SOME SOCIAL ASPECTS OF PAEDIATRICS*

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In his Lloyd Roberts lecture for 1948 Titmuss [1] stated that 'in medicine and in education too, the trend of thought to-day is looking away from egocentricity and towards sociality, towards considering the individual as a social being; to thinking of him as a member of a family, a group, living in a particular environment, and working in a particular setting'.

In medicine, the paediatricians were among the first to recognize the importance of the social environment in the development of the healthy individual, and in the pathogenesis of his diseases.

THE CHILD IN SOCIETY

There are many species apart from man which are socially organized. Perhaps the best examples are the social insects such as ants, and bees whose co-operative forms of life have often been compared with human societies. The essential difference is that in these non-human social groups the pattern of behaviour is entirely instinctive. Man's way of life on the other hand is conditioned by his culture, which is the accumulation of learned behaviour and is not biologically transmitted. In the words of Aldrich,[2] 'the active world of baby care into which (the infant) will be plunged is the accumulated result of folk lore and tradition somewhat modified by scientific thought'.

Plant [3] describes every child as 'an actor in a play; each phrase or deed is understood only as a part of his total role, and that role is meaningless except as a part of the total drama. This role was pressed into his tiny hands long before he stepped upon the stage. Months before he was born, parents, relatives and neighbours "hoped it would be a boy" or "hoped it would be a girl"—lacking the courtesy to wait upon his arrival before deciding the part he must play. Indeed his role goes further back to the dreams, the tragedies, the triumphs of the early years of his parents. Who of us has not mended the disappointments of youth and adulthood with the promise that his child "will live it differently"? The role he is to play is often cast down to the last dotting of the "i" or crossing of the "t".'

The human infant has two outstanding biological characteristics which distinguish him from the young of other species, and render him extremely sensitive to his social environment. These two attributes are the complete helplessness of the infant at birth and his consequent slow maturation, and secondly his remarkable plasticity which gives him his incomparable capacity for learning. 'From all we can learn of the history of intelligence in pre-human as well as human societies, this plasticity has been the soil in which human progress began and in which it has maintained itself'.[4]

From the moment of conception, the life of the embryo unfolds itself in close relationship with the mother. In the shelter of her womb he is protected from the outside world, and he is completely dependent on her for his nourishment and growth. The mother's health is the most important factor on which the survival and well-being of the foetus depends. Her nutritional state has been shown to influence his health and vigour at birth and later.[5–8] Certain illnesses during pregnancy may result in stillbirth, premature delivery or mal-development of the child.

In the neo-natal period the infant has to adjust from an intra-uterine to an extra-uterine existence. That this is a difficult period can be seen by the fact that even today neonatal mortality and morbidity are high, and cannot be reduced as readily as infant mortality occurring after the 1st month. As the baby grows his personality develops. At first he is unaware of his existence as an individual and expresses all his needs, whether due to hunger, loneliness, discomfort etc., in the same way—by the cry. The mother has to interpret his cry and minister to his needs with great understanding.

It is interesting that the first active social trait the child displays is the smile, which starts at 4-6 weeks of age. From this time he begins to be aware of his mother, listening to her voice, following her movements with his eyes and gradually becoming interested in his surroundings. His interests and functions now have a strong social meaning, for himself and for his mother. Spence [9]

* Based on a lecture given to the Cape Town Paediatric Sub-Group.

describes this well in his account of the feeding situation, thus: The infant's 'emotional capacity is encouraged in manifold exercises by which the mother praises or chides, approves or disapproves, using gestures and sounds which are the universal language of all races. This relationship and encouragement are at their best if the mother is breast-feeding the child'.

As the child passes from infancy into the pre-school stage his human and physical horizons widen and he becomes aware of a rapidly enlarging world. Communication becomes more precise through the medium of speech. His early behaviour patterns are influenced by the practice and precept of others in the family. Slowly and painfully he learns to cooperate with others, to share his possessions and to control his impulses. As a result of his early experiences he may learn either to face and solve his problems, or to evade them. Evasion may be manifested by withdrawal, e.g., fearfulness, cowardice, solitariness, neurotic complaints, or by attack, e.g., temper tantrums, aggressiveness, delinquency, egocentricity, etc.

