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Parallel session 1: Theme: Education and History

**Oral presentation 1:**
**Older Bruneian Women’ Narratives on Transitions in Midwifery Care: A Historical Inquiry**
Zarinah, Mohammad; Hajah Jainah, Haji Musa and Munikumar, Ramasamy Venkatasalu, Pengiran Anak Puteri Rashidah Saadatul Bolkiah Institute of Health Sciences, Universiti Brunei Darussalam

**Introduction:** Rapid technological advancements in Midwifery practices influenced swift shifts in its traditional practices. In particular, westernised practices during British colonisation at global level challenged and changed nature and delivery of midwifery services across the world.

**Aim:** To explore on how the transitions in the midwifery services in Brunei Darussalam were experienced by older Bruneians who gave birth since 1940s.

**Design:** A qualitative narrative historical approach was used. Purposive and snowball sampling was chosen as appropriate to obtain 18 face to face interviews with older Brunei women. A semi-structured interview guide was used. A thematic analysis was undertaken to analyse the transcripts.

**Results:** Analysis illustrated on the shared experiences of older Bruneian participants’ transitions in midwifery services from the year 1940s until early 1990s. Three transitions were observed: in-house wise women as traditional village midwives, government midwives and hospital midwives. During those transitions, findings showed how peoples’ beliefs and practices around birth services were challenged and changed to adopt ‘inserted’ westernised practices.

**Conclusions:** Our study conclude that transitions in midwifery services were achieved through ‘collaborative work’ between traditional village midwives and trained midwives, power of ‘government’ midwife through ‘given responsibilities’ and ‘secure hospital environments’ with qualified multi-disciplinary professionals, At this current context of promoting cost effective health care deliveries, Future attempts of transitions in midwifery services in should adopt above criterions for successful implementation.

**Keywords:** Transitions. Midwifery, Brunei Darussalam, older women, History

**Oral presentation 2:**
**English Matron, Chinese Managers and Strict Doctors: A historical lessons learned from early nursing development in Brunei Darussalam**
Dayang Nourfaidzoul Aidzoul binti Haji Awang Basar @ Haji Zulkifli, Armah binti Tengah, Munikumar Ramasamy Venkatasalu, PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam

**Introduction:** Similar to many countries, nursing profession in Brunei Darussalam had experienced various developments and challenging issues, since the formal Health care system introduced by the British Residency in 1907. However, little is historically explored the influence of British colonisation and nursing development.
**Aim:** To explore the early nursing trends and development in Brunei Darussalam since British residency, 1907.

**Methods:** A qualitative descriptive research design with historical approach utilizing in-depth face-to-face semi structured interviews were conducted with 12 retired nurses. Data were analysed thematically by using continuous comparative process.

**Findings:** The analysed data revealed three subthemes which were constantly scrutinized and grouped into four main themes, which were: Theme 1: English Matron, Chinese Managers and Strict Doctors; Theme 2: Senior’s Choices and Theme 3: We Were Better.

**Conclusion:** Our study highlight the power and politics in early development of nursing in Brunei Darussalam. Bruneian nurses were recognized through their attainment in education, quality of nursing services and professional and personal values of the nurses. The local nurses confronted challenges by pursuing higher education and improving their competence and skills to attain professional identity and recognition.

**Keywords:** dressers, Brunei Darussalam, Nursing, history

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**Oral presentation 3:**

**Water village midwives: older midwives reminiscence of on early midwifery**

Rosnah Kambar, Norashikin binti Hj Md Sofian, Munikumar Ramasamy Venkatasalu, PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam

**Background:** Professional identity often remain struggle for midwives. In many countries midwives often mislabeled as nurses and viewed lower than nurses in their grading. There is lack of knowledge on how professional identity of midwives in Eastern world.

**Aim:** To investigate the history of midwifery in terms of practices and training in Brunei Darussalam from the reminiscences of older midwives.

**Methods:** A historical qualitative descriptive study was undertaken. In total of 18 midwives who were trained during 1950-1960s. Six in-depth, face to face interviews were conducted. A purposive and snowball sampling was adopted. The interviewed transcripts were analysed using thematic analysis.

**Findings:** Collectively, two major themes were observed: the theme on “Power Relationship” reflects the bonds between midwives with other health care professionals and public, and ‘Images’ which disclose the perceptions of midwives and public on midwifery as a profession.

**Conclusion:** The professional identity of midwives were rooted in colonial British nursing era. Often older midwives seems to appreciate traditional practices in their practice and trust from pregnant women were influencing factors for development of midwifery as profession.

**Keywords:** professional Image, professional identity, power, midwives, Brunei Darussalam, Historical inquiry.

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**Theme 2: Evidence based Nursing and Midwifery Practice**

**Symposium Paper 1:**

**Knowledge, attitude and practice of evidence based practice among nurses in acute hospitals in Brunei Darussalam: A cross sectional survey**

Meriati Merikan, Salmah Mohd Noor, Armah Tengah, Saloma Ongsang, Asmah Husaini, Liling Chaw, Munikumar, Ramasamy Venkatasalu PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam, Brunei Darussalam

**Introduction:** The impact of evidence based practice (EBP) has changed professional practice and influenced research activities in health care settings, including in acute care settings. Health care practitioners are expected to have positive attitude and updated knowledge to utilize best current evidences to perform high quality health care, increase pa-
tient safety and reduce hospitalization.

**Aim:** To assess the current level of knowledge, attitude and practice of evidence-based practice among critical care nurses in Brunei.

**Methods:** A cross-sectional survey was conducted in the critical care settings in Raja Isteri Pengiran Anak Saleha Hospital (RIPASH), Negara Brunei Darussalam. A convenient and purposive sampling was used. All of the critical care nurses were approached to complete a pre-validated questionnaire on ‘using Evidence in practice Questionnaire’ (Mills et al., 2010). A descriptive statistics was used to analyze the anonymized data.

**Results:** Of total of 250, 206 (82.4%) returned questionnaires. Participants reported that their basis of knowledge used in practice, always be from their personal experience (50.7%), doctors (38.5%), and training (48.5%). Frequently from team members (44.0%), product training (48.5%), policy guidelines (39.5%), internet (36.4%) and text books (38.5%). On the barriers to find and review research reports and organizational information, respondents agreed insufficient time to find research report (35.0%) and organizational information for practice is difficult to find (38.3%). Respondents were agreed insufficient resources (38.3%) as barriers to change practice on the basis of evidence, and stay neutral on the other barriers listed. Peer nurse (42.7%), managers (33.5%), doctors (41.5%) and practice managers (45.6%) were supportive to change practice only at sometimes. Respondents reported that they are ‘quite skilled’ in using library (38.0%) and internet (38.0%), reviewing research (36.0%) and organizational information (34.7%) and using research evidence (34.5%) in their self-assessment of current skill, yet novice on finding research (33.0%) and organizational information (33.5%), and using organizational information (35.7%).

**Conclusion:** We conclude that EBP among medical/surgical nurses in Brunei are more depend on experience and trust on doctors. Even though, they felt quiet skilled in using EBP, yet remain novice in finding evidences. Accessibility to updated resources such as data bases and supportive mechanisms is highly recommended.

**Keywords:** Evidence Based Practice, Nursing, Midwifery, Brunei Darussalam

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**Symposium 2:**

**Knowledge, attitude and practice of evidence-based practice among midwives and Children Nurses in Negara Brunei Darussalam: A cross sectional survey**

Noorbiah Laman, Saloma Ongsang, Armah Tengah, Salmah Mohd Noor, Asmah Husaini., Liling Chaw, Munikumar Ramasamy Venkatasalu, PAPRSB Institute of Health Sciences, University Brunei Darussalam, Brunei Darussalam

**Introduction:** The impact of evidence based practice (EBP) has changed professional practice and influenced research activities in health care settings, including Women and Children Health settings. Health Care Practitioners are expected to have positive attitude and updated knowledge to utilize best available evidences to make any clinical decisions for quality care.

