MILIEU AND THE INTEGRATED TEAM APPROACH WITH ADOLESCENT AND YOUNG ADULT PSYCHIATRIC PATIENTS—A PRELIMINARY REPORT*

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In April 1966, in accordance with the principles of the integrated team approach to therapy as enunciated by Moross,' a unit for female adolescents and young adults was inaugurated at Tara Hospital. This unit caters for psychiatrically disturbed females ranging in age from 14 years to the mid-twenties, who require inpatient care and are containable in an open competitive milieu. In all other respects the patients are unselected. The unit is self-contained, with its own full-time staff and activity areas, though the latter are integrated into the over-all hospital milieu. Embraced in the term ‘team approach’ is a coordinated multidisciplinary therapeutic programme whose goals are primarily re-educative, socializing and supportive.

This preliminary report attempts to evaluate at an empirical level: (a) the therapeutic mechanisms operating within the unit and their short-term effectiveness; (b) the processes of interaction and communication existing within a closely-knit unit and the over-all milieu; (c) the advantages and disadvantages of such a unit both to staff and the young psychiatric patient; and (d) the potentials for future research of a more controlled nature.

UNIT STRUCTURE AND STAFFING

The unit comprises a 17-bedded dormitory and a 2-bedded side ward used primarily for the refractory patient. It has its own large private lounge, the usual toilet facilities, and a small kitchen available to the patients, though all main meals are taken in the hospital dining-hall. Staff offices and group rooms are situated within or near the unit area. The unit is thus a self-contained home within the hospital community. On the other hand, occupational and recreational activity programmes take place within the larger hospital milieu.

At full strength the staff consists of the following:

Nursing personnel. Two or 3 psychiatrically trained nurses, an additional relief nurse and a night nurse are employed. Student psychiatric nurses may be attached to the unit from time to time.

Medical personnel. A part-time consultant psychiatrist acts as head of the unit. In addition there is a full-time psychiatrist responsible for the active direction of the unit, the training and mentoring of unit staff, and the coordination of diagnostic and therapeutic programmes. A registrar (trainee psychiatrist) is responsible for the clerking of all new admissions and the day-to-day handling of patient problems—registrars are attached to the unit for 6 months, though ideally a longer period would be desirable from the point of view of continuity.

Occasional part-time psychotherapists assist in taking on part of the individual psychotherapeutic load and in addition a full medical and laboratory service is available for the investigation and treatment of physical ailments.

Paramedical personnel. A full-time occupational therapist formulates and directs the occupational therapy programme for the unit within its own occupational therapy area, and conducts the ‘Youth Group’ (a working and recreational group of all young patients in the hospital, e.g. from male wards, the neurological ward and the day-patient centre). Many of the unit patients, however, also attend specialized activities such as art therapy, a domestic unit, an entertainment group, etc.

A clinical psychology intern is responsible for the psychological testing of all patients and a social worker does the family case-work and is involved in family-counselling programmes.

Others who provide important services, though not directly members of the unit staff, are the physical education and relaxation instructress, sports and recreation officer, physiotherapists, and various ministers of religion. More recently volunteer student teachers have been providing an afternoon teaching service for those who are still at school—an important addition to our total therapeutic programme.

Communication

Adequate communication must constantly be maintained between members of staff and between staff and patients. This constant interaction alone welds the unit into a therapeutic continuum, preventing inconsistent or conflicting handling of patients. The unit can be likened to a large nuclear family complex. Like a family it becomes disorganized when interpersonal communication is inadequate or distorted. To combat this, frequent staff and staff-patient meetings and groups, both formal and informal, are held. In addition to the routine meetings emergency ‘problem-solving’ groups are held as often as the need arises. These provide the setting in which both patient and staff viewpoints can be explicated when conflicts arise. Patients and staff are invited to air their grievances in public rather than allow them to smoulder. Where unacceptable behaviour is exposed, attempts are made at ‘working-through’ in the group situation. These groups provide a cathartic outlet; they help create an atmosphere of mutual understanding and a realistic impetus towards social adjustment. Perhaps as important, they bring out our own imperfections and show how they might conflict with patient needs and particularly with adolescent values.

