

出國報告(出國類別：[會議](#))

第二屆國際護理研究研討會議
2nd International Nursing Research Conference
2012 on 9-10 February

服務機關：三軍總醫院澎湖分院

姓名職稱：尹均、護理主任

派赴國家：馬來西亞

報告日期：101 年 2 月 20 日

出國時間：101 年 2 月 8 日至 2 月 11 日

摘 要

第二屆國際護理研究研討會議 (**2nd International Nursing Research Conference**)，涵蓋 13 個國家及 66 個團體，於 2012 年 02 月 09 日至 02 月 10 日，在馬來西亞吉隆坡，主席為 **Dr. Pathmawathi Subramanian** 教授，研討會的議題包括兒科護理、腫瘤護理、產科護理、外科護理、手術護理、社區護理、醫學、老人醫學等護理研究。本次護理研究研討會議除了專題演講、口頭論文報告及現場論文展示等，每個研究議題皆能讓參加活動的護理學者專家更進一步與各相關領域的教授、專家即時的討論交換意見。職等此次有幸受邀於大會中提出口頭論文報告，很感謝國防部經費補助參與此會議。藉由參加這次會議，了解他國專家學者的研究成果及趨勢，獲益匪淺。

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本 文

一、 參加目的：

職目前任職於三軍總醫院澎湖分院護理科，承國防部之同意及補助出席第二屆國際護理研究研討會議（2nd International Nursing Research Conference），於2012年02月09日至10日，在馬來西亞吉隆坡舉行。此次會議邀請來自美國的護理專家以及有相關學術研究領域的學者專家。

職將『不同臥姿對使用正壓鼻導管早產兒生理指標之影響』的研究成果投稿於本次大會，經由大會委員會遴選後，同意於會議中以口頭論文報告，此機會實屬不易。於開會期間，職可一方面學習與會的專家學者有關兒科護理的研究最及臨床經驗外，同時發表自己的研究成果與國際人士交流，對於職等在臨床、教學及研究工作的收獲甚豐。

藉由此次的參與，我們希望可以達到以下的學習目標：

目標一:與全世界其他國家之護理先進、專家學者進行面對面的交流，從中學習獲取新知與經驗。

目標二:藉由參與國際學術交流研討會，拓展視野，瞭解其他國家護理發展的趨勢，增進臨床與學術研究之能力。

目標三: 將研究成果與國際人士交流，拓展三軍總醫院之知名度及軍陣護理。

二、 會議過程：(附件一、附件二)

於 2 月 8 日自桃園機場搭機飛往馬來西亞，歷經 4.5 小時的飛航，於當地時間 2 月 8 日下午 3 點抵達，2 月 9 日一早 0730 隨即前往會議地點辦理報到手續。在為期 2 天的議程整個會議包含專題演說、口頭及壁報論文報告三部分的模式在進行，依照每日的議程逐一進行，並記載詳細每日會議過程之重要議題如下：

第一日(十月二十八日)：

辦理報到:

先至報到櫃台辦理報到，並向大會索取會議相關資料及註冊費證明文件。

大會開幕:

進入會場只見半數與會人員都包著頭巾，多為信仰回教的護理先進，大會準備了一場具傳統特色及別開生面的舞蹈，做為大會的開幕式，並由召集人及馬來西亞校長致辭，開始此次的國際護理研究研討會。

專題演講:

Making TRIP Happen: Strategies for Translating Research into practice

Professor Dr. Davina Porock
Professor & Associated Dean for Research & Scholarship
University at Buffalo School of Nursing, USA

內容摘要:

要改變常規或是將研究結果引入臨床的常規中，在現在的健康照護體系中是一個很大的挑戰。最大的目標是讓健康照護措施，來自專業的系統、理論的引導、科學證據和護理研究，並藉由這些方式了解自然的疾病，因為這些有依據的治療和照護必須成為主要施行的常規。但是就算是最好的研究，即使它有最好的科學證據，如果沒有對治療或照護有影響，則誰需要它。

這個演講主題是要由多個面向來解釋將護理研究自然的轉換到實際臨床執行的方式，包

含政策、改變管理、教育、訓練和鼓勵。接著講者用一個自己的研究結果於自己的工作中，去促進每天在醫院和其他健康照護機構，並說明了研究與臨床實踐的相關性，從發展實務與研究問題的相關性開始，到系統研究，而使得病人及其家屬得到不同的照護過程。我們是獨立的護理人員、教育者和組織，能促使研究的結果轉換到每一天的臨床長規中執行。

點心及午餐時間:

大會貼心的準備特色點心，午餐則是走簡約風，蔬果沙拉配上四菜一湯，算的上是美味可口，且回教國家及其他東南亞國家，包含台灣來的都能習慣其口味，只有日本學者大呼不習慣。在此時間巧遇口頭發表的輔仁、長榮大學助理教授及海報發表的奇美、成大醫院護理長等人，並與一些日本、新加坡護理先進交換討論，非常高興。

口頭論文報告:

題目：不同臥姿對使用正壓鼻導管早產兒生理指標之影響

目的：本研究是探討使用正壓鼻導管的早產兒在接受不同躺臥的姿勢（仰臥、側臥、半俯臥）對其生理指標（心跳次數、呼吸次數、血氧飽和濃度）之影響。

背景：由於正壓鼻導管兩側的呼吸管會影響頭部的扭轉或擺位，且此時適合早產兒的俯臥睡姿並不適合使用正壓鼻導管的早產兒。所以有必要瞭解，戴正壓鼻導管的早產兒在躺臥何種的姿勢對其生理指標之影響。

