Introductory Remarks at Opening Session of Colloquium

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The studies and critical papers submitted by the participants in preparation for this conference reflect certain trends that have been increasingly apparent in the field of child psychiatry during recent decades. They appeared after the Second World War, but the burgeoning of the past ten to fifteen years has been particularly striking. Apart from observation becoming more careful and systematic, closer attention is paid to the reliability and validity of the methods of investigation employed, and there is a wider application of controls. Further the interpretation of findings reflects a hard-headed and critical spirit, regarded not so long ago as the enemy of inspiration and insight.

Some observers may be surprised to discover an entire conference devoted to 'enuresis'. But as one glances at these papers the contemporary look of its socio-medical profile becomes quickly apparent. It provides a good exemplar of some of the commonest and most disabling disorders that challenge contemporary medicine and psychiatry.

Although opinions are not unanimous on this, enuresis seems to exemplify the marked variations in prevalence in different socio-economic groups of many of these disorders, and how they are embedded in a whole matrix of social and medical disabilities. As workers in the Newcastle Thousand Family Survey have found, the prevalence of enuresis shows a typically steep social class gradient. Its associations are with poor quality of home care and with parental strife and disharmony. There are significant correlations also with measures of social maladaption: parental crime and delinquency among siblings being commoner than within families in the population at large (Miller *et al.* 1960, and Miller this volume Chapter 5). There is evidence too that the larger the number of indices of social adversity found, the greater the severity of the enuretic disability that can be anticipated (Douglas 1970).

Unravelling of the tangle presented by such findings is always difficult, and the simplest explanation, that a common hereditary factor underlies the whole conglomeration of disabilities recorded in different generations of the family, has understandably received some attention. The studies of Hallgren (1957) and Bakwin (this volume Chapter 9) have shown that heredity probably does contribute something to causation. But we deal not with the simple major Mendelian genes that could be studied by relatively simple mathematical procedures. Instead there is talk of partial penetrance of a large number of genes each of small effect, which is another way of saying that the subject is very difficult. But hereditary factors can be taken to play, at any rate, a small part. It will also be necessary to sort out familial factors which are not hereditary from those which are.

As the polygenic view of the heredity of the disorder implies that the enuretic is merely an extreme variant of the norm, the suggestion has been advanced that the underlying variable in question is the rapidity or degree of maturation of sphincter control. Enuresis could then be regarded as reflecting a parody of normal development. In old age, similar explanations, in an opposite sense, have been invoked to explain senile dementia, which is regarded according to such theories as a precocious version of the senescence that would afflict all of us, if only we lived long enough. In the case of enuresis, the fact that up to 90 per cent or more children affected are dry by the end of the first five years of life is taken by some as providing confirmation of this hypothesis. One could perhaps be forgiven, however, for judging that it merely restates the problem in other terms.

In leafing through the papers, one soon encounters evidence suggesting that learning, or rather a failure of learning, is involved. Early potting appears to be correlated with earlier sphincter control. And treatments derived from learning theory have achieved some measure of success. But in many cases they fail. In so far as it is faulty learning or a failure to learn with which we deal, in enuresis it often proves extremely difficult to modify.

Here the situation is reminiscent of a number of psychiatric and 'psychosomatic' disorders. To look through the other end of the telescope, in adolescents and adults one is often powerfully impressed with the stressful and warping effect of their early environmental circumstances. There is frequently evidence to suggest that learning has played a part in the acquisition of the maladaptive behaviour with which we are faced. The phobic and other disabling neurotic states of adults and children, and of asthma (in a proportion of cases), stammering and migraine, are examples in point. But, by themselves, methods of treatment derived from learning theory achieve only a limited success. This supports other evidence that something more than learning is involved.

This refractoriness of many cases of enuresis has led some workers to postulate that there are critical periods in the early stages of development during which failures or faults in learning are liable to become permanently imprinted. However, the evidence in favour of imprinting of learned responses in this manner is, in general, tenuous and unimpressive.

There is little evidence that the effects of early learning have any special propensity for becoming firmly ingrained. It is repeated reinforcement by stimuli from an unchanging environment, rather than the existence of any critical or sensitive period, that underlies the resistance to modification of traits and habits learned in early life. This does not, of course, preclude the possibility of a sensitive period having importance specifically for enuresis. Such a hypothesis has to be evaluated on its own merits, and it is issues such as this that will doubtless be clarified during the colloquium.

In the severe long-standing case, emotional disturbance is often prominent in child and parent alike. And the high prevalence of enuresis in more global forms of maladaption such as delinquency, both in the Gluecks' (1950, 1962) classical studies and in more recent investigations (Jonsson 1957), has led some workers to concentrate on emotional interactions within the family as the most likely root causes. Their relevance in management and for enquiries into the problem is indubitable. But their importance in relation to other factors, their independent contribution to variation

within the total matrix of factors, does not appear to have been studied in any rigorous manner.

However, for those who take a bird's-eye view of the environments in which enuresis appears to be concentrated, this disorder is prone to present as merely one of a whole range of emotional, psychosomatic and socially maladaptive responses which arise within a certain socio-familial context.

At the other extreme of the spectrum of theories of causation are the views of those who take as their starting point the indubitable organic factor in a very small proportion of cases. They would cut clean through the complexities by suggesting that some disturbance of neuro-muscular co-ordination is the specific central defect, while other factors, though doubtless relevant, are non-specific, peripheral, and unimportant. The fact that controlled therapeutic trials have shown that pharmacological agents in the form of tricyclic compounds are of indubitable (even if temporary) therapeutic value is invoked to buttress such views.

It is here that taxonomic studies, such as those undertaken by Dr. Kolvin and his group, can be of assistance, not only in differentiating separate syndromes, but also in providing a more orderly picture that makes it possible to deal with a disorder in relation to a whole range of inter-dependent variables, all of them potentially significant but impossible to study in isolation from one another. Such studies may make it possible to take, at any rate, the preliminary steps in placing the related factors in some rough order of importance.

The management undertaken by the therapist, whether he is a child psychiatrist or paediatrician, will usually reflect an awareness that there is very likely some measure of truth in all such hypotheses. He will seek the assistance of his social worker colleagues to mitigate the adverse pressures of the family environment, which is often marked by disharmony, separation, divorce or other factors that engender insecurity and anxiety. The wider social environment may have contributed to the poverty of care received by the child and to other maladjustments in the family; hence rehousing may be judged to be desirable. The mother may require instruction in child care and family management, and her anxiety will often need alleviation. It often helps to explain that children achieve bladder control at different ages, and that the popular expectation that it has to be established by the age of three, four or five years is arbitrary. The mother may require formal psychological help, and this will not be considered inconsistent with prescribing medication or a bell-and-pad apparatus for the control of the main symptom, the relief of which will sometimes break a number of vicious circles in a striking manner. In other words, the therapist implicitly adopts a multifactorial approach towards the problem.

But the strategy most likely to prove successful in the scientific attack upon disorders in which so many factors appear to interact at different levels to produce the final result (without general agreement as to the specific, necessary nature of any one) is another matter. There is no satisfactory solution to this problem. A network of causes which may at first glance appear to have a simple underlying pattern tends to prove a maze in which the investigator becomes lost and disorientated. Perhaps some hints as to how to make headway will emerge from this conference. It is 'minute particulars' such as enuresis that sometimes teach the most valuable lessons.

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