Communication between staff members and their respective departmental heads and ultimately with the hospital administration ensures that unit activities are integrated into those of the hospital and do not conflict with hospital policy.

DIAGNOSIS AND TREATMENT

Diagnostic Programme

After the initial psychiatric and physical examinations every patient undergoes certain routine tests. These include a full blood count and sedimentation rate, protein-bound iodine, screening test for syphilis, urinalysis, tests for porphyrins, fasting blood sugar, electro-encephalogram, and X-ray examination of the skull and chest.
Such tests will exclude the commoner organic causes for psychiatric symptoms. In addition, a battery of psychological tests are performed (e.g. IQ assessment, thematic apperception test and Rorschach).

**Therapeutic Approach**

Much has been written in recent years on the therapy of adolescents. Shepherd stresses the need for specially trained psychiatrists and separate treatment facilities for adolescents. Rinsley and Inge insist that total separation of the adolescent patient from his family for an extended period is essential for the establishment of meaningful therapeutic relationships. Contradicting this, Abend et al. follow a community-orientated programme, with only short-term stays in hospital, during which daily family visits are encouraged.

Strong differences of opinion exist as to the value of and necessity for 'discipline' and 'authority' in inpatient adolescent units. On the one hand there are the Belmont Hospital experiments in which antisocial behaviour is 'worked through' analytically. There are few enforced rules and almost any behaviour is tolerated, on the principle that permissiveness fosters trust in those who strongly mistrust authority. On the other hand, Hacker and Geleerd have 'indisputably' found that 'adolescents of the acting-out type do better in an atmosphere of restrictions rather than of unlimited freedom'.

Holmes is in agreement with this viewpoint. He states: 'The aim of authority in psychotherapy is not to bring an end to the youngster's (reality) testing. On the contrary, the business of testing the limits is just another form of reality testing. It is a most helpful developmental exercise—if there are realistic limits for the youngster to test.'

At the individual level most authors agree that special attitudes are necessary to obtain a therapeutic relationship with the adolescent. Dreyfus sees genuine intimacy as the core of the psychotherapeutic relationship. The therapist must surrender his god-like and omniscient doctor roles. Gitelson states this in another way: The therapist must make a 'narcissistic' contact, and counter-identification and empathy by the therapist are of critical importance. He believes that the establishment of this relationship is the sole task of therapy with adolescents, whereas Anna Freud sees this as only a long period of preparation before analytic therapy.

Following the pioneering work of Ackerman and Spiegel many workers have dealt with the adolescent in his family context. This may vary from simple counselling of parents to intensive multiple family group work.

The approach within our unit is essentially eclectic. The patient is viewed along 5 therapeutic dimensions. Firstly, she is seen as an unique individual with her own internalized conflicts—for this she may receive individual psychotherapy. With the persistent shortage of trained psychotherapists we make considerable use of paramedical and nursing staff as supportive psychotherapists under constant mentoring. At a supportive level the patient often 'chooses' her own therapist, a staff member to whom she spontaneously gravitates for sympathy and advice.

The second therapeutic approach views the patient as a social creature with interpersonal and social adjustment problems. The whole unit is orientated towards the interpretation and handling of group interaction. The occupational therapy workroom, the ward, and the hospital milieu in general provide settings for observation, for the emergence of leadership qualities and for the inculcation of social duty. Adjustment difficulties are then dealt with directly by confrontation and interpretation, either in groups or singly.

Thirdly, the adolescent must be seen as one cog in the wheel of family dynamics. Often she is the scapegoat for more disturbed neurotogenic elements within the family, or a neurotic illness may be aggravated and perpetuated by unintentional parental mishandling. Immediate relatives are always interviewed and, where possible, have their homes visited by the social worker. Many then attend for counselling or more active therapy, occasionally conjointly with the primary patient.