方法：研究為類實驗、自我交叉設計，研究場所為台灣某所醫學中心之新生兒加護病房，採方便取樣選取符合收案條件之早產兒 47 位。每位符合收案的早產兒，於早上 8 點至下午 8 點間，由同一研究者使早產兒分別躺臥三種不同的姿勢，測量時間為翻身後 30 分鐘開始，連續測量每一分鐘的生理指標共 30 分鐘。

結果：經 GEE 統計分析，顯示姿勢的改變對於心跳和呼吸次數有顯著差異 ($p < 0.05$)，且於側臥時心跳、呼吸的高低起伏變異最大。於事後檢定發現心跳和呼吸平均次數側臥較仰臥多，有統計上之差異 ($p < 0.05$)。心跳、呼吸次數及血氧飽和濃度潛在性壓力的異常

生理值 (vital signs indicating potential stress) 出現頻率，心跳次數：半俯臥/仰臥/側臥 (336/315/350 次， $p = .296$)；呼吸次數：半俯臥/仰臥/側臥(678/814/748 次， $p < .001$)；血氧飽和濃度：半俯臥/仰臥/側臥(74/109/105 次， $p < .005$)，顯示半俯臥姿出現生理異常次數較其他姿勢少。

結論：對戴著正壓鼻導管的早產兒，採半俯臥姿勢，是可使其生理狀況較穩定的臥姿。

其他有興趣主題:

1. EFFECTIVENESS OF INTERVENTION ON REDUCING THE BMI OF OBESE CHILDREN
2. NEONATAL SEPSIS, BACTERIAL ISOLATES AND ANTIBIOTIC SUSCEPTIBILITY PATTERNS AMONG NEONATES
3. FACTORS RELATED TO CHILD CARE WORKERS' BEHAVIOR IN PREVENTION OF ACUTE RESPIRATORY INFECTION IN CHILD CARE CENTERS
4. A QUASI-EXPERIMENTAL RESEARCH TO INVESTIGATE THE COMPETENCY RETENTION OF BASIC CARDIOPULMONARY RESUSCITATION COGNITIVE KNOWLEDGE AND PSYCHOMOTOR SKILLS BY PEDIATRIC NURSING PERSONNEL
5. DETERMINANTS OF EXERCISE AMONG ADOLESCENTS WITH MILD CONGENITAL HEART DISEASE: A LONGITUDINAL ANALYSIS

第二日(二月十日)：

專題演講：

The Nature and Role of Systematic Reviews in Supporting Evidence in Supporting Quality Healthcare

Associate Professor Dr. Nick Allcock
Director of Postgraduate Studies
University of Nottingham School of Nursing, Midwifery & Physiotherapy, UK

內容摘要：

系統性文獻回顧與其他文獻回顧不同之處，在於他們堅持一套精密嚴格地設計來使它們的內容更廣泛，以降低誤差的機率，並以嚴格的標準來評選文獻，來確保所獲得的結果更具可信度。系統性文獻回顧與統合分析的文章在實證醫學上被認為是證據等級金字塔中最頂端的研究方法。它是利用嚴謹的流行病學與生物統計方法有系統地，從龐大的醫學資料庫中嚴格評讀後，作質性與量性的綜合分析，提供臨床醫療人員更重要更有效力上值得信賴的證據結果。

系統性回顧的五個步驟：步驟一：形成問題；步驟二：找出相關文獻；步驟三：評估文獻品質；步驟四：總結證據結果；步驟五：解讀所得的發現。

文獻證據等級 -Oxford Center

Level	Therapy/Prevention, Aetiology/Harm
1 a	將隨機對照臨床研究(Randomized Clinical Trial, RCT)以系統性評論(systemic review, SR)後的結果。
b	具有嚴格的信賴區間的個別 RCT 研究。
c	無論使用何種研究方法，但其研究結果為完全正面、完全負面或完全無效果(all or none)的研究結果。
2 a	將同質性的世代研究(cohort studies)以系統性評論的結果。
b	個別世代研究或是質量較不足的 RCT 研究。
c	以多數結果為基礎的研究，及生態學的研究("Outcomes" research; liltidi) ecological studies)。
3 a	個案對照研究的系統性文獻回顧
b	單一的個案對照研究
4	病例統計報告，以及質量較不足的個案對照研究。
5	未經嚴謹評估的意見，或者基礎生理學、一般實驗室研究及必要原則。

觀摩海報展示：

比較有興趣的主題有：

1. EXPLORING THE DECISION-MAKING PROCESS OF EMERGENCY PATIENTS IN TAIWAN
2. EFFECT OF MUSCLE RELAXATION ON ANXIETY OF PATIENT UNDERGO CARDIAC CATHETERIZATION
3. THE EFFECT OF EMPLOYING CLINICAL EDUCATION ASSOCIATE MODEL ON CLINICAL LEARNING OF NURSING STUDENT
4. THE EFFECT OF EMPLOYING CLINICAL EDUCATION ASSOCIATE MODEL ON CLINICAL LEARNING OF NURSING STUDENT
5. SYMPTOM DISTRESSES AND COPING STRATEGIES IN GERIATRIC CANCER PATIENTS UNDERGOING INITIAL CHEMOTHERAPY IN TAIWAN

在 2 月 11 日中午由飯店出發搭車前往機場，經過 4.5 小時飛航時程，終於在 2 月 11 日晚間 8 點降落桃園國際機場，結束這次短暫卻充實的國際會議之旅。

