate the people suffering from WCH and MH respectively, triggering many clinical issues. **Objective:** To analyze the prevalence and associated factors of WCH and MH among people who use public primary care facilities in Sri Jayewardenepura municipal area (SJMA).

**Methods:** Participants (102) were randomly selected from regular patients of The National Center for Primary Care and Allergy Research, Faculty of Medical Sciences, University of Sri Jayewardenepura, reside in SJMA. Data was collected using an investigator-administered questionnaire. Clinical BP and 24-hour ambulatory blood pressure (AMBP) were measured using a validated single mercury sphygmomanometer and AMBP monitoring devices, respectively. MH was defined as clinical <BP, 140/90 mmHg and daytime ambulatory BP >135/85 mmHg. WCH was defined as clinical BP >140/90 mmHg and daytime ambulatory BP <135/85 mmHg. A multinominal logistic regression was performed to identify the significant factors associated with WCH and MH.

**Results:** Among 102 patients, 80% were normotensive, 9.8% had WCH, 5.9% had MH, and 3.9% had SH. The majority (55.1%) was females. Mean age was 42.1 ( $\pm$ 15.7) years. WCH was significantly (p<0.05) associated with older age, employment (occupied), presence of diabetes, marital status (married), less time expenditure for working, sleeping and physical activity and drug intake, compared to SN. MH was significantly (p<0.05) associated with older age, employment (occupied), presence of diabetes, marital status (married), time expenditure for working, higher physical activity and drug intake, compared to SN.

**Conclusions:** Finding of the study suggest the use of AMBP monitoring on the current management of hypertension in terms of diagnosis and evaluation of BP control, considering the observed associations of MH and WCH in the study.

Keywords: Clinical BP, AMBP, Masked hypertension, White coat hypertension, Association



#### RS21-005: PP3

#### Artistic and Scientific Components of Nursing: A Review and Evaluation of Evidence

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**Introduction:** The state of nursing is subjecting to contemporary changes with health care advancements. Nursing is identified as a profession with a broad knowledge base affirming scientific and artistic principles.

**Objective:** To develop a comprehensive understanding of scientific and artistic components of nursing with relevance to ongoing professional developments.

**Methods:** The literature was searched from 1977 to June 2021 based on a keyword combination in the databases: Web of Science, PubMed, Science Direct, and Google Scholar. The articles were categorized using a literature matrix and analyzed using content analysis.

**Results:** Forty-eight studies were identified and categorized into three themes; nursing as an art (35%), science (25%), and both science and art (40%). Nursing as science is supported with determinants; critical thinking, evidence-based practice, reflection, paradigm, academic and professional qualifications. Nursing as art is attested with compassion, effective communication, sympathy, empathy, and holistic care. Nursing presence and the therapeutic relationship are supported with both artistic and scientific components. Articles were subjected to decade-wise analysis in which a drastic change was observed in nursing researchers' perception. Before 1989 (8.34%), research development was viewed as a turning point in the nursing profession. From 1990 to 1999 (35.41%), mild criticism was developed based on increasing trends and interest towards research and theory neglecting patient care prioritization. The importance of counterbalance between research and patient care was highlighted from 2000 to 2009 (43.75%), the decade with the maximum available literature. From 2010 to 2021 (12.5%), criticism was observed to reach a settlement affirming the significance of research for nursing career development.

**Conclusions:** Findings suggest that nursing is a science with artistic components requiring both research and practice for professional developments. Research evidence highlights the importance of simultaneous application of treatment based on scientific data and patient-centered care which essentially requires an artistic approach.

**Keywords:** Nursing, Science, Art, Review



RS21-008: PP4

## Attitude of Police Officers Towards Dealing with Individuals with Psychological Problems: A Sample from Selected Police Stations in Colombo District

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**Introduction:** Sri Lanka's Mental Diseases Ordinance gives discretion to police officers to make decisions concerning mentally ill without prior clinical training. Recognition of officers' attitude towards individuals with psychological problems (IPPs) is important as these influences officers' responses to situations involving IPPs.

**Objective:** To identify the attitude of officers using the Mental Health Attitude Survey for Police (MHASP) and explore which demographic factors and experiences would predict their attitude.

**Methods:** The survey was distributed amongst 17 police stations and 77 officers volunteered on site. The MHASP included 33 statements officers rated on their level of agreement. MHASP consists of four subscales, three of which measures police officers' attitudes towards; IPPs in general, community responsibility for IPPs, and IPPs living in the community and gives a total score of 180. Fourth subscale calculated separately, assessed officers' perceived level of adequate preparedness to deal with IPPs. A multiple regression analysis was conducted to identify which officer characteristic predicted the scores of the subscales.

**Results:** The MHASP total (M=132.67, SD=17.55) indicated a more positive attitude towards IPPs. Despite most officers (84%) reported of not receiving any specialized training, results suggested they were nonetheless confident to deal with IPPs. However, 88% of the officers agreed on the need for such training. Regression analysis showed no demographic factor predicted officers' attitude except for gender in relation to community responsibility (p=0.047). The level of education (p=0.088), while not significant, was more associated with the total MHASP than the individual subscales.

