

the pattern may be changing towards an increase of risk factors (drug use, family breakdown, unemployment, etc) and we may be facing an increase in suicide and suicidal behaviours in the young.

With the limited available data, it could be postulated that the behavioural problems in the young share more commonalities than differences when compared to other countries. There are nevertheless some minor variation which requires further studies.

In Hong Kong, over 95% on newborn are screened in Maternal and Child Health Centers. Other than vaccination, they are also screened for behavioural deviance and delay. Common, transient problems are dealt with there. For those with more severe problems, they are referred to Child Assessment Center. In 1997, 2367 cases were assessed. Most of them suffered from developmental delay of one form or others, 4.2% suffered from attention-deficit disorder (Personal communication). Paediatricians also handle some of the common problems. Some of them are referred to the Child Psychiatrists. In the public sector, there are now four teams of Child Psychiatric Services, two in University Hospitals and two in the Hospital Authority. In Yaumatei Child Psychiatric Center, one amongst the four teams, they serve around 850 new cases each year, with an age span of 2 years to 19 years of age.

Behavioural problems are common in children and adolescents. In Hong Kong, we still lack good epidemiological data on the size of the problems. In broad terms, from the available data, we can infer that the pattern of behavioural problems are quite similar to the West. There are some local variation which are of particular interest. It may help us to understand the importance of biological factors (nature), whether the Chinese may have a different genetic make up. Alternatively, environmental factors of different culture (nurture), that different child rearing practices, different schooling, different social expectation, etc could have an important impact on child development. More research in the area is needed.

References

1. Leung PWL, Luk SL, Ho TP, Taylor E, Lieh-Mak F, Bacon-Shone J. The diagnosis and Prevalence of Hyperactivity in Chinese Schoolboys. *Br J Psychiatry* 1996;168: 486-96.
2. Luk SL, Leung PWL, Bacon-Shone J, et al. Behaviour Disorder in Pre-school Children in Hong Kong : A Two-stage Epidemiological Study. *Br J Psychiatry* 1991; 158: 213-21.
3. Wong CK, Lau JTF. Psychiatric Morbidity in a Chinese Primary School in Hong Kong. *Aust N Z Psychiatry* 1992; 26: 459-66.
4. Ho TP, Hung SF, Chung SY, Lee CC, Chung KF. Characteristics of Youth Suicide in Hong Kong. *Soc Psychiatry Psychiatr Epidemiol* 1995; 30:107-12.
5. Hung SF, Ho TP, Leung PWH, Lee CC, Tang CP. Characteristics and Psychopathology among Peers of Suicide Attempters and Completers Final Research submitted to Health Services Research Committee. Hospital Authority, Hong Kong in 1998.

Health Services for Mother and Children in Hong Kong

S LEUNG

Family Health Services, Department of Health, Room 1856, 18th Floor, Wu Chung House, 213 Queen's Road East, Wanchai, Hong Kong

Hong Kong is a developed, highly sophisticated and plural society. It has a mixed medical and health economy. The private sector provides mostly primary health care services and a small percentage of secondary health care. In the public sector, the Department of Health (DH) is responsible for delivering preventive and primary health care services as well as those of rehabilitation, while secondary and tertiary care services are provided by the Hospital Authority (HA).

1. Health Services for Mothers

1.1 Maternity Services

As the socio-economic conditions improve and fertility rate continues to drop, parents are demanding high quality maternity services. Most of the deliveries are now occurring at hospital settings where Obstetric and Neonatal expertise and facilities are concentrated. In 1997, about two-thirds of the 60,000 deliveries took place at public hospitals and the rest at private institutions. The remaining few maternity homes are gradually phasing out.

In the public sector, antenatal care is shared between the Obstetric Departments of the HA hospitals and the Maternal and Child Health Centres (MCHCs) of the Department of Health. The antenatal programme consists of screening for maternal illness, recognition and treatment of abnormality in pregnancy, assessment of fetal development and well-being, detection of fetal abnormality and giving health advice through individual counseling and antenatal classes. In antenatal classes, a variety of issues such as healthy life-style, maintenance of health during pregnancy, preparation for birth and breast-feeding, care of the neonate, family planning, are discussed.

