Symptom Tolerance

We can at present offer no more than palliative treatment to many of our psychiatric patients. However, we can sometimes help if we explain our limitations to the patient and encourage him to accept his symptoms and to carry on his life despite them. Those who can do so often find that their lives are transformed. Later their symptoms may disappear, possibly because of a remission of their illness, which would have occurred in any case.

There is, however, a hard core composed of psychiatric patients who in the present state of knowledge are virtually untreatable, but who do not need to be confined within a hospital. They are a constant worry to their G.P.s. Many of them have personality characteristics which make them tiresome and unrewarding patients. Even if the G.P. fails to give such patients insight into the nature of their illness he should try to see it in perspective himself. He should no more feel personally responsible for medicine's present inability to relieve these patients than he does for medicine's present inability to relieve many organic disorders. The doctor must learn to tolerate his patients having symptoms which he cannot cure.

Symptom tolerance can be a rewarding exercise for both patient and doctor.

Postgraduate Training

Though psychiatry presents G.P.s with some of their major problems, it was proved difficult to organize helpful refresher courses in it. Seminars of the type already referred to which meet regularly for years to discuss details of psychotherapy and the handling of the doctor-patient relationship have enthusiastic advocates. However, the reported results do not show that this is a method which should be generally adopted, and it is difficult to justify devoting so much time to a single technique.

I think that the following are some of the matters with which G.P. refresher courses could profitably deal.

Diagnosis.—A complete diagnosis is rarely possible in any branch of medicine, but diagnosis must form the basis of rational treatment. It is difficult to agree with Balint (1957) when he dismisses diagnosis as "irrelevant diagnostic tags." Diagnosis is irrelevant only if there is no effective treatment or if all conditions are treated in the same manner.

Therapeutic Techniques.—Instruction is needed in techniques that can be applied in practice, of which two come to mind: first, one of the well-tried methods of brief psychotherapy, and, secondly, hypnosis. G.P.s should have the possibility of becoming acquainted with hypnosis and its capabilities and limitations, even if they do not choose to use it themselves.

Physical Treatments.—All doctors use drugs in treating mental disorders, and most would like to know how far a rational basis for traditional medicaments is possible. One would also be grateful for any guidance through the maze of new drugs and their accompanying glossy promotion literature with which we are becoming surrounded.

Psychological Measurements.—G.P.s would like to know about methods of measuring different traits by

such procedures as intelligence tests and personality inventories, and to know how they can be applied clinically.

Research.—Information about research at the growing points in psychiatry is needed, particularly relating to the biochemical studies which seem to be breaking down psychiatry's previous frontiers.

Summary and Conclusions

Mental illness provides one of the main unsolved clinical problems in general practice. Much of it is amenable only to palliative treatment in the present state of knowledge and there is a hard core which is virtually untreatable.

Psychotherapy is a well-tried and valuable technique, but as a specific treatment it is effective in only a minority of cases; training in psychotherapy should form only a small part of postgraduate courses for G.P.s. The G.P. is greatly in need of help in the formidable problem presented by the patients who are not relieved by psychotherapy.

The potentialities of psychotherapy have been adequately explored and reported. There is little need for further descriptive accounts with detailed case-histories. Controlled studies of the value of particular treatments are needed, though they are difficult to carry out.

The next big advance in the management of mental illness in general practice is likely to result from the elaboration of new methods of physical treatment.

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VISION SCREENING OF VERY YOUNG OR HANDICAPPED CHILDREN

BY

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It is now generally agreed that the younger the age at which visual defect is diagnosed and treated the more favourable is the outlook for recovery or improvement of function. Earlier ascertainment depends upon appropriate methods of assessment. For some time I have been interested in the problem of testing the visual acuity of children, especially the very young, the mentally handicapped, the partially sighted, the deaf, those with cerebral palsy, and those with multiple handicaps.

Many years ago, as a result of discovering several school children with high myopia, whose disability had been missed until 8 or 10 years of age, and other children whose severe visual defect had been mistaken for mental backwardness, Dr. Gertrude Pugmire and I came to the conclusion that it was desirable to carry out routine vision-testing of 5-year-old school entrants.

