either by a member of one of the emergency services or a doctor. Secondly, the best results in cardiopulmonary resuscitation out of hospital have occurred where lay bystanders have initiated basic life-support and continued this until advanced cardiac life support is available from specialised services.

CONCLUSIONS

The validity of blanket statements indicating that flying squads "undoubtedly save lives"26 must remain severely open to question. What can, however, be stated with some certainty is that throughout the United Kingdom such squads continue to be formed, and although they are well equipped and generally well staffed, most receive few calls a year. The few attempts at assessment of results have not shown any major improvements in mortality and morbidity, although anecdotal evidence of the efficacy of flying squads has proliferated as fast as the squads themselves.

Although it seems logical that flying squads contribute to the management of critically ill patients whose condition could be expected to deteriorate before or during transfer to hospital, their existence must still be considered to be based on empirical and emotional appeal rather than on scientific evidence of their value.

Correspondence should be addressed to C. R.

REFERENCES

- 1. Collins J. Organisation and function of an accident flying squad. Br Med J 1966; in: 578-80
- 2. Bodiwala GG. Facts behind the flying squads. In: Wilson DH, Marsden AK, eds. Care of the acutely ill and injured. Proceedings of V International Congress of Emergency Surgery. Chichester. John Wiley, 1981: 73-76.
- 3. Mackay GM. Some features of traffic accidents. Br Med J 1969; iv: 799-801.
- 4. Lauppi E. Die aspiration bei Opfern des Strassenverkhers. Schweiz Med Wschr 1954; 84: 335.
- 5 Ruffnell-Smith HP. Time to die from injuries received in road traffic accidents. Injury 1970; 1: 2.
- 6. Hoffman E. Mortality and morbidity following road accidents. Ann Roy Coll Surg Eng 1976; 58: 233-40.
- 7. Hoffman E On site resuscitation. In: Wilson DH, Marsden AK, eds. Proceedings of V International Congress of Emergency Surgery. Chichester: John Wiley, 1981. 77-80.
- Yates DW. Airway patency in fatal accidents. Br Med J 1977; ii: 1249-51.
 Adams R. Evidence "for" immediate care. In: Wilson DH, Marsden AK, eds. Chichester: John Wiley, 1981: 65-72.
- 10. Snook R. Accident flying squad. Br Med J 1972; iii: 569-74.
- Redden JF, Little K. Anaesthesia and the accident flying squad: A new anaesthetic machine. Br Med J 1973; 1. 788-90.
 Snook R. Medical aspects of ambulance design. Br Med J 1972; iii: 574-78
- 13. Little K. The hospital based flying squad. MD thesis. University of Edinburgh, 1976. 14. Baker SP, O'Neill B, Haddon W, Long WB. The injury severity score: A method for describing patients with multiple injuries and evaluating emergency care. J Trauma 1974: 14: 187-96
- 15 Committee on medical aspects of automotive safety. Rating the Severity of Tisue Damage I. The Abbreviated Scale. JAMA 1971; 215: 277-80.
- 16. States JD, Fenner HA, Flamboe EE, et al. Field application and research development of the AIS SAE Print 710873. New York: Society of Automotive Engineers, 1971.
- 17 Bull JP. The injury severity score of road traffic casualties in relation to mortality, time of death, hospital treatment time and disability. Accid Analyt Prev 1975; 7: 249 18 Stoner HB, Barton RN, Little RA, Yates DW. Measuring the severity of injury Br Med
- 7 1977. 11: 1247-49 19 Gorman DF, Coals J. Evaluation of a hospital-based accident flying squad using an
- injury scoring system. Injury 1983; 14: 513-18. 20. Steedman DJ. Analysis of an accident flying squad. Presented at CSA Annual Meeting, Edinburgh, 1984
- 21. Dooley A, Lucas BGB. The evaluation of emergency care. Ann Roy Coll Surg Eng 1978; 6:451
- 22. Rowley DI, Collins J. The role of an accident flying squad in medical emergencies. Resuscitation 1979; 6: 243-48.
- 23. MacKintosh AP, Crabb ME, Grainger R, Williams JH, Chamberlain DA. The Brighton resuscitation ambulances: Review of 40 consecutive survivors of out-ofhospital cardiac arrest. Br Med J 1978; 1: 1115-18.