**Aim:** To assess the current level of knowledge, attitude and practice of evidence based practice among Midwives and Children Nurses in Brunei Darussalam.

**Methods:** A cross-sectional survey was conducted at larger Women and Children Centre in Brunei Darussalam. A convenient and purposive sampling was used. All Midwives and Children Nurses were approached to complete a pre-validated questionnaire on ‘Using Evidence in Practice Questionnaire’ (Mills et al., 2010). A descriptive statistics was used to analyze the anonymised data.

**Results:** Of total of 210, 204 (98%) returned completed questionnaires. 32.4% to 46.5% of participants reported that their basis
of knowledge used in practice, frequently to always be from their personal experience, team members, product training, policy guidelines and internet. On the barriers to find and review research reports and organizational information, respondents were neutral in time for find organizations (43.1%) and research report (39.2%) difficult to understand research (36.9%), not confident to apprise the research reports (39%), identify implications of research (45.8%) and organizational implications for practice (48.3%). Respondents agreed that insufficient resources (34.3%) and lack authority (38.2%) as barriers to change practice on the basis of evidence. Peer nurse (43.1%), Managers (42.6%), Doctors (46.15) and Practice Managers (45.1%) were remain supportiveness to change practice only at sometimes. Respondents reported that they are ‘quite skilled’ in finding research evidence (34.3%) and organizational information (36.8%), using library (33.3%) and internet 32.7%), reviewing research evidence (31.9%) and organizational information (31.4%) and using research evidence (28.2%) and organizational information (27.9%) to change in their self-assessments of current skills in evidence based practice.

**Conclusion:** It concludes that Midwives and Children Nurses although they felt quiet skilled, yet insufficient resources and lack of authority remain as barriers for EBP. Evidence based resources should be built in easily accessible and frameworks that encourage EBP at clinical practice is highly recommended.

**Keywords:** Evidence Based Practice, Nursing, Midwifery, Brunei Darussalam. Children Nurses

**Symposium paper 3:** Knowledge, attitude and practice of evidence-based practice among critical care nurses in Negara Brunei Darussalam: A cross sectional survey.

Khiren Diana Abd Latif, Salmah Mohd Noor, Armah Tengah, Saloma Ongsang, Asmah Hussaini., Liling Chaw, Munikumar Ramasamy Venkatasalu, PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam, Brunei Darussalam

**Introduction:** The impact of evidence-based practice (EBP) has changed professional practices and influenced research activities in health care settings, including the critical care nurses. Health care practitioners are expected to have positive attitude and updated knowledge to utilize best available evidences to make any clinical decisions for quality care.

**Aim:** To assess the current level of knowledge, attitude and practice of evidence-based practice among critical care nurses in Brunei.

**Methods:** A cross-sectional survey was conducted in the critical care settings in Raja Isteri Pengiran Anak Saleha Hospital (RIPASH), Negara Brunei Darussalam. A convenient and purposive sampling was used. All of the critical care nurses were approached to complete a pre-validated questionnaire on evidence-based practice (Miles, 2010). A descriptive statistics was used to analyze the anonymized data.

**Results:** Out of 203, a total of 147 (72%) were returned completed survey papers. 32.3% to 45.5% of the respondents agreed that their basis of knowledge used in practice are frequently derived or supported by their own personal experience, fellow team members, nurse trainings, national policy or guidelines and from the internet. On the barriers to find and review researched reports and organizational information, most respondents agreed that they do not have sufficient time to find research reports (41.2%) and claimed neutral in easiness of finding them (35.9%) and feeling the same in how to find organizational information (38.2%); Remarkably, respondents reported that they are ‘quite skilled’ in finding using the library to locate information (36.6%), using the internet to search for information (36.6%),

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using organizational information such as re-
ports and protocols to change practice 
(37.4%).

**Conclusion:** We conclude that critical care 
nurses were quiet skilled in using evidence-
based practice skills however, their skills to 
find and review evidences should be enriched. 
Future studies should explore barriers and a 
design intervention to peer group support on 
implementing evidence-based practice is es-
sential.

**Keywords:** Evidence Based Practice, Nurs-
ing, Midwifery, Brunei Darussalam, Critical 
Care Nursing

**Symposium paper 4:**
The experiences, barriers and facilitators 
of nurses and midwives’ in the utilization 
and implementation of evidence based 
practice in Brunei hospital settings: A fo-
cus group study
Salizah Yusof, Asmah Husaini, Salmah Mohd 
Noor, Armah Tengah, Saloma Ongsang, Mu-
ikumar Ramasamy Venkatasalu, PAPRSB 
Institute of Health Sciences, Universiti Brunei 
Darussalam, Brunei Darussalam

**Introduction:** Evidence base practice at 
health care settings proven to improve both 
patient and healthcare provider’s outcomes. 
However, adopting evidence based practice 
remain challenges for any professional includ-
ing nurses and midwives.

**Aim:** To explore the experiences, barriers 
and facilitators of nurses and midwives’ in the 
utilization and implementation of evidence 
based practice in Brunei hospital settings.

**Methods:** A qualitative descriptive de-
sign was adopted. Rank based four focus 
groups conducted with 25 nurses and mid-
wives of Brunei Darussalam. Transcripts un-
derwent using qualitative thematic analysis.

**Findings:** Data analysis revealed four 
key themes. Theme one, ‘Do not really know 
how it is, but I hear a lot’ explores the 
knowledge and understanding of EBP among 
nurses and midwives in Brunei Darussalam.

Theme two ‘The reality’ describes challenges 
and experiences of application EBP among 
nurses and midwives in Brunei Darussalam. 
The third theme ‘There is changes but no 
black & white’ explain the cultural conflicts of 
adopting evidence based practices among 
nurses and midwives in Brunei Darussalam. 
However, the theme ‘Shifting culture’ explains 
that, despite the challenges there is evidence 
of a shifting culture towards EBP in the cur-
rent nursing and midwifery profession.

**Conclusion:** We conclude that, nurses and 
midwives have adequate knowledge on evi-
dence based practice. Staffs’ indifference to-
wards EBP and lack resources often became 
barriers to the implementation of EBP in eve-
day clinical practice. Future research should 
focus on developing interventions and re-
sources to enable these striving nurses and 
midwives nurturing EBP culture to improve 
quality health care in Brunei Darussalam.

**Keywords:** Evidence Based Practice, Nursing, 
Midwifery, Brunei Darussalam, Qualitative 
Study

**Theme 3: Elderly, Cancer and Palliative 
Care**

**Oral presentation 1:**
Reasons for cancer patients attending 
The Brunei Cancer Center: A descriptive 
study
Noraini Rafee, Khairulamin Abdullah, Muniku-
mar Ramasamy Venkatasalu, PAPRSB Insti-
tute of Health Sciences, Universiti Brunei Da-
ruссalam, Brunei Darussalam

**Introduction:** In recent years, majority 
of cancer care shifted to the ambulatory set-
ting whereby medical and nursing care ser-
vices are provided on an outpatient basis. 
However, there is limited evidence to suggest 
the nature of cancer patient attending outpa-
tient clinic and evaluate the scope of cancer 
care support services.

**Aim:** The study aim to describe the reason 
cancer patients attending Outpatient depart-
ment in The Brunei Cancer Center
**Methods:** A cross sectional descriptive survey was conducted with a convenient sample of 259 cancer patients attended outpatient clinics of the Brunei Cancer Centre (TBCC), Brunei Darussalam during October 2016. A pre-tested questionnaire was administered as face to face interview. Descriptive and inferential data analysis was done using SPSS version 21.

