Violent suicide and forensic information sources

Sir,

The clinical note by Belzunegui et al. recently published in EMERGENCIAS[1] is an interesting work showing the usefulness of medical forensic data as a source of complementary information, which is unusual in our field[2]. Although others have incorporated medico-legal information (MFI) using an anatomical scale of trauma severity to assess injuries sustained after defenestration[3], its application in the present study of violent suicides is to be commended.

The MFI is also useful to distinguish types of suicidal behaviour[4], along with data obtained in the emergency department which allow calculation of rates and features of non-fatal attempts[5]. Some authors have proposed incorporating the MFI in mortality records (MR) to improve the validity of statistics on mortality due to external causes, which would help correct the underestimates noted by the authors. Thus, the MR only detected 46.9% of suicide deaths identified by forensic reports occurring in the city of Barcelona in the period 2004-2006 (38.7% in women and 51.2% in men)[6].

The importance of autopsies in these deaths is reflected in their influence on the validity of suicide mortality statistics, which means that comparisons between countries should be made with caution[7]. Other relevant Information that autopsies provide is the role of alcohol consumption in fatal suicides[8].

We would also mention certain limitations of the published study. The authors indicate, based on a study in the USA and published in 2000, that the predominant methods employed in fatal suicide attempts include firearms, pesticides and hanging. According to mortality statistics, hanging, strangulation and suffocation (ICD-10 code X70) were the main methods used in Spain 2010, followed by self-defenestration (jumping) and poisoning, while pesticide poisoning played a minor role[9]. Cases of hanging as a violent method of suicide[10] were not included in the calculation, which we feel should have been mentioned in the discussion.

Despite these considerations, we congratulate the authors on this study and hope that forensic data are incorporated in future studies on traumatic injuries and fatal suicides.

References

1 Belzunegui-Otano E, Teijeira-Álvarez R, Reyero-Díez D, Oteiza-Olaso J. Politraumatizados con intencionalidad suicida. Estudio epidemiológico de base poblacional en Navarra durante los años 2004-2005. Emergencias. 2012:24:208-10.

2 Xifró-Collsamata A, Suelves-Joanxich JM. Salud pública y patología forense. Rev Esp Salud Pública. 2011;85:419-20.

3 Taranilla-Castro AM, Rebollo-Soria MC. Aplicación de las escalas AIS/ISS en medicina forense: a propósito de un caso de precipitación. Rev Esp Med Legal. 2009:35:28-31.

4 Verano-Zapatel V, Santos-Yusta V, Poncela-García JL, Tur-Ripoll V. Lesiones y muerte por balconing en Baleares. Rev Esp Med Legal. 2012:38:46-9.

5 Vázquez-Lima MJ, Álvarez-Rodríguez C, López-Rivadulla Lamas M, Cruz-Landeira A, Abellas-Álvarez C. Análisis de los aspectos epidemiológicos de las tentativas de suicidio en un área sanitaria desde la perspectiva de un servicio de urgencias. Emergencias. 2012;24:121-5.

6 Gotsens M, Marí-Dell'Olmo M, Rodríguez-Sans M, Martos D, Espelt A, Pérez G, et al. Validación de la causa básica de defunción en las muertes que requieren intervención medicolegal. Rev Esp Salud Pública. 2011;85:165-76.

7 Kapusta ND, Tran US, Rockett IR, De Leo D, Naylor CP, Niederkrotenthaler T, et al. Declining autopsy rates and suicide misclassification: a cross-national analysis of 35 countries. Arch Gen Psychiatry. 2011;68:1050-7.

8 Kaplan MS, McFarland BH, Huguet N, Conner K, Caetano R, Giesbrecht N, et al. Acute alcohol intoxication and suicide: a gender-stratified analysis of the National Violent Death Reporting System. Inj Prev. 2012 May 24. [Epub ahead of print].

