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Safety and risk in practice

Making injections safer

Injections are by far the most common invasive procedure in medicine. Both the physician and the nurse learn early in their training to adopt a number of simple precautions to ensure safe injection (e.g., avoiding unwanted injection into a vessel), and the fact that there are still residual risks is easily overlooked until ill-chance strikes [1].

Back in March 1998 the World Health Organization drafted a broad strategy to promote the safety of injections [2], the prime motive being growing concern about the fact that, worldwide, some 30% of injections were not sterile. Insofar as sterilizable (multi-use) syringes were concerned, the essence of the strategy was training; health workers were to be taught effective techniques for sterilizing the syringes, equipment and fuel were to be supplied for this purpose, and proper routines for handling, storage and record-keeping were to be introduced.

An altogether different problem arose from the fact that single-use syringes, which cannot be effectively sterilized after use, were often not being discarded but were being re-used, especially in immunization programmes. Here too training can be of some value, but the temptation to re-use these syringes can be very great where resources are limited. In 1999 the Technical Internet Discussion Forum outlined a plan for introducing autodisposable syringes [3]. Many designs have been developed for such syringes which essentially self-destruct once they are used. Some block the needle, others immobilize the plunger, or cause the syringe to leak if an attempt is made to use it again [4]. Only a few of these designs have actually been carried through from the drawing broad to the workshop, and fewer still have been tested in the field or put into production [5,6]. However a point has now been reached where two manufacturers of well-proven devices have made the technology available for international transfer. Production is not complicated and it involves only a minor adaptation of existing production lines.

All the same, there are plenty of problems yet to be solved including motivation, pricing and quality assurance. It is easy to argue that disposable items are unsuited to the developing world and represent a form of waste tolerable only in an affluent society, but sterilization equipment and fuel also cost money, to say nothing of the financial burden imposed on the developing world by syringe-transmitted disease, including hepatitis and AIDS. As a joint WHO/UNICEF meeting has concluded, the disposable and non-disposable approaches will have to co-exist [7], each society using that which is most appropriate and effective as a means of rendering injections safer.

References

[1] A. Battersby, R. Feilden, P. Stoeckel et al., Strategies for safe injections, *Bull. WHO* **77** (1999), 996–1000.
[2] A broad strategy to promote the safety of all injections, WHO, Geneva, 1938. (Unpublished document prepared by the Action Programme on Essential Drugs and other WHO programmes.)
[3] Technet Internet Forum, Technet Post 0131, Injection Safety, 7 April 1999 at http://www.acithn.uq.edu.au/Technet.
[4] J.S. Lloyd and J.B. Milstien, Auto-disposable syringes for immunization: issues in technology transfer, *Bull. WHO* **77**(12) (1999), 1001–1007.
[5] S.R. Steinglas et al., Safety, effectiveness and ease of use of a non-reusable syringe in a developing country immunization programme, *Bull. WHO* **73**(1) (1995), 57–63.

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[6] C.M. Nelson et al., Use of an autodestruct syringe compared with a disposable syringe, *Bull. WHO* **77**(1) (1999), 29–33.
[7] WHO/UNICEF policy on safety of injections for immunization: meeting of global and regional WHO/UNICEF staff, Geneva, 7 July 1999. Draft statement, 28 July 1999.

Whistleblowing: Unveiling medical error

In the very first issue of this Journal, a decade ago, Dr Tony Smith from Britain put it simply enough: "Doctors should admit their mistakes" was the title of his paper. One is still a long way from achieving that; in various countries and situations, medical error is still nervously glossed over as if it were something indecent rather than an experience from which one should be able to learn. The "whistleblower" who breaks ranks to expose the truth is not looked upon kindly by his peers.

The "Bristol scandal" of 1998 was, in Britain at least, something of a turning point. The intolerably poor results being achieved in cardiac surgery in one of the hospitals of that city – resulting in numerous deaths and instances of avoidable brain damage – were exposed by the anaesthetist Stephen Bolsin, and in June of that year the General Medical Council ruled that two of the medical people concerned should be struck off the Medical Register while a third was to be forbidden to practice cardiac surgery for three years [1]. The consequences for Dr Bolsin were however nearly as drastic; professional indignation at his having lifted the veil became so intense that he found himself obliged to move to Australia.

In December 1999 the entire issue of whistleblowing was the subject of a BMA conference in London [2]. What the meeting showed was that Bolsin's case was far from unique. A general practitioner described the pressures to which he was subjected when he found himself obliged to reveal to the health authorities that his partners in group practice had been conducting clinical experiments on patients without their informed consent. A physician employed in industry had found himself summarily dismissed for telling the firm's shareholders – and later the press – that the firm had been peddling misinformation on its products, a step he had only taken after efforts to correct the fault behind closed doors. The latter situation at least – not unfamiliar to other physicians who have worked in commercial firms – may be corrected in due course as Britain's new Public Interest Disclosure Act of 1998 comes into effect [3]. But the December conference was left wondering to what extent local health authorities or even the General Medical Council itself will protect the whistleblower in the medical profession. It is notable that in the preparatory work for the 1998 Act the suggestion was advanced that Britain's National Health Service should establish a listening point where whistleblowers might find a sympathetic ear and where necessary be assured of protection [4]. The GMC Chairman, Sir Donald Irvine, spoke at the meeting of the need for a new professional culture in medicine in which ethical standards would be clearly recognized and their attainment would be the concern of all; something of the same message emerges from the Council's paper on Good Medical Practice [5], but the question remains how deeply its fine words have penetrated day-to-day thinking in the profession. As Dr Bolsin put it at the Conference: there still has to be a far greater degree of openness as regards risk, both towards the patient before risks are taken and towards the victim where things go wrong.

References

[1] B. Olsen, Bristol-saken – et jordskjelv in britisk medisin, *Tidsskr Nor Lægeforen* **118** (1998), 3183–3185.
[2] P. Halvorsen, Tøffe tak for farlig sannhet, *Tidsskr Nor Lægeforen* **120** (2000), 260–261.
[3] C. Dyer, UK introduces far-reaching law to protect whistleblowers, *BMJ* **319** (1998), 7.
[4] A. Wafer, Lonesome whistle, *BMA News Review* **11**(Dec.) (1999).
[5] General Medical Council, *Good Medical Practice*, GMC, London, 1998.