In the school-going age this physical, emotional and social development proceeds in an ever-widening field of formal and informal education. In adolescence the young man or woman is often impatient to break his bonds and become fully independent.

If the family and home are satisfactory, not only will the child be given the necessary nurture and physical freedom to develop his body, but he will also develop the capacity for forming those human relationships which are the essence of a full and mature life. Every child requires the love, support and approval of his mother, his family, and later the community to give him those feelings of self esteem and 'belonging' which are essential to human happiness.

FAILURE OF NORMAL SOCIAL DEVELOPMENT

The optimum soil for the physical, emotional, and social development of the child is provided by the natural home group. In Western society this home group usually consists of mother, father and children. In this and other societies the structure of the group may include related members such as grandparents, uncles, aunts, cousins etc., who may all play important parts in the rearing of children.

Failure of the Natural Home Group. The natural home group may fail to care for the child for one or more reasons:[10]

1. The natural home group may never have been established, e.g. in illegitimacy. Although the definition of illegitimacy varies in different cultures it is true to say that all illegitimate children suffer to a greater or lesser extent.

2. The natural home group may be intact, but not functioning effectively because of economic conditions leading to unemployment of the breadwinner with consequent poverty, or because of chronic illness, incapacity, instability or psychopathy of parent.

3. The natural home group may be broken and therefore not functioning because of absence of one or both parents as a result of death, divorce, hospitalization, imprisonment or desertion, or full-time employment of father or mother away from home. Social calamities such as war, famine and revolution greatly increase the frequency of these disruptions.

This failure of the natural home group may endanger the mother-child relationship previously discussed and may lead to maternal deprivation of the child. The grossest form of this deprivation is that which may occur in 'institutions, residential nurseries and hospitals, where the child often has no one person who cares for him in a personal way and with whom he may feel secure'.[10] Bowlby shows that children under the age of 3 years placed in institutions and deprived of maternal care for a prolonged period may suffer physically, emotionally, mentally and socially, and the damage caused may be severe and irreversible. Although he stresses that not all children from institutions turn out to be 'affectionless psychopaths', the effects on personality growth are usually far-reaching. Goldfarb [11] found institutionalized children to be inferior in intelligence, ability to conceptualize, social maturity, ability to keep rules, feeling guilt on breaking rules, and capacity for forming relationships; and they showed fearfulness, restlessness, inability to concentrate and poor school achievement.

It may be argued that children who are put into institutions as a result of family failure inherit bad genetic traits and that their poor adaptation in later life is due to these hereditary factors. The influence of hereditary factors in producing social maladjustment has been investigated by Theis.[12] She showed that, with hereditary factors held constant as far as possible, 'those children who were brought up in an institution adjusted significantly less well than those who had remained during their first 5 years in their own homes'.

From studies on war orphans and refugees there is considerable evidence that among the many factors which helped to produce disturbances of character, 'rupture of family ties played a fundamental part'.[13]

In addition to the grosser forms of maternal deprivation usually associated with placement of the young child in institutions, there are many other instances of damage done to children by inadequate relationships with a mother or mother substitute.[10] Partial deprivation of the infant may be seen in the relatively mild form where the mother lets her child cry for hours at a stretch because of advice given (often by the attending doctor) that to satisfy the baby's needs would result in 'spoiling him'. In more severe cases the child is more or less wholly rejected by the mother, which may lead to considerable social and emotional mal-adaptation in later life.

Hospitalization of Children. One very common form of maternal and emotional deprivation is associated with the hospitalization of children. Separation from mother, family, familiar toys and household objects comes at a time when all of these are most needed to provide security in a crisis. In hospital the child is handled at infrequent intervals by strange people, who often commit painful assaults upon him and who do not understand or satisfy his basic needs as his mother would.

