

recommended to prevent complications associated with treatment of venous thromboembolism. This letter illustrates the need for clinicians who treat IDU to be aware of unexplained haemorrhagic complaints, which may be due to the use of street acquired warfarin.

D J Dawson

Manchester Royal Infirmary, Manchester, UK

L Peters

Manchester Drug Service, Bolton, Salford and Trafford Mental Health Trust, Prestwich, Manchester, UK

Correspondence to: Debbie Dawson, Emergency Department, Manchester Royal Infirmary, Oxford Road, Manchester M13 9WL, UK; debbie.dawson@mmc.nhs.uk

doi: 10.1136/emj.2005.030346

References

- 1 **McColl MD**, Tait RC, Greer IA, *et al*. Injecting drug use is a risk factor for deep vein thrombosis in women in Glasgow. *Br J Haematol* 2001;112:641-3.
- 2 **Ellis BH**, McCann I, Price G, *et al*. The New Mexico Treatment Outcome Study: Evaluating the utility of existing information systems. *J Health Care Poor Underserved* 1992;3:138-150.

Prevalence of psychological distress assessed in emergency departments

Mental health in general, and undiagnosed psychiatric illness in particular, has been recognised as important concerns in emergency departments (EDs). They have been a focal point for acute healthcare services in Australia.^{1,2} This research examined the prevalence of non-specific psychological distress among people admitted through ED, who had chronic and complex conditions, and were aged 50 years and over.³ Patients over 50 years were selected because of the increased likelihood of the onset of chronic conditions. A chronic patient was defined as an ED admission with two or more presenting comorbidities for at least 6 months prior to admission. This group was matched with people from the New South Wales (NSW) Health Survey who reported any of the following conditions: high blood pressure, diabetes, cancer, or heart problems. Psychological distress measured by Kessler 10 (K10)³ was used because this instrument has been validated in large population based surveys and allows valid comparisons with the 1997 NSW Health Survey data.⁴

The interviews took place in ED or shortly after in the general ward; therefore, it was not possible for the researchers to know whether a psychiatric consultation was conducted after admission to hospital or not.

Altogether, 524 ED patients were interviewed on admission in a principal referral hospital in Sydney, Australia. These were a representative sample of all ED attendees to this hospital. A total of 12.4% (95% CI: 9-15%) had a severe (very high) level, 21.4% (95% CI: 17-25%) had a high level, 31.3% (95% CI 27-35%) had a moderate level, and 34.9% (95% CI: 30-39%) had a low level of psychological distress or no distress. Eight percent (95%CI: 5-10%) of patients who completed the K10 had at least one mental health related condition (ICD-9 codes: 290-319). More females than males reported non-specific psychological distress but age differences were not large for the severe (very high) group.

Table 1 shows the demographic characteristics of admitted patients who completed K10 versus the total population of patients during the study period and data from age-matched people in the NSW State Health survey. The differences in age, gender, or marital status were not statistically significant.

In the comparison with the state wide survey,⁴ the rates of psychological distress from our study were higher than the population wide health survey estimates.

We acknowledge that the sample was drawn from a single geographical region and any generalisation to the broader NSW community cannot be made. Further, the findings of the study are based on self reported information provided by patients and some potential for reporting bias may have occurred because of respondents' interpretation of the questions or desire to report their emotions in a certain way or simply because of inaccuracies of responses because of recall bias.

In conclusion, these findings suggest that high levels of psychosocial distress in ED attendees pose additional challenges for "whole patient" health services delivery, given that ED services are frequently used as the gateway to the health system.

This suggests that when patients are admitted to hospitals through ED for clinical reasons not linked to obvious psychiatric problems, psychological distress in ED may be under reported (by patients) and not treated (in ED). The major finding is that psychological distress in ED is more common than population based estimates; therefore, it may require population health strategies to address mental health problems in ED, especially when it is associated with chronic illness.

R Forero, L Young, K M Hillman

Simpson Centre For Health Services Research, Liverpool Hospital, Liverpool, NSW and University of New South Wales, Australia

A E Bauman

School of Public Health, University of Sydney, Australia

R Forero, S Ieraci, L Young, K M Hillman

Sydney South West Area Health Service, Sydney, Australia; r.forero@unsw.edu.au

doi: 10.1136/emj.2005.029090

Competing interests: none declared

References

- 1 **Kalucy R**, Thomas L, King D. Changing demand for mental health services in the emergency department of a public hospital. *A& NZ J Psychiatry*. 2005;39: 1, 2, 78-80.
- 2 **Smart D**, Pollard C, Walpole B. Mental health triage in emergency medicine. *A& NZ J Psychiatry* 1999;33:57-66.
- 3 **Kessler RC**, Andrews G, Colpe LJ, *et al*. Short screen scales to monitor population prevalence and trends in non-specific psychological distress. *Psychological Med* 2002;32:959-76.
- 4 **Public Health Division**. Report on the 1997 and 1998 NSW Health Surveys. NSW Health Department, Sydney 2000. http://www.health.nsw.gov.au/public-health/nswhs/mhealth/mhealth_intro.htm (accessed 31 March 2005).