三、 會議心得：

對許多健康照護專業人員而言，對於執行健康照護文獻的系統性回顧，有下列常見疑問：這些回顧是如何選取特定研究而捨棄別的？它們是怎麼把各種結果匯集起來的？系統性回顧提供強有力證據來支撐實證醫學，由於各界日益聚焦於透過系統性回顧產生診療的指導與建議，健康照護專業人員有必要明白準備此類回顧的原則。

以證據為導向來進行臨床措施處置決策（Evidence-Based Policy Making）理念逐漸受到國內外學者重視，但證據來源隨著訊息快速流通及知識不斷累積，亦呈現紛雜且品質不一的現象，因此，系統性文獻評閱（systematic review）概念逐漸受到重視，此策略是針對特定健康主題，以系統性過程執行文獻選擇與定位、品質評估、資料收集與編碼、資料修訂與更新等，進而搭配後設分析（meta analysis）技術，提出可靠的研究整合證據，以為醫護人員決策佐證之參考。

隨著消費者意識的抬頭，醫療環境愈趨複雜，提供第一線照護服務的護理人員，在執行護理業務時，必須及時做出決策並適當回應病人或家屬的疑問，倘若護理人員對於病人照護的知識或技巧不足，將無法提供最佳的照護品質並滿足病人的期待。單純以翻閱教科書來更新專業知識的方式，已經無法因應多變且複雜的醫療環境，如果能夠導入實證的方法，使臨床護理人員在面對病人、家屬的問題時，能夠有效判斷及解決，不僅可以增加其照護的能力與信心，亦能使護理人員的專業地位獲得社會大眾的肯定與認同。所以，一定要將護理研究的實證落實於臨床護理措施中。

本次參與國際會議，有專題演講、專題研討會及論文海報展示等各方面議程，與來自全球各地的學者專家互相討論，吸取新知後，對於自己往後的研究工有相當大的助益。同時藉由會議發表自己的論文，讓我知道自己部份的優勢與缺陷不足之處，尤其是應加強在英文聽力及表達的部分。

四、建議事項：

本次參與國際會議，有專題演講、專題研討會及論文海報展示等各方面議程，與來自全球各地的學者專家互相討論，吸取新知後，對於自己往後的研究工有相當大的助益，建議國內相同領域的學者應加強彼此合作與互動的關係。

非常感謝國防部經費的補助讓職大開眼界。經由參加國際性學術會議可拓展視野並學習國際最新研究進展，提昇國內研究水準及國際學術地位，實應多加鼓勵，建議增加補助費用，讓軍醫體系之醫護人員對參加國際性學術會議意願提升，這是值得去努力的方向。

護理研究在促進人類健康，提升護理品質，改善病人安全及促進工作環境上均有很大貢獻，制定相關政策，促使研究落實於臨床實務中，是每一位護理人所需人共同努力地，更應和他院以及國際人士多多交流，才能建構護理的知識。

此外大會議程安排與會場便利與舒適，所耗的人力物力是相當龐大，可感受到承辦單位對於辦國際會議的用心。但是，此次大會在時間的掌控上有嚴重的延遲，尤其是馬來西亞教授的專題演講，不但壓縮了大家休息的時間，也讓各國間交流的時間減少及演講者無法掌控自己的行程所造成之緊張，也讓海報展示解說的時間減少實為遺憾，建議承辦學術研討會時，主持人一定要注意時間的掌握，並提醒講者已超時。

附 錄

附件一：出國參加會議日程表及議程表

附件二：會議過程照片之資料

附件二：回單位後報告之資料

Day 1: 9th February 2012 (Thursday)		
Time	Event details	Venue
0730-0850	Registration & Reception	Selangor Ballroom Foyer
0900-0930	OPENING CEREMONY Welcome Address by: Dr. Pathmawathi Subramanian Chairman, 2 nd International Nursing Research Conference Speech by: Y.Bhg. Tan Sri Dato' Dr. Ghauth Jasmon Vice Chancellor, University of Malaya Speech and opening ceremony by: Y.B. Dato' Seri Mohamed Khaled bin Nordin, Minister, Ministry of Higher Education Malaysia	Selangor 1
0930-1030	KEYNOTE ADDRESS: <i>Making TRIP Happen: Strategies for Translating Research into Practice</i> Professor Dr. Davina Porock Professor & Associated Dean for Research & Scholarship University at Buffalo School of Nursing, USA	Selangor 1
1030-1100	TEA BREAK	Selangor Ballroom Foyer
1100-1145	PLENARY I: <i>Advancing Nursing Practice –Framework for Research Development</i> Professor Dr. Sally Chan Professor and Head Alice Lee Centre for Nursing Studies, Yong Loo Lin School of Medicine National University of Singapore	Selangor 1
1145-1200	PLENARY II : <i>The role of Malaysian Nursing Board in Promoting Research Culture Among Nurses</i> Ms. Dasimah Ahmad Deputy Director of Nursing & Secretary to the Nursing Board Malaysia Ministry of Health	Selangor 1
1200-1245	SYMPOSIA 1 courtesy of MSD: <i>Cervical cancer and HPV disease prevention- putting boys into the equation</i> Professor Dr. Woo Yin Ling Consultant Gynaecological Oncologist University Malaya Medical Centre.	Selangor 1
1245-1400	LUNCH	Selangor 2
1400-1600	CONCURRENT SESSION: Free Papers Concurrent Session I Concurrent Session II Concurrent Session III	Selangor 1 Subang 1 Melati 5 & 6
1640-1700	TEA BREAK	Selangor Ballroom Foyer