**Results:** Of the total of 259 cancer OPD appointments in October 2016, there were 108 Breast cancer (41.7%), 49 Lymphoma (18.9%) and 22 GI cancer (8.5%) and 27 reproductive cancers (10.4%), and 12 Lung cancer (4.6%) patients. Follow-up appointments (n=158, 61%) were the highest reasons for attending OPD, followed by chemotherapy (n=58, 28%) and unscheduled appointments (n=22, 9%). On our closer investigation on follow-up appointments, medical appointments included routine tumor marking 38% (n=97), consultation prior to chemotherapy 22% (n=57), followed by discuss on further treatment plan 14% (n=36) and other reasons (routine follow up (n=18, 7%), medication consultation (3.6% n=10), symptoms (side effects and palliative symptoms (n=7, 3%). Of Oncology nurse appointments, 44.6% patients (n=155) were attended by Breast (85, 33 %),) Gynecological (12, 5%) and GI cancer (18, 7%) nurse specialists. The major reasons were included routine follow-ups (n=13, 5%) and routine treatments by nurses (n=97 37%), however only one patient attended for psychological reasons.

**Conclusion:** Majority of cancer services used more medical-oriented than survivorship oriented outpatient clinic support. Psychological support were least reason why patients attend to OPD clinics. OPD services need to consider developing multi-disciplinary approach to provide holistic care approach.

**Keywords:** Outpatient department, The Brunei Cancer Centre, reasons, Brunei Darussalam

**Oral Presentation 2:**

**Nurses’ Views on Challenges in Elderly Cannulation: A Cross Sectional Survey**

1Maswinda Sari Haji Zainal, 1Nuramalina Abd Rahman, 2Rozita Haji Tamin, 2Zainatul Ashiqin Haji Salleh, 2Liling Chaw, 4Khadijah H. Abdul-Mumin, 3Munikumar Ramasamy Venkatasalu, 3BHSc Nursing Candidates, 2Lecturer (Nursing/Midwifery), 3Lecturer (Biostatistics), 4Assistant Professor, 5Professor in Cancer and Palliative Care, Universiti Brunei Darussalam, PAPRSB Institute of Health Sciences, Negara Brunei Darussalam.

**Introduction:** Increasing number of aging population globally leads to steady increase of usage of hospital services by older people. Older people’s veins are more prominent, but fragile and easily damaged to venipuncture due to the aging process which also may be exacerbated by hypothermia that may cause vasospasm (Fabian, 2010). The existing vein finder has demonstrated improved venipuncture in invisible veins and reduce failure rate in the elderly, however it cannot prevent the risk of accidental arterial puncture during cannulation.

**Aims:** To explore nurses’ views on challenges in cannulation practices on older people.

**Methods:** A survey was conducted to explore the views on challenges in cannulation practices on older people among nurses at two of the largest hospitals in Brunei Darussalam. Self-developed questionnaire with both open and close ended questions was used and all of the data were analysed descriptively using R software (version 3.3).

**Findings:** Of the total 100 questionnaires distributed, 80 returned (80%). Most of our respondents have above 10 years of working experience (56.3% [n=45]) with 68.7% (n=55) working under Medical Department. Nurses used different conventional methods of assessing older people’s vein prior to cannulation. The methods include by palpating the vein (56.2% [n=45]), applying tourniquet (78.7% [n=63]), flicking the skin gently
(61.3% [n=49]) and using warm towel (5% [n=4]). Despite the availability of vein finder device in their current working place (46.3% [n=37]), only 8.1% (n=3) frequently used the device, while 78.4% (n=29) use it sometimes and 3.5% (n=5) never use the device. Although 94.9% (n=75) agreed that the conventional methods were efficient with only 5.1% (n=5) disagree, but half of the total population found it still difficult to perform elderly cannulation.

**Conclusion:** The current vein finder device available at both hospitals is not specifically designed for older people. This may be the likely cause that the device was not consistently and frequently used by the nurses. Hence, the preference to use the conventional methods of performing older people’s cannulation. Further research should be carried out to improve cannulation techniques for elderly.

**Keywords:** Elderly, Intravenous Cannula, Vein Finder, arterial puncture

**Oral Presentation 3**

**Eliciting older people experience on government outpatient healthcare services**

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**Introduction:** This study aims to elicit (which is to obtain) the opinions from the older people on the public (government) outpatient healthcare services. In order to achieve this, the study will focus on its three primary objectives which are to describe the demographic characteristics of the older people involved in the study according to their respective groups, study the experience of outpatient setting in the government healthcare from the perspective of the older people in Brunei Darussalam by categorising it to positive or negative, and finally evaluate the association of the independent variables which are age, gender, religion, ethnicity, education level, monthly income, self-perceived health status and presence of chronic illnesses to the dependent variables, which is positive or negative experience of the government outpatient healthcare services.

**Methods:** Data were collected by cross-sectional survey data on a convenience sample of 402 patients in Brunei-Muara health centres. The survey measured the older patient’s experience when utilising the government outpatient healthcare services. Data were then analysed using SPSS version 21 software through descriptive statistics and multiple linear regression in order to identify respondent’s socio-demographic characteristics that affects their patient experience.

**Results:** The data suggests that 79.6% of the respondents found their outpatient experience be 79.9% either ‘Very Good’ or ‘Good’. This is further supported as the result of overall outpatient experience score’s is incline to be positive with mean (SD) of 80.0 (12.2). Moreover, the respondent’s overall outpatient experience is affected by their monthly income and presence of chronic disease. In general, those with higher monthly income will have a lower level of overall outpatient experience for 1.17. Specifically, those whose earning is in the BND$500-999 group was found to have a decreased overall outpatient experience by 6.24 compared to those who earns BND$0-499 monthly. Whereas, those with chronic disease was also discovered to have a lower overall outpatient experience for 5.12.

**Conclusion:** On the basis of the research’s results, it can be concluded that the results support the other literatures that older people’s overall outpatient experience is mostly positive. However, the results did not support the expectations that higher monthly income group and presence of chronic disease would have a positive association. This research hopes to provide suggestions on future research direction on this area and also relevant authorities on approaches to improve the local outpatient services for the older people.
Oral Presentation 4: Meanings of Patients’ Relatives in Caring for the End of Life of Thai Muslim Patients in Hospital
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Faculty of Nursing, Princess of Naradhiwas University, Narathiwat Provinces, Thailand

Introduction: This qualitative research used phenomenological method to study the experiences of patients’ relatives in caring for the end of life of Thai Muslim patients in hospital.

Methods: Participants included 10 Muslims patients’ relatives of both genders; who were selected according to dimensional sampling. The main inclusion criterion is for only those participants who can remember the incident well. Structured in-depth interviews were applied for data collection during January, 2014 to June, 2014. The data were analyzed by using the van Manen (1990).

Results: The results of the study showed the meanings of experience of family caregivers in caring for Thai Muslim end of life patients in hospital: 1) being proud because Allah send the carers for caring the Muslim end of life patients, 2) Lives life in accordance with value system, 3) Role ascribed by Allah; Modifying prayer posture or cancelling prayer when in pain in Hospital, 4) facilities provided by God to deal with problems in praying, 5) prayer reflected a high level of “Iman” (faith in God) of that person, and 6) Islamic practices such as reading the Qur’an, (remembrance of God) for the end of life for Muslims in Hospital. On the other hand, the problems of patients’ relatives in caring for the end of life Thai Muslim patients in hospital are: 1) a perceived need for Islamic religious experts amongst Islamic Nurses’. 2) Nurses’ lack of knowledge towards meeting the care for Islamic religious aspects, and 3) Communications.

Conclusions: The findings should be were beneficial in providing information for nurses to improve their spiritual care to meet the clients’ care needs and be congruent with their belief and culture. It also provides basic information for further developing the practice guideline for persons at the end of life.