Bakwin [14, 15] described how infants detained in hospital for long periods failed to gain weight, became apathetic, anorexic, diarrhoeic and febrile, despite an adequate diet and an absence of infection. One striking

case described by him was an infant patient [16] who was admitted to hospital for a minor illness under his care. When the illness seemed to be controlled, the patient was retained in hospital to be discharged when the weight began to increase. After several weeks the weight had decreased to less than birth weight. Despite a thorough investigation no cause for the loss of weight was detected and the infant was sent home with the expectation that it would soon die. Bakwin, however, curious to see the outcome of the illness, visited the home a short while later. To his amazement he found that the infant, back in the care of its loving though none too hygienic mother, was happy and gaining weight rapidly. Several months later it was still thriving.

This need of the young patient in hospital for maternal love was recognized by some of the older paediatricians of the Vienna school. It is reported that one such paediatrician employed a buxom *frau* whose main function was to dispense 'love' at frequent intervals to infants in the ward.

Most modern maternity hospitals separate the babies from their mothers soon after birth. The babies are segregated in nurseries and brought to their mothers at fixed intervals for feeding. At night they are not brought to their mothers at all! One of the most striking features of these maternity homes is the wailing of the unhappy infants in the nursery. On the other hand in those hospitals where the babies sleep with their mothers the absence of crying is striking. When the babies are kept in nurseries they are almost strangers to their mothers on home-coming. This separation is completely unnatural in view of the close association of the mother and child before birth.

Community Disorganization. As a result of the rapid industrialization of South Africa the population as a whole is undergoing a social revolution. The Bantu are most affected by these influences. Although a large number of traditional concepts persist and still have a material effect on the way of life and on the health of children, in the face of Western civilisation many of the old customs and beliefs are being modified. In this changing environment there is a conflict of cultures which gives rise to increased tension and anxiety which is reflected in uncertainty in dealing with the problems of child rearing. This often results in the unnecessary weaning of infants which, coupled with an absence of knowledge of artificial feeding and hygiene, frequently results in serious morbidity. Often the position is aggravated by a lack of mutual understanding between mothers and medical attendants.

In the rapidly-developing industrial areas there is the additional problem of shortage of housing and basic health services. The rapidity with which such amenities as housing, sanitation, food supplies, schools, child welfare services, hospitals, etc., are provided is related to the prevailing social, economic and political climate.

An aspect of social disorganization which is of particular interest in South Africa is the effect of the migrant labour policy on the health of the Bantu. According to Kark and Cassel [17] its 3 main effects on health are: (1) the increasing failure of agriculture in the rural areas with consequent deterioration in nutrition, (2) the constant introduction of venereal disease and tuberculosis into rural communities by men returning from long absences in industrial areas, and (3) the intra-familial tensions resulting from long separations of heads of families. All 3 of these effects must have serious implications for the children in these communities.

The effects of community disorganization upon the health of children are well known. Since children are the most vulnerable group of the community they are the first to suffer in times of social and economic stress. For this reason the infant mortality rate of a community is considered a fair index of its health. In England and Wales in 1950 the differences in infant mortality rate in social classes ranged from 17·9 per 1,000 live births in social class I to 41·1 in social class V.[18] In South Africa no comparable figures are available, but in the City of Cape Town in the year 1952-3 the infant mortality rate of the white population was 21 as compared with 101 for the non-European population.[19]

Other indices of community health are the prevalence of juvenile delinquency and the incidence of illegitimate births. Both of these have increased greatly among the urban Bantu population in recent years.

Even in the presence of community disorganization there is considerable variation in the ability of families to adjust themselves to adverse conditions. The use made of available resources, both in the family and in the community, depends largely on personal factors.

Several writers[20-22] have stressed the importance of maternal efficiency and knowledge in determining the health of children. Almost invariably the deciding factor has been the 'know-how' of the housewife who best uses the resources of family and community. In South Africa this range of efficiency is well demonstrated in Native townships and shack areas, where many of the worst run, but at the same time some of the best run, homes can be found.