Day 2: 10th February 2012 (Friday)		
Time	Event details	Venue
0800-0845	PLENARY III: <i>The Nature and Role of Systematic Reviews in Supporting Evidence in Supporting Quality Healthcare</i> Associate Professor Dr. Nick Allcock Director of Postgraduate Studies University of Nottingham School of Nursing, Midwifery & Physiotherapy, UK	Selangor 1
0845-0930	PLENARY IV: <i>Direction of Nursing Research in Malaysia – Past, Present and Future</i> Siti Rabikhatun Datuk Mohd Zain Adjunct Professor Universiti Kebangsaan Malaysia	Selangor 1
0945-1015	TEA BREAK	Selangor Ballroom Foyer
1015-1100	SYMPOSIA II -courtesy of Danone Dumex (M) Sdn Bhd: <i>Weight Management Among Children</i> Leong Ven Luan Nutritionist Danone Dumex (M) Sdn Bhd	Selangor 1
1100-1200	WORKSHOP I : <i>Practical Techniques for Analyzing Data from Mixed Methods Studies</i> Professor Dr. Davina Porock WORKSHOP II: <i>Approaches to Systematic Review: Finding the Evidence to Improve Your Practice</i> Associate Professor Dr. Nick Allcock WORKSHOP III : <i>Developing Research Questions – the Art and Science</i> Adjunct Professor Siti Rabikhatun Dato' Mohd Zain	Selangor 1 Melati 1 & 2 Melati 6 & 7
1200-1245	SYMPOSIA III courtesy of Statworks Sdn Bhd: <i>Integrating Computational Analytics Software in Medical, Nursing and Health Sciences Research.</i> Ms.Rohini Sooriamoorthy Senior Technical Manager Statworks Technology Sdn Bhd	Selangor 1
1245-1400	LUNCH	Selangor 2
1400-1640	CONCURRENT SESSION: Free Papers Concurrent Session IV Concurrent Session V Concurrent Session VI	Selangor 1 Melati 1 & 2 Melati 5 & 6
1640-1700	CLOSING CEREMONY & TEA BREAK	Selangor 1

Time	Day 1: 9 th February 2012 (Thursday) CONCURRENCE SESSION: Free Papers		
	Session I (Medical/Surgical/Gen) Venue: Selangor 1 Chairman: Ms. Lee Wan Ling	Session II (Paediatrics) Venue: Subang 1 Chairman: A/P Dr Khatijah Lim Abdullah	Session III (Maternity/Community) Venue: Melati 6 and 7 Chairman: Ms. Rasnah Abdul Rahman
1400 - 1420	DOES THE EARLY USE OF ANXIOLYTICS MODIFY THE RELATIONSHIP OF ANXIETY WITHIN HOSPITAL COMPLICATIONS IN PATIENT WITH ACUTE MYOCARDIAL INFARCTION? Mona Abed (Jordan)	NEONATAL SEPSIS, BACTERIAL ISOLATES AND ANTIBIOTIC SUSCEPTIBILITY PATTERNS AMONG NEONATES Maria Pais (India)	EFFECTS OF BREASTFEEDING ON SEXUAL FUNCTION: A LONGITUDINAL PROSPECTIVE STUDY Mandana Mirmohamad Ali (Iran)
1420 - 1440	DETERMINATES OF EXERCISE AMONG ADOLESCENTS WITH MILD CONGENITAL HEART DISEASE: A LONGITUDINAL ANALYSIS Chi Wen Chen (Taiwan)	IMPACT OF DIFFERENCE SLEEPING POSITIONS ON THE PHYSIOLOGICAL PARAMETERS OF PRETERM INFANTS WITH NASAL PRONGS. Yin Ti (Taiwan)	TO DETERMINE THE EFFECTIVENESS OF NEONATAL HOME CARE INSTRUCTIONAL MODULE ON KNOWLEDGE OF PRACTICE AND ATTITUDE AMONG MOTHERS IN POSTNATAL WARD Anita Prakasam (India)
1440 - 1500	COMPARING ORAL HYGIENE BETWEEN TRADITIONAL ORAL CARE AMONG POST OPERATIVE ORAL PATIENTS Yi Chin Li (Taiwan)	EFFECTIVENESS OF INTERVENTION ON REDUCING THE BMI OF OBESE CHILDREN Baby Satish Nayak (India)	POSTPARTUM DEPRESSIVE SYMPTOMS: ASSOCIATION WITH PREGNANCY PLANNING AND CHILDBIRTH EXPERIENCE Siti Roshaidah (M'sia)
1500 - 1520	KNOWLEDGE AND PRACTICE OF THE NURSES IN THE MANAGEMENT OF FAT EMBOLISM Kalaivani Karupiyah (M'sia)	RESUSCITATION COGNITIVE KNOWLEDGE AND PSYCHOMOTOR SKILLS BY PAEDIATRIC NURSING PERSONNEL. Nalayanni A/P Vasu (M'sia)	BARRIERS TO MODERN CONTRACEPTIVE PRACTICES AMONG SELECTED MARRIED WOMEN IN A PUBLIC UNIVERSITY IN MALAYSIA Fatimah Najafi (Iran)
1520 - 1540	PREDICTORS OF DIETARY AND FLUID IN JORDANIAN PATIENTS WITH END STAGE RENAL DISEASE RECEIVING HAEMODIALYSIS: A CROSS SECTIONAL STUDY Amani Khalil (Jordan)	KNOWLEDGE, PHYSICAL HEALTH, SOCIAL SUPPORT AND SELF ESTEEM AMONG CHILDREN AND ADOLESCENTS WITH HAEMOPHILIA Sulochana B.(India)	FAMILY PLANNING METHODS AND QUALITY OF LIFE. Fatemah Rahimikian (Iran)
1540 - 1600	THE IMPLEMENTATION AND EVALUATION OF NURSING PROCESS DOCUMENTATION IN A DISTRICT SPECIALIST HOSPITAL Au Yit Moy (M'sia)	AN EVALUATIVE STUDY TO FIND THE EFFECTIVENESS OF TWO METHODS OF MANAGEMENT OF PEDICULOSIS CAPITIS AMONG CHILDREN OF SELECTED HOSPITALS. Majula Upendra (India)	APPROACH TAKEN BY FRONTLINE COMMUNITY NURSES TO SUPPORT AND COOPERATIVE WITH COMMUNITY HEALTH WORKERS IN RURAL AREAS OF THE PHILIPPINES Sakamoto Mariko (Japan)
1600 - 1620	SYSTEMIC REVIEWS IN PRESSURE ULCER RESEARCH Jimmy Choo (UK)	FACTORS RELATED TO CHILD CARE WORKERS' BEHAVIOUR IN PREVENTION OF ACUTE RESPIRATORY INFECTION IN CHILD CARE CENTERS Chayanan Jaide (Thailand)	KNOWLEDGE ON NUTRITION AND FREQUENCY OF FOOD INTAKE RICH IN IRON AMONG PREGNANT WOMEN VISITING PERINGGIT COMMUNITY POLYCLINIC MELAKA (PCPM) Hasliza Hasan (M'sia)
1620 - 1640	EMOTIONAL INTELLIGENCE, PERCEIVED STRESS, AND ACADEMIC ACHIEVEMENT IN NURSING STUDENTS Amel Abouelfetoh (Saudi)	To be confirmed	Confirmed