Consent in emergency research

The legal basis for consent for research in the incapacitated patient changed on 1st May 2004, when the Medicine for Human Use (Clinical

Table 1 K10 scores and demographic characteristics of admitted patients through ED

Kessler 10 Categories	Study sample (n=524)		1997 NSW Health Survey*	
	%	% With comorbidities	Chronic group (%) (n=1121)	Non-chronic group (%) (n=789)
Very high (30-50)	12.4	7.7	6.1	4.1
High (22-29)	21.4	13.4	13.0	9.0
Moderate (16-21)	31.3	7.9	23.2	22.9
Low (10-15)	34.9	4.9	57.7	64.0
Mean score (95% CI)	19.6 (18.9-20.3)		16.55 (16.1-16.9)	15.48 (15.0-15.9)
Demographic characteristics				
Characteristic	K10 sample in ED (%) (n=437)	Reference population†, all attendees to this ED (%) (6385)	Chronic diseased group (1144)‡ %	Non-chronic diseased group (797) %
Age				
50-59 y	16.9	24.5	27.3	46.9
60-69 y	28.4	25.9	33.0	25.7
70-79 y	35.7	28.2	28.8	18.6
80 y +	19.0	21.5	10.8	8.8
Sex				
Males	54.5	52.1	44.9	45.3
Females	45.5	47.9	55.1	54.7
Marital status				
Separated/divorced	59.0	58.6	14.1	16.1
Single	25.5	23.1	5.2	5.4
Widowed	3.4	5.4	26.8	22.2
Married	6.4	6.2	53.9	56.2
Unknown	5.7	6.7	-	-

*People 50 years and older who reported to have attended emergency department at least once in the last 12 months.

†All emergency department attendees at this hospital between January 2002 and January 2003.

‡Chronic disease group (those who reported high blood pressure, or diabetes, or cancer or heart problems).

Trials) Regulations 2004 came into force. The new law provides for a legal representative to give consent on behalf of a patient who cannot consent for themselves.¹ A professional legal representative can consent on behalf of an incapacitated patient if no relative or friend is available. For research in emergency care and resuscitation this is obviously a necessity.

One year after the new regulations were incorporated into UK law, we surveyed NHS Trusts to see if they had systems in place for professional legal advisor consent. Telephone calls were made to the research and development departments of 53 randomly selected acute NHS Trusts, representing approximately 25% of acute hospitals.

Responses were obtained from 45 acute NHS Trusts (85%). Three of these trusts (7%) had a procedure in place for professional legal representatives to give consent to patient participation in medical research. A further three (7%) were in the process of setting up a system. None of the hospitals had a training system for their professional legal representatives. Three trusts stated that as a matter of principle they would never allow research on incapacitated patients.

Our survey shows that, 1 year after the introduction of new regulations, most NHS R&D departments do not have a consent system in place to allow research aimed at improving the emergency treatment of incapacitated patients. Emergency medicine researchers report that this has inhibited new trials on the emergency care of incapacitated patients in England and Wales. Even an experienced trial management group running the CRASH2 trial (<http://www.crash2.lshtm.ac.uk>) is experiencing great difficulty setting up a research project in the UK. There is an urgent need for national guidance for R&D departments with specific advice in this area.

T J Coats

Leicester University, Leicester, UK

G Ng

University Hospitals of Leicester NHS Trust, Leicester, UK

H Shakur

CRASH2 Trial Group, London School of Hygiene and Tropical Medicine, London, UK

Correspondence to: T J Coats, Leicester University, Leicester Royal Infirmary, Infirmary Square, Leicester, LE1 5WW, UK; t.coats@virgin.net

doi: 10.1136/emj.2005.031005

Competing interests: none declared

Reference

- 1 Coats TJ, Shakur H. Consent in emergency research: new regulations. *Emerg Med J* 2005;**22**:683–5.

Best Bets: A call for scrutiny

Best BETS are based on specific clinical scenarios and aim to provide a clinical bottom line which should indicate, in the light of the evidence, what the clinician would do if faced with the same scenario again.¹ The article by Sen and Nechani² serves to remind us that unless Best BETS are rigorously conducted their conclusions may be inappropriate.

Sen and Nechani wonder if prehospital intubation was of benefit to the major trauma patient they describe. They conclude that prehospital intubation is associated with increased mortality and imply that this intervention should not be undertaken.

There are two main problems with this. Firstly, evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.³ Accumulating bad evidence does not make it good. Good evidence answers a highly specific question and the results are similarly specific to the circumstances. Sen and Nechani ask a poorly focused question and do not define the circumstances surrounding pre-hospital intubation in the studies they review – especially whether anaesthetic drugs were used. Even a cursory glance at these studies reveals major differences in quality, study design, patient populations, the experience and training of the operator, the use of anaesthetic drugs and the operational environment. The brief conclusion is therefore completely inappropriate.

