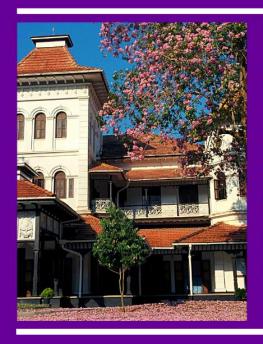


# 3"ANNUAL RESEARCH SYMPOSIUM

"STRENGTHENING NURSING EDUCATION FOR EMERGING HEALTH SYSTEM CHALLENGES"

# **BOOK OF ABSTRACTS**







18<sup>™</sup>DECEMBER 2020

FACULTY OF NURSING UNIVERSITY OF COLOMBO



# 3<sup>rd</sup> Annual Research Symposium - 2020

"Strengthening Nursing Education for Emerging Health System Challenges"

# **BOOK OF ABSTRACTS**

Faculty of Nursing University of Colombo

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## **Published by**

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### **Edited by**

Dr. S.S.P. Warnakulasuriya
Dr. G. Kisokanth
Ms. Nushka Ubhayawardana
Ms. Ruwandi De Silva
Faculty of Nursing, University of Colombo



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#### ABOUT FACULTY OF NURSING, UNIVERSITY OF COLOMBO

Nursing is an art and a science. It is a unique profession within the health care sector focused on the care of individuals, families, and communities Nurses play a vital role in the health care system of any country whose main goals are to promote healthy lifestyles, prevent diseases, alleviate suffering, and rehabilitate individuals that are differently able.

Faculty of Nursing, University of Colombo, is the first-ever nursing faculty in Sri Lanka, which is the latest extension of a wing of the oldest and top-ranked national state university in the island, University of Colombo. The overall aim of the Faculty of Nursing is to enhance Sri Lanka's capacity to produce graduate nurses who are capable of catering to both national and international health care needs with advanced knowledge and skills which are based on a sound theoretical and practical foundation. The establishment of the new faculty will be a driving force of its harbor 'University of Colombo' in achieving excellence in building synergies between knowledge, education, and research, collaborating with its remaining eight faculties with academic departments, campus, school, seven institutes, and five centers.

Faculty of nursing is located at the premises of Sri Jayewardenepura General Hospital and currently, is offering a 4 years bachelor's degree in nursing with three departments; Department of Clinical Nursing, Department of Fundamentals of Nursing, and Department of Basic Science and Social Sciences for Nursing led by the Dean, Dr. Sudath Warnakulasuriya, enrolling 100 students per annum.

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



Initially of Colombo. This year annual research symposium is held for the third time under the theme of "Strengthening nursing education for emerging health system challenges" which was especially adopted in order to emphasize and communicate the importance of strengthening nursing education for the world demand of educated nurses for facing the emerging health system challenges such as corona pandemic, natural disasters and increased elderly population etc. Healthcare is changing dramatically due to the advancement of medical sciences and technology, the abundance of clinical research and the higher demands of consumers. As a key profession of healthcare, these changes represent a significant challenge to the nursing profession and nursing education in terms of maintaining the quality of services and preparing nurses for the future.

Effective systems for education, research, and regulation are vital to strengthening the contribution of nursing services to achieve better health care outcomes. Today nurses need advanced knowledge and skills to practice according to the health care demands of 21st century. This knowledge is based on all the innovations which in turn evolve as trends in nursing. The trends in nursing education are the cornerstones for the dynamic nature of nursing profession. During the past decade, the world health systems faced many challenges due to new emerging diseases, large-scale natural disasters, conflicts, and ongoing wars in different countries. During all these types of health system challenges, nurses played a key role in order to facilitate health system resilience as front-line workforce. Therefore, strengthening nurses in knowledge, skills, and research is paramount important in order to face the emerging health system challenges.

During the symposium, sharing knowledge, research evidence, and experience among nursing professionals and multidisciplinary experts from different disciplines would be a significant contribution to enlighten the wisdom of all participants under the above theme.