Fourthly, the adolescent is viewed according to the particular needs of adolescence. To this end we adopt the more disciplined approach of Holmes. We attempt to give our patients a disciplined frame of reference with a realistic setting of limits. We encourage free expression and creativity but give direction when this is sought. Trust is not taken for granted, it is earned. Gardner has defined 4 primary roles or tasks of adolescence: (a) the search for independence and individuality; (b) the assumption of personal standards of morality and worth; (c) identification with a particular sex role; and (d) the setting up of long-term goals in terms of vocation and education. Psychotherapy must aim towards resolving conflicts or difficulties arising from these roles.

Finally, the patient may need treatment as a diseased organism. While we make little use of the mild anxiolytic or antidepressant drugs, the potent psychotropic drugs and/or electroconvulsive therapy are never withheld in active psychotics.

While we adopt this multiple approach to therapy as a general principle, the accent in any one case may be on one particular aspect. In the adolescent stress reactions a family approach predominates; in the true neurotic individual, the accent is on psychotherapy with a greater degree of permissiveness in the milieu towards neurotic acting-out; in the personality disorders, the learning of discipline and social adjustment by a process of virtual operant conditioning is emphasized; and in the psychoses, organic therapy with strong supportive measures predominates.

The primary aim in all cases is to achieve as much improvement as possible in the shortest time possible, with a continuation of long-term psychotherapy at an outpatient level in those cases with sufficiently intact egos and sufficient motivation and intelligence for intensive 'reconstructive' therapy.

**CLINICAL RESULTS**

An assessment of clinical results has been made on the first 100 consecutive cases treated within the unit (excluding 12 cases who either refused hospital treatment or were discharged as uncontrollable within the first 3 weeks of their admission). Improvement was assessed according to the criteria suggested by Gillis (with slight modifications). Gillis summated the points improved as recorded...
upon four 5-point rating scales of (a) participation in milieu, (b) symptom removal, (c) occupational adjustment, and (d) handling of interpersonal relationships. For the purposes of this survey a patient was considered significantly improved who showed an average of a 2-point improvement on each rating scale. Table I shows the diagnoses and improvement figures in the 100 cases under review.

Table I. Improvement in 100 Cases

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>No. of Cases</th>
<th>W. Case</th>
<th>Unchanged</th>
<th>Slight improvement</th>
<th>Moderately improved</th>
<th>Much improved</th>
<th>Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Manic depressive</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Epileptic</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Defective</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Psychopathy*</td>
<td>16</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Personality disorder**</td>
<td>12</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Neuroses†</td>
<td>39</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>Stress reactions††</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>2</td>
<td>15</td>
<td>21</td>
<td>19</td>
<td>19</td>
<td>10</td>
</tr>
</tbody>
</table>

*Psychopathy = sociopathic personalities including chronic delinquency and 'inadequate' personalities with antisocial acting-out.
**Personality disorders = personality pattern disturbances and personality trait disturbances (international nomenclature).
†Neuroses: 12 anxiety states; 17 mixed or neurotic depressive reactions; 1 anorexia nervosa; 4 dissociative hysterical reactions; 1 chronic depersonalization syndrome; 1 psychosomatic disorder (torticollis); 3 drug dependencies with depression.
††Stress reactions = situational reactions of adolescence or early adulthood.

It will be seen that significant improvement occurred in 62% of cases and some improvement in a further 21%. However, if one excludes the defectives, psychopathic disorders and personality disturbances who would be unlikely to improve on short-term treatment, 81% (55 out of 68) showed significant improvement. As would be expected, the best results were obtained in the neurosis and stress-reaction groups (87% significantly improved; only 6% unchanged or worse). The poorest results were in the psychopathy-personality disorder groups (only 22% significantly improved).

