# THE HEALTH OF STAFF IN HOSPITALS

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# Introduction

The National Health Service employs over 600,000 people, and is the largest single employing authority in Great Britain. By the very nature of most hospital work, automation is unlikely ever to lessen the hospital service's almost total dependence on people, as opposed to machinery. The quality of the care and service which patients receive depends not only on the calibre and expertise of all hospital staff, but also on the satisfactory maintenance of their health and general welfare.

The need to make provision for the health of staff has been well-recognised by many private industrial organisations, and indeed other state industries, of which mining, the railways and the Post Office corporation are good examples. It has been a natural assumption that the Health Service, because of its commitment, would be first and foremost in ensuring that its employees had the maximum health care, both curative and preventive. Unfortunately, as is often the case with doctors' and cobblers' families, the very reverse is true. The essence of this situation was highlighted by Sir Ronald Tunbridge, and as a result of the report of the joint committee on the care of the health of hospital staff, public recognition of the enormous defects in their care began to develop.

At present staff health departments throughout the hospital service are rudimentary or non-existent except in a very few areas. More and more hospital management committees are realising the need to provide facilities for the establishment of proper departments, in which good clinical and preventive care are combined with a responsibility for monitoring health factors in the hospital environment.

There are considerable difficulties in creating these new departments however, not only because of the lack of adequately trained medical and nursing staff, but also because of the lack of practical experience available on which to model the new establishments.

The object of this book is to provide some help and guidance to nurses, doctors and hospital administrators who are concerned with improving or creating staff health departments. Every hospital has its own special problems and local requirements and it is not intended to suggest detailed ways in which any department should be run. It is intended, however, to indicate the general nature of the problems which need to be solved, and some ways in which they can be tackled. What can be achieved in a new hospital may not always be achieved in a long-established one where preservation of tradition is valued. Not all, therefore, of the policies and procedures mentioned in this book may necessarily be carried out in a single hospital. Modifications will undoubtedly be required to conform with local situations and to avoid unnecessary and unconstructive disruption of long-established practice and tradition. The experiences on which the book is based derive on the one hand from the challenge of creating a staff health unit in a new district hospital and on the other by the equal, but quite different experience of running a department in a long-established teaching group of hospitals. Because of the points previously made, not all the policies and procedures have been implemented in both situations.

# The Change from Local to District Hospitals

In small cottage hospitals, although no formal arrangements have existed for staff care, it is often the tradition that a particular consultant accepts this responsibility in addition to his other main hospital work. Because of the small number of staff involved, this arrangement has frequently proved to be fairly satisfactory. It is essential to recognise, however, that this situation has proved satisfactory not because of its inherent organisation and planning, but because of the small number of staff involved and because direct personal communication is possible in small working groups.

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With the change to large district hospitals an entirely new situation has arisen. Personal contact can no longer provide a basis for communication in a working population of between 2-3 thousand people. Not only, therefore, is the volume of work of a totally different order, but also the means by which much of it is carried out. Effective administration and communication is now an essential for good staff health care. In the same way that a general hospital consultant can no longer find time to provide adequate clinical care for hospital staff, the general environmental problems of a hospital are no longer adequately dealt with by a hospital specialist whose primary responsibilities and interests lie elsewhere. Unless personal, preventive and environmental care are the responsibility of one department and one experienced staff health physician, there will not be the co-ordinated care, so essential for the well-being of hospital staff. In emphasising the need for a whole and co-ordinated responsibility, it must be stressed that in exercising this responsibility, it will be necessary to cooperate with and seek advice from those hospital specialists whose expertise is essential for implementing environmental care. Nowhere is this truer than in the control and treatment of infection

# Changing Administrative Structure affecting Work Patterns and Discipline

Changes in the structure of hospital administration and the introduction of the Salmon policy for nurses, have not been without their effect on hospital staff. The fairly strict discipline of the old nurses homes has been replaced by a more liberal policy for hospital residences, in which far fewer distinctions are made between different grades and categories of staff. The home sister is no longer part of the scene, and despite her restrictions on youthful enterprise, there is little doubt that she represented not only discipline but much-needed security. When security and confidence diminish, behavioural problems amongst nurses in training become more significant, and those responsible for their care will be aware of this.

In large working communities many adverse influences — often ill-defined — will only become apparent if statistical and epidemiological methods are used. This is particularly applicable for studying sickness absence figures for the nursing staff. Quite significant differences can be found between wards and departments, and these differences are often only accounted for by the staff's reaction to minor illness, rather than any absolute quality of the illness itself. Small working units tend to have much lower absence rates than larger units. Multi-specialty wards may have twice as much sickness absence as single speciality wards. A sense of unity and loyalty amongst staff is less likely in multi-speciality wards, and this may well account for some of the increased absence.

The introduction of bonus incentive schemes for non-medical staff has not been without its medical consequences. Where these schemes have been introduced, ward domestic staff are usually required to work on more than one ward. Part of the job satisfaction of domestic workers in hospital wards has been the comradeship which can be developed when working in one ward. Bonus schemes often break up working units, and however economic they may appear on paper, they may not result in an overall benefit when sickness absence and over-reaction to minor illness is taken into account.

These are but two of many instances where a broader and more comprehensive view of sickness and absence rates will indicate that morale and motivation affect many people's response to trivial illness and their extremely subjective reaction to "not feeling well". It is obviously important that the physical hazards of a hospital environment are not underestimated, but it will become apparent to those with increasing experience, that behavioural problems are of far greater significance, not only in producing morbidity but mortality also.

# Overlap with Management Responsibilities

In the previous paragraphs it is evident that in discharging the full responsibilities of a staff health department, problems will be revealed which, although affecting the health and well-being of staff, are in essence managerial or administrative. It is essential that a

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clear distinction is made between the two situations, because the department must in no way assume or overlap any managerial function of the hospital administration. The purely advisory, and non-executive nature of a staff health unit must never be forgotten. The quality of the advice given and its constant impartiality will be the yardstick by which the department will be judged. Necessary change will only be brought about by a quiet and restrained approach. The special problems and sensitivities of every hospital community must be understood before advocating change.

#### **Economics**

Where service and health are concerned it is difficult to justify every expense in terms of economic benefit. It is not easy to quantify the benefits of a happy person compared with a depressed one, although few would dispute the benefit in general of the former situation. The number of cases of tuberculosis prevented by an effective B.C.G. programme cannot be known. Indeed, the whole economics of the National Health Service itself would be hard to justify in purely materialistic terms, and no one seriously seeks to do so. Nevertheless, there are occasions when it is possible to point to clear financial benefits attributable to a staff health unit. Where sickness absence amongst nursing staff can be shown to be reduced to half the national average, the gain in nursing hours is obvious. Where shortage of nurses results in ward closures, a 50% reduction in sickness absence in a large hospital could represent an extra ward remaining open for a whole year. Even the most cynical should appreciate this benefit.

### Teaching Hospitals. Student Health Services

In teaching hospitals there has been a general tendency for the student and staff health services to be quite separate departments, with a different doctor responsible for each unit. The reasons for this separation are many, but a general underlying factor is the tendency for student health services to be more developed than the corresponding service for hospital staff. Where, however, the

hospital staff health unit is adequately developed, there is no reason why the two units should not be merged into one department. By so doing, much better joint facilities can be provided for both hospital staff and students. With the necessary goodwill and cooperation between hospital and medical school authorities, there are no significant problems in running a joint health service. To ensure that the medical school and students retain some identity in the combined service, it is helpful to give the department an appropriate title. "Staff and Student Health Service" is one such possibility.

### Confidentiality

One of the hallmarks of the modern staff health service is its confidentiality, and the complete reliance which staff may have in this. Those who have been accustomed to this standard may be surprised to learn that it has been, and still is the practice in many hospitals, for nurses to have no opportunity to see a doctor without a senior member of the nursing staff being present. It is natural to wish to remove such a barrier to confidentiality and individual freedom. In giving absolute confidentiality, it is important however to remember that there may be occasional situations where maintenance of total confidentiality may not be in the best interests of the patient. It would, of course, be utterly unethical to disclose information to a third party without agreement, but sometimes a discussion with a member of staff may be advisable in order to explain why revealing some information to a third party could be of benefit. For example, there may well be grounds for doing so in the case of a nurse suffering from marked depression. It is possible that her depression may go unrecognised by those responsible for her at work, to whom she may give an impression of irresponsibility, of constantly avoiding work and being absent from duty unnecessarily. As a result the nurse may be less sympathetically considered and moved between wards more frequently than might otherwise be the case. This may result in a worsening of the depression with more serious consequences. If the whole picture is known to those in authority it is probable

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that a more tolerant and helpful attitude would be taken. The absence of cooperation with the nursing office in this type of situation may result in an unnecessary exacerbation of the problem. Confidentiality must never operate to someone's disadvantage, although much experience and judgement is necessary to decide when that situation has arisen

#### Staff

Whatever systems and paper schemes are devised it is the calibre of staff which will ensure the ultimate success of a department. There is great need for more doctors and nurses with appropriate experience. If specialists are appointed in the new regions of the reorganised National Health Service, a basis for training doctors for staff health responsibilities may be established. The majority of appointments will be part-time, which means the majority will be held by general practitioners. With the necessary additional training there is little doubt that general practitioners will have the qualities and experience most suited to the successful running of a hospital staff health department. Combining the curative and environmental functions of the department under one doctor, as envisaged in the Tunbridge report, seems the most logical way to establish a coordinated and comprehensive service. The borderline between the two functions in a hospital community would seem too ill-defined for a division to make any practical contribution to solving the health problems of hospital staff.

More hospitals are contemplating staff health departments. Unfortunately, there are very few practical reference points available for guidance. It is hoped, therefore, that the following chapters, based on what has been proved in practice, will be helpful not only to prospective doctors and nurses, but also administrators responsible for providing accommodation and equipment.

# Staff—Accommodation and Equipment

#### Staff

For many years it has been the practice in most hospitals in Great Britain to delegate the responsibility of staff care to junior medical staff, or  $\odot$  senior medical staff whose primary responsibilities lay elsewhere. On the nursing side, home sisters usually accepted the additional commitment of day-to-day care of sick nurses. With the changing pattern of the hospital service, mainly because of the size and complexity of new hospitals, the traditional and rather casual arrangements for staff care are no longer adequate. It is not only the size of the new complexes which necessitates change in the old system, but also the fact that increased medical technology has brought new potential health risks to staff. Furthermore, the terms of reference have changed, so that the nurses clinic is no longer the sole commitment. Health care and responsibility must extend to all hospital employees, although it is important that in accepting this new role, the very real needs of nursing and medical staff are not forgotten or inadequately provided for. Because of these new commitments and responsibilities of the staff health department, the old arrangements are no longer adequate. It is not satisfactory for elderly nursing staff within a year or two of retirement to be "put out to grass" in the staff health units. The problems to be dealt with require not only appropriate experience but also mental vitality and enthusiasm. These qualities are more likely to be found in those who are developing their nursing careers, and who by nature and personality have positive contributions to make to the problems of young

people who form the major part of the population most significantly at risk. Doctors who accept the responsibility of staff care, must for similar reasons have positive contributions to make. They should recognise the need to evaluate the total environmental influences which are so relevant to an individual's well-being, in addition to having the necessary experience for dealing adequately with the majority of clinical conditions.

# **Nursing Staff**

A wide range of responsibilities are embraced in the work of a staff health sister. The immunisation programmes and health screening procedures will be a basic commitment. She will be the primary person to whom staff will go with health problems or illness. It will be her responsibility to provide guidance or treatment where this is appropriate, or to refer problems to the doctor responsible for the department. For much of her working time she will be exercising these responsibilities on her own, and she will find that independent decisions will be required to deal with many of the day-to-day problems presenting to her. There is probably no other clinical nursing post in the hospital service where so much independent decision-making is required when dealing with disease. In addition to the problems arising directly from the clinical and preventive care of individual members of the staff, there will be a community responsibility to the hospital as a whole. It will be necessary, in order to fulfil this role adequately, to liaise and cooperate very closely with other nursing colleagues and senior staff in all branches of the hospital community. An awareness of the problems of hospital staff will only come from such close communication.

It follows that the person capable of fulfilling the role of staff health sister must have a considerable experience of nursing, including, wherever possible, casualty work. Because of the need to understand the effect of environmental factors on the health and well-being of people it is generally considered that more specialised experience in this subject should be acquired. Many staff health nursing personnel will, therefore, find that they will benefit

from the Royal College of Nursing course for the Occupational Health Nursing Certificate. The full-time course for this qualification takes 6½ months, but a weekly day-release course can be taken over a period of 18 months. It cannot be emphasised too strongly, however, that those most suited to caring for hospital staff are those who are concerned about the problems of people and the environmental conditions which produce or aggravate stress reactions in them. A concern and sympathy for the problems of the young is essential, since the largest working group in a hospital — nursing — has a majority of young people in it. Those nurses who see purely physical, rather than behavioural aspects of an environment as being more important, will probably not find a hospital community the best place for their professional interests.

No staff health department will flourish without a "sister" of the highest calibre and experience. It is vital, therefore, to make the grading of the post sufficiently senior to ensure that the right people are encouraged to apply. It can be said categorically that the basic ward sisters grade cannot be sufficient for the responsibilities expected. In a large district hospital the 8B grading of the Salmon scale will be appropriate and anything less will be unlikely to produce the right person. A No. 7 grade would seem to be the lowest possible grading which should be considered for any staff health nursing post where sole responsibility for the nursing duties of the department is entailed.

The Tunbridge report recommended that the nursing post, in order to ensure the independence of staff health care, should not have responsibility to the hospital nursing administration, nor be considered part of that establishment. It is essential that this recommendation is always carried out and that the nursing post has professional responsibility to the doctor, with overall responsibility for the running of the hospital staff health department.

#### **Medical Staff**

The principal nursing appointment to a department will almost inevitably be full-time. In contrast, very few medical posts will require more than 3 to 5 sessions a week, except where the appointment involves responsibility for several hospitals within a group. Because the appointment is part-time it obviously follows that the doctor appointed will already be otherwise employed in a commitment which will not only occupy most of his time, but also probably most of his professional interests. However, the doctor who accepts responsibility for overall planning and developing of a staff health department, will accept a commitment which will often make demands on his time and thinking well beyond that allocated by the employing hospital authority. The doctor who becomes adequately acquainted with the problems of the hospital will forge close links with one of the most challenging and fascinating working groups to be found anywhere. He will be more than rewarded in interest, for all the time he devotes to this task.

The responsibilities of the doctor are fairly wide. In broad outline they range from day-to-day concern for the health care of staff - especially those resident on the hospital premises, to offering guidance and advice to senior staff about those aspects of the hospital environment which may produce adverse health in their staff. In considering these responsibilities which embrace concern for the total effect of the environmental influences on individuals, it cannot be stressed too forcefully that it is the functional influences on staff which are of paramount importance. Morbidity and, without exaggeration, mortality also, are far more related to functional reactions than they are to purely physical influences. It is vital that doctors who accept responsibility for these posts are those whose interests include a desire to understand the behavioural aspects of a hospital environment rather than be unduly obsessed by the purely mechanical and physical problems to be found in many working environments. Whatever the doctor's expertise in calculating or detecting various toxic substances in the environment, it will be his understanding of human nature and those aspects of young people's lives which inspire them to achieve and fulfil their potential, which will give him his greatest challenge.