Social Pathology resulting from Disablement. Another set of problems arises with handicapped children. Children suffering from cardiac disease, deafness, blindness, orthopaedic disabilities, epilepsy and mental defect are examples. The difficulties of these children not only affect themselves as individuals, but also result in economic, emotional, and social stress in their families. The assistance of the community is essential in the provision of services which will enable these patients to develop as far as possible into normally functioning members of society.

SOCIAL PAEDIATRICS IN PRACTICE

Modern medical writing abounds with such terms as 'man in his environment', 'social medicine', 'comprehensive medicine', 'the natural history of disease', etc., all of which are manifestations of the tendency to adopt a more dynamic and holistic approach.

On the community level there has been a change in the attitude of the leaders and legislators of modern societies from one of giving charity, to that of promoting social welfare. Governments have accepted increasing responsibility for maintaining and promoting the health of children. This function is demonstrated by the enact-

ment of laws to protect children against abuse and exploitation, and to assist them when they are in need of care. Expectant women employed in industry are given assistance which encourages them to refrain from working for several weeks before and after confinement. In some countries family allowances are paid and, in some, nursing mothers are given facilities for feeding their babies at intervals during their working hours. In most countries to-day the tendency is to keep the deprived child in the home by providing assistance to his family rather than placing the child in an institution.

The State too is assuming more and more responsibility for the care of the healthy expectant mother and her infant, and provides these groups with clinical and other services for the promotion of health and the prevention of disease. It subsidizes the institutions necessary for the education of pre-school and school-age children and may also provide health services at these institutions. Gradually too the special facilities required for the education and rehabilitation of handicapped children are being established. Here the emphasis is placed on the maximum development of the child's remaining capacities rather than on his disabilities.

On the personal level there have been significant pointers to a greater recognition of the close relationship between the child's health and the mother's health, both before and after birth. For this reason mothers are given dietary supplements and taught the importance of nutrition during pregnancy and lactation. The hazards of certain infections in pregnancy as causes of congenital abnormalities are now recognized.

A striking development in ante-natal paediatrics is the emotional preparation of the mother, the husband and siblings for the arrival of a new baby.[23, 24]

Although there are obvious technical advantages in having the mother confined in a hospital, certain social and emotional benefits are lost thereby. Some of these deficiencies, however, are being remedied in various hospitals. Jackson [25] states that 'rooming-in' is an arrangement for maternity patients wherein a mother and her newborn are cared for together in the same unit of space. But in addition it 'signifies an attitude in maternal and infant care and a general plan of supportive parental education which are based on the recognition and understanding of the needs of each mother, infant and family. It is a plan to maintain natural mother-infant relationships, to reinforce the potentialities of each mother and infant, and to encourage the family unit'.

Thoms and Wyatt [26] describe the education of the pregnant woman and her husband on the subjects of pregnancy, labour, the newborn and parenthood.

Kahn [27] has described a premature baby unit in a hospital for Africans (Baragwanath) where for reasons of economy the mothers carry out much of the nursing of their babies. This arrangement, however, has the additional advantage that the mother learns how to manage her premature baby with resources which are readily available to her when she returns home. In this way a valuable educational opportunity is exploited.

Spence,[28] Moncrieff and Walton,[29] and Illingworth,[30] also recognize the value of the part which the mother plays in the management of her sick child in hospital. In some hospitals the mother is accommodated in the hospital with her child, in others the mother is given facilities for daily visiting. Thus the mother and her child derive emotional benefit from being together at an anxious time, the mother learns much concerning the present and future management of her child, and the hospital staff gain valuable information about the background of their patients.

