example, hospital episode statistics) for which Section 60 of the Health and Social Care Act 2001 creates special exemption. Powerful arguments exist for specialty and disease specific databases for research purposes,⁴ but there is evidence that hospital episode statistics was quite capable of revealing Bristol as an outlier in the period 1991-5.⁸ Compared with the 22% missing deaths in the central cardiac audit database, hospital episode statistics missed only 9% in 1991-5.¹

Meanwhile we have to learn from the data we have. What is the purpose of a central cardiac audit database for congenital heart interventions, and how well is it achieved? In large part it was a response to an imperative to monitor for safety and so it reports comparative death rates for the 13 tertiary referral centres for paediatric heart disease in the United Kingdom. An approach adopted increasingly is to include all cases in risk adjusted trend plots,^{9,10} which are now widely accepted and being further developed internationally in cardiac surgery.¹¹ To risk stratify for such complexity as found in congenital heart disease is not easy, but the authors have made no attempt to do so.

In the report from the central cardiac audit database, cardiological interventions are considered separately from surgical operations, which are in turn subset into those performed with and without cardiopulmonary bypass. Three age bands are used—neonates, infants, and children, separated at 1 month and 1 year. The report contains data for six surgical and three cardiological benchmark procedures with the residue (a 10th set) not reported. “You can’t compare apples and oranges” is the usual defence for creating ever smaller subsets, but this data set is cut so fine that it’s more like fruit salad. Recognising the statistical problem created by the now large number of subsets, Gibbs et al broadened the confidence intervals to 99% to avoid false positives, which puts the emphasis on proof of difference rather than an alert for safety purposes—which was where we started. This is a problem. Apparently insignificant sporadic deaths dispersed among these sets (or classified as “other” in that

10th set) cannot be seen as a pattern. That is exactly the purpose of the methods of trend monitoring that are currently available.¹¹

One final concern is raised by the central cardiac audit database report. In the 1980s a drive prevailed to reduce the number of paediatric surgery units in the United Kingdom¹²—there were then nine. A steer towards centralisation is enshrined in the Bristol inquiry,¹³ and yet we have 13 units reporting cases performed by 104 operators in the report from the central cardiac audit database.

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Intimate partner violence

Doctors should offer referral to existing interventions, while better evidence is awaited

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Intimate partner violence is a major public health and human rights issue. The statistics on its physical, sexual, reproductive, emotional, and financial consequences are alarming. Although men may be abused, women are overwhelmingly the victims of intimate partner violence. Shortly we will have reliable estimates of its international prevalence, determinants, and consequences when the World Health Organization reports on its multi-country study on women’s health and domestic violence against women.¹ However, as Taft et al remind us in this issue (p 618), intimate partner violence affects entire families, including children, making the statistics even more shocking.² We need effective interventions to promote the necessary individual and societal changes to tackle current cases of intimate partner violence and to prevent new ones. Unfortunately, there are only a few examples of

rigorous evaluations of interventions, and this paucity holds for both developed and developing countries. Without knowledge about whether interventions against intimate partner violence do more good than harm, what should doctors do about offering referrals for confirmed or likely intimate partner violence?

Many of those who are struggling with this question have asked the important corollary question—is there sufficient evidence about the benefits and lack of harm of screening for intimate partner violence to warrant its use? Unfortunately, the answer is complex. On the one hand, universal screening for intimate partner violence is generally endorsed by international guidelines because of the desire to cast a wide net, given the adverse effects of intimate partner violence. On the other hand, case identification methods based on presentation of specific signs or symptoms of abuse (diagnostic method)

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are recommended because this focuses time and resources on identifying the people who are in immediate need of health care. Several systematic reviews favour the diagnostic method, given the lack of evidence for the universal screening approach.³⁻⁴ Debate about universal screening versus the diagnostic method will continue until there is evidence about which is more effective and less harmful. What is clear is that if intimate partner violence is detected, a risk assessment needs to be done immediately, and a plan for safety considered. In addition, clinicians should assess the patient for current mental health conditions, particularly depression, since this is strongly associated with intimate partner violence and evidence exists for the effectiveness of screening for and treating depression (p 621).^{5,6}

To answer the original question, we need to identify possible interventions to which referrals could be made (box). Two recent systematic reviews examine the effectiveness of intimate partner violence interventions.^{4,7} Referral to interventions for victim support seems to be a logical pathway, especially if emergency shelter and counselling are needed. Unfortunately, these interventions have not been critically evaluated despite their widespread implementation, although one randomised controlled trial from the United States with two years' follow up indicates that a specific intervention of post-shelter advocacy and counselling services shows promise.⁸ Legal remedies such as mandating arrest of alleged abusers and providing court protection through restraining orders have been evaluated, but the results are conflicting.⁹ The findings indicate there may be confounders—future studies will need adequate power to detect differences in subpopulations. Studies of abuser treatment programmes show mixed results. However, one large multi-site study from the United States showed a moderate effect in reducing recidivism, although dropout rates were high.¹⁰ Community based outreach programmes in the United Kingdom and Australia offer promise in dealing with individuals and families,¹¹ and more studies would prove useful. We do not yet have effectiveness studies of coordinated community interventions.

Clearly, rigorous trials evaluating the effectiveness of interventions against intimate partner violence are urgently needed.^{4,7} Studies of demonstration projects are required, as are multi-site and multinational studies of similar interventions. All studies ought to articulate clearly the target population and characteristics of the intervention to allow for replicability. In terms of effectiveness, these studies need objective and valid measures for short and long term follow up of individuals and of the family. Variation in the definition of intimate partner violence, programme structure, and outcome measures may create challenges in discerning which components lead to success or failure, but determining overarching predictive characteristics of effectiveness may be feasible.

In the interim, doctors should be referring patients to one or more interventions against intimate partner violence, based on the perceived needs of the patient(s). Individual responses to interventions will vary, and a vigilant approach is appropriate. Ongoing follow up is needed to determine if the violence has ended and if appropriate care is being provided to deal with its aftermath and to prevent its recurrence. Being willing to consider other referral options is essential, as is continuing

Secondary or tertiary interventions against intimate partner violence to which referrals could be made* (with examples)*

Victim support:

- Alternative living arrangements (emergency shelters and safehouses)
- Emotional support (individual or group counselling for the IPV victim and the children of the home)
- System support (job training, assistance in dealing with government, police and social services)
- Legal remedies (restraining orders or laying of legal charges)
- Abuser treatment (group or individual counselling which may or may not be mandated by the courts or which may have legal ramifications for non-attendance)

Community based:

- Outreach work (trained peers or professionals providing follow up or providing community support or advocacy services)
- Coordinated community interventions (one setting for coordinating services which may offer one site for obtaining help)

*(Two other WHO interventions against intimate partner violence are structural—judicial reform (criminalising abuse, mandatory sentences for findings of intimate partner violence) and health care (educative manoeuvres to change attitudes and practices of health practitioners).)

to provide a supportive and a non-judgmental environment. Intimate partner violence creates great challenges, but regardless of the difficulty, doctors must recognise and respond to it. Hopefully, we will soon be able to offer best practices with respect to interventions, which will be helpful to patients and doctors struggling with this endemic issue.

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