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Medical Social Service in a Tuberculosis Sanatorium

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Editor's Note: This concludes the article which began in the preceding Tuber culosis Control Issue, No. 66, August 3, 1951. A single reprint containing both parts of the article will be available in the near future.

Economic Aspects

"If my wife breaks down under the strain of working and looking after the children and running out here to see me," said a patient with suitcase in hand as he was leaving the sanatorium one morning, against medical advice, "there won't be too much point in my getting well. I'm going out to see for myself whether there isn't some way of looking after a family caught in this kind of trouble."

The long continued period of medical care almost invariably involved in tuberculosis tends to drain accumulated savings from most patients and families; only a very few can stand the full cost of all the ramifications of tuberculosis from their savings or the earnings of the rest of the family. In any case, even without financial problems, families carry a heavy burden in terms of their psychological need for the person who is ill and away from home. But in most families there is also the burden of financial readjustment, lowered standards of living, assumption of the wage earner's role by somebody else, interrupted schooling and uprooting of children.

A family with substantial strength in the individual members and in the family relationship sometimes realizes latent potentialities and emerges from the illness with new cohesion as the experience of illness and separation brings to light hidden capacities and new facets of personality, and newly discovered qualities in their relationships. The patient himself, however, often suffers from a constant undertow of anxiety, guilt, and insecurity because of the financial straits in which he has left his family. Having given up his job and having relinquished his proper share of family responsibility perhaps with much reluctance,

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he continues to feel inadequate as each financial crisis in the family comes to his attention, and he often remains in constant conflict and indecision as to whether to stay in the sanatorium at all.

At least two other aspects of financial need affect the process of treatment in a sanatorium and are at times overlooked in the light of the more accentuated needs of families without breadwinners. One is the problem of the patient with savings who enters the public sanatorium because he cannot afford private sanatorium care, and who exhausts his savings in the period of treatment because he is required to pay for his hospital care. Even institutional living requires some money and creates still another aspect of need in the sanatorium for the patient without resources and without a family that can supply him with money to meet the simple everyday needs that are not met by the sanatorium. We shall discuss these aspects of the financial question in more detail later.

Maintenance for Families

For most families there are not many ways to secure alternative income for maintenance. The wife may take on work outside the home, or roomers in the home; children may be taken out of school and sent to work, or working children asked to take on added financial responsibility; savings or insurance or property may be converted to cash for immediate use; or the family may turn to public assistance. In comparatively few instances can families depend completely on aid from relatives although such assistance is often significant in supplementation of other sources of income.

Whichever of these alternatives or combinations of them the particular patient has agreed upon with his family, he is likely to have qualms and questions because, at best, they are only substitutes for his place in the family as breadwinner. The amount of guilt and anxiety he experiences in this circumstance varies considerably for each person—with the stage of his illness, the role he has played in the family, the maturity and resilience of the wife and mother, and the patient's own capacity to accept realistically changes in his circumstance. Families may develop well-thought-out plans for meeting the crisis of illness and still have to face new planning at intervals because during the long hospitalization and convalescence for tuber-culosis many changes in the family situation necessarily occur.

Doubtless, many women who have had to assume responsibility for the family's support because of their husbands' illness achieve a fuller stature by reason of that fact. But when the mother, as the only parent at home, must devote her major energy to supporting the family and helping sustain the morale of a sick husband, she has little left for the children and their concerns. And everyone stands to lose—the child, the family, and the community—when children

must leave school before they have a definite vocation to carry them through life.

Public assistance provides eligible families of patients with some financial help during a parent's illness. Although many families do not receive such assistance, it is invaluable in individual cases. In large sections of the country the money provided is inadequate, so inadequate in fact, that, for example, it represents little real opportunity for a woman to choose between going to work to support the family and staying at home to devote herself to her children(4).

Financial Planning Prior to Hospitalization

In the circumstance of both the chief wage earner and the mother who become ill, time is lost and harm is done when patients are hurried into a sanatorium before they have decided upon a solution to the family situation which they feel will work. Sometimes, of course, danger of infecting an infant or the patient's medical condition dictates immediate hospitalization, and a few weeks or even a few days are important. But in most instances and in the long run when a patient comes into the sanatorium before he is satisfied that he has made the best possible plan for his family, the cost in sleep-lessness, hours of conflict and guilt, or actual walkout often wipes out the hoped-for immediate gain.

A family story of financial breakdown recurred with some frequency among patients who came to the sanatorium. In each case the patient and his family had had similar experiences. First, there was a period of treatment in a private sanatorium because they believed that the cost of private care during a few months of illness could surely be met. Then when this period was extended beyond their expectation, the gradual loss of savings and of property investments in business and home resulted in an effort on the part of the patient to salvage the situation by coming out of the sanatorium too early. Eventually a second or third breakdown involved the necessity for readmission to a sanatorium, this time under public auspices. The family situation had grown worse and was in turn reflected in the patient's anxiety and frustration. In each such instance, one could not but ask whether this family could have been helped, at the time of the diagnosis or sometime earlier, so that they might have planned more realistically and in more far-sighted ways and thereby Possibly have avoided such complete loss of resources and status in their own eyes.

Doubtless euphemisms like "a few months and you'll be well again" are directed with all sincerity toward easing the reality of tuberculosis. But patients must deal with the reality, and the danger of the too casual early optimism is that it leads patients into unsound personal planning for themselves and their families. Even with help and an

entirely direct approach, patients have difficulty in understanding fully the potential ramifications in their lives of the disaster of tuberculosis. The social worker who is available to help people face and deal with problems in terms of their real situations can bring to them her knowledge of community resources as well as of the experience of numerous other families. She should be at hand in tuberculosis clinics to work with patients and families starting to face tuberculosis.

It might also be noted that inadequate statements about probable length of cure are remembered with bitterness and resentment which tends to be projected upon the medical and nursing staff in the sanatorium, making their task more difficult. The distrust engendered by an initial "reassuring" statement, made at the time the patient learned of his diagnosis, continues to rankle in the patient because he comes to realize that the reassurance was clearly unrealistic or definitely untrue.

The problems encountered by two families who found quite different ways to solve their financial problems are presented because they are fairly characteristic of the type of solution to which patients turn when the head of the family becomes ill with tuberculosis. They may also serve to throw into relief not only the heavy financial burden tuberculosis places on a family, but also some of the psychological concomitants of family strain under such circumstances and the pull toward leaving the sanatorium that patients must cope with constantly. In the first case, the family drew on their own resources—the wife and children worked, they used their savings, and relatives helped. The second patient turned to public assistance.

A Family's Effort to Absorb the Burden

The first of these cases is of considerable interest because it indicates what families do in their determination not to call upon public aid. At tremendous cost, the immediate family and relatives bring their resources to the sick member during crises in his situation, only to find that they cannot maintain this all-out effort once the crisis is over and the patient is on his way to recovery.

The patient, Mr. Williams, was a man of quiet dignity, thoughtful and sensitive in manner and appearance. Admitted to the sanatorium with far advanced bilateral pulmonary tuberculosis, he was so weak and ill for many months that he was primarily engrossed with the question of whether he would survive at all. His survival and his eventual discharge from the sanatorium at the end of 2½ years, following a carefully planned medical program which included extensive surgery, was at once a tribute to the medical service of the sanatorium and to the devotion of this patient's relatives. The patient's brother, for example, had mortgaged his home in order to buy streptomycin when it was first on the market and funds for its purchase had not yet been allocated to the sanatorium. For the first year and a half of the patient's illness, his brothers and sisters continued to find ways of meeting special financial needs of the family as they arose.

At that point, crises developed in their own families which required all their resources. Mr. Williams was well on the way to recovery, and he and his wife, concerned over the amount of financial support they had already accepted, felt they could neither ask nor accept more from his brothers and sisters.

Mrs. Williams had more than carried her share of financial responsibility during the patient's illness, having established herself as a saleswoman in an exclusive dress shop. The three attractive adolescent children worked at after-school jobs, and Mrs. Williams had supplemented her earnings by taking in roomers until her own ill health led her to give up their fairly large rented house and move into an inexpensive apartment. With considerable reluctance, the family had to agree at that point that the oldest son who was now 18 should give up his schooling in order to help. This was particularly difficult because the boy had had an excellent school record and he and the family had long planned on an engineering career for him.

About a year and a half after Mr. Williams entered the sanatorium, Mrs. Williams had to undergo a breast amputation, and both she and her husband were fearful of a possible malignant cancerous condition, their fears not entirely allayed by reassuring but necessarily cautious statements of her doctor. The long period of strain took its toll psychologically, and she was increasingly turning to her husband to help her in her fears about herself and in the growing tension between her and their adolescent children.

The family had put all their strength into weathering the first period of illness, extending over nearly 2 years. They found themselves depleted, straining under differences that were perhaps to be expected with three adolescents in the home, but which, by reason of the father's absence, became accentuated to the point of open friction and prolonged strife. A financial crisis developed when Mrs. Williams found herself facing a 3-weeks' convalescence at home after a second operation. She had exhausted her money through two periods of hospitalization, and the family was having a very hard time, but they could not bring themselves to turn to the relatives who had already carried so much of the financial burden. Obviously, this family needed help well before this time. It may therefore be appropriate to recall to the reader that in our sanatorium one social worker was available for some 600 patients, so that her services were called upon in selected cases only, as the need for services became relatively urgent.