Secondly, good doctors use individual clinical expertise together with the best available evidence: neither alone is enough.³ Sen and Nechani question whether prehospital emergency anaesthesia is indicated in their patient. Such a question suggests that they do not appreciate the reality of prehospital critical care practice. The decision to anaesthetise and intubate an unconscious trauma patient is not controversial.⁴ The controversy relates to whether this critical care intervention can be undertaken competently and safely. Are they really suggesting that their potentially combative and physiologically compromised patient should preferentially undergo bag-valve-mask ventilation with an unsecured airway for a prolonged period (often greater than half an hour) with no reliable measure of end tidal CO₂? Would this be acceptable in the hospital critical care environment?

The EMJ has a responsibility to ensure that Best BETS are properly conducted and reviewed. This is not the first time that clinical bottom lines with major implications have been questionable – perhaps it is time to review the process again?

J French, A Steel, R Clements, S Lewis, M Wilson, B Teasdale, R Mackenzie, J Black

Correspondence to: James French, Magpas 105 Needingworth Road, St Ives, Cambridgeshire, PE27 5WF; james@magpas.org.uk

References

- 1 Mackway-Jones K. Towards evidence based emergency medicine: Best BETs from the Manchester Royal Infirmary. *Emerg Med J* 2005;**22**:887.
- 2 Sen A, Nechani R. Prehospital endotracheal intubation in adult major trauma patients with head injury. *Emerg Med J* 2005;**22**:887–9.
- 3 Sackett DL, Rosenberg WMC, Gray JAM, et al. Evidence based medicine: what it is and what it isn't. *BMJ* 1996;**312**:71–72.
- 4 Mackenzie R, Lockey DJ. Pre-Hospital Emergency Anaesthesia. *J R Army Med Corps* 2004;**150**:59–71.

Association does not prove causality

I would like to briefly comment on the article entitled "Prehospital endotracheal intubation in adult major trauma patients with head injury" by Ayan Sen and Raj Nichani.¹ In this excellent review, the authors point out that there are no prospective trials that have investigated the prehospital use of endotracheal intubation in adults. I believe it should be stressed that it is very difficult to account for all confounders using a retrospective design. It is extremely likely that the "sicker" patients were the ones who were intubated in

the prehospital setting and therefore had worse outcomes. Until a prospective study is performed, I believe it is quite dangerous to jump to the conclusion that this association proves causality.

Correspondence to: B C Doyle, Seattle, Washington USA; bdoyl123@hotmail.com

Reference

- 1 Sen A, Nechani R. Prehospital endotracheal intubation in adult major trauma patients with head injury. *Emerg Med J* 2005;**22**:887–9.

Prehospital Intubation – Delving deeper into the evidence

May I thank Ayan Sen and Raj Nichani for their recent "Best Bet" on prehospital intubation in head injury.¹ It was a pity however, that they neglected to look deeper into the reasons why their conclusion, at least at this point in time, was that there is insufficient evidence to support its use. The very topic of prehospital rapid sequence induction (RSI), was the subject of a panel discussion and presentation at the National Association of Emergency Medical Service Physicians annual meeting in Arizona in 2004.² They, fortunately, delved deeper into the issues surrounding RSI in head injured patients. One of the most important findings from this discussion was that most of the ambulance services involved in studies surrounding RSI/sedation assisted intubation, did so without the benefit of End-Tidal Carbon Dioxide (ETCO₂) or even oxygen saturation monitoring. This, coupled with the widespread use of hyperventilation and inadequate preoxygenation went some way to explain the adverse findings found.

In one of the largest studies, the San Diego Paramedic RSI study, when one ambulance service introduced the use of ETCO₂ monitoring, further analysis found hyperventilation (<30 mmHg) occurred in 79% and severe hyperventilation (<25 mmHg) occurred in 59% of intubated patients. Post introduction of ETCO₂ monitoring, the incidence of inadvertent hyperventilation was significantly reduced. The only RSI subgroup without increased mortality were in those patients who underwent paramedic RSI but were then transported by air medical crews who had substantial experience using ETCO₂ to guide ventilation.

The San Diego trial uncovered many adverse findings, but in a positive light, many important lessons were learned. First, advanced monitoring including pulse oximetry and ETCO₂ should be mandatory when performing ETI with or without RSI. Second, adequate preoxygenation prior to RSI and close oxygen saturation monitoring during laryngoscopy should be routine. Third, hyperventilation should be avoided. In stark contrast to the San Diego study, the Whatcom Medic One program in Washington has experienced none of the desaturation/bradycardia issues and has an intubation success rate of 96.6%. All failed intubations were successfully managed. This successful RSI program is as a result of rigorous training, clinical governance, medical oversight, continuous quality assurance and of course the investment in adequate monitoring including ETCO₂.

The most startling contrast between the USA and the UK, is that only physicians here undertake RSI. The monitoring described above is now mandatory in the emergency department (ED) and the anaesthetic room after a position statement by both the Royal