Time	Day 2: 10th February 2012 (Friday)		
	CONCURRENCE SESSION: Free Papers		
	Session IV Venue: Selangor 1 (General) Chairman: Ms. Chong Mei Chan	Session V Venue: Melati 1 & 2 (Oncology/General) Chairman: Ms. Puziah Md Zain	Session VI Venue: Melati 6 & 7 (Geriatrics/General) Chairman: Ms. Sulaigah Baputhy
1430 - 1450	NURSING STUDENTS' FEELING AND GOAL ATTAINMENT THROUGH OVERSEAS TRAINING Yoshiko Yamaguchi (Japan)	LOGISTIC AND ATTUDINAL BARRIERS TO MAMMOGRAPHY AMONG WOMEN AGED 35-69 YEARS IN METROPOLITAN TEHRAN Maryam Ahmadian (Iran)	UNDERSTANDING SOCIAL ACTIVITY PARTICIPATION IN LONG TERM CARE INSTITUTIONS Ya Chuan Hsu (Taiwan)
1450 - 1510	GUILT AS A CONSEQUENCE OF LEAVING THE HOMELAND Catherine Ward (Aust)	SYMPTOM DISTRESS AND COPING STRATEGIES IN GERIATRIC CANCER PATIENTS UNDERGOING INITIAL CHEMOTHERAPY IN TAIWAN Shih Ping Wu (Taiwan)	FUNCTIONAL STATUS AMONG OLDER ADULTS AFTER FALLS AT OUTPATIENT CLINICS IN A PUBLIC HOSPITAL IN MALAYSIA . Ong Mei Fong(M'sia)
1510 - 1530	WORKPLACE INNOVATION: THE CONTRIBUTION OF PERSONAL AND CULTURAL VARIATIONS IN NURSES' DAILY STRESS AND COPING Joanne Lim (Aust)	PALLIATIVE CARE IN THE ACUTE HOSPITAL SETTING: A QUALITATIVE INTERVIEW STUDY Christine Ingleton (UK)	RELATIONSHIP BETWEEN ANXIETY AND SEXUAL ACTIVITY AND FUNCTION AMONG OLDER WOMEN IN PURWOREJO DISTRICT Haryanto Yanto(Indonesia)
1530-1 550	MENT OF JOB ACTION AMONG EXPERIENCED NURSES Narges Atefi(Iran)	SYMPTOMS PREVALENCE, CHARACTERISTICS AND COPING STRATEGIES AMONG MULTIETHNIC ONCOLOGY PATIENTS IN MALAYSIA Nor Aziyan Yahya (M'sia)	MALNUTRITION AND ASSOCIATED FACTORS AMONG ELDERLY PATIENTS IN SABAH Waidah Binti Sawatan(M'sia)
1550 - 1610	ASSESSMENT OF THE EFFECTIVENESS OF MENTORSHIP PROGRAM AMONG STAFF NURSES IN PENANG HOSPITAL Foo Siew Li (M'sia)	EVALUATION OF A HAEMOPHILIA NURSES' EDUCATION PROGRAM Jill Smith (Aust)	THE RELATIONSHIP BETWEEN SOCIAL SUPPORT AND EMOTIONAL DISTRESS IN EARLY STROKE PATIENTS Han Chen Weng (Taiwan)
1610 - 1630	ASSESSMENT OF THE NUTRITIONAL HEALTH STATUS OF NURSING STUDENTS Geetha Venugopal (India)	EXTENDING QUALITATIVE RESEARCH METHODS FOR HEALTHCARE (exchange) Karen-Leigh Edward (Aust)	BARRIERS TO ADEQUATE PAIN MANAGEMENT IN GERMANY HOSPITALS AND NURSING HOMES – EMPIRICAL FINDINGS FROM THE STUDY “ACTION ALLIANCE PAIN – FREE CITY MUSTER” Patrick Kutschar (Austria)
1630 - 1650	To be confirmed	CONTRIBUTERS AND CATEGORIES OF MISSED NURSING CARE IN HOSPITALS OF SOUTHERN TAIWAN Shu-Yi Ou (Taiwan)	SURVEY OF OCCUPATIONAL HEALTH SERVICES IN HONG KONG HOSPITALS Maggies Wong Yat Cheong(HongKong)