Postnatal services are available at the hospitals as well as the MCHCs. Traditionally, postnatal clinics have been introduced to ensure physical health of the mother. The challenge ahead will be to broaden the scope to include safeguarding the emotional and social health of the mother, as it is well recognized that maternal depression does not only affect the mother but can have detrimental effect on

the development of the child. A local study has recently shown that about 10% of postnatal woman are affected.¹

1.2 Family Planning Services

Family planning service is available at the 50 MCHCs and the Birth Control clinics of the Hong Kong Family Planning Association. Condom and contraceptive pills are purchasable over the counter.

2 Services for Children

2.1 Childhood public health services

The Family Health Service and Student Health Service of the Department of Health (DH) provide **public health services**, namely, health promotion, disease prevention, screening and surveillance, for children from birth to teenage, completely free of charge, through 50 Maternal and Child Health Centres and 13 Student Health Centres. It is underpinned by **health promotion**, which, as defined by the WHO, is the process of enabling children and their families to increase control over, and to improve, their health. Issues for **health promotion and disease prevention** include the promotion and maintenance of breast-feeding; enabling children to adopt healthy life-style such as healthy eating, exercise, avoiding passive and active smoking; maintenance of oral health; injury prevention; immunization to prevent communicable diseases; promotion of parent-child relationship, positive parenting and teaching of effective discipline methods in order to reduce child behavioural problems and child abuse.

Screening and surveillance comprise neonatal screening of G6PD deficiency and congenital hypothyroidism, which is administered by the Clinical Genetic Service, DH and in the MCHCs and SHSCs, growth monitoring, developmental monitoring, detection of physical anomalies, hearing and vision screening are routinely carried out.

In the past, much emphasis has been put on early detection of diseases through an array of surveillance and screening processes, many of which have been based on no good evidence. There is a need to streamline these procedures, based, as far as possible, on currently available scientific evidence.

2.2 Primary, secondary and tertiary child health care services

While the private paediatricians and general practitioners deliver primary health care to a substantial proportion of children, secondary, tertiary and rehabilitative services are provided mainly by the Hospital

Authority and the Department of Health in the public sector.

Children with **illnesses or injuries** are attended by health workers at the Accident & Emergency departments and Paediatric departments of hospitals, the general outpatient clinics of the Department of Health, as well as by private general practitioners and paediatricians. The Child Assessment Service (DH) and the Duchess of Kent Child Assessment Centre are responsible for assessing and placing children with **disabilities** whose needs for therapy, treatment and special education are met by the para-medics in the hospitals, non-governmental organizations and the Special Education Services of the Education Department. Professionals dealing with the whole spectrum of childhood **behavioural problems** range from primary child health care doctors and nurses, paediatricians, social workers, clinical psychologist to child psychiatrist in various health care and social service settings. **Child protection** is an arena shared by workers in the Police, the Social Welfare Department and the hospital paediatricians.

3. Future Challenges

The present division of the health care structure into the Hospital Authority and Department of Health, each carrying some policy and provider roles, is not conducive to an integrated maternal and child health function. This calls for the commitment of professionals in all relevant health service settings to communicate and collaborate to work for a coherent health care policy and seamless service provision.

In Hong Kong, as in many other parts of the world, in order to cope with the ever advancing bio-technology and escalating aspiration of the society on the one hand and the scarcity of health care resources on the other, service planning and development must be based on the rational process of needs assessment, and programmes developed must be properly monitored and evaluated to ensure effectiveness as well as cost-efficiency.

To effectively address the social, economic and environmental determinants of health which are often outside the direct influence of health services, health promotion strategies such as those put forth by the Ottawa Charter (1986)²: building healthy public policy, creating supportive environment, strengthening community action, developing personal skills and reorienting health services need to be fully explored in the local socio-economic and political environment. This requires the collaboration between all health and non-health agencies.

References

1. Lee DT, Yip SK, Chiu HF, et al. Detecting postnatal depression in Chinese: validation of the Chinese Edinburgh Postnatal Depression Scale. *Br J Psych* 1998; 172: 433-7.
2. Charter adopted at an international conference on health promotion. November 17-21 1986 Ottawa, Ontario, Canada. Co-sponsored by Canadian Public Health Association and the World Health Organization.

