FIG. 3—Turner's Syndrome. A schematic drawing to show ptosis, neck webbing, "shield-like" chest, and increased carrying angle.

When puberty is delayed in girls on account of gonadal dysgenesis oestrogen replacement therapy is required to bring about breast development and maturation of the external genitalia. Treatment is started with ethinyl oestradiol but can be conveniently maintained with one of the proprietary preparations of the contraceptive pill. It is administered cyclically to allow for withdrawal bleeding, which may also have a beneficial psychological effect. Such treatment should be withheld until the optimum or maximum height has been achieved as it will accelerate epiphyseal closure and arrest any further growth. In girls with Turner's Syndrome there is very little growth beyond the age of 15 years. In pure gonadal dysgenesis it may be desirable to start treatment early so as to avoid eunuchoidism.

In a girl with dysgenetic gonads who also has a cell line with a Y chromosome there is a risk of developing a gonadoblastoma, which may become malignant. The vestigial gonads should therefore be removed.

Testicular Feminization

Primary amenorrhoea associated with absent or diminished pubic hair but a normal growth spurt and feminization of body configuration, including breast enlargement, occurs in the very rare condition of testicular feminization. These girls, however, have no ovaries, Fallopian tubes, or uterus, and the vagina is short and ends blindly. Instead, they have testes and male ducts either intra-abdominally or in a hernial sack, and they have a male sex chromosome constitution. This condition is due to a mutant gene which may be inherited through the mother as an X-linked recessive or an autosomal sex-limited dominant. There may therefore be similarly affected "sisters" or maternal "aunts." Incomplete forms of this disorder are also thought to occur. Treatment should be aimed at first at enlarging the vagina. After "puberty" the testes should be removed because of the risk of malignancy, and this introduces the need for replacement oestrogen therapy. There is, of course, no prospect of inducing "menstruation."

Conclusions

"Delayed puberty" is most often due to physiological late development in girls and boys who will eventually undergo full sexual maturation. The delay may occasionally be due to generalized disease and very rarely may be the mode of presentation for a number of genetically determined disorders of sexual differentiation. Treatment and advice should be aimed at minimizing the social embarrassment and psychological trauma. When necessary normal adolescent changes should be accelerated or simulated as far as possible by hormonal treatment.

Scientific Basis of Clinical Practice

Clinical Psychology and the General Practitioner

ANNE BROADHURST

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Clinically trained psychologists are now sometimes employed as community psychologists rather than as hospital clinical psychologists. Whatever their employment or financial support, more and more of them are working in the community in, for example, citizens' advice bureaux, prisons, schools, health centres, and rehabilitation units. Traditionally the clinical psychologist has had a great deal to offer in connexion with the disorders of behaviour that find their way into mental hospitals and psychiatric clinics. Nevertheless, in addition to the trend towards treating mental patients in general hospitals, there is also a growing realization that dis-

orders of behaviour are certainly not confined to such psychiatric patients. There is a disorder of behaviour when a child falls behind his classmates in schoolwork; when a discharged prisoner blatantly steals and is returned to prison; when parents complain that their lad is surly and rude at home, though he may conform to social norms when away from home; when a married couple rouses the neighbourhood with quarrelling and breaking of crockery. Although these are already fairly extreme examples, they are not all likely to come to the psychiatrist.

Disorders of behaviour are in fact all around us and this should come as no surprise when we remember that behaviour is all around us. The ubiquity of behaviour is what makes psychology such an interesting study. Moreover, none of us can avoid observing behaviour—our own and others'—and making predictions from our observations. Psychology is about just this. Psychology, the scientific study of behaviour, starts,

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as do all sciences, with observations (of behaviour) and proceeds to making predictions and generalizations from these observations. Of course, in true ivory-tower fashion, the psychologist goes on to test his predictions by experiment. But so far as the observations and predictions go we are all of us of necessity lay psychologists. My aim here is to show where we can go wrong as amateur psychologists and then, further, to show how general practitioners and psychologists are getting together to avoid these mistakes.

One of people's great prides is in their ability to make judgements about other people. An early theory¹ was that intelligence, especially mental deficiency, and even criminality could be judged from visible abnormalities of the face and skull, but this notion was discredited when carefully tested. If, then, even extremes of intelligence cannot be judged on appearance, how much less can we hope for accurate judgement in the middle ranges of ability. And if intelligence is not judged successfully from the face, can it be judged by other personal characteristics—such as conversation? Conversation could indeed be an index of general ability but is rather more likely to give us an estimate of verbal ability than of general ability. Failure to realize that these are different and sometimes quite discrepant has led to many an error, particularly when making a judgement of an attractive, chatty young defective (or, conversely, of a taciturn, but highly intelligent person). Repetitive pleasant verbalization may give quite a spurious impression of intelligence not later borne out in problem solving or general coping behaviour even in the verbal areas.