The picture tests then available did not prove satisfactory, especially with retarded children, many of whom found difficulty in relating the black-and-white

stylized pictures to the solid objects they represented. The E test was given an extensive trial, but, although we found that in our own hands under controlled conditions in clinics it gave better results than the picture charts, we were not satisfied with the results we obtained under less favourable conditions in schools. Many of the school nurses we consulted also admitted to us that they found difficulty in interpreting the young child's responses, especially with the last two lines.

In our experience, there are three main drawbacks to the E test. These also apply to the Sjögren Hand test. (1) Choice is very limited: only the four cardinal positions can usually be employed, since young children find difficulty in coping with diagonals when required to indicate or reproduce the position of the presented symbol with their own hand or with a wooden model. (2) Children under 7 years are often confused between lateral positions, although they rarely confuse up and down; hence, when the child indicates an incorrect lateral position he may not be seeing the letter, he may be merely guessing, or he may be seeing it correctly but is confused in reproducing it. (3) Although the E is measured accurately according to Snellen standards, the pattern presented is constant, so that the test does not give further information regarding the child's ability to discriminate differences in configuration, which it is desirable to have.

Children of 5-7 Years

After prolonged observation of children in infant schools in order to discover which letters they first learned to recognize and to write spontaneously, we designed two charts, one using script and the other block letters. The latter proved the more satisfactory (Pugmire and Sheridan, 1930). This block-letter chart has recently been revised in the light of greater understanding of the psychological principles involved. The final chart contains nine letters selected according to the now well-established fact that the average child can copy a vertical line at 2 years, a horizontal line at 2½ years, a circle at 3 years, a cross at 4 years, and a square and triangle at 5 years. (At 7 years he can copy a diamond.) The nine letters chosen, H L T C O X A V U, are built on these familiar and copyable shapes. The letters are well spaced, with no more than three on any line.

Procedure.—The chart is hung in a good light at the child's eye-level and the reading distance of 20 ft. (6 m.) is accurately measured. One eye is then efficiently occluded. The child is instructed to say the letters to which the examiner points if he knows them; if not, he is shown how to copy them by drawing them in the air with his index finger (Pugmire and Sheridan, 1957).

V	A	T	V	A	T	V	T
C	O	L	V	O	T		O
H	U	X	H	O	X		
	U		U			H	X

A, 9 letters. B, 7 letters. C, 5 letters.

FIG. 1.—Key-cards.

Some of our colleagues, while admitting the value of the additional information obtained from personal observation of the child's performance, found this procedure slow for screening purposes, and difficult to interpret when the child drew minutely. To solve this difficulty a nine-letter key-card was designed (Fig. 1A).

This is given to the child, and he is asked to "point to the letter on his card which is the same as the one the examiner is pointing to on the chart." This procedure provides an easy, rapid, and interesting screening test for normal children of 5-7 years and for handicapped children of similar mental level. The result of routine testing by 15 different examiners of a total of 1,552 5-year-old school entrants has recently confirmed our experience that the normal vision of 5-year-olds should be regarded as R. 6/6 and L. 6/6 (Pugmire and Sheridan, 1960). Inability to see 6/9 in one or both eyes constitutes a visual defect. The chart is not suitable for normal children over 7 years, who need more difficult material. Incidentally, the letters on the key-card correspond to Snellen 6/9 so that this card itself can be used as a screening device for older children in an emergency.

[*Note.*—Some immature children in this age group find it difficult to maintain rapport with the examiner at 20 ft. (6 m.). For these children the modified procedure described below can usefully be employed.]

Children of 3-5 Years

In connexion with a further piece of personal research I found it necessary to devise a means of testing the visual acuity of pre-school children, normal and handicapped. Study of the literature was unhelpful. Apart from the E, Hand and picture chart tests the only other test mentioned for very young children was Worth's balls. I have never seen the material for this test, and when, from a study of the descriptions available, I assembled a set of balls of various sizes and tried out a version of my own, I found the testing situation difficult to control and the results impossible to assess. I was therefore obliged to evolve new procedures. Three sets of material were considered to possess promising potentialities—single-letter cards, wooden blocks in different shapes and sizes, and miniature toys. The first and last have now been given extensive trials. The shaped blocks are still under investigation.