Vice-chancellor: University of Colombo, senior professor Chandrika Wijeratne as the chief guest and the speaker, senior professor Rajitha Wickremasinghe as the keynote speaker, and Prof K.P. Hewagamage as the speaker in this symposium with their expertise and vast experience in the field of education, health and research, undoubtedly would be a wonderful learning experience for the participants.

I take this opportunity to congratulate all the presenters, 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 a very successful research symposium 2020.

Dr. S.S.P. Warnakulasuriya Dean Faculty of Nursing

#### **MESSAGE FROM THE CHAIR OF ANNUAL RESEARCH SYMPOSIUM 2020**



s the chairperson of the Annual Research Symposium – 2020 of the Faculty of Nursing, I take this opportunity to extend my warm welcome to you all to the Third Annual Research Symposium.

Faculty of Nursing annually conducts the research symposium for disseminating the research activities of academic of Faculty of Nursing as well as the students supervised by the academics. I am sure that Annual Research Symposium will provide a good platform for both academics and their students for sharing their research findings related to all areas of health especially NCDs, 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 - 2020 of Faculty of Nursing an enormous success. I extend my sincere thanks to Vice Chancellor, University of Colombo for initiating and encouraging the annual research symposium in the faculty. Also, I sincerely express my gratitude to Dean, Faculty of Nursing for his appreciation and encouragement.

I hope that Annual Research Symposium – 2020 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 – 2020 of Faculty of Nursing, a great success. I wish good luck to all the presenters.

Dr. G Kisokanth Chairperson, Annual Research Symposium – 2020 Senior Lecturer/Head Department of Clinical Nursing Faculty of Nursing



# **Organizing Committee**

### 3<sup>RD</sup> ANNUAL RESEARCH SYMPOSIUM 2020

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Ms. Rupa Padmini

Dr. Anushka Elvitigala

Ms. Shiroma Malkanthi

Ms. Nushka Ubhayawardana



#### **PROGRAMME**

8.30 am	Arrival of guests
8.45 am	National Anthem & lighting of the oil lamp
9.00 am	Welcome address <b>Dr. S.S.P. Warnakulasuriya</b> Dean, Faculty of Nursing
9.15 am	Address by the chief guest Senior Professor Chandrika Wijeyaratne Vice-chancellor, University of Colombo
9.45 am	Keynote speech Senior Professor A.R. Wickramasinghe Faculty of Medicine, University of Kelaniya
10.05 am	Plenary Speech Senior Professor K.P. Hewagamage University of Colombo School of Computing
10.25 am	Vote of Thanks <b>Dr. G Kisokanth</b> Chairperson, Annual Research symposium 2020
10.30 am	Tea break
10.45 am	Technical session
12.30 pm	Certificate Awarding & Closure of the Session

# PROGRAMME OF THE TECHNICAL SESSION

### **Oral Presentations**

TIME	PAPER ID	TITLE AND THE AUTHOR
11.00 am OP2	0.00	Survival of Colorectal Cancer Patients Treated at Oncology Unit,
	OP2	Teaching Hospital Karapitiya, Galle from 2011 to 2013
	<u><b>De Silva, H.R.T.</b></u> , Perera, S.C.R., Daluwakgoda V.	
11.15 am OP 3	Prevalence of Risk Factors for Non-communicable Diseases and	
	OD 2	Preventive Practices Among Nurses at Colombo South Teaching
	OF 3	Hospital in Sri Lanka
		Rangana A.A.D., Warnakulasuriya S.S.P
11.30 am OP 4		Association Between the Level of Physical Activity and Sleep Quality
	OP 4	Amongst Asthmatic Adults Attending Two Respiratory Clinics in
	Or 4	Colombo, Sri Lanka
		Kariyawasam K.H.A.Y., Wimalasekera S.W.
11.45 am OP 5		Perceived Reasons and Coping Strategies for
	Psychological Distress Among Community Dwelling Adults in A Rural	
	Or 5	Area, Southern Sri Lanka
	<u>Priyadarshani U.G.N</u> ., Warnakulasuriya S.S.P.	
12.00 pm OP 6		Physical Functioning of Below Knee Amputees in Sri Lanka: A
	OP 6	Preliminary Study
		Nadeeshani K.M.D., Kisokanth G., Prathapan S.
12.15 pm		Nutritional Impairment among patients with Early Rheumatoid
	OP 7	Arthritis attending Rheumatology Clinic in a Tertiary Care Hospital, Sri
	OF /	Lanka
		<u>Wijekoon W.M.P.D.S</u> ., Perera P.P.R., Warnakulasuriya S.S.P.
12.30 pm	OP 1	Evaluation of the Psychiatric Nursing Training Program of College of
		Nursing, Mulleriyawa through Context, Input, Process and Product
		(CIPP) Model
		Menike W.A.R.P.