Oral Rehydration Practices : Hong Kong

EAS NELSON

Department of Paediatrics, The Chinese University of Hong Kong, Prince of Wales Hospital, 30-32 Ngan Shing Street, Shatin, Hong Kong SAR, CHINA

Mortality from acute gastroenteritis in Hong Kong is uncommon. For the 10 year period 1985 to 1994 there were only 9 deaths from gastroenteritis in Hong Kong (Figure 1). The dramatic fall in these deaths has been coincident with a rapid rise in Hong Kong's economic status (Figure 2). However gastroenteritis remains a leading cause of morbidity in Hong Kong, accounting for 1 in 6 paediatric admissions.¹ In addition it should be remembered that these admissions will represent only a small percentage of total diarrhoea cases treated within the community.

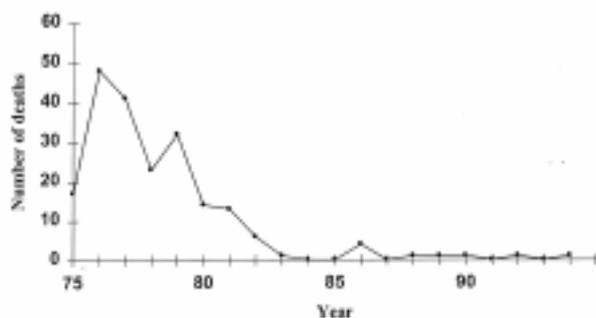


Figure 1 Diarrhoeal deaths for Hong Kong 75-94

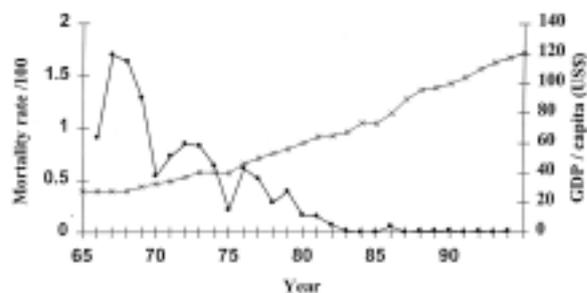


Figure 2 Diarrhoea mortality rate & GDP for Hong Kong 65-94

The World Health Organisation (WHO) has made the correct management of diarrhoea a high priority. Although WHO treatment protocols are aimed primarily to developing countries, the basic principles are universal and are particularly useful for teaching the correct home management of diarrhoea.² Essential aims in the correct treatment of diarrhoea are to first prevent dehydration from occurring and failing this, initiate appropriate and prompt rehydration therapy. Emphasis is given to continued enteral nutrition during a diarrhoeal illness. Frequent breast feeding should continue for breast-fed babies, as breast milk alone, without additional water, is usually adequate during most episodes of diarrhoea. Breast feeding may also reduce duration of rotavirus diarrhoea. Formula fed children should continue to receive the usual formula but if diarrhoea is prolonged a lactose-free formula is commonly substituted. However significant lactose intolerance in acute diarrhoea is uncommon and lactose-free feeds should not be used as a first line therapy for diarrhoea. The past practice of giving diluted formula during and after an episode of diarrhoea is not beneficial, even for infants less than 6 months of age³ and may delay gut recovery.

Ideally dehydration can be prevented in the home by ensuring that the child drinks extra fluids as soon as diarrhoea starts. Although most fluids, including plain water, can be given, recommended "home fluids" are often a food-based fluid such as rice water. There is still debate as to the best composition of oral rehydration fluids but cereal-based ORS and reduced osmolarity glucose-based ORS are probably equally effective.⁴⁻⁵

Of greater concern is the frequent use of drugs in the management of acute diarrhoea.⁶ Caregivers often do not understand the relationship between diarrhoea and dehydration, and their main concern, shared by many health workers, is to see the diarrhoea stop. This probably accounts for the continued widespread use of antibiotics and antidiarrhoeal drugs in many countries. Antibiotics for acute diarrhoea should be limited to use in dysentery and suspected cholera. Adsorbent drugs (such as kaolin, attapulgite, activated charcoal), antimotility drugs (such as codeine, tincture of opium, diphenoxylate, loperamide), or drugs to treat vomiting (such as chlorpromazine or phenergan) should not be given to treat children and infants with diarrhoea.^{6,7} Antimotility drugs in particular can cause ileus, neurological complications and fatalities.

There have been no household surveys undertaken in Hong Kong. However a small hospital study assessed the treatments recommended by primary care practitioners, and evaluated caregivers' perceptions of appropriate management of diarrhoea.⁸ Interview of caregivers of 105 paediatric in-patients with gastroenteritis revealed that many caregivers expected a child with diarrhoea to be