We also believe that we can judge the character of other people. But person perception studies² show that, far from being good judges of other personalities, all of us have a notable tendency to see other people as like one another, and indeed as similar to ourselves. We can, of course, discriminate between people but we do see others all as toned down slightly in the direction of being like ourselves. "Well," you might say, "I may be no great judge of character if a patient arrives out of the blue and you ask me to describe him in a thumbnail sketch, but I do recognize emotional distress when it is presented to me in my surgery." Darwin initiated research in this area since he believed that our emotional expression was a vestigial action of some relevance to the situation. Thus, disgust is represented by mouth and lip movements which could be the remains of spitting out or retching actions. He tested this hypothesis by having people look at photographs and state what emotion was portrayed.³ He produced some supporting findings but Feleky⁴ failed to confirm this and later workers have been far from convinced that Darwin was right.

Interviews

Another of our mistaken beliefs is our ability to make accurate conclusions about people from an interview. If the interview is defined as a face-to-face verbal encounter between two or more individuals with an aim or a purpose then even the fairly casual chat across the garden wall can at times be an interview. Far more often the interview has a more serious aim than the persuasion of the neighbour to lend the lawnmower. We make decisions about whom to employ, or on which of our patients to recommend to the Family Planning clinic, or even decide whom we will marry on the basis of interviews though we may have other behavioural observations to aid the interview. But how reliable and valid is this interview procedure? The answer is not very reliable at all.⁵ For example, Lansing and Blood⁶ found that interviewees tend to exaggerate prestigious incidents in their lives. For example, they over-report the number of times they have travelled by 'plane. Closer to medical interests is the finding that interviewees under-emphasize or under-report illness.⁷ Interestingly enough there is a very consistent amount of under-reporting—by

10% for reporting hospital admissions and as much as 50% for reporting chronic conditions.⁸

The uncertainty of judging holds good even when quite a long period of observation is allowed and the problems are intensified when the interview is relatively brief. Not surprisingly, the same thing has been found for interviewers as for other observers making judgements about another person. Interviewers tend to make judgements about those they interview that reflect their own personalities. In this, one easily recognizes the Freudian mechanism of projection and, indeed, this is one area in which Freudian observation has been time and again verified. Interviewers do, unless specifically trained against it, tend to project their own self-images, their own defences, their own biases on to the person interviewed. It was for this reason that Freud recommended a personal analysis for all would-be analysts.

Interestingly, no one has shown, or even seriously claimed, that a person who has undergone psychoanalysis is free from bias and hence a particularly good person to conduct interviews. Quite a lot of research has, however, been aimed at identifying those who are thought to show particular skill at interviewing, perhaps showing a general ability to judge others. An early study by Vernon⁹ had people taking tests of intelligence and of personality and also making ratings of themselves and of men they knew well and of relative strangers. Accuracy was judged by comparing a person's judgement with the test results of the person judged. Vernon found three types of judge: people who judged their friends accurately; people who judged themselves accurately; and people who were good judges of strangers. Nevertheless, there were no individuals who could judge every type of person accurately and so no evidence for the existence of a general ability to judge character well. Later, Estes¹⁰ in a different type of study showed that some aspects of personality were more accurately judged than others, thus providing more evidence against the notion of a general ability to judge character.

Teamwork

Hence all of us can too often become badly unstuck if we follow traditional beliefs without empirical or experimental tests. The psychologist is of course part man-in-the-street and part scientist. Even the psychologist can blunder when he behaves in the first rather than in the second of these roles. The aim of all must be to increase our certain facts and to use these wisely. Thus if we are concerned with interviewing, and many of us are, then we can study the research findings for how to improve our interviewing techniques and increase at least moderately the accuracy of our conclusions.^{11 12} Another welcome trend is for the amateurs to call on the professionals for help. Examples of happy co-operation between doctors and psychologists are rapidly growing. In the Birmingham region alone I know of general practitioners who regularly refer patients directly to a clinical psychologist. Clinical psychologists have a well-earned reputation as modifiers of behaviour. But often the doctor will ask himself questions concerning his patients such as, "Is he malingering? overworking? frightened? or fatigued?" These are questions which may not be answerable by standardized psychological tests—and this is why I have preferred not to concentrate on tests in this article. Some problems may not even be soluble at all on the basis of present knowledge. But in so far as the problem relates to behaviour then the psychologist has a good chance of being able to offer a solution and is certainly the best person equipped by training and the orientation of his profession to do so.