Letter Cards

In testing children under 5 years three important findings emerged. (1) Most of them found it difficult to maintain rapport with the examiner at the full 20 ft. (6 m.) for the entire duration of the test. (2) They responded more satisfactorily when presented with single-letter cards measuring 5 by 5 in. (12.5 by 12.5 cm.) than with the whole chart. (3) Although the children were unable to copy the nine letters before 5 years, they could match them at a younger age. One obvious solution was to test in a mirror at 10 ft. (3 m.) which entailed discarding two letters, C and L, of the original chart, and preparing a key-card of the remaining seven "square" letters (Fig. 1 B). The child and the examiner sat side-by-side facing the mirror. The examiner then held up the card above or beside the child's head so that he was obliged to look into the mirror in order to see it. In practice this worked satisfactorily, but in schools and nurseries it was not always possible to obtain a mirror of suitable size and position. I therefore decided to present the original single-letter cards at 10 ft. (3 m.) and to add two extra letters corresponding in dimensions to the 6/4 line, giving the equivalent of 6/8 at 10 ft. The full complement of the letters used was thus: 6/60 O; 6/36 X; 6/24 V; 6/18 A, T; 6/12 U, X; 6/9 H, T; 6/6 O, X; 6/4 T, V. This was considered and in practice proved to be a

sufficiently refined screening test. The average child of four years is quite capable of matching all seven selected letters. Similarly, the majority of 3-year-olds were found to be capable of matching the five simpler letter shapes, T, H, O, V, and X at 10 ft. A few 2-year-olds can do this test, but some confuse V and X. In this case, X can be covered, which still gives a choice of four differently shaped letters (Fig. 1, C).

Procedure.—The child is given the appropriate key-card. The examiner then shows his own big O, saying: "I've got one like this and you have got one. Show me yours . . . Good." If necessary—for example, with the deaf or mentally handicapped—the examiner can take the child's hand and place his index finger on the correct letter. When the examiner is satisfied that the child understands the procedure, one eye is covered (an ordinary plastic shade is suitable provided it fits) and the test is carried out for right and left eyes separately at 10 ft. At least one letter of each size is presented down to line 12 and thereafter both letters for lines 6 and 4. A good light is essential, and the card must be presented at the child's eye-level. A little preliminary coaching at home or in the nursery school will improve performance and cut down the time needed for each child.

Standards.—This procedure can be used with all normally intelligent children of 4 years (seven letters), with approximately 80% of 3-year-olds (five letters), and with about 30% of 2-year-olds (four or five letters). The child with normal vision may be expected to match down to the smallest letters, with each eye separately. If he cannot match the two final letters—that is, the equivalent of 6/8—it is advisable to retest within six months. If he falters on the two "6" letters—that is, the equivalent of 6/12—it is safer to refer him immediately for an expert opinion. Any child with squint or history of squint should be referred to a consultant whether or not the vision is normal.

Near Test.—Although some ophthalmologists consider it is unnecessary (Ingram, 1960) I was anxious to find some means of testing the near vision for two reasons: (1) to discover whether the child with poor distant vision could see well or badly close by, and (2) to be able to record the recovery of vision in an amblyopic eye when the good eye is occluded. Experience has taught me that in the course of normal development the child's "spatial world"—that is, his field of continuous visual and auditory attention—gradually expands from within a few inches distance from his eyes and ears at 5–6 weeks to full adult range by 5–6 years. Moreover, I have found, as Guibor (1959) has also recently suggested, that in the treatment of amblyopia the near vision often shows signs of recovery before the distant vision. A suitable card of graduated block capital letters, measured as closely as possible to standard N sizes, was therefore prepared. This has proved useful not only for young children but also for older non-speaking or illiterate children. The same matching procedure is used.