9 Instituto Nacional de Estadística. (Consultado 12 Julio 2012). Disponible en: http://www.ine.es/jaxi/tabla.do?type=pcaxis&path=/t38/p604/a2000/l0/&file=0300002.px

10 Miró-García F, Barbería-Marcalain E, Correas-Soto CJ, Fernández-Arribas E. Violencia del método suicida y circunstancias acompañantes en una revisión de 42 muertes de etiología autolítica. Psiquiatría.com. 2006; 10(4). (Consultado 12 Julio 2012). Disponible en: http://www.psiquiatria.com/articulos/psiq_general_y_otras_areas/urgencias_psiq/30350/

Eneko BARBERÍA[1,2], Alexandre XIFRÓ[3,4], Carles MARTIN-FUMADÓ[3], Josep Maria SUELVES[5]

[1]Institut de Medicina Legal de Catalunya, Departament de Justícia, Generalitat de Catalunya, Reus, Spain, [2]Unitat d'Anatomia Humana i Embriologia, Departament de Ciències Mèdiques Bàsiques, Facultat de Medicina i Ciències de la Salut, Universitat Rovira i Virgili, Reus, Spain, [3]Institut de Medicina Legal de Catalunya, Departament de Justícia, Generalitat de Catalunya, Barcelona, Spain, [4]Departament de Salut Pública, Universitat de Barcelona, Barcelona, Spain, [5]Agència de Salut Pública de Catalunya, Barcelona, Spain.

Authors' response

Sir,

We would like to thank Barber et al. for their comments on our recent article in EMERGENCIAS[1], and express our agreement with them. Regarding the absence of hanging in our case histories, we would mention some details that also serve to complete the content of our article.

Led by emergency department physicians at the Hospital Complex of Navarre, we have implemented the first Major Trauma Registry in Spain, based on the Utstein model[2]. Its web structure allows entering information prospectively and retrospectively from the various departments attending multiple trauma patients, and from the Navarre Institute of Legal Medicine. This register provides data on the characteristics of multiple trauma and the quality of health care provided (which allows comparison with other health systems); it is therefore a high quality database for professionals of the Navarre Health Service performing research (Figure 1).

The Utstein variables constitute a standardized template for the normalization of variables related with severe trauma and asphyxiation, hanging and burns are excluded provided no predominant traumatic mechanism is involved. The template includes within the variable "intentionality" the categories "accidental", "suicidal", "aggression", "other" and "unknown". One of the goals set by our group was to determine the characteristics of trauma

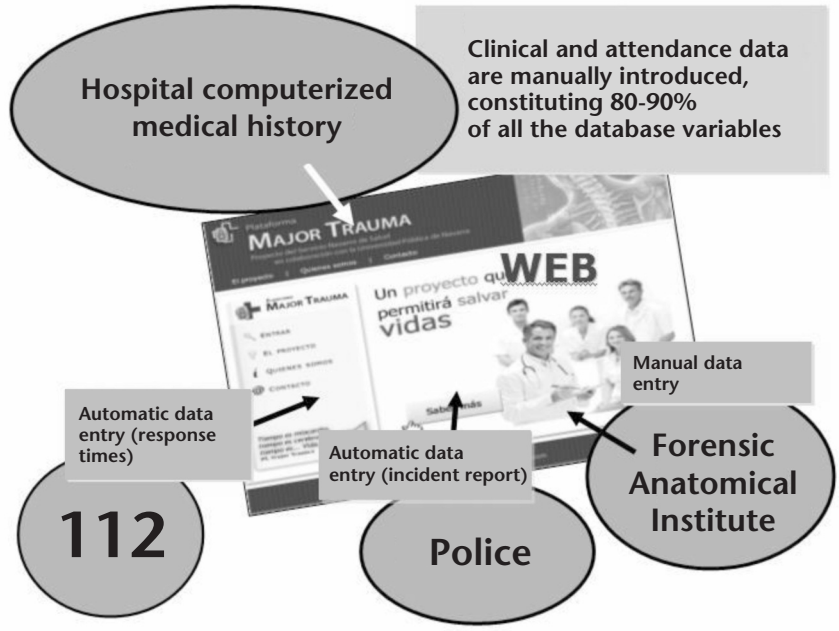

Figure 1. Conceptual map of the operating philosophy underlying the Navarre Major Trauma Registry. Emergency physicians and mobile-ICU physicians access the website, identify the case and fill in the variables. For patients who died, the coroner introduces the ISS-NISS autopsy data. Automatically, the police provide data relating to accident victims and the Coordinating Center 112 introduces response times for each case.

patients with suicidal intent. Hanging was not listed simply because it is not included in standard criteria of the Utstein model.