Because of the part-time nature of these medical posts, it is

probable that the majority of them will be filled by general practitioners. The broad and balanced understanding of medicine, which is a hallmark of good general practice, are some of the most valuable assets for staff health work. An occupational hazard of hospital staff is the all too easy access they have to experts in narrow medical subjects. The experienced practitioner can play a valuable role in protecting staff from such unbalanced expertise.

The broader responsibilities involved require a good understanding of all immunisation procedures, and a good experience of the problems of medical selection, especially where depression and mental instability are the primary conditions requiring exclusion. The full-time occupant of the nursing post may have considerable experience in these subjects; but as the doctor will be the team leader, his own knowledge of the broader aspects of staff health problems must obviously match his position.

Some practitioners may wish to attend courses to acquire this additional knowledge. Unfortunately there are at present no courses particularly designed for those concerned with hospital health. Those that do exist are not very suited to a practitioner's circumstances in any event, as it is necessary to have done 3 years in occupational medicine before being eligible to attend a full-time course, and 10 years in order to attend a part-time course. Few general practitioners will be able to comply with these requirements.

With the reorganisation of the Health Service there is the possibility that consultants responsible for staff health services will be appointed to the new regions. They would form an ideal nucleus for organising training throughout the areas and districts for those general practitioners seeking to work in staff health services.

The majority of posts being created throughout the hospital services of Great Britain are, with few exceptions, in the clinical assistant grade. It may generally be accepted that this grading is appropriate for doctors with little suitable experience, but for those with most of the necessary experience and qualifications, this grading may not be adequate. It should be remembered that the staff health doctor is responsible to the new district or area

health authorities and to no individual doctor. He is required to make decisions of considerable importance to the well-being of the hospital service and may be responsible for the care of 3—4 thousand staff. In the exercise of these commitments he has to rely entirely on his own decisions. The clinical assistant grade was conceived as appropriate for practitioners who assisted consultants in their particular speciality, and who had no overall responsibility for the department in which they worked or for the ultimate decisions made about patients. If the staff health services are to attract the best doctors for the successful expansion of health care for hospital staff, it would seem only good sense and judgement to create grades of a seniority commensurate with the experience, knowledge, and ultimate responsibilities which are so essential in those who will hold these posts.

#### Administration

Medical and nursing staff working in the hospital service depend very considerably on the non-medical supporting staff, and unless this is good and effective, the total service provided for patients will suffer. Nowhere is this truer than in a staff health unit, where much of the routine work depends on good administration. The immunisation programmes and routine chest x-rays are examples of this. The time taken to give an injection is a very small proportion of the total secretarial time taken to arrange for the person to come for the procedure, and for the necessary documentation to be completed. The arrival of a new intake of student or pupil nurses requires extremely thorough documentation and close liaison with the school of nursing. Unless this is done well, the department will fail to provide the proper care and service for these nurses during their time at the hospital. The staff health sister and doctor are likely to be fully occupied in those functions of the service which require their particular professional expertise. In order that they are able to apply this to the maximum benefit, it seems only logical that those functions of the service which require non-medical expertise should be undertaken by those most suited and trained to do them.

The majority of departments will require to have someone not only with secretarial experience, but also ideally, with general administrative ability. In addition to these qualifications, it is important that the person appointed has an interest in dealing with people. The secretary is invariably the first person seen by staff attending the department. The initial welcome and help given is most important in determining the individual's immediate and subsequent aftitude to the department. If someone suffering from depression has plucked up courage to seek help, an unfriendly welcome at the door may deter that person from coming further. It cannot be stressed too strongly the important part in this repect alone, which the secretary plays in the general staff health department. It is also worth remembering that at any given time she will be the only representative of the department available to deal with enquiries. Many staff who attend the department do so either to find out results of routine tests, or to seek guidance on some general matter. New staff especially can be helped in this respect, and the way in which they are given information about their health care may make all the difference to their sense of security during their first few months at the hospital.

Where the department has responsibility for a group of hospitals it may be possible to staff some of those hospitals with receptionists who do not have secretarial experience, provided that they have a natural interest in people, and an ability to organise general administration and records. Such non-secretarial grades can play a vital part in the running of the department, but it will be necessary to have one person in the group with overall responsibility and secretarial experience. Only with centralised coordination of records is it possible to deal with the considerable administrative task of transferring notes between hospitals when student or pupil nurses rotate within a hospital group in order to complete their training.

No apology is made for emphasising these points. There are numerous examples where hospital management committees have not been sufficiently aware of the importance of adequate administrative help when planning new staff health departments. Except in the smallest of hospitals, it is the most false of econ-

omies to contemplate a new department without ensuring that adequate money is available for appointing a suitable secretary.

#### Accommodation

In many old hospitals there is such a shortage of space that adequate accommodation cannot be made available for staff health purposes. In these situations the inevitable has to be accepted, but if there is too little space the potential of the department will be so limited that it may be necessary and wise to record this fact. If this is not done, the subsequent limitations of the department will tend to reflect entirely on those responsible for running it, without account being made of the enforced inadequacies imposed by the lack of space provided.

Accommodation for medical units varies enormously from one hospital to another. Designs and facilities which are considered ideal in one situation may be found unacceptable and inadequate in another. It is not intended, therefore, to make any suggestions as to the specific design and details of a department. These are matters which only those acquainted with the local problems and situations can decide. It is thought worthwhile, however, to give a general guide-line to the amount of accommodation which should be considered by design teams when new hospitals are being planned, before the opportunity is lost to create an adequate department.

The majority of new developments in Great Britain are large district hospitals. The accommodation for staff health departments must relate to some extent to the numbers of staff employed. This will range from 1,000 to approximately 3,000 employees from the smaller to the largest hospitals. Similar areas of accommodation are surprisingly adequate for this varying range of population. During four years experience in developing a department in a district hospital employing 1,700 people, the following accommodation was found to be necessary. The same area of accommodation is likely to be appropriate for a district hospital employing between one and three thousand people.

Accommodation	Area in sq. ft.
Reception, records and secretarial	180
Waiting room	108
Treatment and immunisation	216
Consultation and examination	144
Sister's office	144
Rest room	144
Lavatory with urine testing space	40

## Equipment

For the reasons already given in the above section, it would be presumptious to suggest details of the equipment required to run an adequate department. What should be stressed is that the highest standard should be aimed at and the whole appearance of the department should be one which gives the impression of professional competence combined with friendliness and welcome. It is usually possible to learn something of a staff's enthusiasm and character when visiting their department.

Where possible, each member of the staff should have an opportunity to join in the discussions which concern their own equipment and where practical and possible choose for themselves. One essential for a successful staff health department is an harmonious and united staff having mutual respect and regard for each member's essential contribution to the combined effort. To achieve this it will be necessary to have more joint discussions—or rather informal chats—than is usually the case in other hospital departments.

# **Medical Examinations**

It is generally accepted that medical selection is necessary for some, if not all grades of hospital workers. There is, however, no general agreement as to what form this medical selection should take or what varying criteria should be applied to different grades of staff. A great deal of time and expense can be devoted to carrying out a full physical examination on all applicants. Where doctor and nursing time and resources are limited, it is most important to be certain that the benefits derived from such use of resources are significant and fulfill the criteria for which such examinations are undertaken.

It is necessary to be certain which conditions would render an applicant unfit to perform his or her work, and also those conditions while not preventing an applicant working would constitute a hazard to patients or other staff.

When due consideration is given to these points it is evident that an accurate and searching medical history will reveal much that is of importance and that a physical examination does not necessarily reveal more. Depression, epilepsy, digestive disorders and backache are examples of this. It seems reasonable to consider whether a medical questionnaire supported by a few specific tests (urine analysis, blood count, chest x-ray, blood pressure and vision) can be an adequate basis for assessing fitness. This method has been used for four years in a district hospital, during which time approximately 3,000 new staff, both medical and non-medical, have been employed. From this experience it is suggested that for virtually all new staff a satisfactory basis for medical selection will be provided by a medical questionnaire and

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interview, supported by a few specific tests. The avoidance of a formal clinical examination will save much time and unnecessary effort. The importance of different selective criteria for different types of work is necessary, and details are given of how such different selection can be applied. It is not intended to dispute the value of a full medical examination, but rather to emphasise that alternative methods may provide the same answers, and save much time and effort, which can be directed more usefully to other staff health problems.

#### **Doctors**

Although certain physical disabilities could prevent a doctor carrying out very specialised work, in general there are remarkably few physical handicaps which are a complete bar to some form of medical practice. Open pulmonary tuberculosis must be one of the few conditions within this category and then medical work would only be restricted temporarily until treatment was effective. What is, however, of outstanding importance is the need to consider a doctor's suitability for employment on the basis of overt or latent behavioural abnormalities of sufficient significance to constitute a hazard to proper and safe patient care. Unfortunately, it is these aspects of an applicant's health which are the most difficult to assess and obtain histories of, or to observe during a medical examination. It is almost impossible for an examiner to consider these problems on his own and, if adequate screening is to be done, it is essential for the staff health doctor to reach an understanding with his colleagues who sit on the candidate selection committees. No doctor can be screened for behavioural problems unless the selection committee accepts that it has some part to play. Unless specific enquiries are made to the consultants responsible for supervising the applicant in his previous posts, behavioural defects cannot be ruled out. It is also essential that at least one reference is obtained from the last employment. Considerable note must be taken of an employment record where there has been a long series of locums, perhaps interspersed with the odd permanent but uncompleted appointment.

#### Nurses

Whereas physical defects hardly ever prevent a doctor from continuing in some branch of his profession, a greater degree of physical fitness is necessary for nursing. In assessing candidates for student or pupil nurse training a history of depression or inability to withstand average or above average stress situations may also suggest that the applicant will not cope with the pressures of nursing. The examiner's ability to decide on fitness will again depend very substantially on the medical history. A good medical questionnaire will highlight the conditions which may preclude an applicant, or indicate to the examiner whether a full medical examination is necessary. It is suggested that where there is no history of significant physical or mental ill-health, supported by a normal chest x-ray, urine analysis, blood count, visual check, and blood pressure, a candidate may be judged fit, provided these findings are backed up by a personal interview and discussion. Where a staff health department has a suitably qualified sister this form of medical selection can be very adequately delegated to her. If such a procedure is adopted, it is important that any defects of importance should be discussed with the doctor.

The doctor must also see and examine any candidate who is suspected of being unfit, and no applicant should be rejected without this examination. Any history of mental ill-health or depression must be regarded with concern and caution. An individual who has already shown an inability to cope with life's problems is very likely to be unable to cope with the additional stresses and strains of nurse training. It is worth remembering also that as well as the problems of training itself, most trainee nurses will be undertaking not only their first job but also leaving home for the first time, both significant hurdles for most young people.

As far as physical defects are concerned not all doctors would always agree as to which conditions should preclude selection. Most would agree that recurrent back problems, chronic eczema and chronic suppurative otitis media would almost certainly render an applicant unfit. Well-controlled diabetes on the other hand need be no reason for rejection, and an epileptic even though on anti-convulsant treatment may be accepted provided there has been no fit for at least two years. Antibiotic sensitivity should also not rule out training provided the nursing administration is informed of the need for caution when handling the particular antibiotics.

There are, of course, many relatively minor physical conditions which once a nurse has started her training appear to become grounds for discontinuing training. Many doctors familiar with these situations will be aware that these defects are not usually the primary causes for giving up training, but merely an excuse for the real reasons which are either depression or a basic dislike of nursing.

During four years of selection without formal clinical examinations approximately 400 nurses were passed fit. Of those who subsequently gave up nursing for health reasons, none did so with a condition which a clinical examination would have revealed at the time of selection. Depression and stress reactions were the usual reasons for being unfit to continue training.

#### Non-medical Grades

Canteen and domestic workers are probably the most important categories for medical selection in this group. Any form of medical assessment must consider the problems of the employing officer. Unless most applicants have confirmation on the day of their interview, many will seek employment elsewhere. Hospitals are too much in competition with other employers to be able to afford loss of staff because of delay in medical selection. Confirmation of medical fitness must be given on the day of interview. A simple screening questionnaire will enable the majority to be passed fit. The main emphasis of this questionnaire should be to exclude chronic infectious conditions, mainly enteric or cutaneous. It is suggested that there is no significant loss of confidentiality if the employing officer asks the applicant to complete this form. Where positive answers are given to any question the administrator should contact the staff health sister, or doctor.

Quite often the matter can be resolved by telephone. Occasionally it will be necessary to see an applicant, but the majority can be passed fit without being seen. Some doctors may well consider that this method is far too remote, but in a large district hospital with a high labour turnover — up to 75% in some cases — any more protracted method would result in a lower recruitment level with a decline or cessation of catering or domestic services. Provided this method of selection is supported by experienced catering officers in detecting poor personal hygiene of applicants, it is considered that this is a satisfactory method of selection. Chest x-rays should, of course, be offered to all new hospital employees. Stool testing of canteen workers is discussed in Chapter V, but perhaps it should be stated here that it need not be undertaken routinely.

# Periodic Medicals for Risk Groups

There is little need for these in a hospital community, provided certain screening procedures are carried out at regular intervals. Details of these procedures are given in Chapter V.

Periodic medical examinations can be considered for radiographers; but unless they are designated workers, such examinations are not strictly necessary. As a rule radiation exposure is so minimal, that the regulations for designated workers do not apply.

#### Post-retirement

It is not unusual for employees to ask, or be asked, to continue working beyond their retirement date. In such cases it is reassuring for these individuals, and the hospital administration, if medical fitness can be confirmed. An examination at retirement age, and yearly thereafter as long as employment continues is advisable. Amongst those who consider themselves fit at this age, diabetes, and inguinal herniae are not uncommon findings, although neither condition need prevent continued employment.

# Recurrent or Prolonged Sickness

Although there may be practical difficulties in implementing this, it is advisable for employees absent for two weeks or more to be seen in the staff health department on their return to work. Apart from confirming fitness to return to work, it is reassuring for anyone who has been away for a few weeks to feel that an interest is being taken in him.

When an employee has had a bad sickness absence record often consisting of many 2-3-day absences – the hospital authorities may request a medical check-up. Often behind this request there is an element of a disciplinary procedure, and it is important that the staff health doctor retains a neutral position, thereby enabling him to render fair and constructive advice. No employee should be directed to the doctor unless it has been fully explained to both doctor and employee why the referral is being made. In order that there should be no doubts or ambiguity, the referring officer should give a full explanation in writing to the doctor, with a copy to the employee. If this procedure is carried out no employee will arrive at the staff health department without full knowledge of the issues to be discussed. It is important that the doctor deals only with the medical aspects of absence. Where disciplinary problems are concerned, it is essential that these are dealt with in the proper way by the hospital administration.

# **Immunisation**

It is a relatively easy matter to decide which inoculations should be offered to a hospital community. It is much more difficult to organise the administrative facilities upon which the carrying-out of an effective immunisation programme depends. In a small hospital with no more than a hundred or so employees, direct contact can compensate for any deficiencies in an administrative system. In large district hospitals with over two thousand employees, direct contact is no longer possible and it is essential to establish a system which will be effective where direct communication is not possible.

