

Current topic

Prevention of mental handicap in developing countries

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The Commonwealth Association for Mental Handicap and Developmental Disabilities held a workshop on 'Prevention of mental handicap—what is possible in developing countries?' in Bombay in March 1985. The workshop was attended by 40 invited participants from many parts of the world, both from developed and developing countries. During the two days various prenatal, perinatal, and postnatal problems were discussed to provide practical suggestions suitable for implementation in developing countries.

The workshop recognised that the exact size of this problem and the causes of mental retardation in developing countries are not known. It was thought that the Commonwealth Association should therefore initiate some studies on the prevalence and causes of mental retardation with a view to promoting practical programmes of prevention. It was agreed that such studies should be carried out in conjunction with community based rehabilitation programmes.

The workshop made the following major recommendations.

1. Iodisation of salt

Evidence was presented that there are still many regions in the world with iodine deficiency leading to disorders related to iodine deficiency, such as endemic cretinism, deaf mutism, feeble mindedness, and developmental retardation. The incidence of neonatal hypothyroidism is higher in these regions leading to mental retardation. This problem, which affects many people in developing countries, could be eliminated by a simple and cheap measure—iodisation of salt. The workshop recorded that all salt supplies should be iodised, at least in all regions of the world where iodine deficiency is known or suspected to exist. It was thought that only one form of salt—iodised salt—should be available in those parts.

2. Active immunisation of pregnant women against tetanus

The workshop learnt that there is strong evidence that active immunisation against tetanus during pregnancy considerably reduces the incidence of neonatal tetanus. If a child survives neonatal tetanus perhaps one out of 10 will become mentally retarded. It is therefore recommended that tetanus toxoid be given to mothers during pregnancy, in accordance with the recommendations of the World Health Organisation.

3. Training programmes for birth attendants

Most deliveries in the developing countries are performed by traditional birth attendants. Means should be devised for training and educating them. It was also recognised that constant in-service evaluation and continuing education were important. It was recommended that help should be sought from national and international bodies to provide appropriate training.

4. Resuscitation of the newborn

Birth asphyxia is one of the major risk factors for mental retardation and avoidable developmental disabilities. Simple methods of resuscitation are needed for use in developing countries, and they should be available to the birth attendants. Possible methods are the use of a non-perishable bag and mask or mouth-to-mouth ventilation. It was recommended that these methods should be compared in a controlled trial.

5. Lead toxicity in the fetus

The use of eye cosmetics containing lead seems to be widespread in many countries. In India, Bangladesh, and Pakistan it is called Surma, in Arabian

countries it is called Kohl. It was recognised that when pregnant mothers use these cosmetics large amounts of lead may be absorbed. The blood lead concentration in these mothers becomes high, and it can cross the placenta and damage the fetus. It is recommended that several pilot screening programmes should be encouraged in these countries and that educational programmes aimed at professionals and the public be mounted to prevent further use of eye cosmetics containing lead. Governmental action is necessary to prevent such cosmetics from being manufactured and sold.

6. Cervicograph: a simple graphic method of recording labour

This is a graphic recording of the clinical measurement of cervical dilatation and is used to assess the progress of labour. The rate of cervical dilatation can be plotted on a predetermined nomograph (cervicograph). It was recommended that this type of recording of labour progress should be adopted by all professionals offering maternity care. The early diagnosis of abnormal progress in labour enables the transfer of women to centres where obstetric intervention is possible.

7. Prevention and early treatment of infections

The importance of prevention and early treatment of infections that may lead to mental retardation, such as gastroenteritis and meningitis, was stressed. Among other standard or recognised measures, breast feeding and use of expressed breast milk, where necessary, were highlighted as simple and effective ways of preventing major infections in young infants.

8. Maternal age and chromosomal abnormalities

The workshop recognised that avoidance of pregnancies in older women, particularly over the age of 35 years, would reduce the incidence of Down's syndrome and other chromosomal abnormalities by 25–30%.

9. Genetic counselling units

The workshop endorsed the view that genetic services should be available in the developing

countries. For sophisticated investigations that demand a high degree of skill and expertise support could be arranged from genetic centres in more developed countries.

10. Long term follow up of low birthweight infants

It was recognised that there is little information available on the long term outcome of babies with low birth weight in developing countries. The workshop recommended that controlled follow up studies are needed to assess the incidence of disabilities and mental retardation in these infants.

11. Future studies

Studies should be encouraged to determine the prevalence and aetiology of mental retardation and developmental disabilities in developing countries with a view to promoting practical programmes of prevention.

Discussion

The workshop has provided some practical suggestions and plans for future action. In many countries joint action by professional groups and parents' organisations for the handicapped has proved much more effective than action by either group alone in obtaining governmental support for services for the handicapped. The same joint action has been found to be effective in initiating programmes for prevention of handicap. It is recommended, therefore, that wherever possible in developing countries active support should be obtained from voluntary and parents' organisations for prevention programmes that are contemplated by professional persons. Comments and proposals for implementation would be welcome from those working in both developed and developing countries.

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