The average age of the patients was 20 years, with 68% being in the age-group 18-22 years. Thus the unit during its first year was essentially a young adult unit. However, a decided trend towards a younger age-group being admitted has been noticed recently as the unit has become more firmly established in the public eye. No significant correlation could be found between age and improvement rate, although all those who were unchanged or deteriorated were 18 years or older.

The average length of stay in hospital was 3-8 months (56% 3-6 months). Table II shows the percentage of improvement according to length of stay in hospital.

Improvement rates were maximal in those patients who stayed in hospital from 4 to 6 months. Unfortunately, monthly assessments of improvement were not carried out in this preliminary study, so that it is possible that some patients were kept in for longer than necessary. Patients were discharged when it was felt that they would not benefit further from the hospital milieu, even if little or no improvement had yet occurred. Patients who showed no response after 2 or at most 3 months other than the expected initial 'placebo' response were either discharged or referred to other institutions or out-patient care. These discharges account in part for the comparatively lower improvement percentages in patients kept in hospital for less than 3 months. At the other end of the scale some patients whose improvement was slow and minimal became hospital dependent and, in order to prevent catastrophic breakdowns, had to be 'weaned' cautiously from hospital. On the whole, however, our impression has been that optimal improvement occurs in the 4th or 5th months and that after that period complications such as hospital dependency, stagnation and boredom tend to offset any further benefits of the milieu.

No attempt could be made in this study to correlate improvement with any specific forms of therapy, as the nature of therapy was determined by diagnostic and prognostic criteria. Eleven patients received electroconvulsive therapy (7 schizophrenics and 4 mixed depressions). Drugs were used sparingly in the non-psychotic groups. In only 13 of the neurosis and stress-reaction groups were mild tranquilizers or antidepressants used as adjuvants. While all patients were exposed to the milieu and ward interaction in group situations, and all received supportive psychotherapy, 31 were in more active group therapy and 44 received more intensive individual psychotherapy. Intensive family counselling was resorted to in 33.

Unfortunately only 49 cases have been traced for personal follow-up at 1 year after discharge. Of these, 28 patients had been discharged as significantly improved, of whom only 1 had subsequently deteriorated. Of the 21 patients discharged as at most slightly improved, 5 had subsequently deteriorated: one was a chronic anxiety state and the other 4 had personality disorders.

This preliminary analysis of clinical results clearly lacks scientific objectivity and no claims can be made therefrom. The impressions gained, however, are sufficiently encouraging to warrant more controlled studies, and the results would certainly seem to be no worse than those reported by Gillis6 on 400 patients of all ages treated at the same hospital before the establishment of integrated units.

Table II. Percentage Improved According to Length of Stay in Hospital

<table>
<thead>
<tr>
<th>Length of stay (days)</th>
<th>No. of cases</th>
<th>% improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-60</td>
<td>17</td>
<td>53</td>
</tr>
<tr>
<td>61-90</td>
<td>18</td>
<td>55</td>
</tr>
<tr>
<td>91-120</td>
<td>21</td>
<td>62</td>
</tr>
<tr>
<td>121-150</td>
<td>13</td>
<td>85</td>
</tr>
<tr>
<td>151-180</td>
<td>8</td>
<td>77</td>
</tr>
<tr>
<td>181-210</td>
<td>7</td>
<td>57</td>
</tr>
<tr>
<td>210-240</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>211+</td>
<td>6</td>
<td>50</td>
</tr>
</tbody>
</table>
EVALUATION OF THE UNIT

While evaluation of the unit purely in terms of clinical results may still be somewhat speculative, certain dynamic interactions peculiar to a closely-knit unit for young people have clearly emerged in the unit's first year. We have made many mistakes—some, seemingly trivial, have had serious repercussions. To a large extent it has been only through trial and error that we have acquired the practical techniques for the successful handling of adolescent group behaviour and individual acting-out.