Knowledge that a new member of staff has arrived is obviously essential. In the absence of one co-ordinated system of employment, it can be remarkably difficult to obtain this information. Where personnel departments have been established in the newer district hospitals, it should be possible to arrange for a note to be sent to the Staff Health Department when employees arrive. Details of their work and place of employment within the hospital should be included. Not all large hospitals have personnel departments, and several separate units may interview and arrange employment. In these situations it is necessary to make individual arrangements with each unit of employment to obtain knowledge of new staff. This can be very time consuming and tedious, but essential. It is necessary also to remember that heads of departments change jobs fairly frequently and fresh arrangements will have to be made with each successor.

The majority of people do not know which particular inoculations they have had in the past. They should, however, be invited

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to complete a form as soon as possible after starting work, on which is listed the immunisation courses. When these forms have been returned to Staff Health it is usual to find that more details are required and it is best to invite the individual to attend the department to clarify the details required. Experience has shown that only a small percentage of forms will be returned with adequate information. It may be preferable, therefore, to avoid sending forms, and ask for a personal attendance at the outset. This visit can be of additional value in checking on overdue chest x-rays and other preventive procedures.

#### **Tuberculosis**

Although the incidence of this disease has declined, the rate of decline has slowed up in recent years. It is not uncommon for a case of tuberculosis to be admitted to a general ward for investigation, and the diagnosis delayed for several days, during which time medical, nursing and domestic staff will have been in close contact with the patient. Although ward staff, radiographers, laboratory technicians and post-mortem attendants are among the priorities for tuberculosis prevention, it is not wise to exclude any hospital employee from protection. All staff should, therefore, be tuberculin-tested unless they already know that they are tuberculin positive, or have had a successful B.C.G. within the last ten years. Some people will be uncertain whether they have had B.C.G., but inspection of the arm will confirm or otherwise, the characteristic scar. Where a B.C.G. inoculation has been successful. it is not considered necessary to carry out further tuberculin testing. It is believed that immunity after successful B.C.G. will be developed even if conversion to a positive tuberculin reaction does not take place.

Tuberculin tests should be read 72 hours later, and this should be remembered when carrying out the test, to ensure that the subject is able to return when necessary. Tuberculin-negative subjects should be given B.C.G. and asked to return in six weeks time for inspection of the inoculation site. There are two reasons for this: to confirm a successful reaction and to identify any severe

reactions. In the latter case reassurance is necessary that healing will occur, although this may take several more weeks, during which time a dry dressing is necessary. A further B.C.G. must be given if the first one is unsuccessful.

On identifying tuberculin-negative staff, it is important to tell them and those in charge of them that they must not be allowed near any tuberculous patients or tuberculous specimens until the B.C.G. has been successful. It is particularly important to insist on this precaution where student and pupil nurses are concerned, because the pressures to complete their training programmes may result in a temptation to remain on a ward with a tuberculous patient present.

Occasionally, a member of staff who is tuberculin negative persistently fails to attend for B.C.G. Although a staff health department has no ultimate authority to insist on them having it, the responsibility of the department will not have been discharged until the hospital management has been informed that the individuals in question should not be employed in any area where there is a risk of tuberculosis, until they have attended for the B.C.G.

Amongst those who have positive tuberculin reactions, some will have marked reactions. It is recognised that there may be an occasional case of active tuberculosis found amongst this group. Repeat chest x-rays should, therefore, be arranged within a further six months. Grade three and four Heaf reactions should be followed up in this way.

## **Smallpox**

With the success of the W.H.O. programme to eradicate smallpox, the risk of exposure is continuing to lessen. It is no longer policy in the United Kingdom to carry out routine vaccination of babies. The majority of the present generation of hospital staff were, however, vaccinated in infancy, and the problem of whether or not to do a primary vaccination does not often arise. In the future, of course, the reverse will be true and the majority, if not all, of nurses will have to be given primary vaccinations if protection

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from smallpox is to be provided. Most people still accept that there is sufficient potential risk of smallpox exposure for nursing and medical staff to be given primary vaccinations if previously unprotected. The time must not be too far away when this procedure may not be considered justified when balanced against the near negligible risk of smallpox contact.

It would seem reasonable for the staff health department to confine its efforts to the nursing, medical and laboratory staff. Unless there are suspected cases of smallpox in the country, revaccination should be offered every three years. If exposure is a serious possibility, re-vaccination should be done every year. Medical and nursing staff working in infectious units and isolation hospitals will come in this latter category.

In view of the now minimal risk of smallpox, it is most important to be aware of the contra-indications to primary vaccination. These include eczema —present or past, septic skin conditions, immune deficiency diseases, leukaemia and reticulo-endothelial malignancies, cortico-steroid and other immuno-suppressive treatment and of course pregnancy, especially during the first three months.

When vaccinating medical and nursing staff, it is essential to remind them that they must not risk any contact with eczematous children in the hospital until the vaccination site is completely healed. It is worth liaising with the paediatricians and sister in charge of the children's ward to ensure that this risk is avoided.

### **Poliomyelitis**

The rarity of this most serious and disabling disease is due almost entirely to the success of the immunisation programmes. The occasional outbreak still occurs however and protection with the oral vaccine should be offered to medical and nursing staff, and all other staff where practical. There are no significant reactions or risks to having the vaccine, and it would be an utter tragedy if any member of a hospital staff developed poliomyelitis when so simple and painless a method of protection is available.

As with all virus vaccines, it should not be given to pregnant women.

## Diphtheria

It is very debatable whether protection is now indicated in general hospitals, as diphtheria has been nearly eradicated in the United Kingdom. Anyone working in an infectious-diseases unit should, of course, be protected. Routine Schick testing of nurses for general training does not seem justified any longer. Should, however, this procedure be carried out, it will be found that about four out of five are Schick-negative anyway, no doubt retaining immunity from the triple antigen vaccine given to them in childhood.

#### Rubella

Maternity staff, especially those working in ante-natal clinics, should have immunity against rubella in order to protect susceptible patients from being given the disease during the first three months of pregnancy. It is evident that any non-immune subject may become a carrier of the virus, so that ideally, secretaries, receptionists and portering staff who work in ante-natal clinics should, where necessary, be immunised as well as doctors and nurses.

It is still considered essential to give rubella vaccine only to those known to be non-immune. It is, therefore, necessary to be able to have rubella antibody estimations done. Many hospitals do not have the facilities or laboratory technicians available for these estimations to be done for large numbers, or on a continuing basis. In these hospitals rubella immunisation cannot be undertaken. Where facilities are available it is necessary to establish a routine which is easily carried out. It is useful to come to an arrangement with the haematology department so that extra blood can be taken at routine blood counts. The extra blood can then be sent to the virology laboratory for rubella antibody measurement. Where staff are not having routine blood counts,

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specific arrangements will have to be made. Inevitably, some maternity workers will not get their antibody levels estimated. The staff health department should exert no authoritative or disciplinary policies in these cases, but should inform the senior nursing or medical staff in the maternity unit. It will be their clinical responsibility to decide what, if any, action to take.

Staff in paediatric departments should be offered rubella immunisation to protect them from infection. This especially applies to married women of child-bearing age who are employed in paediatric wards. Many nurses, especially those in training, will rotate between wards, and probably most of them will at some time work in the children's ward. It is, therefore, more realistic to consider all nurses, and of course, domestic staff, as being in need of rubella immunization. The only practical way to achieve this is to link the estimation of rubella antibodies with the initial routine blood count carried out on new staff.

Approximately 80% of the total will have satisfactory antibody levels. A titre of less than 1:16 will indicate non-immunity. To be on the safe side less than 1:32 may be taken as the lower limit.

Before giving rubella vaccine it must be known that pregnancy does not exist, and therefore the inoculation should be given only during the menstrual period or within nine days of the beginning of the period. The subject should be advised that pregnancy must be avoided during the next two months.

There is a theoretical risk that a recently immunised person could transmit the attenuated virus to a non-immune pregnant mother. The basis for this is the fact that the virus can be isolated from the pharynx of recently immunised subjects. In practice, no instances of virus transfer have been recorded. To be absolutely safe, immunised subjects should not work in the ante-natal department for six weeks. They could of course work in the delivery unit.

#### Tetanus

Tetanus toxoid is so effective in giving immunity and has so few side effects that it is a good practice to encourage all staff to accept protection.

# **Typhoid**

Laundry workers, and any other staff who handle soiled linen, should be offered this protection.

# Organisation and Administration

No immunisation programme will ever be sustained and effective without efficient documentation and adequate means to contact and remind staff when follow-up inoculations are required. The secretary or administrator who organises this will be the most important person in the programme. Record-keeping, contacting individuals and arranging times to fit in with staff's working programmes, will require about ten times as long per person as is necessary to carry out the actual inoculation. When a new nursing set arrives it is important to cooperate with the school of nursing to make sure that the students, or pupils, can come for their immunisation without interrupting lectures.

#### Influenza

Provided that the current vaccine available contains the relevant virus antigen for an anticipated outbreak, it seems a wise and sensible practice to offer immunisation to all the hospital staff. As the majority of influenza outbreaks occur in January, February or March, it is best to wait until late November before undertaking an inoculation programme for the whole community. Protective antibodies develop approximately two weeks after the vaccine is given. Immunity from the newest vaccines is said to last six months, but is highest during the first three. Any member of staff who suffers from chronic bronchitis or cardiac disability should be particularly encouraged to have the vaccine. Most people who have experience of offering influenza immunisation to a hospital community will be aware of how few people accept the offer of protection. An acceptance rate of 20% is probably the highest obtainable. Unfortunately this is too low a rate to provide any significant group immunity. An acceptance rate of

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about 70–75% is necessary before a group protection is obtained. It should be a general policy to offer immunisation to all hospital staff. Having established the principle that all staff may avail themselves of the opportunity, the efforts of the staff health department should be directed towards ensuring that the highrisk groups receive priority. In staff categories where there is a high labour turnover, i.e. porters, domestic and catering workers, a high percentage leave within three months of starting. If immunisation is given to large numbers of people who leave within this time, an enormous amount of time, documentation and material is wasted. It is a reasonable policy in order to avoid this, to offer immunisation to these categories only after they have been at the hospital three months.

# Screening Procedures—for staff and patient protection

Routine screening and medical examination of groups of workers exposed to specific risks in industrial or laboratory processes has been a well-established practice for many years. If specific risks can be eliminated from occupational environments, screening individual workers becomes unnecessary. The very nature, however, of some processes makes total avoidance impossible to guarantee, and periodic monitoring of the exposed population for adverse effects is necessary. There is a reasonable objection to this approach to the problem of occupational exposure on the grounds that screening tends to observe the consequences of exposure rather than do anything to prevent it. However, it may be the only practical way to assess the environment in certain complex situations. Where there is individual anxiety, normal results after screening tests can be most reassuring and valuable for morale. This point may be considered when deciding which tests to advise in any given situation. It is sometimes worth carrying out certain tests which may not be strictly necessary but which may have come to be regarded by workers as important and reassuring.

#### Nurses and Doctors

The question to decide is how frequently chest x-rays should be advised. Obviously those working in chest clinics or tuberculosis wards should have annual chest x-rays, or within six months of exposure to open tuberculosis. The majority of nurses and doctors will not fall into either of these categories. It is debatable

whether it is justifiable to advise an annual chest film for this majority, provided that each person has had a clear chest x-ray when first coming to the hospital, and a positive tuberculin response, or B.C.G. protection. Quite clearly, if an annual film is not to be advised, then some interval will have to be recommended. It is suggested that a three-year interval is a reasonable compromise. This can fit in administratively very well with student nurse training, since full qualification is obtained after an interval of three years. Liaison with the school of nursing in training hospitals will encourage nurses to have this further x-ray. For qualified nurses and doctors, a card index recall system is necessary to act as a reminder.

It must be emphasised that the three-year interval is suggested for routine screening only. When any chest illness occurs in medical and nursing staff, even if only a minor bronchitic episode it is strongly recommended that a chest film be taken.

# Radiographers and Radiologists

Anyone who works with radiation and is exposed to 3/10 of the annual permitted dose of 5 rads is classified as a "designated" radiation worker. The Code of Practice for the Protection of Persons against Ionising Radiations arising from Medical and Dental use, published by H.M. Stationery Office, will provide more details for those requiring further information on this subject. The film badges worn by all staff in x-ray departments do not record in the general run of events any exposure when developed at monthly intervals. This means that radiation exposure is less than 20 millirads a month, or 240 millirads annually. This is well below 3/10 of the annual permitted exposure of 5 rads. Although this excludes those workers from being "designated", and they therefore are not required to have a periodic medical examination, experience suggests that a periodic examination is well worth doing. This is not only reassuring to the individual but enables a check to be made on various immunisation procedures, especially B.C.G. Unless there is some specific indication, a full clinical examination is not necessary. It is suggested that a record should

be made of the vision, condition of skin, the fundi, and the urine checked for protein and glucose as a general principle. A blood count is also advised so that some indication of the normal count is recorded. Occasionally someone will be found to have a low total white cell count of 4,000 cells per c.mm. or less, without there being a pathological significance associated with it. It is useful to have this information recorded, and not to find it out for the first time after a possible exposure to radiation. A great deal of unnecessary worry can be avoided. Many radiographers are in the age range where low haemoglobin levels are found, so that the blood count is of additional value. Since radiographers have a high potential exposure to tubercle infection a routine chest x-ray should be arranged annually, and a check made that all are tuberculin positive, or have had B.C.G.

### **Laboratory Workers**

Technicians working in microbiology departments and pathology and post-mortem areas are at greater risk than the general population from tuberculosis. They should be encouraged to have annual chest x-rays.

Exposure to certain aromatic amines has been shown to increase the risk of developing carcinoma of the renal tract. Many laboratory workers handle these chemicals, and if used carelessly there is a risk that renal tract lesions could develop in later years. The code of practice for laboratory workers handling aromatic amines has been drawn-up by the Harlow Industrial Health Service and the Chester Beatty Research Institute, and this is strongly recommended for all hospital laboratories.

There is a long latent period between exposure and the development of bladder or other renal-tract carcinoma—commonly 15 to 20 years. Life-long follow-up of people at risk is recommended, and the question arises as to whether laboratory workers should be included in this category. The follow-up consists of exfoliative cytology on urine samples at intervals of not longer than six months. The decision must depend on the particular circumstances in any laboratory and full discussion with the pathologist

concerned and the Laboratory Safety Committee. Since the test does not have any disadvantage to those undergoing it, it is recommended that if there is any doubt at all exfoliative cytology should be done.

# Maternity Staff

It is a common practice for hospitals with maternity units to insist on clear throat and nasal swabs on all applicant pupils, or trained midwives before being accepted in the maternity unit. It has been demonstrated that nasal carriers of staphylococcal organisms do not permanently retain the organism. It is now generally accepted that it is impracticable to exclude healthy nasal carriers from maternity units. This being so, it is an unnecessary procedure to screen new maternity staff for nasal staphylococcal organisms.

If such a policy were thought justified, it would be necessary to continue nasal swabbing at frequent intervals. Where preemployment nasal swabbing is requested follow-up investigations are rarely if ever practised on established staff. Bacteriological evidence available shows how illogical this procedure is. It is more logical to avoid the initial culture, unless some particular clinical reason is present to justify the procedure.

Similarly, routine screening for streptococcal carriers is not considered a worthwhile practice. It must be emphasised that when there is evidence of a particular infection in a unit it may be necessary to exclude the staff from responsibility. A very full discussion of the bacteriological aspects of the carrier state is to be found in "Hospital Infection, Causes and Prevention" by R. E. O. Williams et al. The evidence on which the above recommendations are made will be found in this book.