#### ABSTRACT OF THE KEYNOTE SPEECH



Prof. A. R. Wickremasinghe

Senior Professor of Public Health

Former Dean of the Faculty of Medicine,

University of Kelaniya

#### Strengthening nursing education for emerging health system challenges

Nursing is an art, a science and a humanitarian service. Nurses play a pivotal role in any healthcare system. The primary role of a nurse is to advocate and care for individuals and support them through health and illness. Some critical roles played by nurses include patient care, patient advocacy, planning of care and patient education and support.

Nursing education in Sri Lanka formerly commenced in 1939 with the establishment of the Nurses Training School in Colombo. Since then, nurses' training schools have been established in many parts of the country. In addition, nursing degree programmes have been established in universities, and training of nurses is being carried out in private sector institutions and degree courses are even offered by foreign educational institutions.

In line with Sustainable Development Goal 3c "Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States", the Ministry of Health in Sri Lanka intends to increase the number of midwives/nurses to 3.82 per 1000 population by end 2030. This is an almost 50% increase from the current workforce that will have to be trained which will be a major challenge for training institutions.

The role of nurses in the healthcare system is unparalleled. In today's COVID pandemic scenario nurses have been the frontline workers in clinical settings often working under strenuous conditions exposed to unnecessary risks beyond their call of duty. The International Council of Nurses in late October estimated that more than 1500 nurses in 44 countries have succumbed to the COVID infection.

Nurses are frontline workers not only in emergency pandemic situations but also in the routine provision of healthcare. Sri Lanka's major public health problem today is non-communicable diseases (NCDs). The Ministry of Health has embarked on a major project to re-organize primary health care to address the NCD issue. In the proposed model, Public Health Nursing Officers are to be appointed to manage a defined population; they will be engaged in promotive, preventive, curative and rehabilitative care. The challenge for institutions is to provide a sound training that will provide the necessary competencies for emerging health system challenges.

#### ABSTRACT OF THE PLENARY SPEECH



Prof. K. P. Hewagamage,

Professor in Computer Science

University of Colombo School of Computing (UCSC)

## The role of ICT in Health Care for Emerging Challenges

We are living in the Information age. Technology is moving fast and carrying the world towards a more sophisticated phase. Healthcare is one of the highly impacted fields which rapidly change in line with the modern technological breakthrough. But it is questionable whether Sri Lankan healthcare sector is moving in the same phase. Still people willing to have medical care in the physical presence of healthcare professionals. It is strongly believed that though other fields can be shifted to online education medical education cannot. To keep phase with the rapid development in the world, integrating the Information and Communication Technology (ICT) with healthcare is vitally important. The global Covid-19 pandemic impacted the whole world and urge us to change our usual practice and mindset. If the healthcare professionals cannot adapt to this dynamic nature it risks the existence of them as well as the health and wellbeing of the whole nation. It is high time for a transition. The pandemic has shown the benefit of integrating ICT not only to provide secure and easy care but also to smooth functioning of the health sector, during hard times.