Keyword: Meanings, Caring, End of Life, Thailand, Muslim

Oral Presentation 5: An Exploration of Specialist Palliative Care Provided In Brunei Darussalam to People with Advanced Cancer Using Embedded Multiple Ethnographic Case Study Design
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Introduction: Brunei is large an Islamic country with a multi-cultural society. Whilst many Western studies have shown the benefits of palliative care for advanced cancer patients, little is known about what is culturally appropriate and acceptable for patients in Brunei Darussalam.

Methods: The study aimed to explore the palliative care experience of advanced cancer patients in Brunei Darussalam. An explorative embedded ethnographic multiple case study was used. Study was conducted at two healthcare settings that treats advanced cancer patients. 11 embedded case studies were developed using data collected from ethnographic observations, review of patients’ medical case notes, and semi-structured interviews with 10 patients and 8 carers. 35 healthcare professionals from both healthcare settings were interviewed using semi-structured interviews. The case studies and data from the interviews with the healthcare professionals were analysed using thematic framework analysis.

Results: Data analysis revealed three key themes that illustrates palliative care provision in Brunei: support in family based country, lost in translation and Islamic spirituality.
in end of life care. Theme one explores the nature and diversity of family support during stages of cancer journey, theme two describes how westernised palliative care approach lost while it translated into local Malay culture and finally theme three explains illness trajectory of people with cancer at an Islamic country.

Conclusion: We conclude that being aware of roots of cultural and religious differences seems to influence acceptability and the quality of care of palliative care for advanced cancer patients in Brunei Darussalam.

Keywords: advanced cancer, palliative care, end of life, Brunei Darussalam

Oral Presentation 6:
Cancer Trends and Patterns in Brunei Darussalam from 2013-2015
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Universiti Brunei Darussalam, PAPRSB Institute of Health Sciences, Brunei Darussalam

Introduction: Cancer burden in Brunei is on the increase. We described the current burden of Cancer death.

Methods: A retrospective cross sectional study was conducted using cancer mortality data from death registry, Immigration department Brunei. We estimated trends and pattern on 801 study subjects for the three years (2013 – 2015) study periods.

Results: Lung, Remainder of Malignant Neoplasms, Breast, rectum, liver and Non-Hodgkin's Lymphoma are the leading cancer deaths in Brunei. A pattern was observed between Rectum and liver cancer in year 2013. Lung cancer death rate was double compared to other cancer deaths in year 2013 but a decline was observed in lung cancer in year 2015 while an increase in mortality rate was found in Breast cancer, Remainder of Neoplasms, Liver and intrahepatic Bile ducts, Rectum and Anus, and Non-Hodgkin's Lymphoma in year 2013 and 2015 respectively. Remainder of Neoplasms is the second most prevalent cancer death burden after lung cancer. Similar pattern was measured in subjects from Malaysia, Indonesia and permanent residents in Brunei across the cancer death trends over the study periods. Majority of cancer mortality was determined among subjects living in Brunei-Muara than the other districts in Brunei Darussalam.

Conclusion: There was a decline in lung cancer and a peak in Remainder of Neoplasms burden in 2015. Age of study subjects, nationality and ethnicity were associated with cancer death burden. Smoking, alcohol consumption, sedentary lifestyle are usually linked with the leading cancer burden among patients. Also, time of registration (death) and access to health-care was another reflection to the difference observed in cancer burden in Brunei. Continued policy and efforts in reducing the burden of cancer in Brunei must be the utmost goal.

Keywords: Cancer, trends and patterns, Brunei Darussalam, death registry

Parallel session 5: Complementary, cultural, Hygienic and Spiritual care
Oral Presentation 1:
Muslim Patients and carers Satisfaction on the Current Hygienic Practice in Meeting Their Spiritual Needs
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Introduction: Spiritual needs often associated with diverse rituals relevant to religious affiliation of the individuals, for example Muslims are allowed to perform prayers after with strict personal hygiene. Yet, little is known on how well current hygienic practices would sup-
port in meeting spiritual and religious needs of patients with limited mobility during hospitalization.

**Aim:** To explore views of patients with limited mobility and their family carers on the current personal hygienic practices in meeting their religious obligations during their hospitalization.

**Design:** A 19 item self-developed questionnaire survey were administered to adult patients who were undergoing an outpatient rehabilitation programme and their carers in one of the hospitals in Brunei Darussalam. Quantitative data were analysed descriptively with R software (version 3.3). Participants’ opinions were analysed using a descriptive qualitative approach.

**Results:** 69% of patients had used soaked cotton or wet wipes to meet their personal hygiene needs. 78% of the patients were satisfied with their care of personal hygiene when hospitalized. Qualitative data indicated that this satisfaction had resulted from the use of ‘high quality’ tissue that was able to hold more water when soaked in comparison to normal cotton. 55% of patients did not carry out their religious obligation, while 46% of the patients agree that they faced difficulties in meeting their spiritual needs because of the hygienic care provided did not meet their satisfaction. Patients stated that they preferred the use of sufficient flow water that resembles common cultural practice when meeting their personal hygiene needs.

**Conclusion:** We conclude that current hospital hygienic practices were not effectively meeting patients’ personal hygiene is one of the requirement for them to perform Islamic ritual prayers in meeting their psycho-spiritual needs and wellbeing. Innovative medical equipment needs to be developed to achieve patients’ satisfaction in hygienic practice.

**Keywords:** hygienic, psycho-spiritual needs, stroke, rehabilitation, satisfaction

**Oral Presentation 2:**

**The Strategies to Develop a Cultural-**

**Based Care Model for Muslim Mothers in Muslim Community in the Southernmost Provinces, Thailand**

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Faculty of Nursing, Princess of Naradhiwas University, Narathiwat Provinces, Thailand

**Introduction:** This study was conducted to explore the strategies in order to better understand the culturally-sensitive maternity care needs and to develop a cultural-based care model for Muslim mothers.

**Methods:** This study was conducted in a rural Muslim community in the southernmost provinces in Thailand from May 2013–June 2014. The study involved three groups of participants: 1) 26 Muslim mothers (15-19 years old with at least one child under age three) and 17 of their husbands, 2) 14 community and religious leaders, and 3) 14 health care providers, including village health volunteers and traditional birth attendants. Qualitative data were collected through focus groups, in-depth interviews, and participatory observations. Data were analyzed using content analysis.

**Results:** To develop a cultural-based care model for Muslim mothers, eight strategies should be employed: 1) establish mutual trust and respect, 2) strengthen collaborative partnership and network support, 3) empower and balance power, 4) promote equal participation, 5) respect local languages, 6) develop a rural maternity care team, 7) encourage community, 8) facilitate participative reflections.

**Conclusions:** The strategies of developing a cultural-based care model allowed participants to experience mutual learning, community involvement, and a sense of empowerment and control. It was executed in harmony with religious practices through community collaboration to improve maternal and child health in the rural community.

**Keywords:** culture, model, Muslim, mothers, Thailand
Oral Presentation 3: 
Nurses’ Views on the Nasal Hygiene Practice for Patient with Nasogastric Tube

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Introduction: Nasal hygiene is one of the common nursing intervention particularly performed for patients with any respiratory tract related illness. Nasogastric Tube (NGT) is commonly used in patients with dysphagia conditions. However, it is known that prolonged use of NGT can lead to more nasal hygiene related issues.

Aim: To survey on the nurses’ view on current nasal hygiene practices for patient with NGT.

Design: Using a pilot tested, self-developed questionnaires consisting of open and close-ended questions, eligible nurses from two large public hospitals in Brunei Darussalam were invited to participate in the study. All the quantitative data were analyzed using descriptive statistics and qualitative data were analysed thematically.