After Mr. Williams had reached a point of enough physical improvement so that he could believe that he would eventually return to his family, he began to review their financial and social situation with growing anxiety and increasing need to assume his old role as responsible head of the family. He began to speak at length of his life.

Coming to know the patient and his feeling about himself and his family, the social worker learned that he had been largely self-supporting since early child-hood. With the early death of his father, he had gradually taken over much of the financial responsibility for rearing younger sisters and brothers, and in his own home, as in his mother's home, he had been the one to whom the family looked for all important decisions. His illness had followed a period of financial reversals and the loss of a business establishment of his own.

When the medical social worker was drawn into the case, she found that there were days in which the family literally had no food in the house, and she was able to arrange for temporary financial assistance through an anonymous contribution from a church group. This was an uncertain source of aid, it is true, but one that was immediately accessible and which the family could bring themselves to accept more quickly than they could the thought of formal application to a public agency. The children needed immediate medical and dental service which was provided by arranging for the use of appropriate resources in the community.

This patient's need, in the light of his personality and the family situation, to take on increasing responsibility was discussed with the doctors. They decided to allow Mr. Williams more than the usual leeway in terms of days out with his family. They requested, however, that provision be made for automobile transportation which would relieve the physical strain of going to and from the city

To relieve some of the psychological burden which was devolving on this man before he was considered medically ready to assume full responsibility, he was given opportunity to discuss the difficulties in the family situation and to clarify his own approach to the problems of the home. He said that in talking with the medical social worker he often arrived at a clearer understanding of his situation at home. He could work out ways to handle such problems as his wife's crying spells and fearfulness about herself, and the growing separation of the children from the parents.

More than once the patient came back to a subject that obviously preoccupied him, namely, how he could take his place in the family without the frequent expressions of affection and demonstrativeness which had formerly been the family He could not believe that he was entirely without danger to his family as a possible source of infection, and yet he felt that his constant awareness of that fact would set up a barrier between himself and his children. help that he knew intellectually that he was no longer infectious. He was struggling rather with his feelings: a sense of being apart from others, as well as guilt for having in the past exposed his own children to his infection. The social worker respected his feelings and attempted to provide him with an atmosphere in which he could articulate his anxieties and questions, evaluate them himself, and sift out what was valid and important. During this psychological movement toward resumption of full responsibility, he knew that someone understood how uncertain he felt about himself, accepted his uncertainty, and yet believed that he could take the necessary steps toward independence and responsibility. His medical and social progress were carefully followed by the doctor and the social worker, and the decision as to the appropriate time to discharge him to the convalescent home was reached in terms of his physical condition and his need to be nearer his family. Subsequent information indicated a fine adjustment on the part of the patient and the family in working out their problems.

The family as a whole came near to a breaking point during Mr. Williams' illness; Mrs. Williams was both physically and emotionally drained under the weight of the burdens she had carried for some time; their son, a most promising young man, interrupted his schooling and the patient in the sanatorium was placed under heavy emotional Mrs. Williams certainly waited too long before she accepted medical care for herself, knowing as she did that once her income was interrupted she might expose her children to need. And as it happened her lack of income for a time did expose them to occasional days of actual hunger, with resultant tension, bitterness, and family disorganization. It is true that she might have applied for help from Aid to Dependent Children or General Assistance, but she knew that the process of application and receipt of aid was long-drawn-out in her community, so drawn-out that she might well be back at work before she received assistance. She also knew that the assistance she might get would be most meager in relation to the needs of her

family. And most of all, she felt that her relatives, friends, church associates and, in fact, she herself tended to look down upon anyone who accepted assistance from public funds.

In this case a church group eased the financial strain. In many other situations, where need was fully as great, there was no group or agency to meet the situation. A whole set of facts in our present approach to illness and to assistance are called into question by this case: problems of coverage of assistance programs, amount of grants, length of time it takes to make application and receive assistance, community and personal attitudes towards public assistance as a proper solution to economic need in some circumstances.

When patients or families are advised to solve their problems by applying for public assistance, recognition is not always given to the fact that the process of bringing oneself to apply for assistance is complex. Adults expect to be self-supporting; their personal goals and their sense of adequacy are involved in giving up self-support and turning to others for maintenance. Public opinion supports them in their attitude that assistance must indeed be a last resort, not to be drawn upon until savings, aid from relatives, and every possibility of employment by other members of the family have been exhausted.

The effects of waiting too long—until the wife is exhausted and ill, for example—and of getting too little, once assistance is received, can be observed daily. We see tension resulting from anxiety about money, restlessness and even walk-outs of patients provoked by concern over the family's needs. How closely related such anxiety is to the family situation was evidenced by the fact that, whenever a cut in public assistance grants occurred in the city, requests for appointments with the medical social worker piled up as patients urged that some special attention be directed to the needs of their individual families. When people's needs are not met, the health official responsible for the control program finds some of his efforts weakened.

A Public Assistance Application

Mr. Johnson, the second patient, turned to public assistance shortly after the discovery of his tuberculosis. He was vividly described by the case-worker from the Public Assistance Division, who said that he had come "storming" into their office, "half crazy with grief and anger," seeking assurance that, if he should go into the sanatorium, his seven children and his invalid wife would be cared for adequately. Mrs. Johnson had just been released on probation from a mental hospital, and her mother had agreed to come into the home to look after the family for the present.

Mr. Johnson, a pipefitter by trade, had suffered a sudden onset of his disease, hemorrhaging in the streetcar on his way home from work. At the time he was admitted to the sanatorium, the diagnosis was "pulmonary tuberculosis, far advanced, bilateral."

This patient was particularly irritated by the watchwords that he heard often during his first week at the sanatorium. "Try not to worry, rest and relax, relax and rest," sounded meaningless to him in the first sleepless nights. He described his problem in taking bedrest, "All night long I find myself figuring how in the world my mother-in-law is going to feed nine people and buy shoes and pay the rent on the public assistance allowance of \$138 a month when I couldn't manage on my wages of \$80 or \$90 a week."

It was not too long after his admission to the sanatorium before his wife had to be readmitted to the mental hospital and related social problems developed. Two children were reported truant from school, one was in need of medical care; their house was unfit and no other housing was available immediately.

The medical social worker to whom Mr. Johnson turned in his dismay at the mounting accumulation of problems had opportunity to see the wretched home conditions of the family in the course of a home visit made at the patient's request, and to know for herself that the family needs were by no means exaggerated in the patient's mind. Appropriate authorities condemned the house and assigned the family priority in a housing unit. Eventually they were able to move into a public housing project. Mr. Johnson's stay in the sanatorium was made a bit easier through a small monthly allowance provided from the welfare fund of the sanatorium, so that he could meet his own needs without undue embarrassment. He was most grateful for reports which the social worker could get for him about the children and about his wife in the mental hospital.

This patient's family undeniably had difficulties. The concrete services that were given were limited by reason of inadequate community resources—inadequacy of public assistance funds, cumbersome and relatively limited provisions for housing for low income families, insufficient funds available for meeting financial need within the sanatorium itself and paucity of child guidance and recreation facilities for the children of the family. The practical help provided to the patient was therefore certainly not great although here and there it eased the pressures a bit, both on him and on the hard-pressed mother-in-law who had undertaken to hold things together in the family while both parents were ill.

Despite limitations of community resources, the patient was able to draw upon the social worker's knowledge of these resources and her ability to deal with community agencies on his behalf. He drew also upon the social worker's capacity to understand how hard it was for him, in the light of the family circumstance, to bring himself into the sanatorium and to remain there until medically dis-The patient could tell the social worker, at length, of his deprived childhood and interrupted education, and find a sympathetic response; he could reiterate his determination and dream that his boys would have a better chance in life—that is, if he lived to give it to them. He wanted reassurance frequently on the question of whether he was deserting his family by placing himself under medical treatment. Wasn't it better, he asked her, and obviously had been asking himself, to come in now and go out well, so that he could really take care of the children properly, than to stay on the outside and work until he dropped When, as often occurred, he reported his anxiety about finances on the streets? and his concern as to the details of managing on the assistance allowance, the social worker was able to bring him back to the fact that his mother-in-law had willingly assumed responsibility for the household, that management of the family allowance was her job for the present, not his, and that he had no reason to doubt her strength to carry her responsibility. He agreed that his illness and his stay in the sanatorium demanded that he relinquish these responsibilities to her. The social worker helped by letting him unburden his sense of guilt and by supporting his determination to regain his health both for himself and on behalf of the children.

The patient did remain on bed rest in his 17-month stay at the sanatorium, and there was reason to believe that the services provided, both practical and psychological in nature, were reflected in fewer sleepless nights, in the patient's continued determination to work at getting well, and in an accelerated movement out of the sanatorium.

The policies of the department of public welfare and the responsiveness of the case worker there resulted in prompt action in providing for this family, on a minimum subsistence basis at least. Technicalities of law and limited finances in many communities often prevent the public assistance agency from giving assistance in situations that are equally pressing.

Neither of the two situations that have been presented in some detail was limited to financial problems alone. The fact is that few, if any, family situations involving tuberculosis are uncomplicated by social factors or psychological attitudes peculiar to the family under consideration. Nor is the part played by the social service department usually restricted to concrete services of a practical nature, important as these are. Social and emotional problems presented by patients require a response in human terms—in terms of understanding and psychological support for what has to be lived through.