However, we can add to the data provided by the Navarre Institute of Legal Medicine for the period of time covered in our study, namely that suicide was found in approximately 15% of autopsied deaths, which represents an annual incidence of 9 cases/100.000 inhabitants (75% male). The leading cause of death was hanging (30-33%), followed by poisoning and self-defenestration from a height. In males, the most commonly used method of suicide was hanging (37%) followed by self-defenestration and self-inflicted gunshot wounds (15% each). In women, 44.4% used self-defenestration or poisoning and there was only one case of hanging.

References

1 Belzunegui-Otano E, Teijeira-Álvarez R, Reyero-Díez D, Oteiza-Olaso J. Politraumatizados con intencionalidad suicida. Estudio epidemiológico de base poblacional en Navarra durante los años 2004-2005. Emergencias. 2012:24:208-10.

2. Ringdal KG, Coats TJ, Lefering R, Di Bartolomeo S, Steen PA, Roise O, et al. The Utstein template for uniform reporting of data following major trauma: A joint revision by SCANTEM, TARN, DGU-TR and RITG. Scand J Trauma Resusc Emerg Med 2008;16:7.

Tomás BELZUNEGUI OTANO[1],
Rafael TEIJEIRA ÁLVAREZ[2],
Diego REYERO DÍEZ[3],
Julio OTEIZA OLASO[4]

[1]Servicio de Urgencias, Hospital de Navarra, Pamplona, Spain, [2]Instituto Navarro de Medicina Legal, Pamplona, Spain, [3]UVI-Móvil, Servicio Navarro de Salud, Pamplona, Spain, [4]Servicio de Medicina Interna, Complejo Hospitalario de Navarra, Pamplona, Spain.

Nursing management of primary care emergency

Sir,

In recent years the Institut Català de la Salut (ICS) has implemented a program for the management by nurses of spontaneous visits in primary care (PC) centers. Nursing staff attend visits following protocols and refer cases they are unable to resolve to a physician. The protocols are available on the ICS website[1]. The study by Pascual et al.[2] recently published in EMERGENCIAS aimed to evaluate the effectiveness of nurses in solving urgent PC consultations. The study has confusing aspects that I would like the authors to clarify.

First, the sample consists of 296 visits, but the authors do no not discuss how many visits took place in the Basic Health Area (BHA) in the same period, how many patients refused to be attended by nursing staff, whether they had different diseases and whether they were comparable populations. Second, the study shows that 46.6% of the visits were referred to a physician. Nurse effectiveness in the resolution of spontaneous medical visits was calculated according to the number of re-visits within 48 hours in non-referred patients. The authors report that 80.5% did not re-visit. Is this the sole criterion of nurse effectiveness? The work does not analyze what this proportion (80.5%) actually did. In addition, would it be acceptable for a physician if 19.5% of his/her discharged patients re-consulted within 48 hours? Third, on analyzing those patients who did re-visit within 48 hours, the tables list the complaint, but then do not discuss these results. Among these complaints were wounds, burns or emergency contraception, which should not be mixed up with medical complaints such as sore throat, red eye, epistaxis, back pain, etc. Wounds were the most common reason for the visit. One cannot assert that nurses are effective in resolving medical consultations without distinguishing between wound care and back pain for example. And fourth, 42.9% of the non-referred visits were for complaints that lacked an established medical protocol, despite which 73.2% were "resolved". The authors found differences according to whether protocols were available or not, but the fact they were statistically non-significant differences was not attributed to the small sample size: the authors simply affirmed no differences and that nurses can be trained to attend more diseases even without protocols.

Neither the criterion of re-visits within 48 hours nor the data analysis is correct. To perform research with such deficiencies, in order to show that one profession can replace another, is unacceptable.

References

1 Badosa P, Cebrián HM, Fabrelles N. Manual de la Gestió de la Demanda. 2011. (Consultado 1 Septiembre 2012). http://www.gencat.cat/ics/professionals/pdf/gestio_demanda_espontania_2011.pdf.