#### Canteen Workers

As with maternity staff there is a variation in practice over the initial selection of these workers. It is important to ask all applicants whether they have had a history of significant enteric infections. The overwhelming majority of applicants will have no such

history and the question arises as to whether this majority should be asked to produce stool specimens for culture before being employed. If such requests are made, the hospital canteen is likely to be very understaffed, because many people do not accept this condition, and seek employment elsewhere. The consensus of bacteriological opinion is that the seeking and exclusion of symptomless carriers of intestinal pathogens as a matter of routine is not justified. It is, therefore, recommended that Staff Health departments do not initiate stool testing of canteen workers, unless the history is significant. Again, the fuller evidence and opinion is to be found in "Hospital Infection, Causes and Prevention".

It is far more important for canteen workers once established, to understand the need to wash their hands frequently and at all times after going to the lavatory. It is also vital that they realise that small septic lesions on their hands can cause serious food poisoning, and that they must seek immediate treatment for such conditions. It is difficult for this information to be conveyed to all workers in some hospitals because of language difficulties. One large district hospital has been found to have canteen workers from at least 15 countries and not one worker was fluent in English. It is clearly necessary to have "Now wash your hands" translated into several languages — a small point usually overlooked.

# **Cervical Cytology**

There is no evidence to suggest that carcinoma of the cervix has any association with hospital work and therefore there would seem to be no justification in providing facilities for screening staff for this condition provided they can obtain ready access to cytology facilities outside the hospital. In practice, it is surprisingly difficult for some staff to obtain this screening, and because there is additional anxiety amongst nursing staff, it is perhaps justifiable to consider arranging an occasional screening session for cervical cancer. Experience of providing this facility in a district hospital was disappointing because of the low response

rate from staff. Arrangements were made for a female doctor to attend the sessions and each female member of staff was notified of this and invited to make an appointment and avoid any delay. Out of 900 women, 254 accepted the test. Of these, 167 were over 30 years old, 13 of whom had significent findings. Fortunately these were monilial and trichomonal infections only and no pre-malignant or malignant cells were found. Of the 87 under 30 years of age only one was found to have an abnormal finding, and this was fortunately only a monilial infection. Bearing in mind that facilities had been organised to cope with all female staff, the response rate was disappointing. It must remain a matter of individual judgement and opinion as to whether a staff health service should consider it a justifiable exercise to arrange for mass cervical cytology for hospital workers.

# Haemoglobin Estimations

It is a fairly general practice for student and pupil nurses to be asked to have a blood count when they first come to their hospital. This seems a very justifiable and worthwhile exercise as judged by the number of low haemoglobins which are found. The responsibility of a staff health service to the whole hospital community should of course ensure that a similar opportunity is extended to all female workers in the hospital. There is a tendency for low haemoglobins to be found in the teenage and older age groups and the female population of a hospital contains a high percentage in both these groups. By extending routine haemoglobin estimations to all women, the resulting number of low values found will amply justify the exercise. Out of 1,128 routine haemoglobin estimations on women in one hospital 99 were below 12.0G., and 5 of these were below 9.0G.

Everyone with a low result should be seen in the department and treated or referred to her general practitioner. Among the older age range, gynaecological pathology may be responsible for excessive bleeding and detection of the low haemoglobin may be the first recognition of the problem.

There can be no compulsion for staff to have subsequent blood

counts; but it is very worthwhile encouraging yearly checks, especially for nurses in training. Over a three-year period, repeat haemoglobin estimations will show quite marked falls in some subjects. One factor in this is the unfortunate tendency for young nurses to avoid eating proper cooked meals in the hospital canteen. It is very tempting for them to have snack meals in their own rooms and a low meat diet is often the consequence. Detection of these falls in haemoglobin levels enables the staff health doctor to advise a better diet, in addition to prescribing iron tablets

To avoid unnecessary delay, and to encourage staff to have blood counts, it is helpful to make an arrangement with the haematology department for staff to report there directly for routine tests. The results should, of course, be referred to the staff health department and staff advised to contact that department for their results.

# Follow-up After Exposure to Infection

# **Smallpox and Poliomyelitis**

Smallpox and poliomyelitis present the most urgent need for an effective follow-up procedure for those who have been in contact with a case. The fairly rapid development of secondary cases and the readily infective nature of both diseases makes it necessary not only to identify and isolate staff who have been at risk, but also visitors from outside the hospital. A staff health department would have a limited part to play on its own in this situation. It would be essential to cooperate with the microbiology department and control of infection committee, who would have primary responsibility for handling the situation. As far as the tracing of visitors is concerned this would be a matter for the public health authorities. Before the re-organisation of the National Health Service in April 1974, medical officers of health were the advisers for community protection, but since that date the district community physician has assumed responsibility for the control and isolation of contacts.

Any member of staff who was not immune would need to be isolated immediately and vaccinated at the same time. Isolation would be necessary for the length of the incubation period, which is approximately three weeks.

# Tuberculosis. Serum Hepatitis

Tuberculosis and serum hepatitis, although both serious conditions, present a rather different situation for dealing with contacts. As has been mentioned in the preceding chapter, cases of

tuberculosis are often undiagnosed when admitted to hospital and several days, or even weeks, may elapse before the diagnosis is made. During this time many people will have been exposed to infection. The problem is to identify this large population and institute and carry out an effective follow-up which may take several months to complete. The most basic need is to establish the means by which information that a tuberculous patient is in a ward reaches the staff health service. So basic is this point that it is in danger of being forgotten, and to the concern of everyone it is possible for the staff health service to be unaware that a tuberculous risk exists, and therefore for no follow-up to take place. It is essential, therefore, for the department to establish a method for receiving immediate details when a tuberculous patient is diagnosed. It will be necessary to discuss this with the nursing administration. The most effective procedure as a rule is for the appropriate ward sister to inform the staff health department directly. It is most important that she is specifically asked to accept this as her responsibility. As soon as this information has been received the staff health secretary should ask the nursing office for a list of all nurses who have worked on the ward since the patient was admitted. A similar approach must be made to the domestic supervisor, and other heads of department responsible for staff who may have been at risk. This will probably include the portering staff, for example.

On receipt of the lists of names, medical records should be checked for the contacts' tuberculin state. In an ideal situation, all should be found to have been tuberculin-positive, or to have had B.C.G. Inevitably, this will not be so, and, therefore, anyone for whom there is no record must attend for tuberculin testing. Those who are found to be tuberculin-positive can be reassured but at the same time told that they should have a chest x-ray in six months time. A card index system, or some equivalent reminder, will be necessary to ensure that these x-rays are carried out. The tuberculin-negative contacts must be removed from any further exposure, and the appropriate heads of departments informed. After an interval of six weeks a repeat tuberculin test should be done to detect any conversions due to infection.

Should any tuberculin-negative contact become positive tuberculous infection must be presumed. This immunological indication is, of course, much more sensitive and earlier than a chest x-ray, which would be unlikely to show a significant lesion for several months. Any who have become positive, should be referred to the local chest clinic or chest physician within the hospital, after consultation with the general practitioner. Those who remain tuberculin-negative should be given B.C.G. and kept away from any tuberculous exposure until the B.C.G. site has been inspected six weeks later and a successful reaction demonstrated. This time will be approximately three months from the initial follow-up tuberculin testing, and when first informing the heads of department of the need for avoiding tuberculous patients, it is important to state that the restriction will be in force for three months. As in the case of those initially found tuberculin-positive, it is wise to arrange chest x-rays in six months time.

# Serum Hepatitis

When a patient is diagnosed with this disease, maximum isolation is indicated. Meticulous care is needed when taking blood and disposing of urine and faeces. Normally, the precautions and techniques required to protect staff are adequately carried out once the diagnosis of serum hepatitis has been made. The anxiety arises, however, because of the possible absence of such precautions before the diagnosis was made. It is advisable, therefore, to interview all staff who were in contact with the patient prior to the diagnosis. After questioning, it is usually possible to discover whether anyone has had a significant risk of infection by the hepatitis virus. If proper techniques for blood taking have been followed, and faeces and urine disposed of without any contamination occurring, there should have been no risk to staff, and in which case reassurance only is necessary. If on the other hand a nurse recalls pricking herself on a needle used on the patient, or had a small cut or graze on her hands and may have been contaminated, then a possible risk of infection can exist. For those members of the hospital staff who may be considered, on this basis, to have run a reasonable risk of infection, it may be advisable to give them injections of specific immunoglobulin for the prevention of serum hepatitis. This immunoglobulin has a high titre of antibodies to the hepatitis B-associated antigen. Supplies of it are limited and costly, so that it is important to be careful in selecting those who are to be given it. It is not necessary to give it to all ward staff unless they have run the risks described. Supplies of the specific immunoglobulin can be obtained from the Central Public Health Laboratory, London, N.W.9 5HT, telephone 01–205 7041, or from other laboratories of the Public Health Laboratory Service. It is recommended that the doctors at these centres are contacted for advice when a member of staff is considered to have been at risk.

### Gastro-enteritis

This is probably the most difficult condition on which to reach a balanced judgement and ensure adequate safety to patients. It is easy to establish a set of rules and bacteriological procedures for dealing with staff who complain of diarrhoea or vomiting, but there is always the danger that if these procedures are tedious and unacceptable to the majority of staff they will not report their symptoms. It is essential to strike a balance between what is theoretically correct, and what works in practice. If overzealous stool testing results in some staff not admitting that they have diarrhoea, then it is obviously ill-judged enthusiasm. It is vital to educate nursing and catering staff of the dangers of gastroenteritis and of the need to avoid risk to patients. To achieve maximum cooperation it is probably better to limit stool testing to relatively few of those who complain of symptoms in the interest of encouraging everyone to be responsible and admit to the condition. It is suggested that those who have one or two days' diarrhoea following over-indulgence in eating and drinking should receive symptomatic treatment only. Those who persist with symptoms after three or four days with abdominal colic and pyrexia tend to fall into a different category and should be stool tested. After this length of symptoms and pyrexia the sufferer is

usually only too pleased to seek medical attention and have stool testing done. Even with this latter group, only symptomatic treatment should be given, in the form of kaolin mixtures. It has been shown that when pathogenic organisms are isolated, clearance takes place as readily, if not more so, when no antibiotics are given. For those who do produce pathogenic cultures, isolation from patients and food processing is necessary, not only while clinical symptoms persist but also until three stool specimens collected on separate days grow no pathogens.

It is necessary to stress that however minor the episode, any nurse suffering from gastro-enteritis while working on a children's ward must come off the ward until clinically well, and where indicated bacteriologically negative. A final point is worth making that only the good sense and judgement of individuals will ensure that the right procedure and isolation where necessary, will be carried out, whatever rules and regulations the staff health and microbiological departments may make.

#### Skin Infections

It is most important to establish a system for treating and isolating septic skin lesions which will be in accord with the microbiologists' and control of infection committee's policies. It is equally important to ensure that staff realise their own responsibility in this matter. Unless they understand the significance and dangers of even minor septic lesions, they will neglect to seek treatment and possibly remain working in an area where their condition could be a hazard to patients. For nurses in training there is often a conflict of responsibilities, because the time schedules for their various courses and ward assignments allow for very little sickness absence. It is tempting to neglect small septic skin lesions, if by reporting them nurses suspect they will be suspended from duty, or transferred to the out-patient department. Senior nursing tutors can help considerably by being a little lenient and not insist too rigidly on the total number of days required for a particular ward or subject, so that a few days lost due to some skin infection will not result in the nurse having to make

up extra days at the end of her training.

Lesions which should result in removal of the nurse from theatre, surgical, maternity and children's wards are those present on the head, face, neck, arms and lower legs. Infective lesions on the trunk and upper thighs are almost certainly a minimal risk because they are protected by clothing. Staff with boils on these areas can reasonably be left at work. For those with lesions on exposed areas return to work must not take place until thorough resolution of the sepsis has occurred. Whether treatment is limited to the application of local antibiotics, or supplemented by systemic antibiotics is a matter for clinical judgement.

Domestic and catering staff must also understand their responsibilities in seeking treatment for skin lesions. The respective heads of their departments are usually hard pressed for staff and they may not take kindly to having an able-bodied member of their staff taken off duty. The need for this will be more likely to be accepted if proper discussion and explanation takes place. It is recommended that a close working arrangement is established between the staff health department and the nursing, domestic and catering managers. Not least of the problems in controlling infection is the difficulty in communicating with the foreign staff who have not acquired an adequate knowledge of English to understand the significance of what they are told about hygiene control.

### Throat Infections

There is a considerable subjective variation in defining a sore throat. Some people complain of the symptom when objectively only the minimum signs of infection are present. In contrast, others will be found to have considerable evidence of infection when they are admitting only to the minimum of discomfort. Therefore, by the very nature of the problem, control is inevitably not precise and it is difficult to define any precise criteria by which staff can judge whether they should seek treatment. Many cases of throat infection are virus in origin. When throat swabs are taken the majority will be found not to grow any bacterio-

logical pathogens. It seems a reasonable policy to avoid routine throat swabs on staff complaining of sore throats, unless they are working in particularly susceptible areas, such as the maternity unit or children's wards or working in a ward where there is evidence of wound infection. When it is considered necessary to take throat swabs, it is helpful to put the name of the ward on the request form so that any cross infection can be more readily traced and controlled.

When there is a significant bacteriological throat infection present, removal from risk areas should be advised for 24 hours after starting on antibiotics. Penicillin, unless contraindicated, is still the drug of choice. Obviously the period of absence will be extended if the patient remains clinically or subjectively unwell.

# Conjunctivitis

This condition is liable to spread readily and removal from patient contact will be necessary in high-risk areas, which must include surgical, maternity and children's wards. Adequate treatment is essential and antibiotic drops or ointment must be applied every three hours.

### Rubella

If any member of staff in their first three months of pregnancy is concerned that she may have been in contact with the rubella virus, antibody estimation should be done at once and repeated in ten days' time. When a rise in antibody level is demonstrated, exposure to the virus is confirmed, and the question of terminating the pregnancy will have to be considered. Staff especially liable to rubella exposure are those working in the children's wards.

# **Facilities for Sick Staff**

### **General Practitioner Care:**

### Resident Staff

The responsibility of the staff health service to provide general-practitioner cover should be limited to those who are resident within the hospital. In district hospitals, staff in this category include domestic, catering and maintenance workers, in addition to the nurses. In the past, nurses have made up by far the largest group of residents, but to-day they may form little more than half this population. The main change has been in the domestic workers. Previously women were employed from the neighbourhood of the hospital, and were non-resident. Difficulties in recruitment have resulted in the employment of foreign domestic staff, the majority of whom live in hospital accommodation.

Many hospitals have given and still give the responsibility for staff care to the resident medical officer (R.M.O.). Where such an appointment does not exist, or has been phased out in the development and reorganisation of the National Health Service, a more junior member of the hospital staff may be delegated to this task. Neither situation can now be regarded as satisfactory, since younger doctors are often pre-occupied with their particular house appointments, and usually have not had the broad based experience necessary.

The responsibility of the staff health doctor should be to see that all resident staff are able to register with a general practitioner, either in a completely independent practice outside the hospital, or with a doctor who has a commitment to hold surgeries within the hospital premises. In the latter event, the same doctor may also be responsible for the overall running of the staff health department. This dual function has much to recommend it, and was suggested in the Tunbridge report. The doctor who decides to undertake such commitments need have no conflict of loyalties between his personal doctor-patient relationship on the one hand, and his responsibility to the hospital on the other, provided he keeps rigidly to the fundamental principles involved in the dual relationship.