Desirability of Sanatorium Care at no Cost to the Patient

Any adequate consideration of the so-called "means" test is obviously outside the scope of this paper. Out of the experience that is under review, the writer can testify, however, that the requirement for payment in the public sanatorium does impose considerable hardship on individuals and their families and is a source of continuing The more farsighted and resourceful the individual, the more likely he is to have savings which can be drawn upon for his care and therefore the more likely it is that he will be required to pay for sanatorium care. But his habit of planning and frugality may mean he is the more in need of financial security and the more disturbed as he sees his savings dwindle and anticipates being left without resources on discharge. Once his resources are depleted he may attempt to get well away from the sanatorium even though the sanatorium offers him his best chance at recovery; or, he may stay in the sanatorium, often suffering from a sense of having no anchorage to which to hold when he is discharged.

For most people of medium income, the accumulation of savings of \$2,000-\$3,000, for example, represents sacrifice of comforts and luxuries over many years, and in fact may have contributed to the breakdown if achieved through self-denials in nutrition, overwork, and concern about savings. Such a sum is exhausted in 1 or 2 years, even though the amount requested for hospital payment may be quite small—as little as \$2 or \$3 a day. Repeatedly, patients readily agree to

the amount requested for sanatorium care, for it is indeed more than reasonable as compared to the benefits to be derived. Once in the sanatorium, however, the patient encounters a number of unanticipated demands on his financial reserve. Most characteristically, he finds himself hospitalized for many months and even years, instead of the limited number of months which in his own thinking he had "allowed" himself. With a date for resumption of earning capacity still far off, he sees his hospital payments eat into his savings steadily and knows that he may be penniless when he leaves, and still be unable to work.

In those States in which the practical significance of free sanatorium and medical care as a policy has been recognized on a State-wide basis, the individual is free from the anxiety entailed in the effort to meet the continuing cost of hospitalization and the concern and guilt involved in knowing that his family is carrying this burden for him. Too many patients face the move out of the sanatorium with an uneasy uncertainty about the future. If they have had the foresight or the good fortune to accumulate some financial resources which may make it possible to leave the sanatorium and undergo convalescence without immediate financial worries, is it not important to enable them to do so?

Patients' Need for a Source of Income in the Sanatorium

Although the sanatorium provides maintenance to patients, those who have neither personal resources nor relatives and friends who can supply them with the necessities they require are in need of a small The patient needs money for pajamas, bedroom slippers, bathrobe, shaving materials, or an occasional "day out" in the city. Few public sanatoriums have adequate provisions to meet this need, although in actual practice various makeshift devices are used for the purpose. The having and handling of money with which to meet one's own needs is often more important in our social economy than the specified items involved. It is symbolic of adulthood and adequacy (5). Tuberculosis forces dependence in any case, and the adult who has no money in hand and no immediate prospect of earning any feels himself more helpless, less vitally a part of the world he lives in. more shut off from normal channels of everyday living. This is true even though the only channels open to the patient in the expenditure of his funds may be mail orders and the sanatorium commissary. figure you're dead as soon as you come out here," said one man left stranded by relatives and friends. His small monthly allowance from the social service department made him feel related again in small part at least to the outside world and to normal living.

Without financial support, the stresses of the outside situation and

the insecurity and sense of helplessness within the sanatorium rob the patient of needed rest. His energies are dissipated in efforts to overcome conditions that he cannot in any case bring under control as long as he is ill. To have the means to meet his illness with dignity and to maintain his status as a member of a family and community may in the individual case prove as important in the management of a man's disease as the exquisite precision of the surgeon working directly on his lung tissue.

Nonresidence

There is one more group of patients who merit attention, the nonresidents, those who are not entitled to hospitalization because they do not have local legal settlement or residence. Such persons sometimes are hospitalized on an emergency basis while efforts are made to return them to their legal place of residence, if any. Often, sick people who require hospital care simply do not receive it because they cannot be admitted to local hospitals, or they have no legal place of residence anywhere, or because having become established in their present homes they cannot uproot themselves and their families and go back to a place which is no longer home or where they have no And so, in addition to all the emotional and social problems related to the illness itself, this particular group suffers from lack of adequate medical care and often from lack of social assistance. is true when all or most of the services of the community are closed to them because they technically are considered nonresident. problems are not discussed in detail in this paper because nonresidents are not admitted to this sanatorium. Patients in need of emergency care are hospitalized elsewhere. But many of this group, in this city as in many parts of the Nation, do not receive hospital care and are often uncared for socially as well.

Parents as Patients

It is obvious that there is no entirely good solution to a problem of such personal intensity as separation of a parent from his children, especially when the children still need him very much, and the parent leaves the home not knowing whether the separation will prove to be temporary or final. When the mother or father goes away to a distant place known as a sanatorium; when children are uprooted from their homes or cared for by relatives or in foster homes; when they can see their mother or father only through a screened porch window of a large, unfamiliar, and possibly formidable building; and especially when adults speak with mournful tone and enigmatic phrase of the sick parent, tuberculosis exacts a costly toll from children.

Because the parent becomes a potential source of infection to his child, indeed an actual danger to him, his behavior with the child is altered and seems to the child unnatural. An obstacle is inevitably set up in their relationship. The writer sensed at times an acute dismay in a patient struggling with the realization that he himself might be his child's greatest source of danger. A feeling of personal guilt is a common reaction.

A full substitute for parental care is rarely available, and even if it exists it is likely to cause jealousy and uncertainty in feeling on the part of the parent who fears he is displaced, perhaps permanently, in the life of the child. To work out appropriate plans for his children is only the first task of the parent; he must still cope with his feelings about separation from his children and their growing attachment to a different parent-person. He may also have to face reconsideration of his plans, no matter how carefully they have been made. Changes in the lives of the substitute parents or in the needs of the children necessitate new provisions for children, each shift in plans representing a crisis and often raising the issue with the parent as to whether he should remain in the sanatorium or go out to take over the adequate care of the children.

Patients are encouraged to come into the sanatorium quickly, once the diagnosis has been made and a bed is available. Sometimes a bed is ready, however, before adequate arrangements for the care of children are worked out, and patients come into the sanatorium without feeling satisfied that their children will receive consistent care on some dependable basis. Anxious and in continued conflict as to their proper course of action they do not achieve the relaxation nor yield to the routine prescribed by medical recommendations, and sometimes they finally leave against medical advice. Given a few more days or even a few weeks and the development of a dependable plan for their children, these same patients coming into the sanatorium would be psychologically prepared to put their energies into their treatment, and an actual saving in time would, in most instances, have been effected in the total period away from the children. And the children would have been spared some shifts and moves and insecurity.

A child has his own ways of punishing a parent who, to his mind, has deserted him. Patients report uncomprehendingly the statements of their young children that they like grandma's home better or that they have more fun or toys or freedom at the foster home than in their own homes.

In fragmentary statements, in a momentary frown of pain, in defensive anger or bitterness, as well as in frank yielding to tears, patients give glimpses of the depth of their feeling about isolation from their children. In one patient's discussion a passing comment,

"lying awake all night figuring out what I was going to say to the kids and especially how I was going to explain my mask and wheel chair," revealed at once the longing and the uncertainty of response which this woman felt so keenly that she was kept awake wording statements to her own children, unable to trust the normal spontaneous give-and-take of mother and child. The writer recalls also a patient's report of a telephone conversation with her 4-year-old child, in a foster home. The child, after listening to her voice for a time, told her that he hoped it was her voice, but he didn't believe it, really, since she must be dead—he felt sure she would have come to see him if she wer alive. "And you know, don't you," she asked, giving up an effort to control her tears, "how hard it was not to call him all this time when I was trying to let him get used to the foster home?"

This then is the emotional problem: For the child, there is bewilderment, as well as a sense of rejection at times, and the need for adapting to parent-substitutes and often to new home settings as well. For the parent, loss and hurt result from his inability to maintain his rightful place of responsibility in the care and development of his child and possibly in his child's affections; he experiences anxiety and guilt because his infectiousness may be, or may have already been, a threat to his child's health and life; and he is concerned with the problem of working out a sound method of caring for his child.

Yet parents with tuberculosis must receive treatment and care, and a home in which their children place constant demands upon them does not usually assure the complete rest they need even when they can obtain adequate medical care. At the same time the children need physical care, training and supervision, and affection; in addition, they must be protected from the parent's infection. What resources in our communities, whether medical or social, will serve most adequately the needs both of sick parents and of their children? Have we put our most thoughtful efforts into providing social resources in order to minimize the effect of the misfortune of tuberculosis on parents and on children?

Substitutes for Parental Care

The usual solutions to which patients resort for the care of children, especially when it is the mother who is to be admitted to a sanatorium, include: (1) arrangements by which the children, and sometimes the husband, move in with relatives; (2) housekeeping service in the home, with the husband and children remaining together; (3) the help of a relative who can come into the home to live there and supervise the children and household; (4) placement of the children in foster homes, located and financed with or without the help of a child welfare agency.

While no solution may be really good, some solutions are better

than others, and it is a matter of constant frustration to patients, and incidentally to social workers trying to help them, that the community is seldom completely organized to provide the resources most acceptable to parents. Other things being equal, it is more desirable to keep children in the home in which they are living when the mother becomes ill and has to enter a sanatorium. The parent's illness becomes more drastic than need be in its effects on the children when they are deprived not only of the sick parent, but simultaneously of both parents and are, in addition, required to make an adjustment to parent substitutes within an unfamiliar setting.

