

Austin Hospital Emergency Department

Research Report 2006

Compiled by

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Foreword

Last year in this foreword, I mentioned the 'lead time' associated with the establishment of an academic emergency department (ED). This 'lead time' represents the period between the development of research study protocols and the publication of the findings. This can be considerable, often up to two years, even for the simplest of studies.

Well, in 2006 we began to see the rewards for our research activities. If publications and presentations are valued as academic 'currency' then our back account is looking very healthy. This year saw a considerable increase in research output as evidenced by 15 peer-reviewed publications and 23 research presentations or posters by members of our ED (see details below). These will, no doubt, raise the academic profile of our ED as well as that of Austin Health. Additionally, such activity is likely to further stimulate research interest, catalyse the development of even more activity, and attract high quality staff.

Our ED's academic activities are not limited to publications and presentations. In 2006, a number of our staff were elected to important academic positions within their respective fields of interest. Notably, Dr Michael Yeoh has been appointed to the Scientific Committee of the Australasian College for Emergency Medicine and as Section Editor for *Emergency Medicine Australasia*. This is in addition to his work with the National Institute of Clinical Studies. Dr Simone Taylor now serves as a research supervisor to a number of candidates pursuing a Master's Degree of Clinical Pharmacy and has been appointed to the national writer's group for *Therapeutic Guidelines – Emergency Medicine*. These new positions are in addition to the contributions that other ED staff members make outside of our ED and help to substantiate our academic profile.

I believe our ED is poised to consolidate and expand its research activities considerably. The next 12 months will see some exciting opportunities eventuate. The planned move of the Victorian Poisons Information Centre to our ED will facilitate the collaboration that we began in 2005. We have established our ED as a centre for the training of Advanced Medical Science students and look forward to their involvement in ED research. We now have a research track record that can be used to strengthen applications for competitive research funding, including NHMRC project grants. Our research infrastructure still needs development and we are developing plans that include the establishment of a research assistant/nurse position. Finally, there is the possibility of Master's and Doctoral programs and the establishment of an Emergency Medicine Research Fellowship.

I would like to congratulate the large number of our staff who have been successful in their research endeavours throughout 2006. I would also like to thank those staff who have assisted and facilitated this good work. Let's all look forward to a great 2007.

A/Prof David Taylor Director of Emergency Medicine Research

2006 Publications

Braitberg G. <u>Drugs and Antidotes in Acute Intoxication.</u> In: Acute Intoxication and Poisoning. 'Critical Care Nephrology' (Edition 2), Bellomo R, Ronco C (Eds), Elsevier (Pub)

Poustie P, Taylor DMcD, Forbes A, Skiba MA, Nelson MR, McNeill JJ. Implementing a Research Governance Framework for Clinical and Public Health Research. *Med J Aust* 2006; 185: 623-626

Taylor DMcD. Reverse triage: Useful for day-to-day access block (invited commentary) *Lancet* 2006; 368: 1940-1941

Taylor DMcD, Robinson J, MacLeod D, Braitberg G. Pilot study of therapeutic errors reported to the Victorian Poisons Information Centre. *J Pharm Pract Res* 2006; 36: 96-98

Welch SA, Taylor SE, Graudins LV. SHPA Standards of Practice in Emergency Medicine Pharmacy Practice. *J Pharm Pract Res* 2006; 36: 139-142

Taylor DMcD, Walsham N, Taylor SE, Wong LF. Complementary and alternative medicines versus prescription drugs: perceptions of emergency department patients. *Emerg Med J* 2006; 23: 266-268

Judkins S. Hear ye, hear ye: Emergency department 10 commandments. *Emerg Med Australas* 2006; 18: 100

Taylor DMcD, Walsham N, Taylor SE, Wong LF. Potential interactions between prescription drugs and complementary and alternative medicines among emergency department patients. *Pharmacotherapy* 2006; 26: 634-640

Valoppi G, Taylor SE. Analgesic selection in patients on abstinence therapies. *J Pharm Pract Res* 2006; 36: 136-138

Taylor SE. Making of mentors and role models. *J Pharm Pract Res* 2005; 35(4): 1-3 (published in 2006)

Robinson J, MacLeod D, Taylor DMcD, Lebel T, May T. The safety of edible fungi purchased at Melbourne markets. *ANZJPublicHealth* 2006; 30: 279-280

Ho BCH, Bellomo R, McGain F, Jones D, Naka T, Wan L, Braitberg G. The incidence and outcome of septic shock patients in the absence of early-goal directed therapy. *CritCare* 2006; 10: open access

Chan EW. Role for aspirin after total hip replacement? *J Pharm Pract Res* 2006; 36: 214-7

Chan EW. Artemether-lumefantrine and primaquine for mixed Plasmodium falciparum and ovale malaria infection. *J Pharm Pract Res* 2006; 36: 134-5.