Almost without exception staff members have considered the integrated unit system as beneficial to them. Nursing and paramedical staff feel themselves to be active and equal members of the therapeutic team. With the psychotherapeutic role diffusion they feel, paradoxically, that they are taking a more well-defined role in the over-all programme. The patient is no longer dissected into ward, occupational, and psychotherapy areas; she is seen as a 'total' individual. But not everyone is capable of playing psychotherapist, particularly with adolescents. In the community at large and in a hospital milieu much 'anti-therapy' takes place in the guise of well-meaning advice. Patients are constantly given each other 'therapy'. It is difficult to prevent this sort of thing, though patients are, of course, encouraged to bring their problems to the staff and not to each other.

But what can be prevented is multiple conflicting psychotherapy given by different members of the professional staff. Within an integrated unit the psychotherapeutic roles can be more effectively defined and their limits set. Staff will counsel with one voice. The untrained therapist has the constant support of the professional group with whom she is in complete communication. As so often happens in an open milieu, she is not left to deal on her own with problems of acting-out and resistance.

The hierarchical atmosphere of a hospital ward, with the ward-round a solemn procession, is notable absent within the unit. While the team has a leader, the constant informal communication engenders a camaraderie not experienced in the average hospital setting. This allows a rapid resolution of staff interpersonal difficulties. The unit, becoming a focal identification point, in a very real sense provides group therapy for its own personnel.

From the patient viewpoint several obvious advantages present themselves. A rapid identification with an age-homogeneous group occurs which encourages social responsibility and provides a relatively secure 'family' setting in which anxieties are shared and guilt diffused. An experiential basis is formed for the establishment of genuine peer relationships. The community of activities in terms of occupational therapy, ward responsibility, etc., helps to stimulate an attitude of goal orientation and motivation. Another important advantage is that, if a particular psychotherapeutic session has been stormy, the patient, returning to the ward, can abreact in a sympathetic atmosphere.

However, the first year's experience with the unit has perhaps more clearly highlighted the problems of such a unit within the setting of an adult psychiatric hospital, and how we must cope with them.

At the patient level the main problem is that of antisocial acting-out. In a hospital milieu acting-out may be of several types, namely:

(a) Individual—neurotic, psychotic, or simple interpersonal.

(b) Group—(i) 'school-dormitory' type, (ii) 'chain-reaction' type, and (iii) 'organized-gang' type.

Individual acting-out is, of course, in itself not a problem peculiar to an integrated unit or a hospital milieu, but it would be expected that such acting-out might have more profound effects on other patients in a closely-knit community. However, when the patients experience a tolerant attitude by authority to the antisocial act or an attitude of concern towards a suicidal attempt or a panic attack, they, too, become more accepting. The chronically attention-seeking or histrionic patient, however, has created problems if treated too permissively. Similar difficulties arise if a patient with overwhelming neurotic problems is granted particular 'privileges' for therapeutic reasons—she may be permitted to stay in the ward while others must attend meetings, or she may be allowed to have her meals in the ward and be let off ward duties, or she may simply demand more staff attention. These special privileges may precipitate resentments among other patients, who then mimic her in order to gain the same attention. This is what is meant by the 'chain-reaction' type of group acting-out. During the unit's first year two such episodes occurred, one a spate of wrist-slashings and the other a series of smashed windows. However, experience has shown that such chain reactions can be prevented with free group discussions in which the dynamics of patients' needs are worked through.

The staff jointly deal with the resentments as they arise, which then become useful therapeutic weapons in the learning of tolerance. It is interesting to note that the schizophrenic patient with not too florid symptomatology is well tolerated within the unit. Unlike the attention-seeking actor-out or the psychopathic element, the schizophrenic's behaviour is totally alien to the non-psychotic patient and is not mimicked. In fact, the group soon learns to support her without exerting undue interpersonal pressure.

The 'school-dormitory' type of acting-out—midnight feasts, 'apple-pieing' beds, etc.—is, of course, no problem at all. It only becomes a problem when authority reacts in a punitive or over-anxious manner.