Good health and wellbeing for all have been identified as one of the main sustainable development goals by the United Nations. Certainly, this is not possible without the integration of ICT. The use of ICT to cope with emerging challenges can be discussed under three broader categories. Firstly, ICT can help reduce the gap in health education for health professionals. No matter developed or developing country, Healthcare services are always understaffed and suffering from skill mix imbalance. During a pandemic like this where it is difficult to go for a usual face to face education and clinical practice while fighting in the forefront, e-learning methods and tools live teleconferencing can be highly effective to make sure continuous education. Employing ICT will also increase global outreach. Secondly, ICT can assist the health and wellbeing of people. Healthcare is not only for cure but also should make sure prevention. Educating people on health and well-being is crucial and ICT can provide easy access tools. And also, online health forums motivates youth and children to help solve their health issues. Thirdly, ICT has shifted healthcare into a more advanced state. Health records have gone electronic and have impacted the advancement of health research and now health informatics is a demanding research area. Most of the countries are encouraging healing at a distance using telemedicine which is essential in the current situation. Healthcare and especially elderly care are now in a different phase with IoT and wearable technology. And the most disruptive technology of the next decade is the blockchain for healthcare.

Throughout the past decades, healthcare has transformed with the changing technology. As one of the highly demanding field in the world, it is highly required to adapt to the technological transition. It is clear that ICT can be utilized as a supportive tool to improve the living standards of the human being. Let's be prepared for the digital age.



# **Abstracts of Oral Presentations**

Annual Research Symposium 2020 Faculty of Nursing - UOC





# Evaluation of the Psychiatric Nursing Training Program of College of Nursing, Mulleriyawa through Context, Input, Process, and Product (CIPP) Model

#### Menike W.A.R.P.<sup>1</sup>

<sup>1</sup>Department of Fundamentals of Nursing, Faculty of Nursing, University of Colombo

**Background:** Psychiatric nursing training program is the only training available for nurses in this field. There is no evidence on evaluation of this program in the past. Therefore, it is vital to study and evaluate this Psychiatric Program. The purpose of this study was to evaluate the program by using the (CIPP) model.

**Methods:** In this cross-sectional study was carried out among 250 nursing students of the CNM as total population taking as the sample. The self-administered questionnaire drawn from the CIPP evaluation model was used to collect data. Descriptive statistics were used for analyzing data by the statistical software SPSS 21.0. The Kruskal-Wallis test was used for comparing mean values of Context, Input, Process, and Product evaluation. Ethical permission was taken from the National Institute of Mental Health.

**Results:** The results indicated that Product evaluation has the highest mean value (686) in which students showed highest satisfaction and agreed that the Program enhanced their subject knowledge (Mean=4.0, SD = 0.7), attitudes (Mean=3.7, SD=1.2), and necessary competencies at the end of the Program (Mean=3.7, SD=0.7), and felt that the training sessions were useful.

The lowest mean value is for the Process evaluation (330.6), the students' least satisfied area in which they were not engaged in research activities (Mean=2.3, SD=1.2), time allocated for clinical practice was inadequate (Mean = 2.5, SD =1.2). The mean values for Context and Input evaluations were 559 and 425.6 respectively. In these parts, they agreed that allocated time was inadequate, the library resources, and the number of lecturers was inadequate (Mean=2.1, SD=1.1).

**Conclusion:** The product part is the most effective part of the program. The students are least satisfied with the Process part. Students had lesser satisfaction on context and input parts than the product part of the Program. Based on the results, the policymakers should initiate strategies to revise the program fulfilling the inadequacies.

**Keywords:** Nursing, Context, input, process, product evaluation, Curriculum





# Survival of Colorectal Cancer Patients Treated at Oncology Unit, Teaching Hospital Karapitiya, Galle from 2011 to 2013

De Silva, H.R.T.<sup>1</sup>, Perera, S.C.R.<sup>2</sup>, Daluwakgoda V.<sup>3</sup>

<sup>1</sup>Department of Clinical Nursing, Faculty of Nursing, University of Colombo

<sup>2</sup>Onco Surgical Unit, Teaching Hospital Karapitiya, Galle

<sup>3</sup>Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri

Jayewardenepura.