Even in their own homes, the children have to adjust to accepting care at the hands of a relative or housekeeper in place of the mother, but they are at least in a setting that is familiar, in which the mother's influence persists in every detail of the household, and most important of all, in which they have the benefit of continued closeness with the father. With his home held together, it may be assumed that the father's ability to maintain his family intact through the long period of illness is further strengthened. Permanent family breakdown in some cases of tuberculosis can be traced to the initial physical disruption of the household, with the children placed away from home, one parent in the sanatorium, and the other left adrift to find his sense of home and personal satisfactions as best he can.

Some families have relatives ready and willing to take the responsibility of managing a household and caring for children in the mother's absence. In families less fortunate, housekeeping service provided by a qualified and competent person on a paid basis is needed to make it possible to maintain children in their own homes during the parent's illness and absence. Housekeeping services are necessarily costly, however, and even when housekeepers of appropriate qualifications can be found, families of average income cannot afford to employ them.

Child welfare agencies, public and private, can play a most strategic role in the lives of tuberculosis patients who have children. In the community under discussion, they stood ready to offer services not only in locating reliable foster homes and placing and supervising children in them, but also in exploring the possible use of relatives' homes in other communities through inter-agency correspondence.

It may be of interest to look at two case situations: in one, the family turned to relatives as the solution to their problem; in the other, to the public child welfare agency for foster home placement and supervision.

Use of Relatives

The example of a patient who placed her children with her mother is of interest in showing some problems that arise in such an arrangement. Housekeeping aid services in this case were provided on an emergency basis. The patient faced constant pressure to leave the sanatorium as the needs of her children were urgent and immediate, and these needs obscured at times her own less immediate, less tangible goal of regaining her health in the sanatorium.

A 22 year-old woman was referred to the social service department by the doctor on the ward, because of a crisis involving her children. The patient, Mrs. Orchard, had been admitted with minimal pulmonary tuberculosis. It is important to know that her maternal aunt had left the sanatorium twice against medical advice and had died in this sanatorium a year earlier, a fact which the patient and family kept constantly in mind.

The patient's stated problem centered around adequate plans for her three children, all under 5 years of age, who, together with her husband, had moved into the home of the patient's mother. Her mother was employed as a waitress from 3 to 11 p. m., and her father and sisters refused to have any part in the care of the three small children.

The initial help given to this patient by the social service department was in arranging for housekeeping aid service, for 2 weeks at a time, to enable her mother to carry on with her work when the children were sick.

After housekeeping services were provided during two separate emergency periods, Mrs. Orchard wearily reported that there was no use putting in any more emergency help. The only solution she could see was to go home and look after her own children. When she told the doctor she would have to leave the sanatorium he again referred her to the social worker. The patient had had an exhausting series of telephone conversations with her parents. She discovered that the constant pressure to which she was subjected was not so much related to the demands made by the children as to the hostility of her family toward her young husband because of his alleged failure to meet his financial share in the The patient was willing to delay leaving, however, until the social worker had an opportunity to see the mother so that together they could evaluate the situation more fully. Subsequently, interviews with the patient's mother confirmed the fact that the parents did feel that they had been burdened long enough by reason of the fluctuating economic circumstances of this young family. The mother, however, was anxious for the patient to stay in the sanatorium and agreed to try again to carry the load.

For the next 3 months Mrs. Orchard was in conflict between immediate fear of the consequences of leaving the sanatorium against medical advice as her aunt had done and her equally strong fear that failure to take over care of her children might result in a permanent break either with her parents or with her husband. She could not bring herself to accept any alternative presented by the social worker—for example, placement of the children—an alternative which the patient quite reasonably rejected, since she now could anticipate discharge from the sanatorium in a few months and she knew, as the social worker did, that an acute shortage of foster homes might well result in placing the children not in foster homes but in a temporary detention facility instead.

Not infrequently the social worker found Mrs. Orchard waiting for her in the morning, after a sleepless night, needing to review the situation and to look again at alternative choices before her. Often, she released her frustration in angry gusts of tears as the social worker led her back to the inexorable pressures on the outside. She recognized that if she grappled with them too soon they might bring her back to the sanatorium again with more disease and with no greater assurance that her children would have the care that she wanted for them.

Mrs. Orchard's background included marriage at the age of 17, three child-births and two miscarriages, family separations due to the husband's service in the Army or his efforts to locate work in other parts of the country, and a series of financial and housing crises. It seemed to the social worker that the sanatorium offered this patient a needed refuge and opportunity to store up more than physical energy. When the patient's mother was interviewed in her home, the social worker could well understand why she could not entirely protect the patient from strain, for the mother had on her hands a nine-room house, three adolescent children of her own, a somewhat irresponsible and demanding husband, and a full-time job. She was staggering under this load, but so aware of the events that led to her sister's death from tuberculosis that she could not bear to "let her daughter down" by turning out the Orchard family, as her husband was apparently urging her to do.

Despite the intensity of Mrs. Orchard's conflict, the actual instability of the social situation, and the small extent of her tuberculosis, the doctors, after reviewing the case with the social worker, concluded that it was still important to recommend that she remain in the sanatorium. Her situation on the outside could be expected to make demands on her, physically and psychologically, for which she would need as much strength as she could possibly accumulate in the sheltered situation in the sanatorium.

Some relief was obtained from the tension under which this patient labored both by her interviews with the social worker and by part-time work in the sanatorium which proved to be a happy experience for her. The social service department was able to obtain attractive clothing for her, which her husband could not afford and which she needed for the job in the sanatorium as well as for life on the outside. The patient did manage to stay until discharged by medical authority, and telephone calls received from her after discharge fully confirmed the prediction of doctors and social worker that Mrs. Orchard's life on the outside would not represent a protected situation. The financial, housing, and other crises in which she was involved shortly after her discharge led the social worker to refer her to appropriate social agencies in the community and to enlist their cooperation.

In this case, the patient showed no desire and little capacity to look at her part in the family's failure to establish itself on a sound and stable basis during 5 years of marriage. Her concern was whether or not to leave the sanatorium before the doctors thought she should. Social service directed itself to this immediate concern, helping in practical ways by securing housekeeping aid services, and in intangible ways by giving the patient the opportunity to work out her conflict and by supporting the patient's mother in the important but difficult part she had to play in making it possible for Mrs. Orchard to remain in the sanatorium.

Another important aspect of arranging for the care of children is the necessity of making sure that parents take part in plans for their children. Too often the parent is not consulted until plans have been made and even put into effect and this can only accentuate the feeling that he is being swept aside, considered dead, as he often thinks of it. before his time. Is it possible that some of the traditional attitude toward the outcome of tuberculosis creeps into our point of view so

that we do not fully expect these parents to return to their children or to play a vital part in their lives? And it is not only in the community that this attitude may be detected. Too often, it makes its appearance within the health or medical setting itself. Somehow, traditionally, we have the attitude that the person who is physically unable to carry out his responsibilities is also unable to think about them and to plan to carry them out. Patients need to be protected from too much stress but in our efforts to protect them we sometimes infringe upon their rights and add to their anxiety.

Unless the parents have by legal determination been found unfit to participate in planning for their children, they should be consulted in all important developments in the lives of the children. It is recognized, of course, that practical circumstances will sometimes preclude prior discussion with parents when moves must be made quickly, but these circumstances should be held to a minimum, as much for the sake of the child as for the parent.

Children, too, need to feel their parents' part in their lives, for the sense of belonging and of having a unique place in the parent's affection, so necessary for growth, can scarcely be achieved except by a knowledge of the parent's concern. Parents themselves, as well as others, sometimes forget this, either because they are consciously or unconsciously ready to shed their parental responsibility when they enter the sanatorium, or because in an effort to protect themselves from further emotional stress and pain, they have withdrawn themselves from living on the outside.

Child Welfare Services

Mr. Jordan, who was referred by the rehabilitation counsellor, came to the medical social worker to inquire whether he could receive help in arranging for the care of his little boy. Mr. Jordan was a man of 30, with limited education. His wife had died of tuberculosis the previous year, just before his infection was discovered; a 5-year-old child was admitted to the sanatorium at about the same time and was now a patient there; and the care of his 7-year-old child had been taken over by a cousin.

When Mr. Jordan came to see the social worker, only his low weary voice and dejected posture gave some clue as to how he felt about himself and his situation, for his words seemed to indicate only apology for troubling the social worker. When this situation was presented to the doctor, the social worker commented on Mr. Jordan's concern for himself and the sick child, and his dejection over his own physical condition and inability to assume responsibilities. The doctor pointed out that he thought that Mr. Jordan was over-reacting to his illness.

From an aunt the patient had learned that the cousin who had taken his 7-yearold son into his home had lost his job, and left the city. The family had placed the boy with a childless aunt and uncle, both of whom were employed and could give the boy little supervision and personal attention.

Mr. Jordan told the social worker how worried he was. The situation was referred to the child welfare agency, which placed the boy in a foster home where he would receive adequate care. At the suggestion of the child welfare agency caseworker, Mr. Jordan was encouraged to initiate correspondence with the foster

mother. The child welfare agency caseworker offered to stress the need for keeping before the child his father's concern and plan to reunite the family group as soon as he was well. Correspondence was begun by the patient and was maintained in lively fashion both with the foster mother and with the child for the remainder of the period of Mr. Jordan's stay in the sanatorium.

