Patient safety is an obligatory priority for all renal unit healthcare professionals. The Renal Association Patient Safety Project has been running for over six years and is now developing into a multiprofessional project in collaboration with the British Renal Society (BRS) and the Association of Renal Technologists (ART).

**Incident reporting**

Incident and risk issues have been reported to the Renal Association Patient Safety Project from: renal units; the National Patient Safety Agency (NPSA); the Medicines and Healthcare products Regulatory Agency (MHRA); and NHS England.

- All incidents should be reported through the hospital incident reporting system. Incidents are downloaded to the National Learning and Reporting System (NLRS), which has been taken over by NHS England from the NPSA. NHS England will continue to analyse trends of incidents and issue alerts as indicated.
- Review and analysis of patient safety issues should be an integral part of clinical governance within all renal units, involving all renal healthcare workers and a process of regular audit.

**Medical device failure**

The term ‘medical device’ covers equipment, disposables and software necessary for the use of devices. Around two-thirds of incidents relate to failure of medical devices. In the case of dialysis disposables, incidents may be related to manufacturing faults or to a change in the composition of plastics, either being too brittle or too flexible.

- Device-related incidents should be reported to the MHRA, which has the statutory authority to investigate device-related incidents, take action and issue alerts as appropriate.

**User error and technique failure**

Approximately one-third of incidents reported by renal units are related to healthcare workers failing to use equipment or devices correctly, or incorrect practice of clinical techniques.

- These issues emphasise the importance of training and supervision.
- Care should be taken when renal healthcare workers are using equipment of a type that they are unfamiliar with, where techniques may need to be retaught.

**Blood loss**

The number of blood loss related incidents continues to rise, which has resulted in a small number of fatalities; the most common is venous needle dislodgement.

- Recommendations to avoid venous needle dislodgement have been circulated by the European Dialysis and Transplant Nurse Association/European Renal Care Association.
- Blood loss detectors, either as stand-alone devices or integrated with dialysis machines, are commercially available and should be considered for use in high-risk patients. Blood loss, with potential fatal outcomes, can occur if dialysers and dialysis lines are inadequately tightened or washback procedures are incorrectly carried out. Serious bleeding can occur from fistula needling sites, from elective removal of femoral dialysis lines, and also from where femoral dialysis lines have been pulled out or have become detached from fixation wings.
- Attention should always be paid to the manufacturers’ instructions on the usage and fixation of dialysis lines, particularly avoiding alcohol-based cleaning fluids, which can soften plastic.

**Vascular access**

It is well recognised that healthcare-associated infections are a cause of increased morbidity and mortality of patients, particularly related to dialysis catheter infections. Renal units should continue to review their processes in regard to achieving Renal Association standards for arteriovenous fistula rates. All units should review their training, catheter care bundle implementation, bacterial surveillance and policies of line removal.

**Haemolysis associated with haemodialysis**

Incidents of haemolysis associated with haemodialysis have been attributed to the use of hydrogen peroxide or chloramine for sterilising hospital or renal unit water systems. However, haemolysis not related to these causes has been observed, possibly related to kinking of dialysis lines, but other incidents have no proven explanation.

- Water supplies to renal unit water plants should come directly off the mains supply.
- Units should ensure adequate communication with estates departments, particularly to the timing of water supply sterilisation.
Safety issues

- Guidelines regarding water supply to renal units are available via the Renal Association website.

Prescribing

There are continuing incidents relating to prescribing errors, in particular: reduced renal excretion of drugs not being considered; renal toxicity of drugs; susceptibility to infection from immunosuppression; inadequate treatment of hyperkalaemia; and generic prescribing errors.

- The training of junior doctors, in regard to prescribing in renal patients and liaison with renal pharmacists, is essential.

- Renal units should consider introducing systems for close monitoring of immunosuppressive drugs and of prophylaxis against infection.

Risks for acutely ill patients

Renal inpatients are commonly elderly, have additional co-morbidities and are susceptible to rapid deterioration. Early identification of such patients, through the use of early warning scores, is essential to enable prompt management. Wherever possible, renal inpatients should not be managed on non-specialist wards.

Human factors

There is increasing awareness of the part human factors play in putting patients at risk. This covers continuity of care, handover, communication, and failure of interprofessional working. Careful handover of ill patients between shifts is essential. Some hospitals now have instituted both theoretical training sessions and practical experience, with the use of simulation wards.

Future development of the patient safety project

The Renal Association Patient Safety Project now operates under the umbrella of the Renal Association Clinical Services Committee, and has developed into a collaborative process with the BRS and ART. We continue to work closely with the MHRA, NHS England and the Royal College of Physicians and are looking to be more proactive in terms of identifying risks as well as incidents.

The project would welcome suggestions from renal units for priorities in patient safety. Improvements in patient safety will also be facilitated by a review of clinical standards data from the UK Renal Registry, where all units are benchmarked.

Acknowledgements

The author would like to thank all renal units who have contributed to this project, and Dr Graham Lipkin and Dr Alastair Hutchison for their support in the development of this project.

Declaration of interest

The author declares that there is no conflict of interest.

Further reading


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When the ‘National Kidney Patients Helpline’ was launched 15 years ago, it was simply perceived as a telephone number that any kidney patient or carer could dial, Monday to Friday, during the National Kidney Federation (NKF) office hours to get help and advice – what a complete underestimation of need this proved to be!

Immediately, the NKF became aware that even though the line was charged at a local rate, many patents could not afford a prolonged call – the first change was to make the calls free of cost.

The second stemmed from the volume of calls – we thought one desk and one helpline manager would suffice; this rapidly expanded to two full-time operators, a purpose built confidential office space, and dedicated specialist communication and printing equipment. The helpline now takes up to 200 calls a week.

The third change was to the means of communication – patients don’t just want to reach us by telephone, they want to write to us, email us, contact us via the NKF website, via Facebook, Twitter and via the three NKF social networking online communities that we established.

The NKF never gives medical advice, we simply point patients in the right direction; we do this verbally and we do it by supplying them with one or more of 150 different titles of renal leaflets that have been created by the NKF medical advisers (the same leaflets we supply to renal units). Originally, the leaflets were about end-stage renal disease – but nowadays, there is just as much demand for early-stage advice to those newly diagnosed.

Many calls reveal patients in real trouble, patients who need support, help, or even holding, which cannot be done via telephone calls and leaflets – they frequently need someone to stand up for them in their battles with the huge machine that is the NHS.

And, so, the NKF Advocacy Service was born, now consisting of eight NKF employees, spread throughout England, Scotland, Wales and Northern Ireland; a service, partly funded by the BKPA (British Kidney Patient Association), providing essential, on-the-ground help as and when needed by any kidney patient or carer.

All of this only works if patients and carers are aware of the services available to them. Help can be found at 0845 601 02 09.

Timothy Statham OBE, Chief Executive