The prime example of medicine/psychology teamwork is in the work of Ley and Spelman¹³ put together in most readable form in their book *Communicating with the Patient*.

They were concerned with the failures of communication that seem to occur between the patient and his doctors. Having reviewed the literature on this subject and made their own observations, they then carried out some limited studies on patients, followed by some more controlled experiments on volunteers and finally returned to the clinic to test out the findings from the first two studies—an excellent example of the progression of applied research. They found that patients, asked as they left the surgery what the doctor had told them, were grossly inaccurate in their recall of the instructions given to them. In this short interval they had forgotten altogether one-third of everything that they had been told and a half of the often truly vital instructions. Later experiments indicated that the amount remembered is to some extent an inverse function of the total amount of information supplied (moral: we must limit our instructions and information to the essentials); that writing down information does not hinder (or, indeed, aid) recall (moral: we should encourage writing of the most essential items so that the client has a permanent record to refer to when memory fails); that the patient's level of anxiety is a potent factor in determining how much is remembered (moral: we must become sensitive to anxiety and aim to reduce it to increase our communication strength); and that the position of items in the total group of instructions is a major factor in whether or not there is recall—the earliest items in the list being recalled best. Return to the clinic with methods of imparting information modified along these lines yielded the encouraging result that now the important information was better recalled than before. By modifying their communication techniques in accordance with the experimental findings, Ley and Spelman had achieved an improvement in

the doctor/patient relationship as well as pointing the way for further joint work by psychologists and general practitioners.

Obviously it is too early to think of every general practitioner having a psychologist at hand, but already many group practices have one on call. Clinical psychologists at local hospitals will often welcome inquiries for their services in behavioural problems especially as this is consistent with their increasing involvement with the community beyond the hospital walls.

This article is based on a lecture given in the Birmingham course under the title "The Scientific Basis of Clinical Practice" (see B.M.J. 27 November 1971, p. 510).

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Days Past

Life and Death in Shakespeare's London

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Among the many treasures stored in the Guildhall Library lie the old parish records of St. Botolph without Aldgate. They are now made available to a wide circle of readers thanks to the research of Dr. Thomas Rogers Forbes, who has recently published his account of them.¹

In the reign of Elizabeth and James I the chroniclers of this 45-acre parish were part-time clerks, and their formal catalogues of human events were often spiced with comments founded on gossip and personal observation. John Clerke, who began his service in 1616, was a girdler with a caustic pen and a watchful eye for premarital conception. One bride and her groom he described as "two beggars both of the Scumm of our parish," while another bride was "a peece of Crackt Stuff." But for unfortunate Anthony Haddocke, the product of "a Base Strumpet" by "a base varlet," he penned this prayer in the margin: "God send the Child more grace then the wicked Parents." Of an unmarried mother who was delivered under the church wall one January night he wrote "There are too manie . . . now adayes, more is the pittie," and of a musician, "a heavie widower the space of three whole weekes," he added that he would have

married earlier but "he was loth to be at the charg of a licence." Clerke's beautiful handwriting ceases to adorn the parchment pages abruptly—and ominously—in the plague year of 1625.

These records of St. Botolph parish, as disclosed by Dr. Forbes, are important because they are virtually day books rather than the simple parish registers introduced in 1538 on the command of Thomas Cromwell. Thomas Harridance, an ironmonger, was the clerk (" . . . a verie Careful and Industrious man in his place") on 9 February, 1586 when he reported the "Ringinge for Ieoye that the queene of Skotte was beheaded," and there are also other references to contemporary events outside the parish. Religious sectarian prejudice of the time is shown in 1617 when "a young Maid of the Minories-street" is buried at night and without a service "because she was accompited to be a Recusant."

Causes of Death

In determining the cause of death the clerk sought the advice of "the Searchers" ("antient women, sworn to their office"—Graunt²), who formed their own opinion at the corpseside, taking due note, one supposes, of gossip and scandal. If necessary he would convene a "crowner's quest." Dr. Forbes's analysis of the causes of the 4,253 deaths which occurred in the period 1583-99 shows that the plague accounted for 23.6%, followed by

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