# Difficulties in Registering with a G.P.

It is most important that new staff do not feel obliged to register with the doctor who provides a practice within the hospital. They should understand that they can choose any doctor within the neighbourhood, and to enable them to have this opportunity, it is helpful to obtain from the nearest general post office a list of doctors providing general medical services under the National Health Service. This list may be displayed in the residence manager's office. Experience has shown that difficulties arise, as many practitioners have full lists, or do not wish to take on hospital staff with the commitment to visit them at the hospital when they are ill in their rooms. Further problems may arise when appointment systems result in a few days delay. Certain infectious conditions, while not harmful to the patient, may require earlier treatment because of the nature of the work in the hospital. Transport difficulties may also add to the problem.

For these reasons, the majority of resident staff will usually seek their general medical care within the hospital, and there must be adequate provision for this. If no official staff health physician has been established, a local practitioner should be invited to start a limited practice within the hospital. When this is done without the doctor having a previous practice commitment in the area, the administrator of the family practitioner committee of the appropriate area health authority should be approached for guidance.

## Sick Bay

Some hospitals still have certain beds allocated for sick staff, either in a side ward, or in accommodation in the nurses home. In many new district hospitals no special sick-bay facilities are provided, and the staff health physician will need to make sure that adequate care exists for staff when confined to their own rooms even with relatively minor conditions. The criteria for admission to the hospital itself tend more and more to equate with those applied to the general population outside. Consequently staff will be confined to their own rooms with conditions which previously would have been grounds for admission to the sick bay. From a purely medical point of view this arrangement may be quite satisfactory, but problems arise over difficulties in getting meals provided in the rooms, and perhaps equally of importance, the problem of utter loneliness and lack of home care and comfort. Some provision should be made for this, and it is strongly recommended that some "home help" facilities are provided, whereby someone is available to attend sick staff in their rooms to give the sort of care that would be available to anyone sick in her own home. This help may provide meals, obtain prescriptions, do shopping, post letters, or just be available for the occasional chat. The appointment of three parttime people will provide cover for most of the week-days, and part of the week-ends. There is usually no difficulty in recruiting the right sort of person for this work, especially when the appointments are part-time. Married women whose children have recently grown up make ideal candidates for these posts.

#### Non-resident Staff

Since all non-resident staff should be registered with their own outside practitioner, it can be argued that the staff health department should see no commitment to this group. However, within a hospital there are numerous relatively minor conditions affecting staff which require early treatment because of the risk to other staff or patients. Throat, cutaneous and enteric infections are obvious examples. To refer such cases to outside practitioners

may result in unjustified delay in treatment, and the department should accept a responsibility to treat these conditions. Furthermore, it is common for nurses to be anxious about symptoms which would be of little concern to an outside population not subjected to the strains and stresses of dealing with illness. Early allaying of these fears would seem a very proper function of a staff health department.

### **Dental Care**

Considerable difficulties may be experienced by staff trying to seek dental treatment. This situation arises principally from the fact that many come to the hospital from distant areas and therefore have no local dentist. Consequently there is difficulty in obtaining appointments, or even being accepted as a new patient. For these reasons the establishment of dental practices within the larger district hospitals would be of great benefit. Unfortunately, the cost of equipping a modern dental surgery is high and there may also be insufficient financial incentive for a dental practitioner to establish such a practice. Discussion and agreement with the local dental profession would be essential before contemplating a staff dental practice.

# Chiropody

It is difficult to find chiropodists who can spare time from their own practices, and it is often not possible to obtain their services for more than a half-day session a week. In view of this it is important to make sure that the most deserving cases are able to have treatment. The nurses, domestics and porters are the priority groups. Some hospitals cover the cost of the chiropodist's sessional fee by charging for individual treatments. Where at all possible, it would seem an appropriate gesture for staff to obtain chiropody without charge.

# In-patient Treatment

The question arises as to whether single accommodation should always be made available. Nurses and doctors when admitted to hospitals are particularly in need of single accommodation because of their close proximity to patients in the course of their work. Any other member of the hospital staff similarly placed should have the opportunity of privacy. This could well include domestic staff who might be admitted to the ward on which they work.

# **Student and Pupil Nurses**

For many years it has been the tradition in most hospitals in Great Britain to provide staff-care facilities only for the nursing staff. The term "nurses' clinic" was the usual term for the staff health service. Most other hospital employees were unable to obtain any staff medical care from whatever limited facilities there were. More recently there has been a general recognition that other hospital staff require staff health care, and it was the publication of the Tunbridge report which first drew attention to the considerable defects in staff-care facilities. However, having recognised the need for all staff to be cared for, it is important to remember that nursing staff, especially those in training, have greater problems associated with their working conditions and hours of duty than any other group of hospital workers. There are those who say that nurses do not have problems significantly different from girls employed in other occupations. This is a view-point which it is difficult to sustain if some of the problems affecting their health and morale are looked at in detail. It is the object of this chapter to highlight some of these factors and where possible to suggest some remedies.

# Leaving Home - First Jobs

The majority of student and pupil nurses are leaving home for the first time and starting their first job. For many young people both these events are major steps and inevitably are accompanied by a certain amount of apprehension and insecurity. Furthermore, they are launched fairly precipitately into work which has demands

and pressures unequalled in other occupations at this age. There is a tendency to overlook these important points and, as a result, there may be insufficient support provided for nurses during the first few months of their hospital career. It is worth recollecting that many enlightened industries are very aware of the problems of young people leaving school. As a result special care and training programmes are provided. Most young people starting in industry have the advantage of remaining at home during this transition from school days to adult life and therefore retain one very supporting influence.

#### Staff Health Attendance

In the absence of any clearly defined pattern of illness, the surgery attendance rates of a group of individuals tend to reflect their morale and sense of security. Those who have responsibility for student and pupil nurse care will probably be aware that their attendance rates appear to be high during their first 6-12 months at the hospital. To confirm how accurate this impression is, the attendance rates of a set of nurses in training were assessed during their first two years at their training hospital. Out of a total of 48 student nurses, the average number of clinic attendances per nurse per year for the first year was 6.9. During the second year, for the same nurses the attendance rate was 4.7. These figures do not include nurses who gave up their training during the two-year period, but apply only to those who remained throughout the period. The reduction in attendance rates probably indicates an improvement in security and self-reliance. With an increase in initial supportive measures the higher rates for the first year could well be improved, bearing in mind that most attendances were for borderline conditions in which subjective attitudes played a considerable part.

A further study is worth recording because it indicates again how the consequences of uncertainty and low morale are reflected in sickness, in this case where absence from work occurred. Before a nurse decides to give up her training she usually goes through a period of considerable doubt and often depression. Table I shows

the excessive absenteeism amongst 19 leavers out of a total of 47 nurses. The absenteeism relates to the first year of training.

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	No.	Total days absent	No. of nurse months worked	No. of days absence per nurse per working month
Nurses leaving	19	571	154	3.7
Nurses remainin	g 28	375	336	1.1

### Duty Rotas - Lack of Recreation and Social Activities

However strenuous and demanding a job may be, the tensions and stresses can often be offset by the adequacy of the recreation and relaxation available in off-duty hours. Nursing has particular disadvantages in this respect because the varying rota systems and night duty make it difficult, if not impossible for a nurse to take part in any regular activities outside the hospital. Regular attendance, for example, at an evening class is not possible, neither is participation in any team game played at week-ends. It is the lack of such recreational opportunities that result too often in a nurse failing to relax and forget her work when off duty. The majority of girls in other occupations are able, because of their regular hours, to have adequate recreational opportunities. A further disadvantage arising from irregular working hours is the lack of opportunity for integrating into a local community and taking part in social activities. Many girls come from backgrounds where such opportunities play an important part in their lives, and the absence of any links with a normal community is a distinct disadvantage. There is no doubt that loneliness in off-duty hours and boredom may be far more important in producing unhappiness and depression amongst student nurses than any problems they meet in their work. If hospitals were to plan and create recreational centres in the large district hospitals being built.

there would undoubtedly be lower wastage rates amongst nurses in training.

One further problem from duty rotas is worth mentioning. After late evening duties there is usually insufficient time before sleeping for mental relaxation and "unwinding". In the absence of this, many nurses find they cannot get to sleep for several hours because they are re-thinking many of the events and problems they have just left behind in the wards. When it is necessary to be back at work next morning for the early duty, many find they have had inadequate sleep. It is hardly necessary to emphasise the cumulative effect of several bad nights on someone who is working close to the limits of their physical and mental capacity.

This is but one further example of a problem which is virtually unique to nursing.

### Accommodation

Where a nurse undertakes her training in a hospital with full training facilities and an adequate number of specialties, she will be fortunate in remaining in the same accommodation throughout her training. In widely dispersed hospital training groups, the training programme requires a nurse to rotate between several hospitals and it is a common practice in some groups for a nurse to have to change her accommodation whenever she moves to a new part of her course. The one security for many is the privacy and permanency of their room. When this has to be changed it is unsettling, and something which should be avoided whenever possible. The training programme for all nurses should take note of the number of room changes which may be involved, and if it cannot be avoided at least the programme should be so arranged that accommodation changes are minimal. In one large London hospital group, student nurses may have to change their accommodation six times during their first eighteen months. With suitable arranging of their programme, the number of moves could be reduced to three. It could also be a possibility that if suitable transport were provided, it would be unnecessary to have any moves at all. If the nursing administration of hospitals is to seek a reduction

in the number of nurses who leave during the first year, much more attention will have to be paid to accommodation problems, and it must not be accepted that frequent, or any changes are necessary, if adequate efforts are made to tackle the problem.

It should be further mentioned that some hospitals still have to ask nurses to share accommodation. The absence of total privacy in off-duty hours can be a great disadvantage and everyone should have somewhere which is entirely her own. If hospital accommodation is so limited that some sharing cannot be avoided, a constructive policy should be established, so that student nurses nearing their finals do not have to suffer the problems of shared rooms. Unfortunately, examples exist where no attempts are made to avoid this. It is the absence of constructive concern about these associated problems of nursing which are often most responsible for low morale and high leaving rates, and excessive absenteeism.

# Nursing Administration Changes: Discipline and Security

In 1968 a new structure of nursing administration was introduced into the hospital service. The old titles of authority, from matron downwards, were replaced by a system of numbered grades with the introduction of the term "nursing officer". The term "matron" was replaced by "chief nursing officer" and in most hospitals the uniforms of the senior nursing staff were abolished. In all organisations it is important for staff, especially the young and insecure, to be able to recognise clearly those who are in authority over them. It is also important that the person to whom they are finally responsible is easily identified. In the days of the matron in uniform, the ideal situation existed from the point of view of the young student nurse. Whether popular or unpopular the matron was there for all to see, and her periodic ward visit reinforced her presence and authority. All nurses had personal interviews with the matron, which were valuable for morale and a sense of security. Unfortunately, to-day, the successor to the matron, the chief nursing officer, does not wear an identifying uniform and very often does not see the student nurse at the start of her career or at any time subsequently. No longer is there the matron's ward round.

All has melted into the shadows, so that the young nurse cannot identify the person to whom she should be ultimately responsible. Thus there has been lost one of the most basic assets in strengthening a sense of security and support for the young nurse.

Associated with those administrative changes, there has been a softening of the disciplinary attitudes of the former authoritarian regimes. Whereas it must be acknowledged that former discipline at times extended beyond what was reasonable or constructive, it did provide a remarkable basis for support and stability for nurses. Today, in the absence of any significant discipline, there has been an undoubted increase in insecurity amongst the young student and pupil nurses. It would not be appropriate for a doctor to voice an opinion on these matters, but for the sad fact that one consequence has been an undoubted increase in behavioural problems presenting to those responsible for the health care of nurses.

### Ward Sisters and Ward Structure: Home Sisters

A further consequence of the new career structure for the nursing profession has been the virtual disappearance of the older ward sister. This is proving very regrettable from many points of view, and one instance is the loss of support such experienced members of the nursing profession gave to young nurses. Many problems and uncertainties of student nurses were put in perspective by the wisdom of these sisters who had many years experience, not only of medicine but of human nature also. A further loss of security is now arising from the development of the multi-speciality wards, in which team-spirit and loyalty and a co-ordinated and cohesive working unit are far less likely to exist than in the old-style ward. The adverse effect of a disunited working environment on nursing-staff morale and absenteeism is discussed in more detail in Chapter IX.

The home sister has been yet another victim of the re-planning of the nursing profession, and once again a help for the younger nurse has been lost. The home sister played an important part in the general support provided and enabled the anxious or depressed nurse to have a fairly ready access to a sympathetic ear. The home

sister also provided help for the nurse who became unduly anxious over a minor medical condition because of an association with some serious condition seen in a patient. Reassurance at the right time often averted unnecessary worry. It is perhaps no surprise that where no home sisters remain, there is more tendency for nurses to seek medical attention out of normal hours because of the absence of available reassurance at their place of residence.

## **Psychiatric Training**

Caring for patients who are psychiatrically disturbed creates far greater demands on nurses than other forms of nursing. Unless nurses are themselves particularly sure and confident when they become involved with these patients marked stress and depression may be precipitated. As many student nurses exhibit anxiety symptoms, there must be considerable reserve about them all doing psychiatric training. During the first year of any new set of nurses, it becomes apparent which of them has less resistance to stress and tension. Many will already have been treated in the staff health department for stress and anxiety. Some of them may well be advised to avoid psychiatric training when this is optional. Those who are familiar with treating behavioural problems amongst nurses in training will be more than aware of the dangers of adding the further stresses and tensions created by psychiatric training. It will be the sad experience of some doctors to have seen suicide attempts precipitated by the anxieties and uncertainties of psychiatric work. This is such an occupational danger that a staff health department must seek to recognise those nurses most at risk and take effective steps to protect them.

# Drugs and Prescribing for Staff, and Use of Staff for Research

## **Drug Abuse**

The enormous benefits brought by the advances made by the pharmaceutical industries in the post-war period have been accompanied by certain problems and disadvantages. Some of the social and medical problems created by the misuse of drugs have produced as great, if not greater, human tragedies than many of the conditions which have benefited from the correct use of drugs. It appears to be very difficult to obtain facts and figures about how widespread drug abuse is in our society, but in a community of about 3,000 with a reasonable cross-section of the population it is not unusual to find evidence of drug abuse. Opinions vary as to how much this matters, provided no obvious social or work problems result. For those who have the welfare of a hospital community as their responsibility the question arises whether a different situation exists in that environment. There seems little doubt that much more serious consideration must be given to the subject than might seem necessary in non-medical working groups. The more the problem is considered the more difficult it is to reach a balanced decision as to what the hospital policy for drug abuse amongst its staff should be. If a non-medical hospital worker is found to be a cannabis smoker, for example, there are many who would say that it is of no great consequence, provided there is no evidence that work efficiency is impaired. If, however, that worker encourages a student nurse to start drug-taking, then there is a problem with a new dimension, since the training of the nurse is directed towards obtaining a qualification which confirms her responsibility to handle drugs. Whatever the differing views on

this question, it must be remembered that if a nurse becomes associated with drug-takers either within or outside the hospital, she may have additional temptation or pressure put on her because her associates will be aware that she has access to drugs. The majority of people with experience of the problem may consider that no great issue should be made when non-medical staff are discovered abusing drugs, provided no social or working problems arise, and that there is no evidence that other staff are being persuaded or enticed to associate with them. Where heroin addiction is concerned work performance is almost certain to be impaired, and there seems little to justify the employment of a heroin addict in a hospital. Where nursing staff are concerned, because of the responsibilities for which they are trained, and the dangers to which they may be exposed, it seems a reasonable proposition that drug abuse is not consistent with the obligations imposed upon those who choose nursing or medicine as a career. These views are entirely personal, and are not expressed without much deliberation. This opinion may seem too dogmatic for some who might feel that this is a situation where an open and receptive mind is more likely to be of value. The experience of dealing with the very real problems created by drug abuse amongst student nurses has provided the evidence upon which the view is expressed.