In the field of child development the individuality of the child is recognized, and the harmfulness of treating all children as if they were cast in one uniform mould. Gesell and Amatruda [31] stressed the maturation of the central nervous system as the basis of development, and systematized the gradations in different fields of behaviour. Aldrich [32] went on to show that although the underlying needs of infants are the same, the ways in which they want these needs satisfied may be very variable. He illustrated this fact very beautifully by placing 100 newborn infants on a self-demand schedule on discharge from hospital. At one month 61% wanted to be fed 3 hourly, 26% at 4-hour intervals, and 10% at 2-hour intervals. This attitude of respect for the infant's rights as an individual is more fully expounded in his delightfully understanding book *Babies are Human Beings.*[33] Spock, one of Aldrich's colleagues at the Rochester Child Health Project, has brought this more sensitive and tolerant attitude towards child rearing to the public through a very popular book on child care.[34] The futility of expecting too much of the infant is well illustrated by toilet training, where it is shown that infants before the age of 1-1½ years cannot control their bowel actions because their central nervous systems have not yet reached the stage of myelinization necessary for such control. This attitude also stresses the need for giving the child opportunities for exercising his skills as they develop.

In the pre-school period there have also been changes of attitude. The old idea of day nurseries originated from the need for care of toddlers whose mothers had to work. Thanks to the efforts of such people as Susan Isaacs, the needs are recognized for pre-school children to have opportunities of manipulating their bodies and their physical environment, and to learn to cooperate with other children. This educational aspect is particularly necessary in these days of flat dwellings, working mothers and small families. For the school child, too, education has become more human—more dynamic, more functional—as a result of the work of educationalists like John Dewey, A. S. Neil, and many others. Perhaps child psychology has become too 'soft', but at least we are thinking more in terms of what the child requires and not only what the adult would like.

The attitude to sex education is also undergoing a rapid change and efforts are being made to make sex less sinful and unmentionable. It is reasonable to hope that modern children will be better prepared for parenthood and will suffer less from sexual neuroses.

Child Health as a part of Family Health

Two examples are given which illustrate how problems of child health can be perceived in the total context of the family environment.

In the masterly study in which Spence and his team of workers set out to investigate the health problems of

1,000 infants,[35] they found that they were unable to pursue their objects adequately without investigating the families of these infants. Accordingly, the private practitioners, the staff of the local health department, the University teaching department and the parents themselves cooperated closely in this venture.

The policy of the Government Health Centres in South Africa was based [36] upon a comprehensive programme of family health and medical care. In these Health Centres a combined preventive and curative service is provided by teams of doctors, nurses and health educators. The team attempts to uncover and deal with the underlying causes of ill-health in the community. Health education is employed for the better use of such resources as income, housing, home gardens and food supplies. To improve their health the patients are encouraged to utilize all available educational, welfare, medical and nursing services. The health of children receives considerable attention because it is especially susceptible to preventive measures and because Health Centre practice, like general or family practice, is largely concerned with children.

The Health Centre programme for child health begins in pregnancy. During this period the woman is given health-education, preventive and curative services with special reference to the health of her coming child. In suitable cases delivery at home is encouraged. Continuing care is given to mother and child both in the home and at the Centre by the same team of workers. Through repeated contacts during pregnancy, delivery and infancy, both in health and in sickness, an intimate and effective relationship is developed between families and health workers. A measure of the success of this programme was the infant mortality rate of 60-70 per 1,000 in a Native township served by a health centre at a time when the rate in other model Native townships in South Africa stood at 250-300 per 1,000.

This continuing programme persists in older age-groups of children and all efforts are made to cooperate with existing agencies such as nursery schools, schools, hospitals, welfare organizations etc. When necessary and practical the community is encouraged and assisted in organizing their own community centre, play-groups for children, food-buying cooperatives, etc. It is believed that if the service does for a community what education could enable it to do for itself, then that community is harmed. All efforts are therefore made to encourage families to use their own resources to maintain their health and to assist in the care of their sick.

Finally, in the practice of paediatrics it is important to remember that the ultimate responsibility for the care of children rests in the hands of the parents. For this reason health education is directed particularly towards the mother to increase her efficiency in the rearing of children. Education for health, however, is not the prerogative of any single agency. All health workers, and especially family doctors, have great opportunities for promoting the health of children by virtue of the relationship to the families and communities they serve.

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