Shah K, Taylor SE, Cranswick M, Chan R. Angioedema possibly associated with Ezetimibe. *J Pharm Pract Res* 2006; 36: 301

Articles accepted for publication – In Press

Shen JJ, Taylor DMcD, Knott JC, MacBean C. A comparison of Lignocaine and Bupivacaine use in the Emergency Department Accepted *Emerg Med J* December 5, 2006 – In press

MacBean CE, Taylor DMcD, Ashby K. Mammal bite injuries (human and non-human) in Victoria, Australia (1998-2004). *Med J Aust* 2006 – In press

Taylor S, Braitberg G, Lugt J. Minimising pethidine prescribing in the Emergency Department *Emerg Med Australas* 2006 - In press

Hendrie J, Sammartino L, Silvapulle MJ, Braitberg G. Experience in adverse events detection in an emergency department: incidence and outcome of events. Accepted *Emerg Med Australas* – In press

Hendrie J, Sammartino L, Silvapulle MJ, Braitberg G. Experience in adverse events detection in an emergency department: the nature of events Accepted *Emerg Med Australas* – In press

Articles undergoing peer review

Ye K, Taylor DMcD, Knott JC, Dent A, MacBean CE. Handover in the Emergency Department: Deficiencies and Adverse Effects Submitted to *Emerg Med Australas*

Mann T, Taylor DMcD, Smit De V. Eutectic Mixture of Local Anesthetics (EMLA) versus Nitrous Oxide for cannulation of children in the Emergency Department Submitted to *Acad Emerg Med*

Chan A, Braitberg G, Elbaum D, Taylor DMcD. Hatzolah First Responder Service – To Save a Life.

Revised manuscript submitted to *Med J Aust* in January 2007

Published Abstracts

Yeoh M, Ferma M, Huckson S. Improving the care of mental health patients in the emergency department (ED). [abstract] *Emerg Med Australas* 2006; 18 (s1): A3

Taylor SE, Braitberg G, Lugt J. Minimising pethidine prescribing in the emergency department. [abstract] Emerg Med Australas 2006; 18 (s1): A14

Coutts R, Taylor DMcD. Interpersonal assault in Victoria (1996-2004) [abstract] *Emerg Med Australas* 2006; 18 (s1): A24

Taylor D, Ou D, To P. Weather patients will come to the emergency department [abstract] Emerg Med Australas 2006; 18 (s1): A28

Degrees and Qualifications awarded:

Jackie Crane Masters of Public Health (Economics and Program Evaluation)

Monash University

Esther Chan Master of Clinical Pharmacy (MClinPharm)

Monash University

Conference & Seminar Presentations

Kennedy B. ATEM – A website for Trainees in Emergency Medicine (free paper) (www.austinemreg.com)

ACEM Winter Symposium, Townsville, June 2006

Chan E. Medications brought into the emergency department by ambulance: does this impact on the accuracy of prescribing on admission? (free paper)
Australasian College for Emergency Medicine, Annual Scientific Meeting
Sydney, November 2006

Haack L. An intervention to reduce the use of error prone abbreviations in the emergency department (free paper)

Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Yeoh M. Spreading best practice (invited presentation) Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Goutzamanis J. Paediatric cases to trick the unwary (invited presentation) Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Chan T. Hatzolah first responder – to save a life (free paper) Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Mann T. Eutectic mixture of local anaesthetics (EMLA) versus nitrous oxide for cannulation of children in the emergency department (free paper) Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Taylor S. Evaluation of ED medical nursing and allied health staff attitudes towards use of complimentary medicines. (free paper)

Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Taylor DMcD. Non-invasive ventilation in the pre-hospital setting: Is it a feasible therapeutic option? (free paper)

Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Taylor DMcD. Making good research governance work: establishment and evaluation of a practical process (free paper)

Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Taylor DMcD. Problems associated with patient handovers within the

emergency department (free paper) Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Taylor DMcD. Bupivacaine in the emergency department: underutilized and scope for improved patient care (free paper)

Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Taylor DMcD. Pilot study of therapeutic errors reported to the Victorian Poisons Information Centre (free paper)
Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Chan E. Medications Brought into the Emergency Department by Ambulance: Does This Impact on the Accuracy of Prescribing on Admission. SHPA Conference, Melbourne, October, 2006

Posters Presentations

Mann T, Taylor DMcD, Smit DeV. Eutectic mixture of local anaesthetics (EMLA) versus nitrous oxide for cannulation of children in the emergency department. Austin research week

MacBean CE, Taylor DMcD, Ashby K. Mammal bite injuries (human and non-human) in Victoria (1998-2004). Austin research week

Shen JJ, Taylor DMcD, Knott JC. Bupivacaine in the emergency department: underutilized and scope for improved patient care. Austin research week

Ye K, Taylor DMcD, Knott JC, Dent A, MacBean C. Problems associated with patient handovers within the emergency department. Austin research week