# Prescribing for Staff

Many staff have opportunities to obtain prescriptions in their hospital from doctors who do not have clinical responsibility for them. In these situations there is considerable danger that through several uncoordinated "consultations" the patient will obtain treatment that is not necessarily in his best interests. Nowhere is this truer than amongst those who are suffering from anxiety and depression. It is often a characteristic of such patients to seek multiple advice. If random opinions and prescriptions can be obtained easily the opportunity for centrally coordinated medical care is lost. In such a situation, these patients are more likely to have a longer illness. What to the unsuspecting patient appears a beneficial opportunity is in reality a considerable disadvantage. It is

therefore an important function of the staff health physician to consult colleagues to seek their acceptance of this, so that when hospital doctors are approached by staff for prescriptions they will refer the patient to the physician responsible for the primary medical care. There can obviously be no satisfactory solution to this problem unless the majority of doctors in the hospital accept the wisdom of the proposition. To obtain this acceptance it will be necessary to approach the chairman of the medical advisory committee so that he and his committee can consider the matter. If this committee is prepared to give support to the proposition that only the primary physician, or those doctors to whom a patient has been formally referred, should prescribe for hospital staff, then one very real "occupational" hazard will have been removed. As support for this, it is very helpful if the staff health service has its own easily recognisable prescription form; this will enable the pharmacy to cooperate much more readily in controlling random prescribing.

If a staff health physician cannot obtain the cooperation of his medical colleagues in controlling this problem, then it must be said categorically that the risk of drug abuse within the hospital must be substantially greater. It is impossible to avoid indiscriminate use and abuse of drugs within a hospital community, when medical staff prescribe for patients who are not formally under their clinical care.

### USE OF STAFF FOR RESEARCH

In hospitals closely linked with research units there is often a demand for staff to take part in research projects, or to give blood samples. Where there are ethical committees functioning effectively all research projects are vetted before being given permission to commence. The object of these committees is to look after the interests of patients. So far, the responsibilities of these committees do not include direct concern for staff who may become involved in research projects. When volunteers are invited, there is a tendency for the same enthusiastic few to step forward. The same

person may become involved in several experiments during the course of a year. There may well be no harm in this, but in the absence of any central control or register, it is not possible to be certain. In conjunction with the ethical committee, an attempt should be made to form a card reference system for all staff used for research. In order to achieve complete co-ordination and supervision, no research worker should use any member of staff for a project until reference has been made to the central card index system. It is advisable that this card record is kept and controlled by the staff health service, as it is this department which is most likely to be aware of any additional health factors which would make participation in a given research project undesirable.

It is also recommended that when a research worker is seeking volunteers for whatever purpose, no direct approach should be made to a member of staff because it is often difficult or embarrassing for them to refuse when asked directly. It is far better for an explanation and request to be placed on a notice board. If this is done, no one is put in the awkward situation of having to refuse to volunteer, but only willingly to agree to do so.

From time to time, the staff health department may be approached to supply names of staff suffering from a particular condition. The department should on no account give this sort of information, nor act on behalf of the research worker to make contact with staff attending the department. Exactly the same principle should operate as for requests for volunteers. A notice should be put on display so that the staff health service does not in any way become linked with research programmes.

# Sickness Absence

When the National Health Service was established in 1947, it was predicted that there would be a decline in disease because adequate and early treatment would be available to all. It was assumed that eventually as a result of the decline there would be less sickness absence. It was even predicted that, once the large reservoir of disease was eliminated, the initial high cost of the Health Service would be reduced because there would be less disease to treat. Unfortunately, the prediction that the cost would be reduced over the succeeding years has not been realised. Likewise, the hope that sickness absence would decline has also been unfounded. Some of the more serious diseases have, of course, declined – tuberculosis being an obvious example. The rise in sickness absence has been due to the more trivial illnesses and to the less-well-defined conditions where a precise diagnosis is difficult. Because of the borderline nature of much of this minor illness, there is a considerable variation amongst patients regarding their criteria for remaining at work or reporting sick. The subjective judgement necessary to reach these decisions depends very much on individual attitudes and on family and social traditions. Superimposed upon these influences there are undoubtedly factors in the working environment which contribute to sickness-absence patterns. The more significant of those influences are usually the most difficult to identify or define, and are those which are concerned with morale, motivation and job frustration.

Abnormally high sickness absence is obviously a concern of the staff health department. It is not uncommon for a member of the staff to be referred for an assessment because of repeated absences

Sickness Absence 55

due to illness. Such referrals are made as a rule because of the extreme number of days lost from work by the person concerned. In addition to those people, there are others whose absence is above average, but not so significantly that the management becomes aware of the extra days lost. Only by looking at the average sickness rates of groups of workers can these higher rates be observed. That such differences exist can be fairly easily demonstrated by determining the absence rates for different grades of workers within one working community. Further information can be derived from looking at the absence rates not only for different grades of staff, but also for different working units. It is not always easy to draw valid conclusions from such figures. Sickness rates are to some extent a reflection of the influences of morale and motivation on the subjective decision of an individual to report sick or stay at work when suffering from the less welldefined or borderline diseases. The assessment of these absence rates may therefore enable the observer to highlight those working units which exert an adverse influence on the morale and motivation of the staff. Since depression and behavioural problems can be so significant and important in the hospital working community, especially among the nursing staff, awareness of the value of assessing sickness absence is essential.

# Methods for Recording

Unless a hospital has a centralised method for recording staff absence, it can be extremely difficult to obtain accurate figures even for the main grades of staff. Where personnel departments have been established in the newer district hospitals, the task may be much easier. It is usual for all absences to be recorded where a national health service certificate is produced by the sick person. In order to obtain this information, suitable liaison with the personnel manager should be established. Where this appointment and department does not exist it may be necessary to seek cooperation from the accounts department which records absence for salary and wage deductions. Unfortunately, from the point of view of those seeking information, certificates are required

only from those employees who are absent for more than three days. For those who are away for three days or less it is much more difficult to obtain information about their absence. Since no documentary evidence is produced, very often no central recording is made anywhere in the hospital, including the accounts department. To make certain of recording this important short-term absence, it will be necessary to make arrangements with each head of department. As this request increases the already considerable amount of paper work, it is always necessary to offer an adequate explanation for making it.

# Diagnosis

Even where certificates are produced, the medical information available on them is usually insufficient to make any worthwhile assessment of the incidence of any particular disease. Where three days or less absence is concerned no medical information is available at all. It is recommended that no attempt is made to seek diagnoses when asking for sickness absence figures. The majority of departmental heads do not like asking for this information, and equally the staff may consider the request a breach of confidentiality. The incidence and pattern of short-term absence is in itself sufficient to identify problem areas, and the knowledge of the diagnoses does not add significantly to this. In any event, the stated causes of short-term absence are usually vague and form no basis for monitoring any particular disease.

### General Pattern of Absence

The simplest assessment of the overall differences in absence rates should be made for categories of employment within the hospital. In doing this it must be remembered that inevitably some inconsistencies and anomalies will arise, because the figures reflect not only factors in the different occupations, but also department differences. With a few exceptions, most staff work throughout the hospital in a variety of working units. Domestic workers are an obvious example of this, so that their absence rates may be

influenced by factors in their different working areas, as well as by the special characteristics of their employment. Telephonists, on the other hand, are one of the relatively few examples of an occupational group working within one defined and constant unit.

The following table shows the differences in sickness rates between some of the main groups of workers in a large district hospital.

Table II

Staff Category	Nos. employed	Av. number of working days lost per person per year
Catering	103	16
Dietitians	15	2
Domestic	284	17
Finance	25	7
Maintenance	54	20
Medical Records	<b>5</b> 6	17
Medical Social Workers	8	18
Nursing	519	16
Pathology Technicians	102	5
Pharmacists	18	4
Physiotherapists	16	2
Porters	72	10
Radiographers	22	4
Secretariat	27	8
Security	17	21
Telephonists	16	4
Ward Assistants	21	15

When absence rates are compared it is necessary to make allowance for many factors which vary between groups of individuals. Some of the more important factors are age, sex and the marital status of the women members of the staff. In general, married women tend to have more absence than single women. Without standardising for all differences it is apparent that there are substantial variations in absence rates for the 17 grades of staff shown in Table II. The general trend is for the lower absence rates to occur in those occupations in which the workers remain in one constant working unit. The rates for physiotherapists and telephonists and pathology technicians, which are 2, 4 and 5 days average absence each year respectively, are good examples of this. The higher rates tend to occur among those occupations in which the staff are disseminated throughout the hospital among the wards and departments. Domestic, maintenance, nursing and ward assistants, with average yearly rates of 17, 20, 16 and 15 days per worker respectively are good examples of this increased absence. It would be wrong to draw too many conclusions from these differences, because the nature of the occupations vary considerably. Furthermore, a septic skin condition may make it necessary for a nurse to be absent, when the same condition would not prevent a telephonist from remaining at her work. Nevertheless, there is a general trend for the closerknit working units to have lower absence rates. There seems little doubt that when the working area or unit is readily identified and constant, staff are much more likely to develop a sense of responsibility and loyalty to their work and to those in charge of them. It is often these factors which influence individuals to remain at work or go absent when suffering from what may be called marginal illness. With the development of the large district hospitals, the very size and complexity of them tends to make loyalty to the hospital as a whole less likely than loyalty to the more easily recognised smaller working unit within the hospital complex. If absence rates are to be improved in those occupations in the higher ranges, it will probably require more recognition of the need to give each member of staff a more readily identified working unit with the opportunity therein to develop personal and group loyalties.

Before leaving Table II, there are two other categories worth discussing. The security staff are shown to have a high absence rate, averaging 21 days each year. This appears to be contrary to

the previous points raised, since workers in this department would be expected to be a well-defined group with obvious responsibilities. Their absence pattern was looked at in detail and many of the days lost were due to a few periods away, but with many days absence on each occasion. The majority of the security staff were retired from a previous occupation and many were over 60 years old. Several suffered from chronic conditions, the commonest being bronchitis. Their high absence rates undoubtedly were dependent to some extent on their age and medical conditions.

The other group showing a higher rate than might have been expected was the medical social workers. Several discussions were held with them and it appears that their work, because of its fairly constant association with the socially unsettled and underprivileged members of society, may play a part in producing stress and tensions. This may be added to by the possible lack of job satisfaction in dealing with patients for whom there is often no satisfactory solution.

### Nurses

The nursing staff forms approximately a third of all hospital employees. It is not uncommon for hospitals to have to close some of their wards because of nurse shortages. These shortages are often not a result of recruiting failures but because of the number of nurses off sick at any one time. It is therefore well worth while examining the absence rates for nurses in greater detail. Table III shows the average days lost per person per year by grade or seniority of all nursing staff in a group of hospitals.

With the exception of the nursing officers and sisters, these rates are well above the average for women employed in other occupations. The national average in Great Britain for the age range 18–25 years is between 8 and 12 days per person per year. The rates for enrolled and pupil nurses and nursing auxiliaries are outstandingly high, being 33.7, 36 and 32.1 days average per person per year respectively. It is not easy to find an explanation for this excessive absence. Investigation of the cause does not indicate any significant pattern of illness, much of it being ill-defined and

of short duration. One factor common to all three groups is that they are in the less academic branch of nursing and in general have lower academic abilities. They are trained and employed in the practical side of nursing and do not undertake the more extensive study which is part of the student nurse's training. Their working days are unrelieved by study periods and lectures and there is the tendency for them to feel that they are not quite the elite of the nursing profession. It is possible that these factors may be partly responsible for a lower morale and motivation.

Table III

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Grade	No. em- ployed	Total No. of ab- sences	Av. per person per year	Total No. of days absent	Av. days per per- son per year	
Nursing officers	21	24	1.1	236	11.2	
Sisters	99	190	1.9	998	10.1	
Staff nurses	241	1,044	4.3	3,758	15.6	
Enrolled nurses	146	891	6.1	4,915	33.7	
Nursing auxiliaries	55	345	6.3	1,980	36.0	
Student nurses	259	1,387	5.4	4,295	16.6	
Pupil nurses	65	608	9.4	2,087	32.1	
	886	4,489	5.1	18,269	20.7	

What is quite clear is that this excessive absence is not due to significant disease and a staff health department should be prepared to discuss this point with the nursing administration. It is not uncommon for this excessive absence to be regarded as a problem of the staff health department alone. It is important to explain to the nursing administration that if morale and motivation were improved, without any medical assistance, the "sickness" absence rates for auxiliary, pupil and enrolled nurses would improve.

A further study of the same group of 886 nurses in Table III separated the absence rates into three main hospitals comprising the group. The results are shown in Table IV.

Table IV

	No. of nurses	Total No. of absences	Av. per person per year	Total days absent	Av. days per per- son per year
Hospital A	298	1,399	4.7	5,159	17.3
Hospital B	444	2,481	5.6	10,636	24.3
Hospital C	144	609	4.2	2,474	17.2
	886	4,489	5.1	18,269	20.7

Although hospital B was found to have a much higher rate than the other two hospitals within the group, this seemed to be accounted for by the different distribution of staff between the three hospitals, rather than by any inherent differences in the hospitals themselves. In hospital A the auxiliary, enrolled and pupil nurses comprised 20% of all nurses, in hospital B 36%, and in hospital C approximately 24% of the total. The additional absence in hospital B was mainly accounted for by the much higher ratio of these grades of nurses (auxiliary, enrolled and pupil) known to have very high absence rates. This small study illustrates the importance of knowing the ratios of grades of nurses within different hospitals when comparing overall absence rates between them.

### Absence Rates in Different Wards

It can be reasonably stated that some wards are more likely than others to create stress and tensions amongst the nursing staff. A study of the sickness rates of several wards can be of considerable value in highlighting problems. Where significant differences in absence rates are found it is important to draw the right conclusions from the differences. It is usually impossible to prove that any one set of circumstances in a ward situation is having an effect on absence. However, where a ward has much higher absence rates, some clues as to the relevant factors in the ward environ-

ment can be obtained by talking to the staff. Without doing this, false conclusions may be arrived at by considering the absence rates on their own. The following example illustrates this:

Three wards, a geriatric, a multispeciality ward and an intensive therapy unit (I.T.U.) were studied, and their absence rates compared. The ratio of the different grades of staff in the three wards were comparable. The results of the study are shown in the following table.