A channel of communication between Mr. Jordan and his boy was thus quickly established and the immediate problem of child care seemed solved, but the patient continued to come to the social worker to talk of other problems. With help from the medical social worker, and probably for the first time since his wife's illness and death, Mr. Jordan was able to talk of the meaning to him of the experiences of the past 2 years. He had had to give up most of the relationships that made up his life to that point. As he told of his wife's death, the effect on him of his diagnosis of tuberculosis, the separation from each of the children, and his continuing anxiety about himself and the little boy hospitalized in the other building, it was clear that this patient had tried to repress his feelings as best he could in denial of the pain and desolation through which he had passed.

Sharing the pain with someone, he could cease somewhat his constant preoccupation with that phase of his life which included his wife and accept the fact that it represented something to which he could not return. It probably was not mere coincidence that, following the easing of his anxiety about the child and his first talk with the social worker, Mr. Jordan seemed to take heart for the first time and to believe the doctor when he was told he was not as sick as he had feared. He began taking part increasingly in recreation and work in the hospital within the limits of medical advice.

This was particularly interesting as he had previously spoken with the doctor several times but had apparently not been able to absorb and accept favorable news about his condition. He was soon assigned to part-time work in charge of a commissary branch store on his ward. Further problems with regard to the children were brought to the medical social worker and were promptly cleared up with the child welfare agency before they took on large proportions. Following his discharge and the subsequent discharge of his child from the sanatorium, he did reestablish a home for himself and his children.

The community cannot eliminate the deleterious effects of tuberculosis as it bears upon children of sick persons; at best, it can provide resources for minimizing the toll exacted from children when their parents suffer from tuberculosis. Neither the health official nor the medical social service department of the sanatorium can work directly on the problem from the standpoint of the children. Rather, the full array of social services in the community, including child-welfare agencies, day care and institutional facilities, housekeeping-aid services, and family-welfare agencies must be called upon to take their proper share of responsibility in minimizing the impact of tuberculosis on children, in facilitating admission of the sick person to the sanatorium and in assuring some measure of freedom from anxiety for him while he is there. If the community has neither agency resources nor adequate funds for measures such as housekeeping-aid services and foster-home placement and supervision, the conflict placed upon parents with tuberculosis becomes so grave and real that refusal to accept sanatorium care is at times the only responsible

course possible for the parent. Adequate social-service resources, in other words, represent a vital part of tuberculosis control.

In the sanatorium, the social service department can facilitate the use of community resources in the individual case by bringing to the patient a knowledge of appropriate resources in the community which may be called upon, and by communicating with the agencies involved.

The hurt of separation from children, the pain of being a potential source of infection to them, the longing to be a daily participant in their growth and development, these emotional facts are an omnipresent reality in the sanatorium. It is believed and hoped that sharing the hurt and longing, and receiving a deep and honest response of understanding from the medical social worker helps make these emotional facts more bearable for the parents who are patients.

* * * * * * *

A person need not stand alone in his trouble. A sick person who must spend many months in a hospital has many problems. He can be helped to work out his practical problems and the subtle elusive facts of the inner reality in which we find our meanings and our satisfactions in living. He can be helped to resolve his confusion of feelings and facts and find a way of dealing with them so that he can remain in the sanatorium as long as necessary, using his medical care constructively. Eventually he can leave the sanatorium physically and emotionally sustained and sufficiently freed to live with greater inner security and peace with himself and his illness.

ACKNOWLEDGMENT

The writer expresses her gratitude to Dr. Robert J. Anderson and the Division of Chronic Disease and Tuberculosis. That the paper was made possible at all is due to their belief that the experience of the writer in one sanatorium would have significance beyond the immediate locality. To Sophia Bloom, Chief Medical Social Consultant in the Division, sincere appreciation is extended for her generosity in sharing her wide and intimate knowledge of the medical social aspects of tuberculosis; to Marcella Bernstein, Chief, Publications Section, the writer expresses thanks for her valuable editional assistance.

Although the sanatorium of the paper is unnamed, it is appropriate to acknowledge the writer's indebtedness to its medical staff, especially the superintendent and his associates, for an opportunity to work in a setting in which she could rely upon their support and humaneness. To the patients themselves, the writer can only express a sense of humility and deep gratitude, for from them and with them she came a little closer to knowing what the human spirit can bear.

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BCG Vaccination on a World-Wide Scale

The Joint Enterprise, or International Tuberculosis Campaign, has conducted mass BCG vaccination programs in over 20 different countries in Europe, Asia, Africa and Latin America. An account of these and other ITC activities, now available in this organization's second annual report, deserves wide attention. It will be of value not only to experts concerned with technical problems related to BCG vaccination, but also to anyone interested in the practical day to day working details of an international health program.

Since its earlier report ¹ describes at length the history of the ITC, a short introduction merely summarizes organizational relationships and policies. As is now generally known, three Scandinavian relief organizations, recognizing in the late 1940's that tuberculosis had become so widespread in post-war Europe as to create an emergency, began mass BCG vaccination in Hungary, Poland, and Germany. In 1948, the United Nations International Children's Emergency Fund joined with them to create the Joint Enterprise (later called, for purposes of popular understanding, the International Tuberculosis Campaign). With the World Health Organization providing technical guidance and aid, the ITC has aimed to assist countries in the execution of mass campaigns and to introduce BCG vaccination to them as a tool in their long-range tuberculosis control program. As of June 1950, 22,582,792 children and young adults throughout the world had been tuberculin tested and 10,845,455 vaccinated.²

The report is divided into two main sections, one dealing with operations at ITC headquarters in Denmark and the other with field activities. A shorter section discusses extensive research studies on BCG vaccine, carried out in Denmark in cooperation with the Danish State Serum Institute and WHO's Tuberculosis Research Office; the final section is devoted to plans for the continuation of BCG work under United Nations' auspices upon the termination of the ITC this summer. Charts and graphs illustrate various points in convenient annexes to the different sections.

The headquarters operations section is composed of reports from ITC's director and its departments: finance, BCG laboratory consult-

over 37,000,000 people had been tuberculin tested and 16,447,934 vaccinated.

Note.—A review of the Second Annual Report of the International Tuberculosis Campaign, July 1, 1949–June 30, 1950, issued by the International Tuberculosis Campaign. Copies may be obtained from the International Tuberculosis Campaign, Syanemollevej 25, Copenhagen, Denmark.

¹ The Conference on European BCG Programmes. Conducted with the assistance of the Joint Enterprise, Copenhagen, Denmark, September 8-12, 1949. Issued by the International Tuberculosis Campaignal These figures include pre-ITC work under Scandinavian auspices only. As of May 31, 1951, a little

ant, field personnel, public relations, statistics, field supply service, and motor transport. All administrative details are competently presented and from a refreshing point of view. As the director, Dr. Johannes Holm puts it: "The Headquarters of the ITC is not a 'master mind' for the programmes but a 'home base' through which solutions are found to the practical problems which assure efficient conduct of the campaigns * * * ITC.HQ staff in fact, do not regard themselves as a head-quarters with responsibility only for formulating policy, issuing directives, and controlling to ensure that these are followed, but as an integral working part of the field operations." He points out that there is no major ITC staff officer who has not actually participated in field work and faced immediate problems in his particular area of responsibility.

Reports forming the field operations section were prepared by headquarters personnel rather than by officials in individual countries (as they were in the first annual report). Fear is expressed that in this way "local color" is sacrificed to uniformity and standardization of material. Nevertheless, a wealth of human detail is included. Accounts of the "counter propaganda" campaigns in Egypt and India, for instance, make highly interesting reading. So also do the pages concerning situations encountered in North Africa where most of the people are nomads, and few can read or write, where the principle of authority is strong, and it is usually necessary to vaccinate in the open air. The campaigns in each of the countries are described, and details are given, with some variation, on (1) developments prior to the ITC phase; (2) the campaign itself; (3) practical organization of day-today work; (4) techniques of tuberculin testing and BCG vaccination; (5) statistics; (6) retesting (if any); (7) plans for continuation by the government upon completion of the ITC phase; and (8) general remarks.

The report likens progress in the management of mass BCG vaccination campaigns to the development of the airplane. "It must be stated that when the Danish Red Cross started its mass BCG vaccination campaigns in Europe in 1947, the plane was a 1918 model monoplane. Perhaps the four-motored Constellation of BCG mass campaigns has not yet been reached. However, ITC staff feel that they are on the right track." Many problems have arisen in the day-to-day campaign work, as they did during the airplane's evolution, through constant experience under varying conditions. These have had to be attacked by special studies, some in the field, others under separate, controlled conditions.

Many interesting details of problem solving are given. For example, experience has proved that paramedical personnel, like medical students or nurses, who lack extensive medical experience and are most likely to follow instructions without individual inter-

pretation, carry out tuberculin testing and BCG vaccination most satisfactorily. "The most unreliable category for such work, paradoxically, is the highly specialized doctor." In ITC's first year a working team was composed of one doctor and two nurses, but this has been modified and now varies somewhat from country to country. The most successful way of organizing a campaign, the report states, is to have all, or many of the teams, concentrated in one area at a time to finish their work before moving on.

