



the emetic toxin of *Bacillus cereus*, hampered the chances of making a definitive diagnosis. With hindsight and in the light of the questionnaire findings, it is unlikely that hysteria was the sole explanation of the symptoms that led to the admission of a large number of children to the hospitals involved.

Data related to the second outbreak suggest that the *Shigella flexneri* isolated from the maize-meal porridge may have been responsible for the diarrhoea in a number of the children. However, neither this organism nor other enteric pathogens were isolated from any of the children, and the evidence incriminating *S. flexneri* therefore remains inconclusive. Furthermore, *S. flexneri* would probably not have survived the preparation of the porridge and was probably introduced afterwards, during handling of the porridge before it was served. Considering the available evidence, the aetiology and evolution of the diarrhoeal outbreak were unfortunately not fully elucidated. Nevertheless, the conditions for the preparation of the food were, in certain instances, questionable.

One of the lessons to be learnt from this outbreak is that we need systems in place to monitor how food is prepared at such events. The organisers must be aware of food regulations and in the interests of transparency agree to have caterers' premises inspected. Caterers should be selected only if they comply with these regulations.

South Africa has already held a number of international sporting events and is bidding for others, most notably the Soccer World Cup in 2010, the biggest sporting event in the world. We would like to suggest that the organisers of such large, high-profile meetings be well versed in and prepared to implement preventive measures appropriate to such a major event. These would include:

1. An agreement to co-operate fully with the various Departments of Health in allowing them to inspect premises where catering and the serving of food will be undertaken. Contracts for the provision of foods should comply with stringent regulations, which should include a satisfactory pass of thorough inspection of the premises.

2. There should be a standard protocol for the investigation of such outbreaks that includes environmental, laboratory and clinical aspects and a task force should be nominated to have responsibility for co-ordinating this. Members of such a team should be available at all times, including after hours, to expedite the investigation and control of outbreaks that may occur.

3. Those involved in the outbreak should improve liaison with the media and the public to avoid misunderstandings, contradictions and misrepresentations.

To reiterate, public interests demand thorough investigation of food-borne outbreaks not only at sporting events but also at other large social, political and religious gatherings. More importantly, preventive measures commensurate with the reasonable expectations of all participants are mandatory. Let

us see more examples of good co-operation between various health officials that could go a long way towards meeting internationally accepted standards in future.

Lastly, there is a major undertaking currently to re-examine the notifiable diseases and make these more appropriate for South Africa. Hopefully, when the new list of notifiable diseases has been published, once again public interests will be served and notifications will be improved, facilitating outbreak investigation.

**Karen H Keddy
Hendrik J Koornhof**

*Department of Clinical Microbiology and Infectious Diseases
South African Institute for Medical Research
Johannesburg*

1. Snyderman D. Food poisoning. In: Gorbach SL, Bartlett JG, Blacklow NR, eds. *Infectious Diseases*. Philadelphia: WB Saunders, 1998: 768-781.
2. Karas JA, Nicol MP, Martinson N, Heubner R. An outbreak of food poisoning among children attending an international sports event in Johannesburg. *S Afr Med J* 2001; **91**: 417-421 (this issue).
3. Small GW, Nicholi AM. Mass hysteria among school children. Early loss as a predisposing factor (Abstract). *Arch Gen Psychiatry* 1982; **39**: 721-724.
4. Department of Health, Republic of South Africa. Notifiable medical conditions. *Epidemiological Comments* 1998; **25**:

ULTRASOUND IN OBSTETRICS AND GYNAECOLOGY — QUO VADIS?

Obstetrics and gynaecology has cause to be thankful to Professor Ian Donald, who despite numerous setbacks pioneered the technique of ultrasound imaging in the specialty. Today no obstetrician or gynaecologist would so much as consider practice without having such a service available.

The benefits of ultrasound imaging continue to multiply.

From the diagnosis of ectopic pregnancy to detection of multiple pregnancy or fetal anomalies and confirmation of gestational age and fetal well-being, the indications for ultrasound examination cover virtually every facet of obstetrics and gynaecology. The ultrasound image has opened a window into the private life of the developing fetus, allowing us to do a detailed fetal examination long before birth.

However, as one surveys the broader South African picture of ultrasound in obstetrics and gynaecology one cannot fail to conclude, in the words of Shakespeare, that something is rotten in the State of Denmark — or in this case, of course, the state of ultrasound in obstetrics and gynaecology.