2 Pascual M, E Gené E, Arnau R, Pelegrí M, Pineda M, Azagra R. Evaluación de la eficacia de enfermería en la resolución de las consultas urgentes en atención primaria. Emergencias. 2012;24:196-202.

Lurdes ALONSO VALLÈS

Médico de familia, CAP Manso, Barcelona, Spain. Vicesecretaria de la Junta de Gobierno del Colegio Oficial de Médicos de Barcelona (COMB), Barcelona, Spain.

Authors' response

Sir,

Regarding our recently published work[1], we would like to thank the Deputy Secretary of the Governing Board of the Barcelona College of Physicians for her interest[2]. We will now respond to and clarify the points raised. First, the 296 visits analyzed constitute all visits to a primary care (PC) center in which the first medical contact was a nurse during the study period. Patients who preferred to be seen first by a physician were not included and in our opinion do not constitute a reason for confusion. Second, revisits for the same reason within 72 hours is an accepted quality criterion[3]. In our study this was limited to 48 hours because of the idiosyncrasies of the center: high accessibility (93.2% of patients attended were registered inhabitants of the reference basic health area-BHA) and we were able to know if they visited the other medical center in Girona (via the Catalan shared medical history database). Third, the reasons for the visits (medical or otherwise) that we analyzed are all protocolized by the Institut Català de la Salut (ICS) and the protocols specify warning signs that indicate the need for referral to a physician[4]. The study tables list the reasons for visits attended by nurses and the percentage of re-visits for each one. Clearly did not wish to evaluate whether nurses are effective at resolving medical cases or not, but to analyze their effectiveness in attending situations protocolized by the ICS regardless of the reason for the visit. Fourth, as stated in the discussion, nurses also attended non-protocolized cases that "should have been referred to a physician. " However, we also commented that nursing staff can resolve other situations that could be agreed on and protocolized, as the ICS has done to increase them from sixteen (in 2009) to forty three (in 2011). Some newly protocolized situations or reasons for visits[4] (dizziness, bruises, fever etc) appear as not protocolized in our study[3].

Health services (not just nursing) should be subject to systematic assessment to determine their effectiveness, efficiency and degree of citizen satisfaction and the results should be published in prestigious journals. The first level of healthcare is based on primary care teams where physicians and nurses (and others) work in concert to respond to patient demand. In this context of teamwork, we agree with Dr. Alonso that attempting to show that one profession can replace another is unacceptable.

References

1 Pascual M, Gené E, Arnau R, Pelegrí M, Pineda M, Azagra R. Evaluación de la eficacia de enfermería en la resolución de las consultas urgentes en atención primaria. Emergencias. 2012;24:196-202.
2 Alonso L. La resolución de enfermería en las consultas urgentes de atención primaria. Emergencias. 2013;25:79-80.
3 Grupo de Trabajo SEMES-Insalud. Calidad en los servicios de urgencias. Indicadores de calidad. Emergencias. 2001;13:60-5.
4 Badosa P, Cebrián HM, Fabrellas N, et al. Grupo de trabajo. Manual de la gestió de la demanda. 2011. (Consultado 27 Octubre 2012). Disponible en: http://www.gencat.cat/ics/professionals/pdf/gestio_demanda_espontania_2011.pdf.

Marta PASCUAL[1],
Emili GENÉ[2],
Roser ARNAU[3],
Margarida PELEGRÍ[3],
Montserrat PINEDA[3],
Rafael AZAGRA[4]

[1]Medicina Familiar y Comunitaria. Directora del Área Básica de Salud Arbúcies-St Hilari, Girona, Spain. [2]Servicio de Urgencias. Hospital de Sabadell. Corporació Sanitària i Universitària Parc Taulí. Sabadell. Universitat Autònoma de Barcelona. Cerdanyola, Spain. [3]Enfermería. Área Básica de Salud Arbúcies-St Hilari. [4]Equipo de Atención Primaria, Badia del Vallés. USR-MNord-IDIAP Jordi Gol. Institut Català de la Salut. Universitat Autònoma de Barcelona. Cerdanyola, Spain.