Table V

Ward	Av. No. of staff	Av. No. of absences	Av. per person per year	Total No. of days absent	Av. days per per- son per year
Geriatric	24	57	2.4	246	10.2
Multi- speciality unit	14	63	4.5	276	19.9
I.T.U.	23	102	4.4	423	18.5

The results show a much higher absence rate in the intensive therapy unit and multispeciality ward compared with the geriatric ward. In view of the demands of geriatric nursing, the low rates in that ward were somewhat unexpected. The high rate in the I.T.U. had been presumed to be due to the stress created by treating seriously ill and often dying patients. The staff on the I.T.U. were interviewed and they were invited to say what particular aspects of their work they found most stressful. In fact they admitted to very little, if any, stress from their work, but very readily complained of boredom. The main reason for this arose from the fact that the hospital had not yet opened its accident and emergency department and as a result no accident cases were being admitted.

The only cases coming to the I.T.U. were cardiac cases and strokes, and the capacity of the unit was under-used. Staff complained that they often came on duty and had no patients to look after. With this knowledge they admitted that if feeling slightly unwell they stayed off duty when there was probably nothing for them to do at work. There seems little doubt that where nursing staff are employed in wards which are not working at full capacity sickness absence rates are likely to be higher.

The higher rates found in the multispeciality ward were also discussed with the staff. This rate was not due to boredom, for the ward was excessively busy. However, five consultants had beds on the ward, each with his own junior medical staff and particular routines and techniques. The main problem from the nursing staff point of view was the complete lack of any co-ordination in the working routines. Equally important, there was no established working relationship between nursing and medical staff, because of the number of consultants with beds on the wards. The nursing staff undoubtedly found the absence of a united and co-ordinated ward extremely frustrating and demanding. There was little doubt that this poor working arrangement accounted for some of the extra absences found on this ward. It may be necessary to bear this in mind when more multispeciality wards are being planned, for whatever other benefits there may be, they will be more than offset by the absence of a good working unit from the nursing staff point of view.

The low absence rate in the geriatric ward was a surprise in view of the mentally and physically exacting nature of the work. There was, however, only one consultant responsible for the ward and it may well be that the resulting team spirit which has been created between the consultant and ward staff more than compensated for the demanding nature of the work.

In a survey of all wards and departments in a large group of hospitals it was found that the lower absence rates were nearly always to be found in the departments which were small with well-defined areas of work. The highest rates occurred in the medical and surgical units and the lowest rates in the x-ray, out-patient and casualty departments as well as the operating theatre.

#### Absenteeism of Staff Seconded to Other Hospitals

As part of their training, student and pupil nurses may be seconded from their main hospital to nearby hospitals to complete their geriatric, maternity and community care courses. Quite remarkable differences in absenteeism were found for staff attending the different courses in one large hospital group. These differences are shown in Table VI.

Table VI
Staff Seconded for Special Training

	Av. No. employed	Total No. of ab- sences	Av. per person per year	Total No. of days absent	Av. per person per year
Geriatric	6.5	104	16	309	47.5
Maternity	3.5	12	3.4	19	5.4
Community care	12.5	17	1.4	141	11.3

The excessively high rate of absence amongst pupil nurses attending the geriatric hospital was a matter of extreme concern to the administration and the staff health department was approached. No fully adequate explanation was found for the high absenteeism, but one non-medical relevant fact emerged. No transport was provided for the nurses to reach the geriatric hospital. They were obliged to walk the distance of approximately two miles each way from the main hospital. This journey took over half an hour each way, thus adding considerably to the working day. It is possible that the provision of transport might have more than paid for itself in less absenteeism and general goodwill. This would appear to be but a further instance of managerially created "sickness" absence.

#### Requests for Investigating High Absenteeism

From time to time the head of a department in the hospital may ask the staff health doctor to look into what is thought to be a high rate of sickness in the department. It is obviously important to exclude any epidemic condition, or chronic infective illness. It is not usually difficult to do this, and the best way is to ask the head of the department to make a list of all who go off sick and to note the causes of absence. If these lists are looked at monthly it will soon become obvious whether there is any pattern of illness. It usually transpires that no particular pattern of illness is present, and that the high absenteeism is due to minor conditions only.

#### Certificates

No discussion of sickness absence rates would be complete without considering the part played by medical certificates. Where absence is over three days, it will be necessary for administrative purposes alone, for the sick person to obtain a National Health certificate from a doctor. Without this, there may be loss of income since the amount of money obtainable from the National Insurance scheme will be deducted from the normal earnings. Where absence is for three days or less no claim can be made on the National Insurance and, therefore, no certificate is required for the purposes of the insurance payment. Many employees find, however, that they are required to produce some form of private medical certificate as evidence that their absence was justified. From a medical point alone this can be a disadvantage, because many employees are forced to attend a doctor for the certificate and not for medical advice. Quite often the doctor sees the patient only when he has recovered from the minor illness and has therefore to rely on the good faith of the individual about the genuine reason for absence. As most sickness causing three days or less absence does not require medical attention, there is a growing body of medical opinion that considers that employers should not request any certificates for this short-term absence. From a

staff health point of view there is everything to support this. Because many hospital employees, and of course especially nurses, live in hospital premises, there has been, and still is in many hospitals, a tendency for the senior staff to visit those who are sick in their rooms to check on the genuineness of the illness. It is most important that the staff health department is completely dissociated from this practice. Whenever a nurse or domestic worker states that she is unwell and cannot come to work, no one should pressurise her to attend a doctor unless that is the wish of the sick person. It must be the absolute right of all staff to be off sick without interference or enquiry from their superiors. Furthermore, after an absence of short duration, the word of the individual should be accepted that the absence was necessary. Except to exclude a significant infectious condition, the reason for the absence need be no concern of the employer. Regrettably, these views are not held by those in authority in many hospitals and it is a matter of great regret that nurses are often unable to have privacy when they are ill in their rooms, nor allowed to use their own judgement to decide when they feel well enough to come back to work after a minor ailment. Unfortunately there are those who claim that in the absence of this supervision of young staff there would be an avalanche of absenteeism. The facts confirm otherwise; where young people are made to feel responsible and treated as conscientious adults, they are far more likely to remain at work when suffering from minor ailments. In a new district hospital the value of this policy was accepted by the nursing administration, and from the outset all nurses were able to be off sick without enquiry and to return to work without having to account for their absence, or produce a certificate unless this was administratively necessary. The following table shows the sickness absence rates for three student nurse sets during the first year of each set at the hospital.

All rates were remarkably low for student nurses, and showed a steady decline over the three years. There is little doubt that many factors were responsible for this excellent sickness rate, but it can be said that allowing these nurses to make their own decisions and judgements about short-term absence did not produce an increase

in absenteeism. The fact that their absence rates were approximately half that for most student nurses throughout Great Britain should make those who doubt the benefit of giving freedom and responsibility to student nurses over sickness absence reconsider their approach to the problem. Inevitably, instances can be quoted when staff have been known to have taken a day or two off for what were clearly irresponsible reasons. This is, of course, bound to happen from time to time, but it is most unfortunate if the policy of the hospital is geared to the few irresponsible ones, rather than to the vast majority who are responsible, and upon whom the hospital depends.

Table VII

	1st set (1970–1971)	2nd set (1971–1972)	3rd set (1972–1973)
Av. number of days absent per person per year	10.6	8.9	7.3
Nos. in set	22	28	25

#### **Conclusions and Summary**

A staff health department cannot fail to be concerned about sickness absence rates especially when these rates are much higher than they would be for a similar population employed outside the hospital service. Before being able to make constructive comments to the hospital management, it is necessary to find out the details of the absenteeism. It is important to assess the absence rates by categories of staff and individual departments. Some grades of staff, especially amongst the nurses, have extremely high absenteeism, even compared with other nursing grades. When comparing absenteeism between different departments, due allowance must be made for this. Some of the excess absence may be accounted for by the necessity for nurses to be off sick with relatively mild infectious conditions because of the need to protect

patients. It will be found however that this does not account for much of the excess absenteeism, nor for the marked differences between nursing grades. The size and working structure of a department or ward are often factors which influence sickness rates. Although nursing is generally recognised as being a hard and demanding occupation, both physically and mentally, it is doubtful whether it is this which really accounts for the excess absence. The ability of management to recognise those conditions which go to make up a good working unit, and which create good morale and motivation, is probably the most important single factor influencing absenteeism. It is often the worse managements which are least able to understand this and who believe that absence is due only to excess illness or malingering. For many minor illnesses and borderline conditions, the decision to come to work or stay away depends very much on subjective attitudes, rather than any absolute quality of the illness. The personalities and attitudes, frustrations and anxieties which are so important a part of a working environment are often influences which decide whether or not an individual comes to work when suffering from a minor illness. Where staff are given a sense of responsibility and are not asked to produce medical confirmation for short-term absence, sickness rates are more likely to improve. It is strongly recommended that requests for certificates for absences of three days or less should be discontinued. Those who request certificates should be advised of the probable benefits of better morale and motivation in getting people to come to work. Authoritarian attitudes do not usually contribute to this.

# Accidents: incidence, causes and treatment

Injuries and accidents at work are more usually associated with workers in manufacturing and building industries, and not as a rule with hospital employees. The large hospital complexes of today, however, have many working areas within them which are comparable to an industrial situation. The maintenance departments, boiler houses, and laundries are some examples of these units. It would obviously be expected that workers in these areas would have an injury rate similar to workers in comparable occupations outside hospital employment. Examination of the types of injury and their causes would seem to confirm this. It is of interest to look at the injuries occurring to all hospital staff and consider some of the main causes.

It is true of most hospitals that there is no ready means of assessing injury rates and no methods are established for doing so. A staff health department may have to initiate a system for gathering this information. It is possible that some system does exist for recording certain accidents. As a rule where such recordings are made, the information is filed away in case of subsequent litigation, and no use made of the information for medical or preventive purposes. It will, therefore, be necessary to establish a system whereby every member of staff who sustains any significant injury is asked to fill in an accident form on which are recorded the nature and causes of the injury. This form should be sent routinely to the staff health department so that relevant details can be extracted. Where the form is finally kept is a matter for administrative decision, and it may be retained either in the staff health department or in the employee's administrative file.

When records of accidents are kept and analysed, an excellent method for monitoring the hospital is available, and those who are able to establish this system will find the results rewarding. Without a centralised assessment of accidents, it is impossible to detect dangerous practices or events. The results of recording all accidents for a period of three years in a district hospital employing approximately 1,500 people are of interest, and illustrate the value of establishing a central method of recording and analysing these events. Table VIII shows the distribution of accidents amongst the different grades.

Table VIII

	% of all staff	No. of accidents	% of all accidents
Administration	10	25	3.3
Catering	10	94	12.2
Domestic	18	130	17.1
Laboratory	7	126	16.4
Maintenance	6	66	8.6
Nursing	33	154	20.2
Porters	6	170	22.2
Others	_10_	0	0
	100	765	100

The 10% of staff for whom no accidents were recorded included some para-medical workers and the medical staff. The two groups having considerably higher than average accident rates were the porters and laboratory technicians. The primary cause of injuries to the porters was found to be sharp objects in wastebins and sacks. The majority of these objects were hypodermic needles discarded into general waste receptacles instead of into the special boxes provided for used needles. Out of 170 injuries sustained by porters, 121 were due to hypodermic needles. As a result of this information considerable improvements were made

in the methods for disposing of needles and sharp objects. Staff accepted the need for observing these methods more conscientiously. The accident rate from this cause fell substantially, althought it was a matter of regret that it was by no means eliminated.

Laboratory technicians sustained well over half their injuries from handling glassware, usually pipettes. Chemical burns and splashes in the eyes from various solutions were the other specific cause of injuries in this group.

Amongst the catering staff burns and scalds were the most common reported injuries, followed by lacerations of the hand from knives. The domestic staff sustained most of their injuries from being struck by or colliding with protruding objects in the area of their work. The same reasons were generally true for maintenance workers, closely followed by injuries from handling tools or materials.

The causes of accidents to the nursing staff are of special interest. Out of a total of 154 reported accidents there were 33 (21%) back injuries from lifting patients. However, it is rather surprising to learn that 41 (26.6%) injuries resulted from nurses falling on wet floor surfaces. A further 14 (9.1%) injuries were caused by being deliberately struck by patients. This is a fairly recognized hazard for psychiatric nurses, but less expected for general nurses. The number of injuries resulting from falls on wet floor surfaces is worth further comment. It is remarkable, and perhaps somewhat ludicrous that a nurse is more at risk from this than she is from lifting and handling patients. Because of the large numbers of these falls amongst nurses the total number for all staff was counted. Out of 765 reported accidents under review, 148 (19.4%) were caused by falls on wet or greasy floor surfaces. The cause of this accident is probably one of the most preventable, for it is common practice to wet-mop floors in hospitals. Often no attempt is made to leave the surfaces in a dry and safe condition, and it seems that those whose job it is to do this work, feel compelled to leave visible evidence of their efforts. When figures are produced which reveal such a specific cause of injury a report to this effect should be sent to the person responsible for domestic cleaning. The dangerous state of many floor surfaces in hospitals would not be tolerated in most other working environments.

#### Treatment of Staff Accidents

When staff sustain their injuries in hospital, it might seem fairly obvious that the right place to seek treatment should be the casualty or accident and emergency departments. In small hospitals this may be the only sensible system to organise, especially if staff health facilities are limited. In large district hospitals, some of which are dispersed over sites up to 40 acres in area, it may not be such a practical arrangement, especially for treating minor injuries. These minor conditions should not be regarded as justifying the use of the facilities of the modern accident departments. Provided the staff health department has adequate and sufficiently experienced nursing staff, consideration should be given to dealing with all minor injuries to staff rather than send them to the accident and emergency department. Apart from avoiding the unnecessary use of expensive and often already over-used resources, there is much additional value in the staff health department seeing and treating staff. By so doing, not only is the event brought to the attention of those whose responsibility it is to know, but a golden opportunity is presented to discuss the event with the injured person. This is often the most effective occasion on which to suggest safer working methods of the wearing of some protective clothing. A bond of confidence and respect is often established between patient and nurse or doctor, which allows a greater influence to be exerted than would be the case were treatment to be delegated. The day on which the accident has occurred is also the best time to inform the head of the department and suggest some safer method of working or whatever else is appropriate. When minor injuries are referred to the accident and emergency department, it is almost impossible to establish a follow-up system because information is rarely sent to the staff health department, and apart from a belated accident form, no knowledge of the event reaches the department at the time or shortly after the accident. In theory, it is possible to ask the casualty department to notify all

staff cases treated for injury at work to the staff health department. In practice, it is almost impossible to achieve this, not only because casualty departments are already overburdened with work, but also because of the constantly changing casualty staff, upon whose cooperation the success of any scheme depends. When staff changes occur frequently, it is impossible to maintain the continuity of any arrangement so dependent on individual cooperation.

#### First Aid

So far the treatment of minor injuries has been discussed within the context of existing hospital facilities, either in the casualty or staff health departments. Because of the widely dispersed working units in some district hospitals, the question arises as to whether there is any scope for simple first aid treatment at the place of injury. It is a requirement of all industrial sites that first-aid equipment is provided, and in practice many small skin lesions are treated at work through the first-aid system. Provided good sense and judgement are exercised there seems no reason why an effective first aid network should not be established in large district hospitals. Instances are known to be on record where hospital consultants have been opposed to any first aid facilities being allowed on the hospital premises. In such cases, it can only be assumed that the reasons and circumstances for suggesting firstaid cover had not been adequately put to those who raised objections. Already the hospital service is in danger of being unable to cope with those conditions which must be seen and treated in hospital. It would seem essential to keep a sense of proportion about minor lesions which, but for the fact that they occurred to workers on hospital premises, would have been dealt with by simple first aid methods, either at the place of work or at home. Furthermore, the time taken in treating a trivial condition through the formal hospital channels is considerable, and may result in an important worker losing half a day's work. It is also worth pointing out that the walking distances involved in the large hospital sites are considerable. The distance from the maintenance department to the casualty unit and back in one district hospital was found to be over a mile.