Let me state immediately that many sonologists in obstetrics and gynaecology are seriously committed to high standards and have attended many courses and congresses covering the subject as well as visiting centres of excellence to get hands-on training. Recently a number of state and private sonologists in



South Africa wrote and passed the very difficult examination of the Fetal Medicine Foundation of Professor Kypros Nicolaides (London), reflecting the very high standards that are available in South Africa — the fact that the course fee was R22 000, to which air travel and accommodation had to be added, is evidence of their tremendous dedication, and I wish to congratulate them.

However, there are many others who use an ultrasound machine in obstetrics and gynaecology without having received, or sought, training. The service they provide reflects their lack of training and skills.

Part of the problem lies with the individual medical schools.

Few academic departments of obstetrics and gynaecology offer their registrars more than 4 weeks of dedicated ultrasound training, while some provide no time in the ultrasound department at all. This is obviously because the clinical needs of the departments are so heavy that it is not possible to allocate dedicated ultrasound time to registrars. Things are often no better in the radiology departments. When the O&G ultrasound service resides in the O&G department, there is little time for radiology registrars to go across and be taught by their obstetric and gynaecological colleagues.

Certainly no attempt is made to make undergraduate students competent in ultrasound skills, yet once qualified, general practitioners, radiologists and obstetricians and gynaecologists all feel the need to provide an ultrasound service in obstetrics and gynaecology without any concern about their lack of knowledge.

This inevitably means that many women get a poor ultrasound opinion. Gestational age is miscalculated and multiple pregnancies are missed or over-diagnosed, while false positives or negatives in the field of fetal anomalies result in unnecessary anxiety or avoidable births of babies with serious defects.

The situation is much worse in the state hospitals, where owing to lack of money even academic departments have to manage with poor or old equipment, and cutbacks in medical posts result in chronic understaffing. In rural areas the situation is worse still. The health departments often do not realise the value of good ultrasound in obstetrics and gynaecology, and therefore do not supply machines in the rural areas — and in any case they do not have the doctors to provide this service.

So, quo vadis?

It is incumbent on the national health service to provide an affordable service that is of proven value. Such a service need not be doctor-driven, and in fact in the case of ultrasound would be better if radiographers or midwives were used in all centres apart from referral centres. However, it is central to improvement in ultrasound services that there must be adequate education for those providing the service, both in private and in state institutions.

It is in the area of education that the South African Society of Ultrasound in Obstetrics and Gynaecology (SASUOG) wishes to play a strong role, and in the International Society of Ultrasound in Obstetrics and Gynaecology (ISUOG) it has a strong and willing partner to assist it. We hope that the World Health Organisation will also be able to help in the area of ultrasound use in the primary health care facilities.

As a first step in the education process the SASUOG with the assistance of ISUOG has donated the *International Journal of Ultrasound in Obstetrics and Gynaecology* to all eight medical schools for 3 years to assist with keeping doctors up to date in the ultrasound literature. As Chairperson of SASUOG I have just completed a short tour of most of the South African medical schools, accompanied by the President of ISUOG, Professor Sturla Eik-Nes. The journals were handed over to the medical schools, and Professor Eik-Nes had discussions with leading role players concerning how ISUOG and possibly the WHO could assist in improving ultrasound services in South Africa.

It seems that some form of accreditation is necessary to identify adequate training, and the College of Obstetricians and Gynaecologists (CMSA) together with SASUOG is working on creating a diploma programme for ultrasound in obstetrics and gynaecology which will have practical course work and a final examination. Doctors who have obtained this diploma will definitely be accredited, but some form of recognition should also be given to those who have kept themselves up to date.

In terms of the broader needs of the country, especially at PHC level, we need programmes involving teaching midwives and radiographers to do ultrasound imaging in the rural areas. With the currently available financial resources this would be difficult to instigate from within South Africa, and the President of ISUOG has intimated that the Society is keen to become involved in teaching at PHC level and would be willing to send a team of teachers to South Africa. They are also willing to run a special programme to meet the needs of the various excellent young sonologists in academic departments who do not have the finances to further their skills in O&G imaging overseas by providing a teaching programme in a South African centre specifically aimed at improving the teachers.

These programmes are exciting and bode well for the future, but will need financial input. We hope that finances will be forthcoming, both from the WHO and from the private sector. If all of this were to be made possible by innovative thinking on the part of the various administrative bodies, pregnant women throughout South Africa would be the grateful beneficiaries.

Edward J Coetzee
Chairman, SASUOG

Department of Obstetrics and Gynaecology
University of Cape Town