Craig SS, Furyk JS, Braitberg G, Lowe R, Canary J, Winkel K, Nimoritakis W. Are Australian Emergency Departments adequately stocked with emergency antidotes and antivenoms? Austin research week

Taylor DMcD, Robinson J, MacLeod D, Braitberg G. Pilot study of therapeutic errors reported to the Victorian Poisons Information Centre. RMH research week

MacBean CE, Taylor DMcD, Ashby K. Mammal bite injuries (human and non-human) in Victoria (1998-2004) RMH research week

Haack L, Taylor SE. Wide variation in Bell's Palsy treatment in the emergency department. Australasian College for Emergency Medicine- Annual Scientific Meeting

Shah K, Taylor SE, Cranswick M, Chan R. Angioedema possibly associated with ezetimibe. Society of Hospital Pharmacists of Australia – Annual Scientific Meeting

Ongoing Research Projects in the Emergency Department

Teleconference support for junior medical staff working in a regional emergency department – an intervention trial

• O'Callaghan C, Taylor DMcD, Braitberg G, Harrison J

Delayed versus immediate urethral catheterization following instillation of local anaesthetic gel in males: a randomized clinical trial

• Garbutt B, Taylor D, Lee V,

The use of health smart cards by emergency department patients: perceptions of healthcare professionals and patients

• Taylor D, Mohd Rosli R, Knott JC, MacBean CE, Das A

Emergency Department procedural sedation practices and factors associated with adverse events

• Taylor DMcD, Millar R and the ED sedation study national collaborative

Quantitative assessment of tasks performed by interns and registrars in the Emergency Department during their clinical shifts

• Weiland T, Sivagnanam T, Zhu JN, Dent A, Taylor DMcD.

Evaluation of Emergency Department Random Finger Prick Glucose testing as a screening tool for Type 2 Diabetes Mellitus.

• Hewat N, Taylor D

The Australian Resuscitation in Sepsis Evaluation (ARISE) Study

• The ANZICS Clinical Trials Group

The resource implications of vital signs monitoring in the Emergency Department

• Ferma M, Taylor D, Cochrane C, Petre I, Yeoh M, O'Neill H, Pearsell J

Do triage descriptions bias wait-times & slow patient flow in Emergency Departments?

• Dutch M, Taylor DMcD, Dent A.

Nature and Outcomes of Therapeutic Errors reported to the Victorian Poisons Information Centre – a prospective follow up study

• Taylor D, Robinson J, Macleod D, Braitberg G, MacBean CE

The utility of chest Xray in patients with uncomplicated chest pain

• Ng J, Taylor D

Paediatric Pain: Yes I truly can feel your pain, I think?

• Rajasagaram D, Taylor D, Braitberg G, Peersall J, Otin B

Epidemiology of interpersonal assault in Victoria (1996-2004)

• Coutts R, Taylor D

EMLA versus N2O for analgesia during intravenous cannulation of children in the emergency department: a randomised controlled trial

• Mann T, Taylor D, Smit De V

Paramedic cooling compared with hospital cooling after pre-hospital cardiac arrest: a randomised controlled trial

• The RICH Investigators

A comparison of lignocaine and bupivacaine use in the ED

• Taylor D, Shen JJ, Knott JC, MacBean C

Problems associated with patient handovers in the emergency department

• Taylor D, Ye K, Knott JC, Dent A, MacBean C.

The frequency and nature of complementary and alternative medicine usage among Emergency Department patients on warfarin

• Ghosh A, Taylor D, Taylor S, Haack L

Evaluation of ED medical, nursing and allied health staff attitudes towards the use of complementary medicines

• Taylor SE, Welch S, Barbour L, Ainsworth J.

An intervention to reduce the use of error prone prescribing abbreviations in the Emergency Department

• Taylor SE, Chu M, To P

Patient transfer from hospital to Aged Care facilities: Common medication problems and possible solutions.

• Taylor SE, Chu M, Tanner F

Comparison of two methods of providing patients with information about sublingual glyceryl trinitrate for acute relief of angina pain

• Taylor SE, Valoppi G, Sammut F, Antonopoulos J, Longhi T, Nomikoudis K

Medications Brought into the Emergency Department by Ambulance: Does This Impact on the Accuracy of Prescribing on Admission?

• Chan E, Taylor SE, Barger B, Marriott J

Snake Bite in Vietnam, a comprehensive review of the epidemiology of a fatal condition.

• Trinh KX, Quyen LK, Braitberg G, Winkel K.

Are Australian Emergency Departments adequately stocked with emergency antidotes and antivenoms?

 Craig SS, Furyk JS, Braitberg G, Lowe R, Canary J, Winkel K, Nimorakiotakis V

Prizes and Awards

Taylor DMcD. Bupivacaine in the emergency department: underutilized and scope for improved patient care (free paper)

Australasian College for Emergency Medicine, Annual Scientific Meeting Sydney, November 2006

Winner of the *National Institute of Clinical Studies* Prize for the best paper addressing the evidence-practice gap