24. Briggs RS, Brown PM, Crabb ME, et al. The Brighton Resuscitation Ambulances-a continuing experience in pre-hospital care by ambulance staff Br Med 7 1976; is: 1161-65

- 25. Eisenberg MS, Bergner L, Hallstrom A. Out-of-hospital cardiac arrest: Improved survival with para-medic services. Lancet 1980; i: 812-15.
- 26. Spencer JD. Why do our hospitals not make more use of the concept of a trauma team. Br Med J 1985; 290: 136-38.

World Health Organisation

APPROPRIATE TECHNOLOGY FOR BIRTH

In April, the European regional office of the World Health Organisation, the Pan American Health Organisation, and the WHO regional office of the Americas held a conference on appropriate technology for birth. The conference, held in Fortaleza, Brazil, was attended by over 50 participants representing midwifery, obstetrics, paediatrics, epidemiology, sociology, psychology, economics, health administration, and mothers. Careful review of the knowledge of birth technology led to unanimous adoption of the recommendations which follow. WHO believes these recommendations to be relevant to perinatal services worldwide.

Every woman has the right to proper prenatal care and she has a central role in all aspects of this care, including participation in the planning, carrying out, and evaluation of the care. Social, emotional, and psychological factors are fundamental in understanding how to provide proper perinatal care. Birth is a natural and normal process, but even 'no risk pregnancies" can give rise to complications. Sometimes intervention is required to obtain the best result. In order for the following recommendations to be viable, a thorough transformation of the structure of health services is required together with modification of staff attitudes and the redistribution of human and physical resources.

GENERAL RECOMMENDATIONS

Health ministries should establish specific policies regarding appropriate birth technology for the private and nationalised health services.

Countries should carry out joint surveys to evaluate birth care technologies.

The whole community should be informed of the various procedures in birth care, so as to enable each woman to choose the type of birth care she prefers.

The mother and her family should be encouraged to practise selfcare in the perinatal period and develop the understanding of when and what help is required to improve the conditions of pregnancy, birth, and afterwards.

Women's mutual aid groups offer valuable social support and a unique opportunity to share information about birth.

The health team must foster coherent attitudes to ensure continuity in the monitoring of birth and the perinatal team should share a common work philosophy in order to ensure that staff changes do not jeopardise continuity of care.

Informal perinatal care systems (including traditional birth attendants) must coexist with the official system and a collaborative approach must be maintained for the benefit of the mother. Such relations, when established in parallel, can be highly effective.

Professional training should pass on new knowledge of the social, cultural, anthropological, and ethical aspects of birth.

The perinatal team should be jointly motivated to enhance relationships between mother, child, and family. The work of the team can be affected by interdisciplinary conflicts, which should be systematically explored.

The training of health professionals should include communication techniques in order to promote sensitive exchange of information between members of the health team and the pregnant woman and her family.

The training of professional midwives or birth attendants should be encouraged. Care during normal pregnancy, birth, and afterwards should be the duty of this profession.

Technology assessment should involve all those using the technology, epidemiologists, social scientists, health authorities, and the women on whom the technology is used.

Information on birth practices in different hospitals, such as rates of caesarean section, should be available to the public.

Research on the structure and numbers of the team attending at birth should be conducted, at regional, national, and international levels, consistent with maximising access to appropriate primary care and maximising normal birth outcomes and improving perinatal health, cost effectiveness, and the needs and desires of the community.

SPECIFIC RECOMMENDATIONS

The wellbeing of the new mother must be ensured through free access of a chosen member of her family during birth and throughout the postnatal period. In addition, the health team must provide emotional support.

Women who give birth in an institution must retain their right to decide about clothing (hers and her baby's), food, disposal of the placenta, and other culturally significant practices.

The healthy newborn must remain with the mother whenever possible. Observation of the healthy newborn does not justify separation from the mother.

Immediate breastfeeding should be encouraged even before the mother leaves the delivery room.

Countries with some of the lowest perinatal mortality rates in the world have caesarean section rates of less than 10%. There is no justification for any region to have a rate higher than 10-15%.

There is no evidence that caesarean section is required after a previous caesarean section birth. Vaginal deliveries after a caesarean should normally be encouraged wherever emergency surgical intervention is available.