Result: Out of the 100 questionnaires, 85 (85%) were returned. Majority of participants (83.5% [n=71]) agreed that nasal hygiene was essential to all types of patients. The most common nasal hygiene procedures that nurses perform were using cotton bud or small gauze (74.1% [n=63]). 98.8% (n=84) nurses felt that patient with NGT need nasal hygiene. From the perception of nurses. Among all patient with respiratory related illness, majority (84.7% [n=72]) considered patient with NGT needed for nasal hygiene procedure. Although 89.4% (n=76) agreed that improper nasal hygiene can lead to infections, however 42.4% (n=36) of them perform nasal hygiene procedure on NGT patient when necessary only. As a result, 90.6% (n=77) of them had some concerns with current nasal hygiene practice. Qualitative findings show that lack of staffing, uncooperative patients, limited time and poor nurses’ behavior hinder the performance of nasal hygiene towards patients.

Conclusion: In conclusion nurses have substantial knowledge on the significance of performing nasal hygiene to all types of patients, particularly to those with NGT. They pointed out that proper nasal care is important in prevention of nasal infection and promoting better quality care of life for patients. However, nurses only perform nasal hygiene when necessary. Our findings indicate that the practices may be hindered by uncooperative patients, heavy workload, lack of staffing, poor nurses’ behavior and limited time. The frequency and consistency of nasal hygiene practice for patient with NGT may possibly be improve in the presence of an innovation product facilitating this practice. Therefore further research is needed in improving nasal hygiene practice standards for patient with NGT.

Keywords: nasal, hygiene, intranasal, lubricant and nasogastric tube

Parallel session 6: Professionalism and management
Oral presentation 1:
Service users’ views on current outpatient appointment system in one of the largest Health center in Brunei Darussalam

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1BHSc Nursing Candidates, 2BHSc Midwifery
Introduction: Waiting times at any healthcare settings especially outpatients departments often determine the level of patient satisfaction. Despite the technological advances and its adaptations into the healthcare system, little is explored on use of smartphone applications in managing outpatient appointments.

Aim: To conduct a market survey and explore the views of service users on the current appointment system at outpatient clinics and the development of a smartphone application based appointment system.

Design: A market survey research methodology was employed to explore service user views on current appointment system in Berakas Health Center outpatient department and the proposed smartphone application appointment system. The researchers used self-developed questionnaires for extracting information while the data were analyzed using descriptive statistics using R software. (Version 3.3).

Results: In total, 100 respondents returned our questionnaires. 89% graded the current appointment system as acceptable to very good. 30% respondents claimed to have waited for under 30 minutes, 49% respondents waited between 31 to 60 minutes while 20% declared to have waited for more than an hour. 84% of the respondents agreed that a smartphone application will be convenient in managing appointment waiting time and 69% respondents prefer to do their waiting at home instead of the clinic. There were 29% respondents willing to pay to download such an application while the remaining 71% feels that the app should be provided free. Open ended questions agreed that although smartphone applications might reduce waiting times, adequate staffing at OPD clinics is essential for improvements in the healthcare system.

Conclusion: We conclude that development of smartphone application for managing appointment times is positively viewed to improve patient waiting experiences and time management. Further research is required to test the development and applicability of the product in the current health care system.
discharged patients underwent surgery at one of the largest public hospital in Brunei. Self-developed questionnaires with both closed and open ended questions were distributed to all eligible participants. Quantitative data were analysed using descriptive statistics facilitated by the ‘R’ program (version 3.3).

**Results:** 30 practitioners out of 40 and 35 patients out of 40 returned the questionnaire. 57% (n=17; nurses=15, doctor=1, dietitian=1) of practitioners reported that there were guidelines or procedures that are being used as a practice in the discharge process. 86% (n=30) patients reported that they received information on their condition during their discharge process and 97% (n=34) felt discharge information was useful. 30% (n=9) of the health care practitioners are at beginner and 53% (n=16) are at the intermediate level of expertise in using Information Technology (IT) in the hospital. While 73% (n=22) of health care practitioner prefer to use an electronic discharge checklist over the current practice of paper based, similarly 94% (n=31) patients prefer to use electronic discharge checklist. Qualitative findings showed that patients spent a long time waiting for discharge confirmation. Moreover, from patients and practitioners medication delivery primarily the main reasons for delays in discharge. Further information on wound care, recovery process, medication, lifestyle education were requested by patients.

**Conclusions:** We conclude that discharge information is crucial for quality patient care. Electronic discharges were highly perceived as positive both by patients and practitioners. Future research should design, develop and test electronic discharge summaries in Brunei Darussalam.

**Oral Presentation 3:**
**Correlation between Organizational Consensual Culture with Professionalism Of Nurses**
Devvy Mayangsari, Hurin’in Aisy Baridah, Dia-ra Cintia Kusuma Rahmat

**Introduction:** Majority of nurses in Paviliun Sedudo RSUD Nganjuk indicates a medium level of professionalism, while professionalism is needed to improve the quality of service. To improve professionalism of nurses, there is a need for consensual with the organizational culture. The objective of this study was to investigate correlation between the organizational consensual cultures with professionalism of nurse.

**Methods:** This study was employed using a cross sectional design. The number of nurses who work at Paviliun Sedudo RSUD Nganjuk were 35. Respondents who meet inclusion criteria were recruited with purposive sampling and a total of 32 nurses were included as a sample. The independent variable was types of organizational consensual culture and the dependent variable was the professionalism of nurse. Data were collected by using questionnaires.

**Results:** The result showed that there were a correlation between consensual culture with professionalism of nurse (85% of 35 nurses). However, hierarchical culture has no correlation with professionalism of nurse. This is because habitual work bureaucracy did not show commitment as part of professionalism, whereas commitment is an important part of professionalism.

**Conclusion:** It can be concluded that the most dominant factor that affect professionalism of nurses is cultural development. This finding suggests the importance of the improvement of developmental culture to increase professionalism of nurses. Thus performance and work achievement can be improved accordingly. It is recommended that further studies should evaluate nurses’ professionalism by using observational method.

**Keywords:** organizational consensual culture, professionalism, nursing

**Parallel session 7: Theme: Maternal and Child Health**
Oral Presentation 1:
Postnatal Mother Views Using Traditional Herbal Paste Aid in Abdominal Comfort for Infants

Nur Faizah Hj Mohd Daud, Hjh Nadhirah Hj Bahrin, Nurul Ezzyanie Musa, Armah Tengah, Hjh-Saloma Hj-Onsang, Liling Chaw, Khadizah H. Abdul-Mumin, Munikumar Ramasamy Venkatasalu

Introduction: Complementary therapy of utilizing traditional herbs has been a practice in countries especially in Malaysia, India, China, and in parts of the world to improve health. Traditional herbs betel leaf (sirih), areca catechu or areca nut (pinang), slaked lime (kapur sirih), and gambier (gambir) are believed to help in relieving colic, preventing bloating, and giving warmth for infants. Due to limited literature available, little is known on the health benefit and effectiveness.

Aim: To explore postnatal mother’s views of using Malay traditional herbal paste in infants for abdominal discomfort.

Methods: A survey method is used. Self-developed market survey questionnaires were distributed to the convenience sample of postnatal mothers attending three Maternal and Child Health centers in Brunei Darussalam.

Result: In total, 83 mothers returned the questionnaire. 74.7% of mothers reported using the traditional herbs for their infant. 71.1% mothers reported that the herbal paste are effective to reduce bloating, 45.8% in treating colic, 21.7% in giving warmth to their infant. 65% of mothers usually apply it during night time. The common herbs used are betel leaf (61.4%), slaked lime (44.6%), areca catechu (42.2%) and Gambier (43.9%). 85.2% of mothers also reported that there are no side effects when using the paste, and only 14.8% and 1.6% encountered rashes and skin irritation respectively. When asked about their attitude towards herbal paste based patch, majority of the participants reported that it is convenient (88%) and hygienic to use (91.6%). 94% of the participants would like to purchase the herbal pasted based patch if made available.

Conclusion: To conclude, utilizing traditional herbs for infant has been a common practice in Brunei Darussalam. Future research should develop herbal paste based patch as it is perceived positive by the mothers.