**Introduction:** Colorectal cancer (CRC) is the commonest malignancy in the gastrointestinal tract. It is the third most common cancer of both sexes in the world. It comprises 10.2% of all cancers in 2018. Incidence rates of CRC are increasing in developing countries. Survival rates of CRC vary widely. The highest survival rates are showed in Australia, North America and Europe. Aim of the study is to determine two and five year overall survival and its predictors of CRC patients treated at Oncology unit, Teaching Hospital, Karapitiya (THK) from 2011 to 2013

**Methods:** A retrospective study was conducted among 151 CRC patients treated at Oncology Unit, THK from 2011 to 2013. The patients were followed up till 30<sup>th</sup> September 2020. The patients with secondary CRC were excluded. Oncology unit clinic records were referred to collect data. The patients who have stopped clinic visits were contacted via telephone and letters to identify their current status. Kaplan Meier and Cox's proportional hazards model were used to model survival.

**Results:** The mean survival times of two year and five year survival were 21.29 months (SD=5.18) and 44.56 months (SD=20.60) respectively. The median survival times of two year and five year survival were 24 months and 60 months respectively. The commonest age group is 55 to 64 years (32.5%). The commonest stage of lesions was "Duke's C" (26.5%). Duke's stage, nodal status and presence of metastases were statistically significant (P<0.001) independent predictors of survival. Duke's stage was statistically significant (P<0.001) predictors of survival after controlling for other variables.

**Conclusion:** More than two third of patients (71.5%) survived two years and more than half of the patients (60.3%) survived five years. Duke's stage was a significant predictor of survival in CRC patients treated at Oncology unit, THK.

Keywords: Colorectal Cancer, Survival, Sri Lanka





# Prevalence of Risk Factors for Non-communicable Diseases and Preventive Practices Among Nurses at Colombo South Teaching Hospital in Sri Lanka

A.A.D. Rangana<sup>1</sup>, S.S.P. Warnakulasuriya<sup>2</sup>

<sup>1</sup> Department of Clinical Nursing, Faculty of Nursing, University of Colombo, Sri Lanka. <sup>2</sup>Faculty of Nursing, University of Colombo, Sri Lanka.

**Background:** Non-communicable diseases (NCDs) are one of the major health and development challenges of the 21st century and the burden of NCDs are becoming significant health issues in Sri Lanka. Nurses are known to suffer from health problems. Specially NCDs due to physical and stressful nature of work. Assessing NCDs related risk factors among the nursing population is very important. Thus, the study was to determine the prevalence of risk factors for non-communicable diseases and preventive practices among nurses at Colombo South Teaching Hospital.

**Methods:** A cross-sectional study was carried out among 384 nursing officers at Colombo South Teaching Hospital in Sri Lanka and participants were recruited using simple random sampling. Data were collected through self-administration questionnaire and Anthropometric measures were also taken by using standard types of equipment. Data were analyzed by using SPSS (ver.20) software. Ethical clearance was obtained from the Ethics Review Committee.

**Results:** Majority of the participants were females (92.4 %) and the mean age was 31.49 (±9.02) years. The prevalence of BMI>25Kg/m² was 54.9% and the BMI < 18.5 Kg/m² was 5.7%. Prevalence of Waist Hip ratio over than the normal among male and female was 48.2% and 84.5% respectively. The Isolated systolic hypertension and chronic hypertension among all participants was 13.6% and 31% respectively. Majority of participants (82%) had engaged with light physical activities. Consumption of alcohol was 14.3% among all the participants. Second-hand smoking exposure was 27.3%. Nearly 99% participants were consuming deep fried foods. Nearly 70.9% and 43.6% of female participants were not attending cervical cancer screening and self-breast examination.

**Conclusions:** Risk factors for NCDs among nurses at CSTH were highly significant in this study. Thus, education programs on screening tests, lifestyle modification needs to be implemented to prevent NCDs.