研討會報到台



大會會議約可容納400人



大會即將開始只剩少數空位



大會開幕迎賓開幕表演



研討會召集人致詞



馬來西亞大學校長致詞



美籍教授為大會進行第一場演講



巧遇口頭發表輔仁、長榮大學助理教授
海報發表的奇美、成大醫院護理長等人



觀摩海報展-與國旗合影



與許多回教國家護理先進共進午餐



準備口頭發表時間



口頭報告-1



口頭報告-2



聆聽報告者：馬來西亞、印度、泰國、新加坡、伊朗、台灣等國



觀摩學術海報展-1



觀摩學術海報展-2



The effect of different lying positions on the physiological parameters of preterm infants with nasal prongs

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100.02.09

Special announcement

- My English is not fluent, I will be highly appreciated if the question can be written to me via E-mail.
- My E-mail address is edenstud@gmail.com

Outlines

- Purpose
- Literatures review
- Research Materials and Methods
- Research Results
- Discussion
- Conclusion
- Limitation and suggestion

Purpose

- This study aims to **determine the effect of different lying positions**(supine, lateral or semiprone position) on **the physiological parameters** (heart rate[HR], respiratory rate[RR], oxygenation saturation[SpO₂]) of preterm infants with **nasal prongs**.

Background

- **Nasal continuous positive airway pressure cannula (NCPAP)**
 - provide a **noninvasive ventilation support**
 - to maintain preterm infants airway, pulmonary residual volume and **prevent apnea**
 - **reduce the need of intubation** and sequelae of chronic pulmonary disease
 - **Nasal prongs over both sides of head limit the turning of head** (Carney , DiRocco , & Nieman , 2005)
- **Supine position**
 - is used during NCPAP therapy
 - easier to adjust the ventilation equip at this position (Bonner, & Mainous, 2008)
- **The prone position that is most suitable for preterm infants is not suitable for those with nasal prong**
- **Any lying position can be used during application of NCPAP** ✨ (Bonner, & Mainous, 2008)

Literature Review -1 ✨

- The preterm infants is **majorly place in lying supine, lateral or prone position**. (Hess, 2005; Wells, Gillies, & Fitzgerald, 2005)
- It has been demonstrated that in preterm infants the **oxygen saturation and partial pressure of oxygen are higher when the preterm infants is placed in prone position**. (Bhat.et.al, 2003 ; Kassim, et.al , 2007)
- **In prone position, the respiratory muscles in chest or abdominal wall are more synchronous, the duration of desaturation is shorter**. (Hess, 2005 ; Bhat, et al., 2003)
- A study suggested that **semiprone position can maintain the functional position, decrease the respiratory works and increase the oxygen saturation, which can stabilize the physiology**. (Chao, 1999)

Literature Review -2

- A study suggested that the **physiological parameters** of preterm infants were **more stable** when they were placed in **prone or semiprone position**, compared to supine or lateral position.
- During semiprone position
 - the **RR was less and the oxygen saturation was higher** than those during prone position
 - the **emergence of vital signs indicating potential stress was significantly decrease** as compared to those in lateral or supine position ($p \leq .001$).
- As a result, it was suggested that the **preterm infants can be placed in semiprone position to increase the oxygen saturation, decrease the potential stress** in respiration and heart function. (Yin, Chen, Chang, Tung, Hua, & Liaw, 2008)

Literature Review - 3

- **The effect of lying position on neuronal development**
 - preterm infants maintained in **functional position and regularly changing the position** can improve the autonomic and functional movement activity
(Vaivre-Douret, Ennouri, Jrad, Garrec, & Papiernik, 2004)
 - Preterm infants **using NCPAP should be placed in 30 degree upright**. (Bonner, & Mainous, 2008)
 - The **position should be changed every 2-4 hours** to maintain the skin integrity, enhance the neuronal development.
 - Preterm infants **using NCPAP can be placed in prone or lateral position if there is support**. (Saiki, 2009)
- However, there are no solid evidence to support the most appropriate lying position for preterm infant using NCPAP in view of physiological impact. Therefore, study is needed to provide evidence for the care of these infants.

Materials and Methods - 1 ✨

- **Study design**
 - used **crossover design**
 - used **repeat measure design**
 - to investigate the influences of three different lying position (supine, lateral and semiprone) on the physiological parameters (HR, RR and oxygen saturation) in preterm infants using NCPAP
 - Each case received **three different lying positions** sequentially.
 - In each position, the parameters were **measured for 30 min**.
 - The next measurement began 30 min after the position had been changed. ✨

Materials and Methods -2

Study population ✨

- **The inclusion criteria of the preterm infants was**
 - i) gestation age between 25 to 30 weeks
 - ii) aged less than 30 days
 - iii) body weight less than 2000g
 - iv) no congenital abnormality, cardiopulmonary diseases, infectious or metabolic diseases
 - v) without use of respiratory or sedative drugs
 - vi) without use of oxygen but use 5 cmH₂O PEEP.
- **The exclusion criteria of the preterm infants was**
 - i) depend on oxygen to maintain the saturation
 - ii) use of respiratory drugs
 - iii) the study could not be accomplished within one day

Materials and Methods -3

- **Study settings**
 - in a newborn intensive care unit in a medical center
 - placed in the incubator ✨
 - the bed was raised to 30 degree, and all the preterm infants was nested ✨
- **Measurements**
 - The HP monitors (Hewlett Packard Model 64S Monitor) was used to measure and record the physiological parameters every one minute.
 - The accuracy of the monitor was $\pm 1\%$ and sensitivity was $\geq 200 \mu V$ peak.
- **Study procedure**
 - After 30 min in a certain position, the mean of the parameters measured in one-minute were recorded.