Keywords: traditional herbs, postnatal mothers, bloating, infant, abdominal discomfort

Oral Presentation 2
Mothers’ Experiences of Using Phototherapy Device in Postnatal Wards at a Central Hospital in Brunei Darussalam

Syazwanie Abdullah Sima, Nur Syarfa Syazana Ahmadyani, Darinah Haji-Abdul-Manaf, Liling Chaw, Munikumar Ramasamy Venkatasalu, Khadizah H. Abdul-Mumin

Introduction: Phototherapy is a device used for treating hyperbilirubinemia in newborn. It is usually bulky, occupying space and cause maternal-infant separation eventhough it is just next to mother’s bed. It is also likely to cause difficulty for mothers to breastfeed their babies and a potential risk of injury due to its features. Currently, there are limited studies being conducted on the use of phototherapy in terms of its convenience, safety, the effects to maternal-infant bonding and breastfeeding.
Aim: This study investigate nurses, midwives and mothers’ perception on the current phototherapy device for its convenience, safety, the effects to maternal-infant bonding and breastfeeding.

Methods: A survey was conducted at postnatal wards in a central hospital in Brunei Darussalam. All mothers with jaundiced babies and on phototherapy, admitted in a period of one week of data collection, nurses and midwives were invited to participate by answering a self-administered questionnaire. Data were tabulated analysed descriptively using ‘R’ Software version 3.3.

Results: Mothers whom babies were jaundiced (n=31), and nurses and midwives having experienced caring for jaundiced baby (n=58) all participated in the study (100%). Although all the mothers (100% [n=31]) understand that phototherapy reduced jaundice, they are faced with challenges during phototherapy that include less time to breast feed baby (64.5% [n=20]); difficulties in caring baby (58.1% [n=18]); and separation from baby (48.4% [n=15]). The most common modes of phototherapy is through standing (72.3% [n=21]) and Bili bed (27.6% [n=8]). 46.2% (n=12) and 54.8% (n=17) mothers respectively reported that they might injured themselves or their babies because of the features of the Bili bed and standing phototherapy. Only 12.9 % (n=4) mothers with babies on standing phototherapy and 19.2% (n=5) mothers on Bili bed can breastfeed their baby without interruptions. Nurses and midwives also reported that mothers might injured themselves or their babies because of the features of the Bili bed (14.5% [n=9]) and standing phototherapy (58.1% [n=36]) which is bulky and space consuming (67.7% [n=42]). Nurses and midwives also reported that mothers have difficulty while nursing their jaundiced baby on Bili bed (58.7% [n=37]), and standing phototherapy (31.7% [n=19]). The Bili bed phototherapy (67.7% [n=42]) and standing phototherapy (28.3% [n=17]) also caused a lot of interruptions during breastfeeding.

Conclusion: Although nurses, midwives, and mothers understand the purpose of phototherapy, they are concern that the current design of the phototherapy might injured the mothers or their babies or both. The design of the phototherapy was viewed to cause interruptions while mothers nursing their baby and during breastfeeding; that lead to maternal-infant separation. It is suggested that future study should include designing, developing and testing phototherapy device that reduce interruptions in maternal-infant bonding.

Oral Presentation 3: Factors Influencing Eating Habits and Physical Activity in Bruneian Parents and Their Children
Zaidah Rizidah Binti Murang, Nik Ani Afiqah Tuah, Siti Tajidah Talip, Lin Naing
Universiti Brunei Darussalam, PAPRSB Institute of Health Sciences, BRUNEI

Introduction: The global prevalence of childhood obesity has escalated over the past few decades. Brunei is not exempted as a large proportion of its children are overweight and obese. This study aimed to explore the behaviour of Bruneian parents and their children to identify factors influencing the development of childhood obesity.

Methods: A qualitative study was conducted from November 2015 to February 2016 on 38 participants comprising of children aged 9-12 and their parents. The participants were recruited from two government primary schools. The data was collected using semi structured, focus group discussions and the principles underpinning thematic analysis was applied.

Results: We identified three themes for parent behaviour (‘failed attempts, ‘time and safety concerns’ and ‘lack of control’) and three themes for child behaviour (‘no to vegetables, ‘love unhealthy food’ and ‘barriers to exercise’), which, may contribute to the high prevalence of childhood obesity in Brunei and
other countries with similar socio-cultural backgrounds.

**Conclusion:** Attitudes of parents, their misconceptions regarding genetics, as well as home environment, may influence the opportunity for a healthy lifestyle to prevent and manage childhood obesity in Brunei and other countries. Relevant agencies may utilize the evidence to plan and implement tailored interventions targeting families to prevent and manage childhood obesity.

**Keywords:** Childhood obesity, eating habits, family health, physical activity, qualitative study

**Oral Presentation 4:**

**The Differences in the Effectiveness between Application of Breast care only and Introduction of Oxytocin Massage to Express Breastmilk Smoothly in Normal Postpartum Mothers**

Ima Syamrotul Mufliah, University of Muhammadiyah Purwokerto, Central Java, Indonesia

**Introduction:** Breastmilk is the best food that must be given for babies after they were born. But, there are many postpartum mothers who complain that they cannot release their breastmilk because of various obstacles. Breastfeeding becomes difficult despite the fact that exclusive breastfeeding is the most effective interventions to prevent child death. The obstacles can be solved by applying breastcare and oxytocin massage to express breastmilk.

**Methods:** This research was conducted to identify the differences in the effectiveness between application of only breastcare and those introduce with oxytocin massage to express breastmilk smoothly in normal postpartum mothers. This study was conducted in Ambarawa Hospital Semarang Regency. A quasy experiment research was undertaken with two groups: pretest and posttest design to 10 mothers in breastcare group and 10 mothers in oxytocin massage group where the observation was used as a measure instrument.

**Results:** The outcome of statistic test by using dependent t-Test showed that, breastcare was effective to express breastmilk with p value= 0.000<α (α=0.05) and oxytocin massage was effective to express breastmilk with p value= 0.000<α (α=0.05). Meanwhile by using independent t-Test of oxytocin massage was more effective than breastcare to express breastmilk smoothly in normal postpartum mothers in Ambarawa Government Hospital with p value= 0.035<α (α=0.05).

**Conclusion:** Based on the research results, the health workers need to apply and teach not only breastcare, but also oxytocin massage for postpartum mothers. This is to ensure that mothers will be able to do it by themselves or by families’ aid in home for enhancing breastmilk production so the mothers can give the best nutrition for their babies.

**Keywords:** Breast care, Oxytocin Massage, Express Breastmilk

**Oral Presentation 5:**

**Why Mother Use Complementary Care for Caring Their New-borns? A qualitative Study**

Inggar Ratna Kusuma, Muhammadiyah University of Purwokerto, Indonesia

**Introduction:** It is difficult to exclude traditional culture from the provision of maternal and child health services. However, this traditional habits have an impact on the development, growth and the health status of the infant. In Indonesia, baby massage, putting traditional herb on the baby head (or smearing on all over the body) are some of the complementary cares which are often used for newborn care.

**Methods:** This research aimed to investigate why a mother use complementary care for her newborn. The study is conducted using a qualitative method. In order to obtain our research aim, we interviewed 10 mothers and 3 practitioners who use complementary care in
in Banyumas Regency, Central Java, Indonesia. In doing so, we use phenomenology approach and validate our data using triangulation.

**Results:** Our research indicates some of the mothers’ reasons for using complementary care on their infant. We categorize our findings into three dimensions: psychology (e.g. feel comfortable and relaxed when seeing the baby calm), physical (e.g., massage sensations, the effect of increasing baby feeding after baby massage), and traditional culture (traditional culture environment and parents’ advice). We also find that the family financial constraint and lack of knowledge have a significant influence to the mother for using complementary care for her baby.