Most serious and most difficult to control is the true 'organized-gang' behaviour where aggressive defiance of authority is the primary aim of the acting-out. It has been our invariable observation that the formation of psychopathic cliques within the unit has 3 prerequisites:

1. The presence of one or two clearly psychopathic individuals who assume the leadership roles.

2. An inconsistent or panicky staff approach—this may be due to frequent staff changes or an 'unsuitable' staff member within the unit. Under such circumstances the more inadequate or dependent personalities among the patients gravitate towards the psychopathic leader for support instead of towards the staff.
3. An attitude of intolerance among the adult population of the hospital as a whole, both patients and staff. This may present in several ways—a tendency to attribute all the ills of the hospital to the adolescents, or to blame 'adolescence' as a whole for the misbehaviour of a single adolescent, or to see something sinister in what is often innocent and childish play. Under the pressure of adult intolerance the adolescent clique closes its ranks and adopts the defiant 'gang' pattern of behaviour.

Problem-solving groups and stern disciplinary measures are resorted to in an attempt to break the vicious cycle, but often it becomes necessary to discharge the offending leader from hospital. Patient resentment thereafter soon fizzes out and the gang disintegrates.

A serious problem, not specifically restricted to an integrated unit but perhaps more severe with adolescents, is that of ‘over-adjustment’ to the semi-sheltered hospital milieu and the accepting ‘family’ atmosphere of the unit. Some patients, coming from broken or economically insecure homes, or from a severely disturbed family environment, tend to languish in hospital with absolutely no motivation towards recovery with its implication of discharge. In some cases there is no realistic solution other than eliciting the support of welfare agencies. In other cases the patient herself becomes sufficiently motivated towards breaking the parasitic family relationship and moving out on her own; or she accepts active environmental manipulative measures on our part. However, wherever possible, we resort to intensive family counselling or more dynamic family therapy in an attempt to resolve the intrafamily conflicts and reintegrate the patient into her home environment.

With the establishment of the ‘integrated unit’ system there has been a tendency for the hospital population to become fragmented into isolated sub-communities, thereby dissipating the benefits of the hospital milieu. Such a tendency must be rigorously contested by encouraging all patients to participate in hospital activities (sports, recreation, youth group, etc.).

From the staff point of view problems have also presented themselves. The need for staff consistency has already been mentioned. This applies particularly to the nursing staff, because of their more continuous association with patients. Frequent changes of nursing staff, particularly if there is no overlap, have invariably resulted in a flare-up of ward problems. Ideally there must be a sufficient number of nurses attached to the unit to allow for night-duties, leave, etc. With the chronic shortage of nursing personnel this ideal can rarely be attained. One solution is the employment of voluntary workers or untrained nursing aides. Holmes' has found that these are often more understanding of, and accepted by, patients than some highly trained nurses obsessed with theoretical considerations.

But perhaps more important than the number of personnel is their quality—or should one say their adaptability to the adolescent Weltanschaung. Cumming and Cumming have described the qualities of the successful psychiatric nurse in general terms. But the nurse well-suited for the geriatric ward may be quite ineffectual with adolescents and vice versa. Adolescents are not really more difficult to handle than other age-groups. But, if viewed solely according to mature adult standards, much of their behaviour and thinking is near psychotic. The ability to participate emphatically in the adolescent’s amorphous psychological field without regressing into adolescent fantasy oneself, is the sine qua non of nursing adolescents.

Certain personality types have, in our experience, proved unsuitable. The rigid, obsessional individual, motivated by the letter of the law, easily becomes a target for adolescent rebellion. It is a natural adolescent habit to break minor rules. The obsessional, seeing this as a personal affront on her authority, attempts to clamp down; the adolescent resists, and soon the battle is joined. Examples of this sort of interaction have been numerous within our unit and are extremely difficult to resolve.