Teams were instructed to use thermos flasks for transporting vaccine from place to place in the field, after its arrival in special refrigerated containers. ITC.HQ devised a wooden block in which one ampule could be held during work so that sunlight might not have a deleterious effect. A single prevaccination tuberculin test, the Mantoux, has been arrived at, with the Pirquet and Moro patch tests used only under special conditions. Originally a distinction was made between over-all and demonstration campaigns, but later it was only possible to separate two phases of the same campaign: that of demonstration and instruction and that in which it was no longer necessary for international medical personnel to take part in the actual vaccination work. The first demonstration phase, it was found, should never be too brief.

Over-all plans for the campaign in a country, ITC has learned, should be developed at least several months before actual work begins. These plans should be worked out with national health authorities and the vaccinating staff well in advance, nationally as well as in the first districts to be covered. All doctors should be completely informed and community leaders contacted and given information for dissemination. Interestingly enough, planners of community X-ray surveys in the United States 3 have found, in the same way, that it is advisable to conduct presurvey studies months or even longer in advance of actual X-ray operations. Moreover, a great deal has been done to arouse public interest before any of the units are in operation. For some 6 weeks before X-raying begins, the survey has been written up in the press, talked about on the radio, perhaps announced in theatres.

ITC has also found that the local press and public information resources must be exploited. Mobile loud speakers are most useful, particularly in countries where there is high illiteracy. Wherever possible, ITC missions have first carried out vaccination in the schools, thus ensuring that information about the vaccination and tuberculosis in general would spread to the great majority of homes. "Experience from many programmes," (in schools), says the report, "has shown that positive consent forms impede the work considerably and should not be used. Parents should not be asked to give positive consent

³ Community-Wide Chest X-ray Surveys, I. Pub. Health Rep. 65: 1277-91 (1950).

to the tuberculin testing or vaccination of their children. Where some parental acknowledgment is deemed essential a negative consent form should be used."

To American readers, the material on tuberculin sensitivity given in the report is perhaps of greatest interest. During these ITC campaigns for the first time in history, tuberculin testing and vaccination have been carried out on a broad international scale with practically uniform material, uniform techniques, and with personnel who had received substantially uniform instruction. The report emphasizes, however, that it would be unwise to draw direct conclusions about a country's general tuberculosis problem from its percentage of reactors alone, since "a number of factors will influence the percentage of reactors in a population." Examples of these factors include the amount of cattle tuberculosis, the degree to which infectious cases have been isolated, the general living habits, and the housing habits of the population.

Tuberculin sensitivity data given in the report are considered preliminary and presented with reluctance. The more comprehensive country statistical reports, already issued for Czechoslovakia ⁴ and Poland ⁵ and forthcoming for other countries will provide indices of tuberculosis infection which will be comparable and therefore of international as well as national value. However, statistical summaries of the work done are given and these indicate that tuberculin sensitivity is, in general, high in Poland (tested: 5,514,036; reactors: 2,512,321) or Ceylon (tested: 32,639; reactors: 20,827) or Hungary (tested: 3,095,146; reactors: 1,903,412), while it is relatively low in Austria (tested: 739,699; reactors: 147,822) or Greece (tested: 1,102,-489; reactors: 237,819). "It is difficult to select representative statistics," the report points out, "until the campaigns are completed and a thorough analysis has been made of the figures and bias factors in each country."

In Greece, for instance, because of wartime and geographic conditions, only about half the number to be reached in each district was tested. In Austria the number tested was far from the total rough target, but the number of school children tested is not far from the total number of school children, province by province. Percentages of tuberculin reactors by age and by district are charted graphically for each of ten separate countries. Average percentages for all the countries studied, in easy-to-read table form, however preliminary, would have added to the usefulness and interest of the document.

^{4&}quot;Mass BCG Vaccination in Czechoslovakia 1948-49." Prepared by the Tuberculosis Research Office, World Health Organization, Copenhagen. Published by the International Tuberculosis Campaign, August 1950.

⁴ "Mass BCG Vaccination in Poland, 1948-49." Prepared by the Tuberculosis Research Office, World Health Organization, Copenhagen. Published by the International Tuberculosis Campaign, December 1950.

| Country | Grand total including pre-ITC work under Scandinavian auspices only | | | | |
|---|--|---|---|--|--|
| | Tested | Reactors | Vaccinated | | |
| Austria Czechoslovakia Finland Greece Hungary Italy Malta Poland Yugoslavia | 1, 322, 000 1, 102, 489 3, 095, 146 50, 401 54, 968 5, 514, 036 | 147, 822 1, 036, 656 (2) 237, 819 1, 903, 412 14, 902 9, 962 2, 512, 321 822, 614 | 507, 541 2, 088, 446 592, 523 756, 395 1, 081, 391 28, 636 38, 70 2, 535, 026 1, 262, 764 | | |
| Arab Refugees Egypt Israel Lebanon | 211, 323 297, 499 296, 821 43, 463 | 25, 751 118, 714 75, 737 5, 354 | 148, 137 82, 129 176, 772 28, 311 | | |
| Syria Algeria Morocco Tangier Tunisia | 166, 676 545, 731 1, 198, 066 21, 089 274, 649 | 41, 790 188, 263 3 127, 045 8, 771 82, 748. | 75, 386 185, 297 566, 836 7, 493 123, 757 | | |
| Ceylon India Pakistan | 32, 639 1, 563, 673 231, 805 | 20, 827 767, 165 99, 868 | 5, 641 . 485, 045 69, 159 | | |
| Total | 22, 582, 792 | 8, 247, 541 | 10, 845, 455 | | |

Second Annual Report of the International Tuberculosis Campaign, p. 139.
 Data not available.

Incomplete data.

It is not made clear just how ITC's work will be carried forward, nor under what auspices. In any case, this general report, combined with the more comprehensive reports from each individual country, will form a valuable permanent record of mass BCG campaigns carried out on an unprecedented scale and provide data on the epidemiology of tuberculosis such as have never been available before. It gives the broad background which should greatly aid in drawing conclusions as to the protective value of BCG mass vaccination.

Errata

In the article, "Research Contributions of BCG Vaccination Programs. I. Tuberculin Allergy as a Family Trait," Public Health Reports, vol. 66, pp. 259–276, March 2, 1951, the following corrections should be made: On page 268 replace the s_T in first formula by s_T . Footnote 2 on the same page should be as follows: "The degrees of freedom for $\overline{s_1}^2$ was 732-84=648 (number of families with a reduction of 1 for each school), and the degrees of freedom for $\overline{s_2}^2$ was 1,739-732=1,007 (number of siblings with a reduction of 1 for each family)."

Incidence of Disease

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

Reports From States for Week Ended August 18, 1951

Virginia reported 22 cases of malaria for the current week, the largest number reported for any week this year in that State. From January 1 to August 11, inclusive, a total of 47 cases was reported; and for the first 8 months of 1950, there were only 10 cases. Of 33 cases reported in the 6-week period ended August 11, 1951, 28 were said to be among military personnel. Twelve of the latter were reported from Fairfax County, and 6 from Prince Georges County.

One case of human rabies was reported in each of two States—Indiana and Tennessee—for the current week.

Wisconsin reported one case of smallpox.

The total number of new cases of poliomyelitis was 1,765 for the current week as compared with 1,521 for the previous week, or an increase of 16 percent. Last week a 26-percent increase over the previous week was noted.

Three geographic regions—New England, East South Central, and the Mountain States—reported slight decreases in the numbers of poliomyelitis cases for the current week as compared with the previous week. The South Atlantic and Pacific States reported increases of only three and six cases, respectively. Of the remaining States, only the West North Central States showed a substantial increase in the number of cases for the current week, 242 as compared with 138 for the previous week. In this group of States, Minnesota, Iowa, Missouri, and Kansas accounted for the large increase. Although all States in the East North Central area reported increases over the previous week, numerically they were not great.

The cumulative total since the seasonal low week late in March is now 8,908 as compared with 9,090 in 1950 and 16,374 in 1949. The cumulative total since January 1 is 10,120 as compared with 10,221 and 17,287, respectively, for similar periods of time in 1950 and 1949

Epidemiological Reports

Gastroenteritis

Dr. John Kazutow, Maine Department of Health and Welfare, has reported a family outbreak of gastroenteritis in which it was

suspected that sandwiches made from commercially canned chicken and commercially prepared mayonnaise were the vehicle of infection. About 4 hours after eating the food, all four members of a family became ill. When opened, the canned chicken did not show evidence of spoilage. No laboratory confirmation of a definite etiological agent was obtained.

Measles-like Infection

Dr. V. A. Getting, Massachusetts Commissioner of Health, has reported a widespread outbreak of a disease in eastern Massachusetts during the past weeks which superficially resembles measles. However, coryza, photophobia, and koplik spots have not been observed, and the usual posterior cervical gland involvement of rubella is also lacking. It does not resemble scarlet fever, and occurs in older children which appears to rule out roseola infantum. Clinicians have not been able to make a definite diagnosis of the ailment.