Keywords: Non-communicable Diseases, Risk Factors, Prevalence, Preventive practices





# Association between the Level of Physical Activity and Sleep Quality amongst Asthmatic Adults Attending Two Respiratory Clinics in Colombo, Sri Lanka

Kariyawasam KHAY1, Wimalasekera SW2

<sup>1</sup>Faculty of Nursing, University of Colombo, Sri Lanka <sup>2</sup>Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka

**Background:** Asthma is a burdensome health problem present all over the world and nocturnal worsening is one of the commonest features of asthma. The level of physical activity is a marker of asthma control and it affects the health status of asthma patients. The aim of the study was to determine the association between sleep quality and the level of physical activity of asthmatic adults.

**Methods:** A descriptive cross-sectional study was conducted among 180 asthmatic adults attending two selected hospitals in Colombo district, Sri Lanka. Data was collected using an interviewer-administered questionnaire. A validated International Physical Activity Questionnaire used to assess the level of physical activity and a validated Pittsburgh Sleep Quality Index questionnaire used to assess the sleep quality of the participants. The collected data was analyzed using statistical Package for social sciences (SPSS) software version 25.

**Results:** 60% of participants were females. Nearly 11% were experienced asthma for more than 20 years. Majority (94.4%) had attended the clinic every month. Mean sleep quality score was 6.4 (±3.7). Nearly 64.44% of participants had deficient sleep. After calculation of Metabolic Equivalents (MET minutes/week), the mean score of physical activity level was 2318.7 (±5077.1) MET minutes/week. Only 17.8% had high level of physical activity. Most of the participants with deficient sleep had low 22.8% and moderate 33.3% level of physical activity. There was a significant difference between sleep quality and the level of physical activity (p=0.005) and a negative correlation (p<0.001) found between these two parameters.

**Conclusion:** This study reveals that physical activity is a possible protective factor against nocturnal worsening of asthma. Assessment of sleep quality and the level of physical activity can potentially aid health care providers when counseling adults on asthma self-management.

**Keywords:** Asthma, Adults, Level of Physical Activity, Sleep Quality

OP 5



## Perceived Reasons and Coping Strategies for Psychological Distress among Community Dwelling Adults in a Rural Area, Southern Sri Lanka

Priyadarshani UGN1, Warnakulasuriya SSP2

<sup>1</sup>Department of Nursing, Faculty of Nursing, KIU, Sri Lanka <sup>2</sup>Faculty of Nursing, University of Colombo, Sri Lanka

Background: Psychological distress in individuals due to varied reasons affects their day today life an that has become a major public health problem in the communities in all over the world.

Methods: A community based descriptive cross-sectional study was conducted with the participation of 280 adults aged between 20-64 years, residing in Nagoda Divisional Secretariat area, Galle, in order to determine the perceived reasons and coping strategies for psychological distress. Self-developed pre-tested questionnaire was administered to ascertain the data related to perceived reasons for psychological distress and coping strategies.

**Results:** Descriptive analysis was performed. Of the participants, 59.3% were females and 39.6% were aged between 35-50 years. Most prevalent reported reasons for psychological distress were income (73.6%), future plans (64.6%), busy work schedule (70.4%) and personal appearance (71.4%). Most frequently reported perceived reasons for psychological distress were health condition of the family members (53.6%), own health condition (52.1%), relationship issues (44.3%) and dietary pattern (44%). Three fourths of the individuals (75.7%) reported that they were watching television or listening to music as coping strategies. Out of total sample, practices of using alcohol (23.2%) and smoking (11.8%) as a stress coping method were reported by males only. Very few percentages of individuals reported healthy coping strategies including meditation (15.4%), engaging exercises (14.6%), seeking support of counselling (13.9%), telling the problem with a familiar person (33.6%) and recreational activities (14.3%) respectively.

Conclusion: Community dwelling adults reported varied reasons which leads to psychological distress and there is a lack of practices of healthy coping strategies which emphasizes the need of mental health development programs in community level in order to improve the mental health among community dwelling adults.