**Conclusion:** The use of complementary care for newborn is heavily influenced by the surrounding culture, the grandparent suggestion, and as a part of the treatment used by “dukuh bayi” (“baby shaman”). Mother’s believe that by using complementary care the baby appears to be more comfortable and could increase the feeding frequency.

**Keywords:** complementary-care, traditional-culture, Indonesia

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**Parallel Session 8: Theme: Clinical Research**

**Oral presentation 1**

**Healthcare Practitioners’ (HCPs) Views on the Durability and Usage of the Current available Surgical Masks**

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**Introduction:** HCPs are at risk of acquiring airborne and droplets transmission diseases. Proper use of surgical mask as personal protective equipment (PPE), especially changing the mask when damaged and contaminated is highly recommended. However there are no specific guidelines in recommending the exact duration or frequency when a surgical mask should be change.

**Methods:** A survey was conducted in all operating theaters and isolationwards of the four major hospitals in Brunei Darussalam, where all nurses, midwives and doctors are the eligible participants. A self-designed and piloted questionnaire was developed consisting 20 questions. There are 18 close-ended questions quantitative data that explored the knowledge, attitude and practice of wearing mask as PPE and two open-ended questions that explored participants’ experiences qualitatively. The quantitative data analysed using descriptive analysis are presented here.

**Results:** Of the total 200 questionnaires distributed, 188 returned (94%). 78% (147) agreed that it is very important to wear a surgical mask. 91% (179) agreed that by wearing a surgical mask is effective in reducing risk of infection transmission. While, 87% (163) have declared that they are following steps recommended internationally or as documented in local guidelines with regards to infection control in wearing surgical mask. Although 69% (129) had some training on proper wearing of surgical mask, only 26% (49) always wear surgical mask and 18% (33) always change their surgical mask as part of their daily work. Our findings indicated that since healthcare practitioners attended proper wearing of surgical mask, it is likely that the design of the current mask may have some influences in the frequency and consistency of the practices of wearing the mask.

**Conclusion:** Our study confirms that nurses have substantial knowledge and positive attitude towards the use of surgical mask in relation to infection control. Future study should include designing, developing and testing new surgical mask with usage indica-
The establishment of the BNSRC in 2010 marked Brunei’s significant milestone in management of neurological diseases, such as stroke. With advancement of stroke care and treatments, many patients are being likely to survive and discharged early for continued rehabilitation at home. Essentially, patients’ recovery and rehabilitation are expected to take place largely at home. The importance of providing support to sustain rehabilitation continuum is therefore increasingly crucial.

Methods: This presentation will draw experience of employing a mixed methods research that aimed to explore the different aspects of home-based service provision in order to identify areas needed for improvement.

Results: In general, mixed methods research (MMR) is an approach that combines quantitative and qualitative research methods in
various phenomena of interest that cannot be fully understood using a quantitative or a qualitative method alone. The presentation will illustrates how MMR was used to identify key findings of the research and help strengthen the interpretation of these findings. The challenges of using this approach will further highlighted.

**Conclusion:** In conclusion, students or healthcare researchers may benefit from the opportunity to use MMR approach to address complex issues, given careful planning and consideration to overcome the multi-factorial challenges.

**Keywords:** stroke, Brunei, rehabilitation, Mixed Methods

**Oral Presentation 4:**
**Nurses’ Views on Current Use and Compliance of Compression Stockings for Immobile Stroke Patients**

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**Introduction:** Studies have shown that a prolonged immobile stroke patients is associated with the increase risk of developing deep vein thrombosis (DVT). Compression stockings are one of the prevailing standard in the treatment and prevention of DVT. Evidence however indicates poor use and compliancy amongst nurses due to varied reasons.

**Objective:** The objective of this study was to assess nurses’ views on the use and compliancy of compression stockings for immobile stroke patients.

**Methods:** Using a self-developed questionaire, a total of 66 nurses from a stroke reha-

brillation centre and one of the largest hospital in Brunei participated in this study.

**Results:** The results showed that the primary reason given by nurses for unfavourable use of compression stocking was poor patient’s satisfaction (36.3%), followed by application difficulty (33.3%) and development of pressure ulcers (24.2%). Other reasons include sizes difficulty (22.7%), time consuming (12.1%), non-compliance (7.6%), limited stock (4.5%), easily soiled (4.5%) and loose elasticity (1.5%). Nurses’ reported that the overall compliance with stockings application amongst the patient’s family and carer was low (56.1%) with the remaining (18.2%) was perceived as compliant.

**Conclusion:** This study expanded on nurses’ use of compression stockings in clinical set-
ing, and warrants further research in examining their practice. The noncompliance rate is also high amongst the nurses and family/carer and this suggests that the inapplicability and inefficacy of the stockings may be the contributing factors of such low usage and compliance rate.

**Keywords:** compression stocking, DVT, compliancy, Brunei Darussalam

**Oral Presentation 5:**
**Psychosocial Impact of Infertility among Men and Women in Brunei Darussalam: A Qualitative Study**

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**Introduction:** Infertility is viewed as a medical condition needing treatments and requiring interventions, including the use of advance technology. Yet, little is known about the psychosocial impact of infertility to men and women in Brunei Darussalam.

**Methods:** A qualitative approach was em-
ployed to explore the psychosocial impact of infertility among men and women in Brunei Darussalam. Data were collected by using purposive sampling. Audio recorded semi-
structured in-depth interviews were conducted on five men and three women. Thematic analysis was performed with use of NVivo10.

**Results:** Three main themes emerged: *initial reactions towards infertility; coming to terms with infertility; precipitating impacts of infertility; and coping strategies towards infertility.* Emotional distress, hurt, anger, embarrassment, disappointment, frustrations and guilt are the common initial reactions to infertility. The main precipitating psychological impacts of infertility include inadequate resources, insensitive health care professionals, feeling withdrawn which consequently result to isolation. This is aggravated by social expectations and norms towards the outcome of marriage, which is “to procreate”. There are similarities in the coping mechanisms between the male and female participants in this study in dealing with the issue of infertility.

**Conclusion:** This study suggests that infertility is not merely a medical conditions but also have psychosocial impact on both the men and women, and is socio-culturally and religiously bound. In addition, infertility support groups and psychological counselling during the reproductive years may benefit both couples than one of individuals.

**Keywords:** Infertility, psychosocial, Brunei Darussalam

**Oral Presentation 6**

**HEALTHCARE PRACTITIONERS’ VIEWS ON THE EXISTING DESIGN OF ENDOTRACHEAL TUBE (ETT)**

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**Introduction:** Endotracheal tube (ETT) is commonly used to maintain and manage patient’s airway ventilation whereby airway difficulties occur. However, minimal knowledge is known about the users’ (healthcare practitioners) views on ETT utility.

**Aim:** To explore the views and experiences of healthcare practitioners on current design of ETT in relation to ETT balloon cuff inflation.

**Methods:** A market survey research methodology was utilized to explore healthcare practitioners’ views on the existing and a proposed design of ETT. Researchers used self-administered questionnaires with open and closed questions distributed to healthcare practitioners (nurses and doctors) working at the Emergency Department and High Dependency Units. Data was entered into Microsoft Excel and was analyzed descriptively using statistical software R (version 3.3).

**Results:** In total, out of the total of 100 questionnaires distributed, 76 respondents (76%) including 10 physicians and 66 nurses returned the questionnaire. It was found that 75% (n=54) respondents have undergone prior training using the ETT and are satisfied with the current design of ETT. However, 78% (n=55) respondents agree that the current ETT design can be improvised. 70% (n=51) of the respondents agreed that time taken to inflate the ETT balloon cuff can be reduced and omitting syringe use for cuff inflation is an economical approach. Open ended responses showed that the healthcare practitioner find the current ETT designs use now is less durable and kinks easily.