Ligation of the fallopian tubes is not an indication for caesarean section. There are simpler and safer methods for tubal sterilisation.

There is no evidence that routine fetal monitoring has a positive effect on the outcome of pregnancy. Electronic fetal monitoring should be carried out only in carefully selected cases related to high perinatal mortality rates and where labour is induced. Research should investigate the selection of women who might benefit from fetal monitoring. Meanwhile, national health services should abstain from purchasing new equipment.

It is recommended that the fetal heart rate be monitored through auscultation during the first stage of labour, and more frequently during expulsion.

There is no indication for shaving pubic hair nor for an enema before delivery.

It is not recommended that the pregnant woman be placed in a dorsal lithotomy position during labour and delivery. Walking should be encouraged during labour and each woman must freely decide which position to adopt during delivery.

The perineum should be protected wherever possible. Systematic use of episiotomy is not justified.

The induction of labour should be reserved for specific medical indications. No region should have rates of induced labour higher than 10%.

During delivery, the routine administration of analgesic or anaesthetic drugs (not specifically required to correct or prevent any complication) should be avoided.

Artificial early rupture of membranes, as a routine process, is not justifiable.

Further investigation should evaluate the minimum special clothing required for those attending birth and the newborn.

IMPLEMENTATION OF RECOMMENDATIONS

The above recommendations acknowledge differences between various regions and countries. Implementation must be adapted to these special situations.

Governments should determine which departments should coordinate the assessment of appropriate birth technology.

Universities, scientific societies, and research groups should all participate in the assessment of technology.

Financial regulations should discourage indiscriminate use of technologies.

Obstetric care that criticises technological birth care and respects the emotional, psychological, and social aspects of birth should be encouraged. Government agencies, universities, scientific societies, and other interested groups should be able to influence the excessive and unjustified use of caesarean section by exploring and publicising its negative effects on mother and infant.

WHO and PAHO should promote a network of evaluation groups to assist countries in adopting new technologies developed by more advanced countries. This network will in turn constitute a focal point for the dissemination of information.

The results of technology assessment should be widely disseminated in order to change the behaviour of professionals and the attitudes of the general public.

Governments should consider the development of regulations to permit the use of new birth technologies only after adequate evaluation.

National and regional conferences on birth, to include health providers, health authorities, users, women's groups, and the media should be promoted.

WHO and PAHO should designate a year during which attention is focused on promoting better birth.

Repercussions of Torture

A STUDY OF CHILEAN REFUGEE CHILDREN IN DENMARK

Jørgen Cohn Lis Danielsen Kirsten Inger Mygind Holzer Lone Koch Birgit Severin Steen Thøgersen Ole Aalund

Amnesty International Danish Section Medical Groups and International Rehabilitation and Research Centre for Torture Victims, Copenhagen, Denmark

JUST as, in some countries, adults are imprisoned because of political, religious, or other ideological opposition to the prevailing regime, so, too, are many children arrested, with or without their parents. Several examples are known—in Latin America and South Africa, for instance—of children spending a long time in prison or prison camps, under conditions of poor hygiene and poor nutrition.¹

An increasing number of pregnant women are being arrested and deliver their babies in prison. Some of these infants are removed from their mothers immediately after birth and are never heard of again. Other children are born in prison to mothers raped by prison staff.²

Children may witness the often brutal arrest of one or both parents, and even their torture, abduction, or execution. Or they may be left unexpectedly on their own, at home or in the street, if their parents are arrested.²

Some children are born after their fathers have been arrested or executed and have thus never seen them. To others, a longlasting separation from one or both parents is an enormous mental strain, causing anxiety and insecurity.^{1,2}

Children are also used as witnesses in legal proceedings or as hostages. In the latter case, there is evidence that children have been present while their parents have been tortured, or that children have been tortured in front of their parents to "make the parents talk" (Latin America, South Africa, Iran, Iraq, Indonesia).^{1,2}

There are also records of the rape of small girls and mass execution of children (Ethiopia, Central African Empire, El Salvador).²

To help children who themselves and/or whose parents have been subjected to physical and/or mental torture, a special paediatric group was established in 1976 by the Amnesty International Danish Medical Group.