The anxious, over-permissive staff member often creates more serious problems. Her misguided over-involvement serves only to exacerbate guilt feelings and stifle any genuine catharsis; patient anxieties increase until a catastrophic abreaction occurs. Also, in overprotecting or indulging their patients, they invariably come into conflict with other staff members whom they see as unsympathetic in their firmer or more disciplined handling. Such conflicts, unless rigorously dealt with, soon undermine unit cohesion. The ‘omnipotent’ punishing individual, who constantly criticizes or preys on patient guilt, is of course totally unsuitable. She may make an efficient theatre sister, where strict discipline and control are essential, but she is completely out of place in a psychiatric hospital, except in respect of having her own sadomasochistic needs gratified. However, the distinction between punishment and discipline is often a very fine one. As Holmes points out, both are aggressively determined, but the latter is in the services of the patient and not to allay personal tensions. On the same terms the over-permissive nurse can be seen as fearing her own aggression or its possible misdirection.

One cannot, therefore, stress too strongly the importance of careful staff selection for integrated unit work, particularly with adolescents. Staff groups may help resolve interpersonal problems but they cannot compensate for basic personality traits which conflict with particular patient needs. This, of course, applies not only to nursing members, but to all those who may become closely involved with the patients in their daily routine.

The integrated team approach has created problems in the matter of professional and other confidences. It is here that some registrars (trainee psychiatrists), who have had long experience in general practice, have difficulty in adjusting to the team approach. Imbued as they have become with the traditional attitude of professional secrecy, they are reluctant to ‘share’ their patients in any way with the team. This difficulty is not always easily overcome, as it involves an ethical principle, however misguidedly applied.

Paramedical staff, assuming psychotherapeutic roles, may find themselves caught between two conflicting duties, namely that of personal confidante and that of administrative informant. If a nurse observes antisocial behaviour—or, worse still, is informed of it in a ‘confidential session’—it is her duty to report it. She is caught in the cleft stick of betraying her patient or betraying hospital
CONTROL OF TYPHOID FEVER BY VACCINATION*

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For some years it has been generally accepted that the incorporation of paratyphoid A and B vaccines with the S. typhi vaccine serves no useful purpose in regions where paratyphoid fevers are rare and comparatively mild. On the contrary, it seems reasonable to suppose that, if the systemic and local reactions caused by the paratyphoid vaccines were removed, the dose of potent and effective S. typhi antigen could usefully be increased. The importance of larger dosages was made clear in the USSR controlled field trials (1959 - 1964) in which the effectiveness of small doses of different vaccines was compared with that of large doses. The results were unequivocal and showed that 'inadequate protection may be conferred, irrespective of the method of production of the vaccine and the number of injections given, if the doses are not sufficiently large'.

It was decided therefore to try out a typhoid vaccine without including paratyphoid antigens. At the same time it was noted that, in the colossal field trials in the USSR, Poland, Yugoslavia and Guyana, the endotoxoid vaccines were found to be 'least immunogenic' or (at the bottom of the list of 5 vaccines) to 'confers only a low degree of protection'. Thus it was decided to use a whole-bacterium S. typhi vaccine without paratyphoid A and B for trial.

A heat-killed phenol-preserved S. typhi vaccine with 1,000 M bacteria per 1 ml. was prepared for us by the Vaccine Institute of the SAIMR.

THE TRIALS

Preliminary Safety Trial

In March 1967, 74 schoolchildren volunteered for this test. Temperatures were recorded and axillary glands palpated, and their general condition was checked. They were then given varying doses of the vaccine subcutaneously. Reactions were checked the following day. All the children were afebrile, there was no adenitis, all had some tenderness at the site of injection and most arms had some degree of local heat and very slight swelling. Only 2 of the 74 children said that sleep had been disturbed. These reactions did not seem to vary according to dosage given.

Two weeks later the vaccinations were repeated in the same dosage, with similar but slighter reactions. These safety tests having proved satisfactory, a field trial was organized.

The Field Trial

On the basis that after typhoid vaccination there is little or no relationship between the results of serological...