Comparative Data For Cases of Specified Reportable Diseases: United States
[Numbers after diseases are International List numbers, 1948 revision]

| Disease | Aug. Aug. | | 5-year me- dian 1946-50 | Sea- sonal low total season w | | Cumulative total since seasonal low week | | Cumulative total for calendar year— | | 5-year me- dian |
|---------------------------------------|-------------|-------------|----------------------------------|---|----------|---|--------------------|--|----------|-----------------------|
| | 18, 1951 | 19, 1950 | 1940-30 | | 1950-51 | 1949-50 | through 1949–50 | | 1950 | 1946-50 |
| Anthrax (062) | 1 | | | (1) | (1) | (1) | (1) | 45 | | |
| Diphtheria (055) | 36 | 65 | 121 | 27th | 263 | | 698 | 2, 271 | 3, 515 | 5, 308 |
| Encephalitis, acute infec- | | | | | | ١ | | | | 0=0 |
| tious (082) Influenza (480–483) | 23 | 21 | | | (1) | (1) | (1) | 632 | | |
| Influenza (480–483) | 254 | 337 | | | | | | | 139, 871 | |
| Measles (085) | 1, 402 | 979 | 979 | 35th | 495, 453 | 305, 774 | 584, 297 | 466, 752 | 286, 644 | 549, 351 |
| Meningitis, meningococcal | | | | 07/1 | 0.000 | 0 | 0 4 7 4 | 0.051 | 0 040 | 0.400 |
| (057.0) | 55 | 58 | | | | | | | | |
| Pneumonia (490-493) | 462 | 708 | | (1) | (1) | (1) | (1) | 46, 067 | | (2) 9, 743 |
| Poliomyelitis, acute (080) | 1, 765 | 1, 488 | 1, 488 | 11th | 3 8, 908 | 9, 090 | 9,090 | 3 10,120 | 10, 221 | 9, 740 |
| Rocky Mountain spotted fever (104) | 21 | 26 | 27 | (1) | (1) | (1) | (1) | 254 | 348 | 410 |
| Scarlet fever (050) 4 | 260 | 239 | 342 | 32d | 260 | 239 | 342 | | | |
| Smallpox (084) | 200 | 200 | 1 | 35th | 18 | 45 | 71 | 10 | | 50 |
| Tularemia (059) | 17 | 11 | 18 | (1) | (1) | (1) | (1) | 445 | | 672 |
| Typhoid and paratyphoid | 1 1 | 11 | 10 | () | (7) | (7) | (-) | 410 | 042 | 0.2 |
| fever (040, 041) 5 | 177 | 102 | 131 | 11th | 1, 316 | 1,604 | 1, 757 | 1, 751 | 2, 114 | 2, 242 |
| Whooping cough (056) | 1, 039 | 2, 353 | 2, 129 | 39th | | 107, 941 | 90, 561 | 47, 744 | | |
| | _, 000 | _, 505 | _, | | , 010 | , | , 00- | | 11, 100 | |

¹ Not computed. ² Data not available. ³ Deductions: Michigan, week ended Aug. 4, 2 cases—week ended Aug. 11, 5; Arkansas, weeks ended June 9 and Aug. 11, 1 case each. ⁴ Including cases reported as streptococcal sore throat. ⁵ Including cases reported as salmonellosis.

Reported Cases of Selected Communicable Diseases: United States, Week Ended Aug. 18, 1951

[Numbers under diseases are International List numbers, 1948 revision]

| (: vuintbets und | uci unocaoco | are rincer | iativiiai ins | t numbers | , 1770 10116 | | |
|----------------------------------|-----------------|-----------------------------------|---------------|------------------|------------------------------|----------------|--------------------------|
| Area | Diph- theria | Encepha litis, in- fectious | Influenza | Measles | Meningitis, meningococcal | Pneu- monia | Polio- myelitis |
| | (055) | (082) | (480–483) | (085) | (057.0) | (490-493) | (080) |
| United States | . 36 | 23 | 254 | 1, 402 | 55 | 462 | 1, 765 |
| New England | . 1 | 1 | 1 | 167 | 3 | 8 | 59 |
| Maine New Hampshire | | | 1 | 27 | | | 6 |
| Vermont | 1 | | | 22 | 2 | | 6 |
| Massachusetts Rhode Island | . 1 | 1 | | 88 14 | 1 | | 29 1 |
| Connecticut | | | | 13 | | 7 | 16 |
| Middle Atlantia | 1 | 10 | 1 | 365 | 7 | 38 | 174 |
| Middle Atlantic | 1 1 | 7 | (1) | 190 | 3 | 38 | 103 |
| New Jersey | | 3 | 1 | 118 | 2 | 10 | 22 |
| Pennsylvania | | | | 57 | 2 | 28 | 49 |
| East North Central | | | 1 | 295 | 11 | 39 | 476 |
| Ohio | | | | 53 | 4 | | 95 |
| IndianaIllinois | | | 1 | 73 | 3 | 22 | 29 151 |
| Michigan | | | | 42 | 2 2 | 17 | 117 |
| Wisconsin | | | | 125 | 2 | | 84 |
| West North Central | 3 | 2 | | 24 | 4 | 31 | 242 |
| Minnesota | 2 | | | 5 | 3 | 10 | 39 |
| Iowa Missouri | 1 | ₁ - | | 3 | 1 | | 57 |
| North Dakota | 1 1 | i | | 1 5 | | 19 | 39 57 50 6 7 |
| South Dakota | | | | 2 | | | 7 |
| Nebraska | | | | 2 6 | | 2 | 21 62 |
| Kansas | | | | | | l | i |
| South Atlantic Delaware | 16 | 2 | 115 | 187 1 | 9 | 71 | 124 |
| Maryland | | | 2 | 65 6 | 1 | 24 14 | 4 |
| District of Columbia | | | 107 | 55 | | 23 | 14 |
| Virginia West Virginia | 3 | | | 8 | 3 | | 8 23 17 |
| North Carolina South Carolina | 10 | 1 | 4 | 12 3 | 2 1 | 8 | 23 |
| Georgia | 2 | 1 | 2 | 15 | 1 1 | 2 | 42 |
| Florida | | | | 22 | 2 | | 15 |
| East South Central | 4 | 3 | | 25 | 10 | 51 | 159 |
| Kentucky Tennessee | 2 | 2 | | 8 8 | 2 3 | 4 | 22 43 |
| Alabama | 2 | î | | 8 | 3 | 30 | 54 |
| Mississippi | | | | 1 | 2 | 17 | 40 |
| West South Central | 4 | 2 | 64 | 101 | 5 | 159 | 228 |
| Arkansas | | | 22 | 11 | | 18 | 34 |
| Louisiana. Oklahoma | 1 1 | 1 | 41 | 2 2 | | 30 | 51 48 |
| Texas | 2 | î | | 86 | 5 | 103 | 95 |
| Mountain | 3 | | 47 | 56 | 1 | 28 | 173 |
| Montana | 1 | | 3 | 19 | | 20 | 6 |
| Idaho | | | | | | | 5 |
| Wyoming Colorado | | | 5 | 5 7 7 | 1 | 5 | 4 82 |
| New Mexico | | | | 9 | 1 | 11 | 4 |
| Arizona. | 2 | | 39 | 9 | | 12 | 19 |
| Utah Nevada | | | | | | | 50 3 |
| | | | | | | | • |
| Pacific. Washington | 4 | 3 | 25 3 | 182 16 | 5 1 | 37 | 130 16 |
| regon | 1 | | 14 | 32 | | 6 | 6 |
| California | 3 | 3 | 8 | 134 | 4 | 31 | 108 |
| Alaska | | | | | | 2 | |
| Hawaii | | | | 47 | | | |
| | ı | | 1 | | | ! | |

¹ New York City only.

Anthrax: Tennessee, 1 case.

Reported Cases of Selected Communicable Diseases: United States, Week Ended Aug. 18, 1951—Continued

[Numbers under diseases are International List numbers, 1948 revision]

| [Numbers un | uer uisease | s are Inter | national L | ist number | 5, 1740 ICV | 191011 | |
|---|--|-----------------|-----------------|----------------------|---|------------------------|-------------------|
| Area | Rocky Mountain spotted fever (104) | Scarlet fever 1 | Small-pox (084) | Tulare- mia (059) | Typhoid and para- typhoid fever 2 | Whoop- ing cough | Rabies in animals |
| United States | 21 | 260 | 1 | 17 | 177 | 1, 039 | - |
| | | | | | | - | 151 |
| New England | | 17 | | - | 9 7 | 59 10 | |
| Maine New Hampshire | | 2 5 | | | 1 ' | 10 2 | |
| Vermont | | | | | | . 2 | |
| Massachusetts Rhode Island | | 7 | | | . 2 | 36 | |
| Connecticut | | 3 | | | | 9 | |
| Middle Atlantic | 1 | 35 | | . 1 | 12 | 149 | 19 |
| New York | 1 | 21 | | . 1 | 4 | 51 | 14 |
| New Jersey Pennsylvania | | 7 7 | | | 1 7 | 50 48 | 5 |
| | | 1 | | | 1 | _ | |
| East North Central | 1 | 90 | 1 | | 4 | 175 | 14 |
| Ohio Indiana | | 30 | | | 2 | 38 10 | 3 9 2 |
| Illinois | 1 | 18 | | | | 40 | 2 |
| Michigan | | 30 | | | 1 | 30 | |
| Wisconsin | | 11 | 1 | | 1 | 57 | |
| West North Central | | 14 | | 1 | 5 | 30 | 15 |
| Minnesota | | 1 | | . 1 | | 4 | 4 |
| Iowa Missouri | | 5 2 | | | 4 | 5 2 | 6 |
| North Dakota | | | | | - | | |
| South Dakota | | 1 | | | | 4 | |
| Nebraska Kansas | | 2 3 | | | 1 | 15 | |
| | | | | | | | |
| South Atlantic | 16 | 29 | | 3 | 15 | 183 | 23 |
| Delaware | 3 | 1 | | 1 | 1 | 6 | |
| District of Columbia | 1 7 | 2 | | | | 3 | |
| Virginia | 7 | 2 4 | | | 1 | 31 39 | 9 3 |
| West Virginia North Carolina | 1 4 | 16 | | | 3 | 62 | |
| South Carolina | | | | | 4 | 1 | 6 |
| GeorgiaFlorida | | 3 | | 1 | 6 | 6 35 | 5 |
| Florida | | 1 | | | | 30 | |
| East South Central | | 20 | | 1 | 18 | 45 | 24 |
| Kentucky | | 2 13 | | | 9 | 8 26 | 11 |
| TennesseeAlabama | | 4 | | 1 | 6 | 8 | 2 6 |
| Mississippi | | i | | | 3 | 3 | 5 |
| West South Central | | 9 | | 10 | 28 | 225 | 56 3 |
| Arkansas Louisiana | | 1 | | 9 | 9 | 15 4 | 3 34 |
| Oklahoma | | | | i | 2 | 26 | 1 |
| Texas | | 7 | | | 11 | 180 | 19 |
| Mountain | 3 | 8 | | 1 | 3 | 91 | |
| Montana | 1 | | | | | 9 | |
| Idaho | 1 | 5 | | | 1 | 3 | |
| Wyoming Colorado | | 1 | | | 1 | 7 29 | |
| New Mexico | | - | | 1 | | 16 | |
| Arizona | | 2 | | | 1 | 27 | |
| Utah Nevada | 1 | | | | | | |
| | | | | | | | |
| Pacific | | 38 | | 1 | 83 | 82 | |
| Washington | | 3 2 | | | 1 | 3 7 | |
| California | | 33 | | 1 | 81 | 72 | |
| | | | | | | | |
| Alaska Hawaii | | | | | | | |
| 110 TO GALLERY OF THE PARTY OF | | | | | | | |