Materials and Methods -4

- **All the analysis was performed by using SPSS 17.0 .**
- **p value < 0.05 was considered significance.**
- **Data analysis**
 - Descriptive statistics : frequency, percentage, mean and standard deviation.
 - Univariate analysis : ANOVA
 - Post Hoc Tests : Turkey
 - Multivariate analysis : Generalized Estimating Equations (GEE)
- **Ethics ✨**
 - IRB of the Tri-Service General Hospital.

Results

- The lying position had a significant influences on the HR and RR ($p < 0.001$)
- No difference in oxygen saturation (SpO₂) was found among different lying position ($p = 0.225$)
- The variation of HR is greatest in supine position.
- The Post Hoc Tests found that the mean of HR and RR, there is significant difference.
- HR, RR and SpO₂ indicating potential stress frequency :
 - HR : semiprone /supine /lateral (336/315/350 times , $p = .296$)
 - RR : semiprone /supine /lateral (678/814/748 times , $p < .001$)
 - SpO₂ : semiprone /supine /lateral (74/109/105 times , $p < .005$)

Table 1. Characteristics of preterm infants

Characteristics		n (%)	Mean±SD
Gender	Male	21 (44.68)	
	Female	26 (55.32)	
Type of delivery	Vaginal	26 (55.32)	
	Caesarean	21 (44.68)	
Steroids	Not use	13 (27.66)	
	One time	17 (36.17)	
	above 2 times	17 (36.17)	
Surfactant	Not use	42 (89.36)	
	Use	5 (10.64)	
Phenobarbital	Not use	35 (74.47)	
	Use	12 (25.53)	
Birth weight (grams)			1210.5 ± (407.41)
Gestational age (weeks)			28.6 ± (2.29)
Body weight during procedures (grams)			1186.7 ± (400.87)
PCA (weeks)			29.9 ± (1.86)
Apgar score: 1 min			5.9 ± (1.45)
Apgar score: 5 min			8.1 ± (0.94)
Age (days)			10.3 ± (10.05)
Use ventilator days			10.3 ± (10.05)

PCA: postconceptional age

Table 2. Different positions of the HR, RR and SpO₂ by Turkey Post Hoc Tests and ANOVA (N=47)

Variable	SUPINE		LATERAL		SEMI PRONE		SS	df	MS	F	p
	M	SD	M	SD	M	SD					
HR	148.5	13	151	13	150	13					
HR range	(98-209)		(124-209)		(90-204)						
Within group							5716	2	2858.22	16.19	<0.001***
between group							746330	4227	176.56		1vs.2 <0.001*** 1vs.3 0.012* 2vs.3 0.013*
RR	42.5	12	45.5	14	44	11					
RR range	(13-99)		(15-104)		(17-86)						
Within group							5937	2	2968.51	19.93	<0.001***
between group							629700	4227	148.97		1vs.2 <0.001*** 1vs.3 0.001*** 2vs.3 0.014*
SpO ₂	96.6	3.7	96.7	3.4	96.8	3.6					
SpO ₂ range	(63-100)		(70-100)		(54-100)						
Within group							38	2	18.81	1.49	0.225
between group							53354	4227	12.62		

* $P < .05$ ** $P < .01$ *** $P < .001$; different lying positions (1=supine, 2=lateral, 3= semiprone)

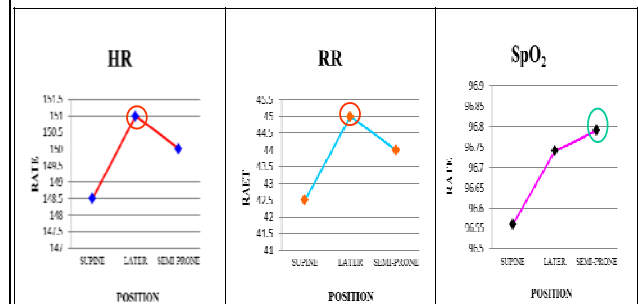


Figure 1. The heart rate, respiratory rate and oxygen saturation in different lying positions.

Table 3. The number of value of physiological parameters indicating potential stress in different lying position (N=1410)

Variable	supine		lateral		Semi-prone		F	P
	normal time/ (%)	abnormal time/ (%)	normal time/ (%)	abnormal time/ (%)	normal time/ (%)	abnormal time/ (%)		
HR	1059/(77.7)	315/(22.3)	1095/(77.2)	350/(22.8)	1074/(76.2)	336/(23.8)	1.21	0.296
RR	596/(42.2)	814/(57.8)	662/(47.0)	748/(53.0)	732/(51.9)	678/(48.1)	13.24	<0.001***
SpO ₂	1301/(92.3)	109/(7.7)	1305/(92.6)	105/(7.4)	1336/(94.8)	74/(5.2)	4.11	0.017*

* $P < .05$ ** $P < .01$ *** $P < .001$;

N=1410, 47 patients was measured for 30 minutes and a total of 1410 data were collected

Table 4. Changes in HR, RR and SpO₂ predicted by GEE method logistic regression (N=47)

