ples of mishaps that could have triggered nuclear conflict.[16] Neither Pakistan nor India has the luxury of distance and time in which to evaluate a false alarm, and thus the possibility of accidental nuclear conflict becomes frighteningly real. The only prudent way ahead for the leadership of the two countries is to step back from the brink and start substantive discussions and political dialogue. The large cadre of health professionals and societies in both countries, as indeed globally, must assume responsibility for the promotion of peace, and eventual nuclear disarmament.

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Oxygen therapy in acute medical care

The potential dangers of hyperoxia need to be recognised

Oxygen is cheap, widely available, and used in a range of settings and conditions to relieve or prevent tissue hypoxia. Since its discovery by Scheele and Priestley in the 1770s, it has remained one of the most effective therapeutic agents available. However, as a result of poor prescribing and monitoring, inappropriate doses are often given.[1]

Oxygen is most commonly delivered by devices with variable performance such as face masks and nasal cannulae. These can produce unexpectedly high concentrations of inspired oxygen, particularly when ventilation is depressed.[2] In addition, masks that incorporate a reservoir bag are often used in emergencies, following the widespread adoption of advanced trauma life support style (or ATLS) guidelines. These appliances can produce systemic hyperoxia that is generally assumed to be harmless. However, emerging evidence suggests that for some patients with acute medical conditions, hyperoxia may be harmful.

Oxygen therapy is often provided for patients with acute coronary syndromes, although the evidence to support its benefits is controversial. Animal studies have shown that hyperoxia can reduce coronary blood flow,[3] particularly to ischaemic areas.[4] Hyperoxia can also produce potentially adverse effects on systemic haemodynamics—reducing cardiac output and increasing blood pressure and systemic vascular resistance—in patients with myocardial infarction or congestive heart failure.[5,6] These haemodynamic changes may further impair blood flow and delivery of oxygen to tissues already hypoperfused. This apparent paradox occurs because supraphysiological oxygen tensions produce little increase in the oxygen carrying capacity of blood, but they promote reflex vasoconstriction via local regulatory mechanisms in arteriolar smooth muscle.[7] In one of the few randomised double blind controlled trials of oxygen therapy, patients with uncomplicated myocardial infarction randomised to receive oxygen tended to have a higher mortality and more ventricular tachycardia than those randomised to receive air.[8] Routinely giving oxygen to patients with a stroke has also been questioned. Indeed, a recent randomised study showed an increase in mortality at one year in non-hypoxic patients with mild or moderate strokes who had received supplemental oxygen as part of their initial treatment.[9]

The dangers of pulmonary toxicity due to oxygen, ranging from atelectasis to pro-inflammatory processes, and the risks of prescribing oxygen for patients with chronic obstructive pulmonary disease are more widely appreciated. A recent study investigated the prevalence of respiratory acidosis in patients with an exacerbation of chronic obstructive pulmonary disease. This confirmed that injudicious use of oxygen therapy is associated with respiratory acidosis, which then predicts a subsequent requirement for intensive care.[10] This study emphasises that treatment guidelines should be based on achieving target arterial oxygen tensions and saturations rather than on giving predetermined concentrations or flow rates of inspired oxygen.

Inevitably, oxygen continues to be given on the basis of presumed need rather than of documented low oxygen saturation. This may be acceptable practice

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in emergencies. In more controlled circumstances, however, efforts should be made to confirm the presence of hypoxia by pulse oximetry before giving oxygen. In this way normoxic patients, who do not require treatment with oxygen, will avoid the risks associated with hyperoxia.

Pulse oximeters should be available in all clinical areas where acutely ill patients are managed and oxygen is given, allowing oxygen saturation to be monitored on a continuous basis. At the very least, oxyhaemoglobin saturation should be documented before and intermittently during oxygen therapy. Supplemental oxygen can then be given on a rational basis focusing on the attainment of target oxygen saturations, which may differ between patient groups, rather than on using fixed flow rates. However, patients requiring high inspired oxygen concentrations to maintain adequate oxygen saturations must always be cared for in areas where intensive monitoring is available. In addition, arterial blood gas analysis can be done if necessary to confirm that appropriate oxygen and carbon dioxide tensions, and pH, have been achieved. In this way patients can get oxygen therapy that is tailored to their need and the unfavourable cardiopulmonary effects of hyperoxia can be minimised. The use of oxygen prescription charts similar to those advocated by Dodd and colleagues may, in non-specialist areas, help achieve these aims.[1]

Oxygen therapy remains a cornerstone of modern medical practice. To further quantify the risks associated with hyperoxia more trials are needed. The results of well conducted trials may lead to refinements in the use of oxygen. Unfortunately, due to its accepted role in therapeutic practice and virtually non-existent potential for commercial development, oxygen therapy has attracted little research funding in recent years. At present doctors should strive to ensure that oxygen is prescribed, administered, and monitored with care. This will enable us to achieve optimal tissue oxygenation for more of our patients.

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Adoption by lesbian couples

Is it in the best interests of the child?

The report of the American Academy of Pediatrics in February[1] supporting the introduction of legislation to allow the adoption by co-parents of children born to lesbian couples sparked enormous controversy not only within the medical profession but among the public as well. Almost without exception, only the mother who gives birth to or adopts the child may currently be the legal parent, even in cases where a couple plan a family together and raise their child in a stable family unit. The academy has taken the view that children in this situation deserve the security of two legally recognised parents in order to promote psychological wellbeing and to enable the child's relationship with the co-mother to continue should the other mother die, become incapacitated, or the couple separate. This position is based on evidence derived from the research literature on this issue.[2] The *Washington Times* described the stance of the academy as "an unfortunate surrender to political expediency" and accused the academy's Committee on Psychosociological Aspects of Child and Family Health of sacrificing scientific integrity in order to advance an activist agenda.[3] Is it the case that children born to lesbian couples "can have the same advantages and the same expectations for health, adjustment, and development as can parents who are heterosexual," as stated by the academy? Alternatively, is the academy simply pandering to a politically correct agenda?

Two main concerns have been expressed in relation to lesbian mother families: firstly, that the children would be bullied and ostracised by peers and would consequently develop psychological problems, and, secondly, that they would show atypical gender development such that boys would be less masculine in their identity and behaviour, and girls less feminine,

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