**Conclusion:** We conclude that the time taken to inflate the ETT balloon cuff using a separate syringe during intubation is a factor which can be improved which is also economically beneficial. Future research should be designed to develop and test a new design of the ETT specifically targeted to improve on these matters in Brunei Darussalam.

**Keywords:** Endotracheal Tube, ETT, balloon cuff, time, syringe
Parallel session 2: Research culture and Mental Health

Oral Presentation 1:
JOURNEY OF A NOVICE NURSING RESEARCHER
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Introduction: Conducting nursing research can be a daunting process fraught with many challenges. This is especially true for nurses who are embarking on research for the first time.

Methods: This presentation shares real life experiences in conducting and coordinating a study on "Positive thinking workshops for mental health and well-being" from the perspectives of a novice principal investigator. The study was supported by a Brunei Research Grant for multidisciplinary research utilizing salivary biomarkers. It studied the efficacy of positive thinking workshops to improve mental health among a group of newly enrolled nursing and midwifery students.

Results: The planning and preparing stage included study design, consent form and questionnaire development, preparation of the research protocol, application for ethics approval. During the study implementation, several challenges were faced, both in the pilot study as well as the main study. These required prompt problem solving and decision making in exploring solutions during field work. Next was laboratory analysis of collected salivary samples, data entry, statistical analysis, results interpretation and finally report writing. These processes required technical skills and provided valuable learning opportunities. Having successfully navigated the early stages of the research project, the researcher and team is now in the process of writing two manuscripts for publication. The findings of the study were also shared with the study population and practical tips given on how the results can be applied. This is another important aspect of our research, where findings are translated into the real world in order to improve the mental health of nursing undergraduates.

Conclusion: Nursing research can be challenging but also rewarding. It can be applied to improve health and quality of life among patients and the community. While the novice researcher may at times feel overwhelmed, having the involvement of a group of highly committed and supportive team members of various backgrounds and research seniority is a great help. Different members contributed inputs throughout the stages of planning, implementation and data analysis and report writing, and provided motivation and mentorship for the research to succeed.

Keywords: Brunei, Novice Researcher, Nursing research, multidisciplinary research

Oral presentation 2
AN ETHICAL VIEW OF NURSING WORKLOAD IN BRUNEI DARUSSALAM
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Introduction: The heavy workload of hospital nurses creates an increasing concern in nursing practice, education and research. Previous research has suggested that a heavy nursing workload adversely affects patient safety and affects nursing job satisfaction.

Method: In this qualitative study, twenty eight nurses were interviewed on Bruneian nurses’ perceptions of ethical dimensions in nursing practice.

Results: Some of the early findings were nurses’ description on the nature of the workload and how it may possibly devalue the safety and needs of their patients. The heavy workloads were also associated with reduction in the time spent communicating with patients, doctors and nurse colleagues.

Conclusion: Based on these findings, it high-
light insights for practice and future research that are needed to enhance the development of approaches aimed at reducing workload or balancing the impact of workload on nurses and patient care.

**Keywords:** ethics, Brunei, workload, nurses

**Oral presentation 3:**
**Detaining Patients under New Mental Health Law 2014 in Brunei Darussalam: A Discourse Analysis**
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**Introduction:** In 2014, Brunei has introduced the Mental Health Order, replacing the nearly century-old Lunacy Act. The Order was introduced with the aim to ensure that the patient with mental illness get the appropriate care and treatment and because of the patient’s limited capacity in the decision making for their own care and treatment. Yet, little is investigated on the process by which the patient is detained under MHO 2014.

**Methods:** This paper presents an discourse analysis to examine a detention order section 7(4), 8, 9, 12 and 32 of the newly implemented mental health order 2014 (MHO 2014) of Brunei Darussalam. This is a linguistic analysis in an attempt to study the organisation of language over a statement within the order. Every statement within each of the section is critically examined by using discourse analysis. This is done in order to reveal how the act with it linguistic text and meaning within the order is interpreted and understood by the people who are authorised to execute them. Therefore the analysis will pay more attention to the macro-analysis to the text in the sections identified.

**Results:** Our analysis showed key elements of MHO (2014) a) protection of vulnerability b) practice of compassionate care approach c) journey of detained patient d) professional accountability e) trust on moral judgement of the practitioners.

**Conclusion:** Our analysis found that MHO (2014) evidences the standardised protocol for detaining patients with mental health problems in Brunei Darussalam. Future studies should attempt to investigate the process by which the patient is detained under MHO 2014 from the perspectives professionals involved in detention (doctors, nurses, social workers, and police officers) the service users (patient and family carers) in Brunei Darussalam.

**Keywords:** Brunei, discourse analysis, mental health

**Oral Presentation 4:**
**Why Nurses and Midwives Are Not Into Research: Barriers to Research in the Clinical Setting**
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**Introduction:** This study was conducted to determine the factors why nurses and midwives are not doing and utilizing research in their respective workplaces.

**Methods:** The study utilized the systematic review approach in exploring peer-reviewed articles on barriers for research and utilization among nurses and midwives in the clinical setting between a twenty-year period 1996-2016 available in research engines primarily from Google Scholar and Science Direct.

**Results:** Fifty studies were included with all using cross-sectional design. The barriers to research in the clinical setting identified were categorized into three factors: organizational-related barriers, researcher-related barriers, and research-related barriers. The organizational factor accounted for the majority of factor accounted for the majority of perceived barriers to research. These include among others, shortage of time to conduct research due to workload, staff issue, etc.; lack of access to research and literatures; no organiza-
tional support in terms of lack of protected time to conduct research among nurses and midwives; inadequate authority to conduct and implement research findings. Lack of skills training, knowledge, and confidence were reported to be barriers under the researcher-related factor. The quality of research output, and its implication to practice were also found to be barriers to research under the research-related factor.

Conclusions: Notwithstanding the lack of knowledge and training on research among nurses and midwives, the study revealed that it is in fact the organization that was perceived to be the most important barrier to research. Nurses and midwives are not into research primarily because their organizations have neither effectively promote nor support the conduct of research and utilization of research in practice. Recommendations on how to foster a research culture in line with evidenced-based safe practices in workplace organizations with strong management support will more likely lead to active pursuit of research among nurses and midwives.

Keywords: Research, Nurse, Midwife, Barrier

Oral presentation 5:
Psychosocial Factors, Musculoskeletal Disorders, and Work-Related Fatigue amongst Nurses in Brunei: A Partial Least Square Structural Equation Model Approach
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Introduction: Psychosocial factors, musculoskeletal disorders, and work-related fatigue have adverse effects towards individual nurses and create substantial financial burden on healthcare system. The literatures have suggested evidence of their association however no studies or theoretical basis was found to explain their relationship. This study aimed to explore and develop a structural model to provide theoretical explanation of this relationship.

Methods: This cross-sectional study was conducted from February to April 2016. Data from 201 valid samples of emergency and critical care nurses across public hospitals in Brunei was obtained via self-administered questionnaire. The structural equation model was assessed using partial least square analysis.

Results: A valid and robust structural model was constructed (SRMR > 0). It revealed that 61.5% of the variance for chronic fatigue could be explained by psychosocial factors and musculoskeletal disorders pathways. Among the psychosocial factors, work-family conflict was identified as key mediator for progression of musculoskeletal problems and subsequent fatigues through stress and burnout. Two paths were identified to mitigate work-family conflict. One was by reducing emotional demands. Second was through improving rewards by providing better quality leadership and role clarity.

Conclusion: This is a novel finding that contribute towards knowledge on theoretical understanding of the relationship between psychosocial factors, musculoskeletal disorders, and work-related fatigue. Practically, it informs healthcare and nursing management that addressing work-family conflict could be key in tackling harmful effects of stress, burnout, low back pain, and chronic fatigue attributed from work.

Keywords: Fatigue; Musculoskeletal pain; psychosocial factors; Structural equation mode