Variable	HR				RR				SpO ₂						
	B	Wald χ^2	95% confidence interval	P	B	Wald χ^2	95% confidence interval	P	B	Wald χ^2	95% confidence interval	P			
Semiprone /supine	1.58	-0.83	3.99	1.65	0.199	1.63	2.86	-0.26	3.52	0.091	0.20	0.53	-0.35	0.76	0.468
Lateral/supine	3.58	1.90	5.26	17.49	<0.001***	3.17	14.35	1.53	4.80	<0.001***	0.27	1.22	-0.21	0.74	0.270
Type of delivery (Vaginal / Caesarean)	3.22	-0.05	6.49	3.72	0.054	3.49	8.39	1.13	5.86	0.004	-1.44	16.48	-2.13	-0.74	<0.001***
Steroids (use 4 times)	7.99	0.38	15.60	4.24	0.040	-8.17	8.48	-13.67	-2.67	0.004	3.35	16.48	1.73	4.97	<0.001***
Steroids (use 2 times)	0.87	-2.52	4.25	0.25	0.615	0.16	0.02	-2.29	2.60	0.900	0.09	0.06	-0.63	0.81	0.814
Steroids (use 1 times)	5.06	1.38	8.73	7.28	0.007	-0.21	0.02	-2.86	2.45	0.878	-0.47	1.37	-1.25	0.32	0.242
Surfactant (use 2 times)	-0.70	-7.46	6.07	0.04	0.840	3.30	1.76	-1.57	8.18	0.184	-0.58	0.62	-2.01	0.86	0.433
Surfactant (use 1 time)	2.65	-2.83	8.13	0.90	0.344	3.45	2.92	-0.51	7.40	0.088	-1.19	4.03	-2.36	-0.03	0.045
Body weight during procedures	0.02	0.01	0.02	11.67	0.001	0.02	56.90	0.02	0.03	<0.001***	0.00	11.81	-0.01	0.00	0.001
PCA	-4.21	-6.08	-2.34	19.52	<0.001***	-5.23	57.01	-6.59	-3.87	<0.001***	0.84	17.04	0.44	1.25	<0.001***
Apgar score: 1 min	1.85	-0.26	3.95	2.95	0.086	-0.44	0.32	-1.96	1.08	0.573	0.51	4.96	0.06	0.96	0.026
Apgar score: 5 min	-1.35	-4.59	1.89	0.67	0.414	4.16	12.13	1.82	6.49	<0.001***	-1.13	10.29	-1.82	-0.44	0.001
Age (days)	0.63	0.46	0.81	48.90	<0.001***	0.37	31.64	0.24	0.51	<0.001***	-0.13	41.69	-0.16	-0.09	0.000
Measuring time (minute)	0.02	-0.03	0.07	0.48	0.489	0.01	0.12	-0.05	0.07	0.728	-0.01	1.25	-0.03	0.01	0.263
HR															
RR															
SpO ₂															
(Scale)	131.90						137.53								11.17

* $P < .05$ ** $P < .01$ *** $P < .001$; PCA: postconceptional age

Discussion-Heart Rate

- the mean HR was highest during placing on lateral position and lowest during placing on supine position. ($p < 0.001$)
- Indicating potential stress frequency was less during supine (315 times), than semiprone (336 times), and lateral position (350 times) ($p > 0.05$)
- The possible reason is that
 - a nest was constructed to support the preterm infants.
 - the respiratory circuit was more properly placed. ✨
 - at semiprone position, the cannule might be compressed or dragged during changing position
- Although the increase HR might increase energy consumption, a very slow HR might compromise the blood supply in brain. (Antelmi et al., 2004; Bonner, & Mainous, 2008)

Discussion-Respiratory Rate

- The mean RR was highest during lateral position and lowest during supine position ($p < 0.001$)
- Indicating potential stress frequency was less during semiprone (678 times), than supine (814 times), and lateral position (748 times) ($p < 0.001$)
- support with 5cmH₂O in different lying positions
- The possible reason is that in semiprone position
 - similar in prone position
 - the lung compliance, tidal volume, respiratory rhythm and oxygen saturation are improved during prone position
 - during supine position, the movement of chest wall is free
 - the movement of chest wall was limited during lateral and prone position(Kurlak, Ruggins, & Stephenson, 1994 ; Wells, et al., 2005)

Discussion-Oxygen Saturation

- The mean SpO₂ was highest during semiprone position but lowest in supine position ($p = 0.225$)
- Indicating potential stress frequency was less during semiprone position (74 times), compared to those during supine (109 times) and lateral position (105 times) ($p < .005$)
- The possible reason is that in semiprone position
 - similar in prone position
 - the preterm infants was placed in a functional position
 - can promote the synchronous movement of chest and abdominal respiratory muscle
 - the oxygenation, lung volume and compliance are better than in supine position in preterm infants
 - the increase of ventilation / perfusion ratio(Saiki, et al., 2009; Wolfson, Greenspan, Deoras, Allen, & Shaffer, 1992)

Conclusion ✨

- we suggested that preterm infants using NCPAP should avoid placing in lateral position, as the HR and RR was faster, but oxygen saturation was lower.
- The function is similar between semiprone position and prone position, the oxygen saturation is also improved in semiprone position.
- Study showed that in preterm infants using NCPAP, semiprone and supine position are two better lying positions, in which the physiologies were more stable.
- In addition, the care-giver is easier to observe the preterm infants when they are placed in supine position.

Limitation and suggestion

- The case number is relative small.
- The study was conducted in just a single center, and the result might not be a general phenomenon.
- The study on semiprone position is lacking, it is hard to perform a study using experimental design.
- It is merit to investigate the physiologies, behavior changes or development of neuromuscular system in preterm infants lying on semiprone position in the future study. ✨

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Thanks for your attention!