¹ Including cases reported as streptococcal sore throat. ² Including cases reported as salmonellosis. ³ Report for June 1 to July 21.

Rabies in man: Indiana and Tennessee, 1 case each.

FOREIGN REPORTS

CANADA

Reported Cases of Certain Diseases-Week Ended August 4, 1951

| | 1 | 1 | , | 1 | I | 1 | 1 | 1 | 1 | 1 | 1 |
|-----------------------------|-----------|------------------------|---------------------------------|----------------|-----------------------|-------------|--------------|----------------|------------------------|--------------|------------------------------------|
| Disease | Total | New- found- land | Prince Ed- ward Island | Nova Scotia | New Bruns- wick | Que- bec | On- tario | Mani- toba | Sas- katch- ewan | Al- berta | Brit- ish Co- lum- bia |
| n . Nasta | | | | | | ١. | | 1 | | | |
| Brucellosis Chickenpox | 385 | 2 | | 13 | | 1 39 | 155 | 32 | 20 | 93 | 31 |
| Diphtheria | 4 | | - - | 10 | | 2 | 100 | 32 | 20 | 90 | 1 |
| Dysentery, bacillary | 12 | | | | | 5 | 4 | | | | 3 |
| Encephalitis, infec- | | | 1 | | | | _ | | | | _ |
| tious | 1 | | | | | | 1 | | | | |
| German measles | 60 | | | 4 | | 9 | 16 | 1 | 13 | 10 | 7 |
| Influenza Measles | 33 | | | 27 30 | | | | 1 47 | | | 5 49 |
| Meningitis, meningo- | 395 | 20 | | 30 | 1 | 56 | 43 | 4/ | 10 | 139 | 49 |
| coccal | 3 | | | l | | | 1 | 2 | | | |
| Mumps | 159 | 3 | | | | 12 | 74 | 18 | 10 | 20 | 22 |
| Poliomyelitis | 85 | 1 | | 6 | | 8 | 60 | | 1 | 5 | 4 |
| Scarlet fever | 107 | 1 | | 1 | | 15 | 18 | 27 | 13 | 16 | 16 |
| Tuberculosis (all | | | | | | | | | | | |
| forms) Typhoid and para- | 267 | 14 | | 6 | 19 | 117 | 23 | 22 | 8 | 46 | 12 |
| typhoid fever | 5 | | | | | 4 | 1 | | | | |
| Venereal diseases: | | | | | | - | • | | | | |
| Gonorrhea | 316 | 11 | | 12 | 16 | 66 | 52 | 16 | 40 | 30 | 73 |
| Syphilis | 94 | 1 | | 2 | 1 | 52 | 10 | 2 | 10 | 5 | 11 |
| Primary | 9 | | | 1 | | 5 | | | 3 | | |
| Secondary Other | 4 | | | | | 2 | 1 | | 1 | | ; |
| Whooping cough | 81 135 | | | 1 2 | 1 2 | 45 35 | 9 31 | $\frac{2}{12}$ | 6 | 5 19 | 11 24 |
| opnig wugii | 100 | 1 | | 4 | - 1 | 90 | 31 | 12 | 9 | 19 | 44 |
| | | | | | | | | | | | |

JAMAICA

Reported Cases of Certain Diseases

4 Weeks Ended June 30, 1951

| Disease | Total | Kingston | Other localities |
|--|--------------------|-------------------|------------------|
| Chickenpox. Diphtheria. Leprosy Tuberculosis, pulmonary Tubeld favor | 22 4 3 77 | 6 4 1 24 | 16 2 53 |
| Typhoid fever | 43 | 5 | 38 |

 $_{
m Jamaica}$. Note.—Week ended June 23 not included in above table. No report for that week was received from $_{
m Jamaica}$.

4 Weeks Ended July 28, 1951

| Disease | Total | Kingston | Other localities |
|---|------------------------------------|---------------|------------------------------------|
| Chickenpox. Diphtheria. Dysentery, unspecified. Leprosy Tuberculosis, pulmonary. Typhoid fever Typhus fever (murine). | 21 3 1 1 53 59 5 | 21 13 4 | 15 1 1 1 32 46 1 |

POLIOMYELITIS IN EUROPE AND AFRICA

Europe. The incidence of poliomyelitis as judged by reports up to July 28, 1951, has been lower in the German Federal Republic, France, Ireland, England, Scotland, Wales, and Sweden than for the corresponding periods, in 1950. However, Austria, Italy, the Netherlands, and Switzerland have reported an increasing number of cases as compared with similar periods for last year. Information has been received that 80 cases of poliomyelitis, with 6 deaths, plus 47 suspected cases have occurred in the Saar region.

Africa. The Belgian Congo continues to report relatively large numbers of cases of poliomyelitis, 54 cases being reported for the 2-week period ended July 28.

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

The following reports include only items of unusual incidence or of special interest and the occurrence of these diseases, except yellow fever, in localities which had not recently reported cases. All reports of yellow fever are published currently. A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

Plague

Venezuela. A total of 7 cases, with 3 deaths, of plague has been reported during the period July 22-August 15, 1951, in the jungle zone of San Pedro County, Miranda State.

Smallpox

French Equatorial Africa. During the period July 21–31, 1951, 13 cases of smallpox were reported as compared with 35 for the previous 10-day period.

French West Africa. During the period July 21–31, 1951, 166 cases (18 deaths) of smallpox were reported chiefly in Sudan (115 cases), Dahomey (23), and Ivory Coast (18). In Dahomey 82 cases (20 deaths) were reported for the period August 1–10.

Indochina. For the week ended August 11, 1951, smallpox was reported in Viet Nam as follows: Hanoi, 44 cases; and Haiphong, 19.

Indonesia. In Surabaya, Java, where 5 cases of smallpox each week were being reported for the past several weeks, a sharp rise has occurred for the week ended August 4, 1951, when 13 cases were noted.

Yellow Fever

Costa Rica. A fatal case of jungle yellow fever has been reported in the Province of Limon. The patient who lived in a wooded area in Guacimo, County of Pococi, became ill on August 11. Three other cases have been reported in this area during recent weeks.

Cold Coast. One suspected case of yellow fever was reported in Accra on August 9, 1951. The patient was from Abetifi Kwahu. Another suspected case was reported on July 30 in the Village of Mfanta near Suhum. The latter patient had visited Akuapim Mampong, where a death from yellow fever had occurred.

The suspected cases of yellow fever reported earlier have been confirmed as follows: Brenase, July 11-12, 2 cases; Kpandu, July 15, 1; and Winneba, July 12, 1. A suspected case reported July 18 in Lartch was not confirmed.

-Announcement-

Courses in Laboratory Diagnosis of Tuberculosis

In cooperation with the Division of Chronic Disease and Tuberculosis, Public Health Service, the Bacteriology Laboratories of the Communicable Disease Center, Chamblee, Ga., will offer two courses in the laboratory diagnosis of tuberculosis November 5–16, and November 19–30, 1951.

The courses are open to all grades of employed laboratory personnel who are approved by their State health officers. Practical laboratory training in all phases of tuberculosis bacteriology, including preparation of culture media, microscopy, cultural procedures, diagnostic use of animals, and testing of drug sensitivity will be included in the course. No tuition or laboratory fees are charged. Reservations for the courses should be made well in advance.

In addition, a similar course will be given for laboratory directors, senior laboratory staff members, physicians, and others of comparable professional standing October 29 to November 2, 1951.

Additional information and applications may be obtained from the Chief, Laboratory Services, Communicable Disease Center, Public Health Service, Chamblee, Ga.