Test With Miniature Toys (1½–3 Years)

This test was first evolved for use with severely handicapped children and especially for those whose opportunities to learn from experience had been limited and who were not only unable to match single letters but were also unable to name or match coloured pictures pasted singly on 5 by 5-in. (12.5 by 12.5-cm.) cards. Fortunately most of them had experience of playing with

toy motor-cars, aeroplanes, dolls, wooden blocks, balls, and various domestic objects. I therefore decided to investigate the possibilities of using miniature models of these. The results were promising. The toys eventually selected were car, plane, doll, chair, knife, fork, spoon. In order to discover the approximate mental age required, the test was then tried out with normal day-nursery children, who co-operated with gratifying enthusiasm. It proved suitable for application from about 20 months up to the age when the letter cards could be applied. Testing procedures suitable for still younger children are under investigation.

Procedure.—The examiner asks the child at conversation distance to name the toys shown. With normal children even the youngest usually know the car, doll, chair, and spoon. The majority of those over two years can cope with all seven toys. Having confirmed that the child understands the procedure, the examiner withdraws to 10 ft. (3 m.) and, presenting one of the toys, asks the child: "What's this?" It is important that the toy should stand out clearly against its background. I usually place it on a strip of black velvet. If the child cannot speak intelligibly he is given a duplicate set of toys and requested, by signs if necessary, to indicate the one which is the same as the one the examiner has presented. In this case the examiner's and the child's car, chair, and doll's dress should be of different colours or the child may make the more primitive match by colour rather than form. Whenever possible two sizes of miniature knife, fork, and spoon are used. The difference between the smaller fork and spoon calls for very fine visual discrimination. The test should be given with each eye separately. If the child will not tolerate the plastic shade it may be possible to persuade him to look through a 1-in. (2.5-cm.) hole in a highwayman's cloth mask. The near vision can be tested by asking him to pick up small sweets, crumbs, pieces of thread, or "pills" of cotton wool.

Although it has not been possible to determine the precise relationship between the miniature toys and the Snellen letters, this test has proved clinically useful not only in establishing that the child can see small objects at 10 ft. but also in demonstrating the difference in visual acuity between the right and left eyes. The need for early detection of amblyopia in young children has been stressed by Cole (1959). It is important that the medical examiner himself should observe how the child behaves in the test situation, since the manner of his performance is often as revealing as the final result, perhaps more revealing. Hence these tests are not intended for large-scale routine screening by ancillary personnel.

In order to give valid results it is essential to observe the following conditions: the distance should be measured accurately; the toys described should be used; the eye not under test should be properly occluded; the examiner should be experienced in the handling of young children; the child should be given as much explanation of the "games" as is within his understanding; and the mother or other familiar adult should be in attendance.

Children "At Risk."—Although it is impracticable to apply vision screening tests to all infants and young children, follow-up of certain groups "at risk" of visual disability is desirable. These include the children of mothers who have suffered from rubella, toxoplasmosis, or toxæmia during their pregnancy; babies who have experienced premature, prolonged, or difficult birth,

especially those to whom oxygen has been administered in the neonatal period; children with cerebral palsy, galactosaemia, or lipid diseases; deaf children; mentally retarded children; children with myopia or other serious visual defect in the family; and all those with squint or a history of squint.

Summary

A graded series of simple clinical vision tests which have proved useful for young children and children with various physical and mental handicaps is described.

Two sorts of material were used according to the age and ability of the child—that is, Snellen letters and miniature toys.

Children of 5–7 years (and handicapped children of corresponding mental level) were tested with a specially designed chart at 20 ft. (6 m.). It was found that normal vision at this age is R. 6/6, L. 6/6.

Children of 3–5 years were tested with single-letter cards at 10 ft. (3 m.). It was found that normal vision at this age approximates R. 6/8, L. 6/8.

Children of 1½–3 years were tested with seven miniature toys. The test proved clinically useful in demonstrating visual acuity for small objects at 10 ft. (3 m.) and in detecting differences in functional ability between the right and left eyes.

The help given by Dr. G. E. Pugmire in the preparation of this paper and in the investigations which preceded it is gratefully acknowledged.

The material for these tests can be obtained from the National Foundation for Educational Research, 79, Wimpole Street, London, W.1.