**Keywords:** Psychological distress, coping, adults





#### Physical Functioning of Below Knee Amputees in Sri Lanka: A Preliminary Study

Nadeeshani KMD1, Kisokanth G2, Prathapan S3

<sup>1</sup>University Hospital-Kotelawala Defence University, Sri Lanka

<sup>2</sup>Department of Clinical Nursing, Faculty of Nursing, University of Colombo, Sri Lanka

<sup>3</sup>Department of Community Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri

Lanka

**Introduction**: Limb amputations are lifesaving yet devastating for the amputees when adapting physically to changes after an amputation. Less studies in this area are conducted in the Sri Lankan context despite of its importance. This cross-sectional descriptive study assessed the physical functioning of the unilateral lower limb amputees in Sri Lanka.

**Methods**: 100 males and females, aged 20-80 years with a unilateral lower limb amputation due to any reason for at least 1 year representing all rehabilitation settings in Sri Lanka were included using simple random sampling method. They were assessed using the physical functioning subscale of the short form health survey (SF-36) after pretesting. Lower scores indicated lower physical functioning. Descriptive and inferential statistics were used to analyze data.

**Results**: Males being predominant (70%) and 41% of the participants were aged 41-60 years. Most had transtibial amputations (54%). The mean score for the physical functioning was 61.3 ( $\pm 25.5$ ). Activity limitations were categorized as; limited a lot, limited a little or not limited at all. The percentages of participants responded according to the above categorization was consecutively 35%;36%;29% for vigorous activities, 13%;42%;45% for moderate activities, 11%;32%;57% for lifting or carrying groceries, 18%;47%;35% for climbing of stairs, 9%;29%;62% for bending/kneeling or stooping , 25%;42%;33% for walking several miles, 36%;33%;31% for walking several blocks, 8%;29%;63% for walking one block and 17%;43%;40% for self-care activities. Physical functioning had significant associations with education level (p=0.01), level of amputation (p=0.04) and marital status (p=0.00). Physical functioning was not significantly associated with age (p=0.14), income (p=0.21), job (p=0.05) and financial help (p=0.27).

**Conclusions:** The physical functioning among the unilateral lower limb amputees were higher than the average (50%). But, to improve further, home based physical exercise programmes can be introduced to the participants.

**Keywords:** Amputation, Lower limb amputees, Physical functioning





## Nutritional Impairment among Patients with Early Rheumatoid Arthritis Attending Rheumatology Clinic in a Tertiary Care Hospital, Sri Lanka

Wijekoon WMPDS1\*, Perera PPR1, and Warnakulasuriya SSP2

<sup>1</sup> Department of Biochemistry, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka

**Background:** Quantification of body composition alterations and identification of nutritional risk factors among Rheumatoid Arthritis (RA) patients are clinically important. The objective of the study was to determine selected nutritional and anthropometric parameters of patients with early RA.

**Methods:** A case control study was carried out at Rheumatology Clinic of Colombo South Teaching Hospital among 100 early RA patients (disease duration of RA < 4 years) and age, gender and functional status matched healthy controls (n=100). Height, Weight, Waist Circumference (WC), Hip Circumference and Serum Haemoglobin (Hb) levels of patients and controls were assessed. The data was analysed by SPSS version 20. Ethical approval was obtained from Ethics Review Committees of University of Sri Jayewardenepura and Colombo South Teaching Hospital.

**Results:** Majority of the patients were female (84%). Female RA patients had significantly high values of BMI (27.1 $\pm$ 4.4 kg m<sup>-2</sup>, p=0.003), WC (97.6 $\pm$ 11.9 cm, p=0.000) and waist to hip ratio (0.99 $\pm$ 0.10, p=0.005) compared to female healthy controls (BMI- 25.1 $\pm$ 3.5 kg m<sup>-2</sup>, WC- 89.6 $\pm$ 9.7 cm, and waist to hip ratio - 0.93 $\pm$ 0.06). Serum Hb levels of male (12.45 $\pm$  1.18 g dl <sup>-1</sup>) RA patients were significantly low (p=0.001) compared to healthy males (14.6 $\pm$ 2.0 g dl <sup>-1</sup>). Anaemia was observed among 48 % of total early RA patients and 4% of healthy controls.