**Conclusions**: Although a positive attitude towards IPPs was observed, considering majority were confident to deal with IPPs without formal training, a similar study can be conducted with a larger sample that could also investigate current practices amongst police officers in dealing with IPPs and to recommend the incorporation of specialized training to the police academy curriculum and for existing police officers.

**Keywords:** Police, Law enforcement, Attitude, Mental health, Psychological problems



#### RS21-010: PP5

### Job-Related Burnout During the Period of COVID-19 Pandemic Among Nurses at National Institute of Infectious Diseases; Sri Lanka

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**Introduction**: Nurses are under persistent psychological pressure since they are promptly exposed to COVID 19, as frontline healthcare workers. Burnout is a prolonged response to chronic emotional and interpersonal stressors. The persistent psychological pressure due to worsening COVID 19 situation in the country, could lead to burnout among nurses.

**Objective:** To assess the job-related burnout and its' associated factors during the period of COVID-19 Pandemic among nurses at the National Institute of Infectious Diseases (NIID); Sri Lanka

**Methods:** A descriptive cross-sectional study was conducted among randomly selected 160 nurses at NIID. Data were collected by using a pretested self-administered questionnaire which included "Maslach Burnout Inventory for Medical Personnel" to assess job-related burnout. Data were analyzed using descriptive statistics and inferential statistics. IBM SPSS version 25.0 was used as the data analysis tool.

**Results:** The majority (84%) of the participants were females with a mean age of 30±5 years. Nearly half (56%) of the participants were married and the average working hours per day was 13±4 hours. When considering burnout, the mean values of emotional exhaustion (EE), depersonalization (DP), and personal achievement (PA) were 29.82±11.17, 13.61±5.45, and 32.29±9.04 respectively. The study participants reported high levels of EE (61%), high levels of DP (54%), and low levels of PA (39%) during COVID-19 Pandemic. Educational status (p=0.03) and working at COVID unit (p=0.03) were associated with EE. Working hours per day (p=0.02), number of night shifts (p=0.003) and working at COVID unit (p=0.001) were associated with DP. Marital status (p=0.05) and covid training (p=0.01) were associated with PA.

**Conclusions:** Nurses encounter high levels of burnout during the COVID-19 pandemic, while several factors significantly associated with the burnout. The study findings emphasized the necessity of interventions for early detection, reduction, and prevention of burnout among nurses.

Keywords: Nurses, COVID 19, Burnout



#### RS21-014: PP7

#### A Quantitative Study Determining the Contribution Factors and Impact on Social Media Addiction Towards Depression Among Adolescents in Gampaha District-Sri Lanka

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**Introduction:** Mental health conditions account for 16% of the global burden of disease and injury in people aged 10-19 years globally, depression is one of the leading causes of illness and disability among adolescents.

**Objective:** To determine the contributing factors on social media addiction towards depression among adolescents (13-17years) in Gampaha District.

**Methods:** A quantitative study was conducted among 200 school children aged 13-17 in the Gampaha district using a self-administered questionnaire, validated by a Pre-test including the depression scale (Depression level was measured by Mood and Feeling Score (MFQ) range from 0 to 26. Scoring a 12 or higher indicates the presence of depression of the respondent. The convenience sampling technique was used. Data were analyzed using Statistical Package for Social Science (SPSS 22) and the findings were presented in a descriptive and inferential manner.

**Results:** The response rate of the study is 87% where 174 students participated. It was found that one-fourth of the sample (24.9%) had depression. The highest of the sample responded on "Internet addiction" as negative impact (61.85 %) and a minority of the sample responded on "Suicide; Self-harm content" (20.8 1%). There is no association between personal factors and depression (p=0.329) and between social media factors and depression (p=0.865). Among students who were categorized as having depression, 65.1% mentioned that they do not have mental or health problems and they use social media more than 15 times in a week.

**Conclusions:** According to the finding, one-fourth of the population is experiencing considerable mental health issues. Addressing adolescent mental health conditions extend to adulthood, improve both physical and mental health and enhancing opportunities to lead fulfilling lives as adults.

**Keywords:** Depression, Social media addiction, Adolescents



#### LIST OF THE REVIEWERS

The organizing committee of the Annual Research Symposium 2021 expresses sincere gratitude towards the undermentioned reviewers for their invaluable contribution.

- Prof. Sampatha Goonewardana, University of Sri Jayewardenepura
- Prof. S.S.P. Warnakulasuriya, University of Colombo
- Dr. Sujatha Senevirathne, University of Sri Jayewardenepura
- Dr. M.K.D.L. Meegoda, University of Sri Jayewardenepura
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- Mr. Nimantha Karunathilaka, General Sir John Kotelawala Defence University



#### **ACKNOWLEDGEMENT**

#### We extend our sincere gratitude to:

#### Chief Guest - Senior Professor Chandrika N. Wijeyarathne

Vice Chancellor – University of Colombo

#### **Keynote Speaker - Professor Martin Jens Persson**

Professor of Health Sciences, Faculty of Health Sciences, Kristianstad University,
Sweden

#### Professor Sudath Warnakulasuriya

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