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MATERNAL DEATHS IN ENGLAND AND WALES, 1955–7

MINISTRY REPORT ON CONFIDENTIAL INQUIRIES

The second report on "Confidential Enquiries into Maternal Deaths in England and Wales," which covers the period 1955–7, was issued last week by the Ministry of Health as No. 103 in its series *Reports on Public Health and Medical Subjects* (H.M.S.O., London, price 4s. net). This report, of which the *Journal* received an advance proof, was the subject of editorial comment in our issue for July 9 (p. 123). Here, the main findings are summarized. The first report on maternal deaths (No. 97 in the Ministry's series), with whose findings those in the present report are compared, was issued in 1957 and covered the years 1952–4. The second report is by Mr. Arnold Walker, F.R.C.O.G., Mr. A. J. Wrigley, F.R.C.O.G., Dr. G. S. W. Organe, F.F.A.R.C.S., Dr. Roma N. Chamberlain, and Dr. W. J. Martin, D.Sc. The method of inquiry was the same as in the first series.

Plan of Report

After a short introductory chapter the findings in nine major causes of maternal death are analysed. There is then a section on the 1957 Asian influenza epidemic and maternal

mortality. Finally, the "avoidable factors" in the antenatal period, during labour, and during the puerperium are discussed, and the report ends with a note on prevention. Tabular data are given as an appendix. The nine major causes of maternal death discussed in the report are: (1) Toxaemia of pregnancy, (2) haemorrhage, (3) pulmonary embolism, (4) abortion, (5) cardiac disease associated with pregnancy, (6) caesarean section, (7) deaths due to complications of anaesthesia, (8) sudden death in labour, and (9) rupture of the uterus.

During the period reviewed there were 2,149,396 births and 1,112 maternal deaths directly due to pregnancy and childbirth. Of these deaths, 861 were the subject of inquiry. In addition, 339 out of 368 "associated deaths" (deaths due to disease occurring in pregnancy or childbirth) were inquired into. Since the previous series there has been a fall from 43.1 to 40.9% in the proportion of deaths with avoidable factors due directly to pregnancy and childbirth. This is ascribed mainly to a "remarkable fall" in the number of deaths from post-partum haemorrhage with retained placenta.

The total number of maternal deaths directly due to pregnancy and childbirth in the years 1955–7, both those recorded by the Registrar-General and those here reported upon, fell by about one-fifth compared with the years 1952–4, despite an increase in the total births from 2,079,275 to 2,149,376. A fall of this order occurred among all causes of maternal death with the exception of haemorrhage, pulmonary embolism, and sepsis. Deaths from haemorrhage showed a greater fall, while deaths from pulmonary embolism and sepsis remained much the same. If the deaths due to pregnancy and childbirth were arranged in clinical groups the four largest groups had undergone some change in their relative importance as compared with the 1952–4 series as follows:

	Number of deaths		Percentage of total deaths	
	1952–4	1955–7	1952–4	1955–7
Deaths due to toxaemia (including toxaemic accidental haemor- rhage)	246	188	22	22
Deaths due to haemorrhage (ex- cluding toxaemic accidental haemorrhage)	188	121	17	14
Deaths due to abortion	153	141	14	16
Deaths due to pulmonary embo- lism	138	147	13	17

Toxaemia of Pregnancy

In 1955–7 toxaemia of pregnancy still remained the most important cause of death in childbirth, accounting for just over one-fifth of the deaths directly due to pregnancy and childbirth. There were 188 such deaths, compared with 246 in the 1952–4 series. Of these, 46 women died undelivered, four miscarried, 67 had stillbirths, 60 had live births, and 11 had twins. This was a much higher proportion of twins than among all births. The proportion of cases with avoidable factors had risen from 52% in 1952–4 to 54.8%.

Faulty antenatal care was by far the most serious and most frequent avoidable factor, states the report, and the faults recorded in this series would be regarded by most doctors as inexcusable in these days. Greater emphasis and wider appreciation must be given to the vital importance of selection of cases for hospital confinement. No doctor or midwife should ever willingly agree to confinement out of hospital for women in the older age-groups, who might have borne more than four children previously, and especially when previous pregnancies had been complicated by pre-eclamptic toxaemia. Shortage of hospital beds did not seem to provide an avoidable factor in this series, but it would not be possible to say whether indirectly it contributed to the death of these women.

Haemorrhage

There were 138 deaths from haemorrhage, of which 72 (52.2%) had avoidable factors. This compared with 220