**Conclusion:** Majority of RA patients could exhibit anemia and anthropometric impairment compared to healthy controls even from the early stage of the disease.

**Keywords:** Early Rheumatoid Arthritis, Nutritional Impairment, Anaemia, Obesity, Abdominal Obesity

 $<sup>^{\</sup>rm 2}$  Department of Clinical Nursing, Faculty of Nursing, University of Colombo, Sri Lanka

# LIST OF THE REVIEWERS

- 1. Dr. S.S.P. Warnakulasuriya, Dean, Faculty of Nursing, University of Colombo
- 2. Dr. G. Kisokanth, Head, Department of Clinical Nursing, Faculty of Nursing, University of Colombo
- 3. Dr. G.A.S. Premakumara, Head, Department of Basic Sciences & Social Science for Nursing, Faculty of Nursing, University of Colombo
- 4. Dr. M.K.D.L. Meegoda, Head, Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri Jayewardenepura
- 5. Dr. A.A.T.D. Amarasekara, Senior Lecturer, Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri Jayewardenepura
- 6. Dr. I.M.P.S. Ilankoon, Senior Lecturer, Department of Nursing and Midwifery, Faculty of Allied Health Sciences, University of Sri Jayewardenepura
- 7. Dr. K. Abhayasinghe, Senior Lecturer, Department of Nursing and Midwifery, Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University

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

Vice-Chancellor – University of Colombo

### Keynote Speaker - Prof. A. R. Wickremasinghe

Senior Professor of Public Health, University of Kelaniya

# Plenary Speaker - Prof. K. P. Hewagamage

Professor in Computer Science, University of Colombo School of Computing

#### Dr. Sudath Warnakulasuriya

Dean, Faculty of Nursing, University of Colombo

#### All the Reviewers

Annual Research Symposium 2021 – Faculty of Nursing, University of Colombo

#### Dr. G.A.S. Premakumara, Dr. G. Kisokanth, Mrs. N.A.R. Nettasinghe

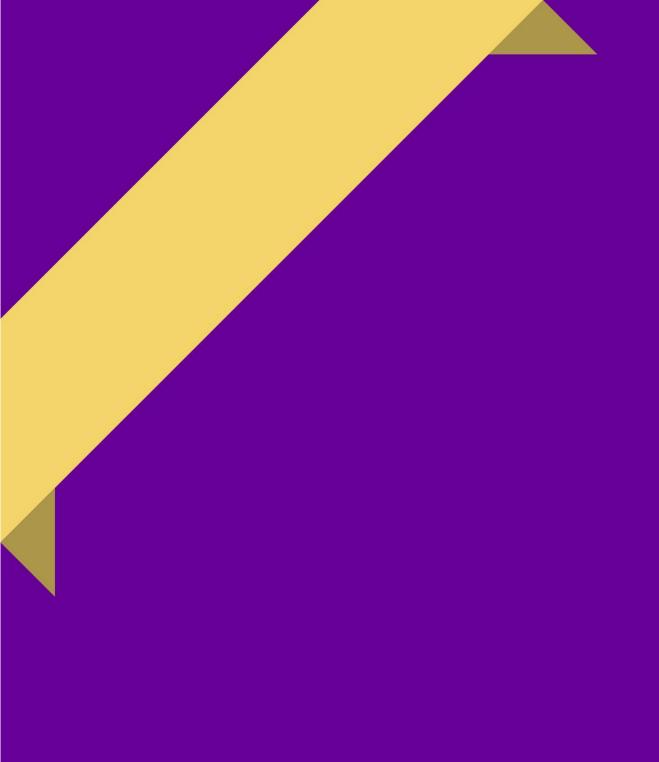
Heads of the Departments, Faculty of Nursing, University of Colombo

#### Academic and Non-academic Staff Members

Faculty of Nursing, University of Colombo

Students of Faculty of Nursing, University of Colombo

All the Presenters and Participants



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