It is proposed that in those hospitals in which it is appropriate to do so, the staff health department should establish a first-aid system so that trivial injuries can be dealt with simply and effectively. It is suggested that all the main areas other than the medical units, are provided with first aid boxes. Typical examples of those areas requiring these are the kitchens, maintenance, stores and laboratories. In a district hospital employing about 1,500 people or more, approximately thirty first aid boxes may be required. These boxes can be made at the hospital, but more conveniently can be purchased ready made and equipped. It will be necessary to supplement the standard first aid dressing provided with small dressing plasters. If the traditional tourniquet is included it is recommended that this is removed before issuing the box. It may also be found that sulphacetamide eye ointment is part of the equipment, in which case it would be safer to exclude this preparation since eye conditions are best seen in the staff health department and in addition sulphacetamide may cause allergic conjunctival reactions more commonly than more recently developed antibiotic eye preparations. The hospital supplies department should be asked to purchase the boxes, but the staff health department should be responsible for their distribution in order that adequate advice and instruction can be given to the departmental heads whose units are being provided with these facilities. The supplies for subsequent restocking of the boxes should be ordered from the pharmacy and kept in the staff health department. When further dressings are required the staff health sister should be approached by the appropriate head of department. Provided that this routine is carried out an adequate control of the use of first aid dressing will be exercised, and a knowledge of the reasons for their use maintained.

A final point should be made about giving tetanus protection to people sustaining minor injuries. It should already be the policy for hospital workers to have full tetanus protection. Provided a sensible working arrangement is created between the staff health sister and those departments with first aid boxes, an adequate

check can be made on any worker who may not already have received full protection against tetanus.

The experience of a first aid system established in a large district hospital with nearly 2,000 employees has, over a period of four years, produced no problems and has saved important hospital facilities from unnecessary use and many valuable working hours.

### **Environmental Surveys**

The present concept of the function and responsibilities of a hospital staff health service include the monitoring of the environments of the hospital departments and working areas. It is important to appreciate that this is a fairly recent development and that in many hospitals this role would not generally be recognised or accepted. Traditionally it has been the responsibility of certain hospital consultants to act as advisers in their particular specialty. not only for individual staff, but also for the broader application of their expertise to the hospital as a whole. The doctor who accepts an appointment to the staff health service may automatically assume that he has responsibility for all aspects of the hospital environment. He would be wise, however, to liaise with his medical colleagues before acting upon these assumptions or else he may find himself overlapping other doctors' accepted spheres of responsibility. Should this happen a hostility and resentment may be generated against the department which it is only wise and sensible to avoid. Without the goodwill and cooperation of the majority of the senior staff of a hospital – medical, nursing and administrative especially - a staff health department may find itself unable to play as full a part in the life of the hospital as it should. Where a senior doctor or member of the nursing staff has been responsible for carrying out some aspects of what is now regarded as a staff health function, it may be wise to wait a considerable time before discussing the question of that person relinquishing his particular responsibility. He is more likely to do so once the newcomer has become known and accepted. Where a senior colleague is about to retire it may be better to await the

arrival of his successor. Specific examples of these points include the safety of laboratory workers — often the pathologist's concern, and operating theatres which, understandably, the theatre sister and surgeons feel they should control. Although the staff health physician may be in a better position because of his training to assess or measure such factors as humidity, air change, radiant heat and glare, to be able to apply such expertise, a degree of tact and discretion is often needed. The rewards for those with these qualities will be far greater than for those with misdirected pioneering zeal.

It is not the purpose of this book to give specific advice on environmental investigations. There are many excellent books available from which to seek such information. It is intended, however, to suggest and indicate some areas of a hospital where health hazards may be found and where appropriate advice can result in removal of a health risk, or reduction in the incidence of a particular condition.

#### **Maintenance Departments**

The majority of hospital carpenters and engineering departments are sited in basement areas in cramped conditions, and many of these units have machinery installed without appropriate ventilation being present. The most obvious instance of this is the dust created by machine sanding and planing. Unless exhaust ventilation is installed and operated close to the point of maximum dust production, an unacceptable airborne dust will arise. The nonspecific effect of frequently inhaled dust will result in a chronic upper respiratory catarrh, but recent epidemiological evidence has been produced to associate adeno-carcinoma of the ethmoid sinus with some wood-workers. Many block or chip boards are bonded by resin glues and inhalation of fine dust from these sources may result in sensitisation not only to the constituent wood but also to the bonding substances. All carpenters' workshops should be looked at with this problem in mind, and suitable recommendations made for installing exhaust ventilation. There

would seem little justification for money being withheld from this form of disease prevention.

For those who are familiar with the personal safety equipment available for workers in industry, the absence of such equipment for hospital workers will be in marked contrast. It may be necessary for the staff health department to advise that safety goggles, or glasses, and safety shoes or boots should be available. Also, in the absence of adequate, or any, exhaust ventilation for dusty processes, masks should be advised.

#### Kitchen Area

The most common problem is excessive heat and high humidity. Dry and wet bulb thermometer readings will enable factual evidence to be produced. It is important to take these measurements over a long interval, and during an adequate selection of processes. Washing-up machines usually increase humidity considerably and measurements must be made when this machinery is operating.

Outbreaks of dermatitis amongst kitchen staff have occurred from the use of powdered detergents in the large industrial washing-up machines. When this powder is replenished in the feeder compartment of the unit, fine detergent dust becomes airborne and will cling to skin, especially when moist from perspiration. Powdered detergent should whenever possible be avoided and replaced by the liquid form.

#### **Operating Theatre**

The majority of hospitals built during the last 10–15 years have operating theatres with adequate temperature and ventilation control. The recommended standard is a temperature of 70° to 72°F (21°–22.5°C) and a relative humidity of 55%, with an air change 20 times in one hour. In older hospitals there is often little hope of achieving these standards. Fortunately, the use of presterilised equipment has resulted in a reduction of boiling or autoclaving in the theatres, and this alone has improved humidity and temperature excesses. However hopeless the task of improving

conditions in old theatres appears, even small improvements are worthwhile. Many ventilating systems become defective and inadequately maintained over a period of several years. Sometimes, advice from outside ventilation experts can be valuable. Excess additional radiant heat may be produced from large unprotected windows in the summer. With improved lighting, it may be possible to avoid this heat production by screening the window. These large windows were originally installed to derive maximum light when artificial sources were inadequate. This situation no longer exists.

#### Wards

When a staff health department is readily available for staff to come and discuss their health problems, factors in their working conditions responsible for some of these problems are more likely to be observed and remedied. An example of this was provided when a ward sister in a new hospital complained of headaches. When the usual causes of this symptom appeared to have been ruled out, further questioning suggested a factor in the ward. Here it was found that fluorescent lighting on low ceilings was producing significant glare because of the low angle of the light reaching the eyes of anyone sitting at the central ward desk. This did not produce symptoms in more junior nurses because they spent only short intervals at the desk, whereas the senior ward sister spent most of her time at the desk on administrative duties. With the tendency for new hospitals to have very low ceilings and fluorescent lighting, symptoms from glare are likely to be observed in anyone spending most of her time sitting at a desk in these conditions.

Intensive therapy units (I.T.U.) are now a feature of most new hospitals. Seriously ill patients are often x-rayed on the ward and the task of holding these patients still while they are x-rayed is usually delegated to a member of the nursing staff. It is most important to ensure that protective lead aprons and gloves are always available for these nurses. Unfortunately this is by no means always found to be the case. In addition, after consultation with the radiographers if necessary, film badges should be advised for all

who work in I.T.U. wards. It is a considerable reassurance for these workers to have positive evidence that they are not receiving harmful radiation

#### Domestic Areas

When dermatitis occurs in one or two people only, an environmental factor must obviously be considered, but the isolated occurrences do not necessarily imply that such a background factor is present. However, when several people working in a similar situation develop dermatitis over a fairly short period, a common background to the cases must be considered. Within a period of six months eight members of the domestic staff of one hospital developed severe dermatitis of the hands. There was little or no response to standard forms of treatment. Enquiry revealed that they were protecting their hands from detergents and cleaningfluids by wearing rubber gloves. It was only after closer investigation that it became apparent that it was the gloves themselves which were responsible for the skin condition. Because these workers were concerned at the possibility that they could pick up some infection from patients during the course of their domestic duties they wore gloves for most of their working day. As a result considerable perspiring took place within the gloves, with the consequent irritant effect on the skin. The problem was solved by advising that cotton lining gloves should be worn inside the rubber ones, and that the lining gloves should be changed sufficiently often to avoid a build up of moisture. After establishing this procedure, the skin conditions settled. The administrative arrangements for this protective measure were made with the domestic superintendent, whose help and encouragement was essential in correcting the situation.

#### Portering and Transport

The duties of the portering or transport staff expose them to foot and hand injuries from various handling and salvage procedures. Crush injuries of the feet, particularly fractures of the big toe,

occur during the handling of heavy gas cylinders. Two such fractures were recorded in the space of six months in one hospital. Protective footwear should be worn by these workers. It need not be unsightly, nor in the form of boots, since ordinary style shoes can be bought with protective toe caps. It will be necessary to advise the head porter or transport manager that this protective footwear is available. Incineration of hospital waste materials is also one of the responsibilities of these workers and it is not unknown for "blow-backs" to occur when rubbish is fed into the incinerators, especially when aerosol containers have been carelessly discarded into the general waste containers. Because of this risk, protective goggles or glasses should be worn as well as asbestos leather gloves.

#### General

Once the staff health unit has demonstrated to other departments that it can give sound and balanced advice about environmental aspects of hospital life, more problems will be brought for further advice. These problems can be of a wide and interesting variety and include difficulties arising from static electricity in offices where nylon, or other synthetic materials are in the carpets. Although a relatively minor problem, the small shocks given to staff when touching furniture or doors can be disturbing, and women do not appreciate the effect of static electricity on nylon underwear or equivalent materials. The problem can be solved by advising the use of an antistatic spray, which can be applied to the carpets.

Sometimes, a request to look at an environmental problem in a department may be a somewhat disguised reaction against the management of that department. Where no explanation can be found for the symptoms complained about, it is always wise to bear in mind that the staff may be consciously, or unconsciously, reacting against a managerial conflict and magnifying some trivial physical discomfort as an outlet for frustration. The staff health department has no part to play in disciplinary or managerial matters, and in advising that no health hazards appear to be present in

a department, great care must be taken to avoid implying any criticism of those who work in the area. It is quite probable that the person responsible for the dissatisfaction or tension will be identified during the course of the investigation. Personality clashes or basic bad man-management are the usual reasons, but it is essential that no comments in this respect are made.

This brief review of some of the environmental influences or hazards in a hospital is not intended to be anything but a general indication of the variety of problems which may occur, and some of the methods by which a solution may be found. No great detail has been given because every hospital has its own particular problems and difficulties, each one of which will require an individual and tactful assessment before well-considered advice is given.

### **Notes, Records and Documentation**

Within the National Health Service many hospitals in Great Britain have retained their own particular characteristics and identities. Medical documentation is an example of this, where, contrary to what might be expected, the majority of hospitals still have their own distinguishing forms and notes. Little attempt has been made to standardise these documents. Staff health departments are no exception to this, and it is not the object of this chapter to propose standardisation of staff medical documents, however desirable that may eventually be. It is hoped, however, to indicate the general principles involved, and the situations and problems for which it is worth establishing forms and documents. Where examples of forms are given, the purpose is to indicate the help which may result, but in no way is the form given as an example to follow in detail. All the forms have in fact been in use for several years. During this time modifications have been made, for it is unusual to design a form which requires no subsequent alterations. Where there is the opportunity to have forms printed, it is strongly recommended that a prototype is used for several months before printing the final version, as it is almost certain that after using the form, some alterations will be found necessary. Some newer hospitals have a department for dealing with all new form proposals, in which case the staff health department will not be able to produce documents without reference to the documentation section of the hospital.

#### **Personal Notes**

It is essential that these are entirely confidential to the depart-

ment. To ensure this, it will be necessary to have quite separate forms and folders from the general hospital notes. It will be important to impress on the hospital staff that the hospital notes used for patients who are referred for specialist opinion are not to be used for the day-to-day staff health department notes. The confidentiality of personal notes kept in staff health can only be guaranteed when this distinction is made. To emphasise this, it is much better to have folders and note forms which are completely different from those used for hospital patients. When a member of staff is referred to a hospital consultant for advice on a particular problem, there is sometimes a request for the staff health notes to be sent. This must not be done. A proper referring letter is all that is necessary.

Where resident staff elect to have their general-practitioner care provided by the department, there is sometimes difficulty in keeping the general practice notes and the day-to-day notes separate. When one doctor is responsible for both functions – the general practice and preventive and environmental medicine – two sets of notes can become difficult and impracticable. Some departments have found that it is better to have one set of notes for both functions of the department, and to dispense with the general practice notes. When this is done it is important before a member of staff leaves for a summary of their significant illnesses to be recorded on the general practice notes. Unless this is done future doctors will have no knowledge of the medical history of the patient while at the hospital. The amount of work involved in doing this can be reduced to a minimum. The majority of attendances for medical treatment do not need recording in detail. A stamp can be made with the wording shown in the example opposite.

This should be sufficient for the majority of notes, and when it is not, the briefest additional summary will be all that is usually necessary.

Because the staff health sister will see and treat staff patients without always referring them to the staff health physician, it is suggested that separate notes are established for her use. Unless this is done, the intermingling of the medical and nursing notes will result in a very confused record. It is helpful to distinguish

# STAFF/STUDENT HEALTH SERVICE .....HOSPITAL This patient was at Hospital he/she was registered with the Staff/Student Health Service. Apart from minor complaints he/she was treated for the following illnesses: Should you require further information please telephone or write to: Physician in Charge Staff/Student Health Service . . . . . . . . . . . . . . Hospital

the sister's and doctor's notes, not only by the appropriate wording but also by different colouring where possible.

The folder for the notes should be clearly marked as confidential to the staff health service. One arrangement for this folder which has been found extremely useful provides a pocket on the inside of each page, for retaining the appropriate notes. Valuable information on immunisations, x-rays or drug allergies can be kept on the outside of these pockets, so that this information is readily available and seen each time the notes are used. A suitable design for this folder is shown in Fig. 1.

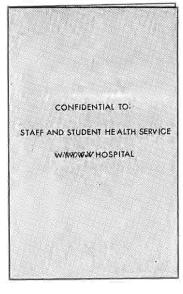


Fig. 1 (a)

#### Information on pocket flaps:

		Date	Bato	h No.	Result	
	Primary					
Smallpox	Re- vaccination					
		Method		Date	Result	_
T.B. Test	Heaf M	lantoux			_	
B.C.G.						
		IMMUN	ISATION	s		
Diphtheria						_
Tetanus						
Pollomyelitis						
Rubella						
Typhold						
						_

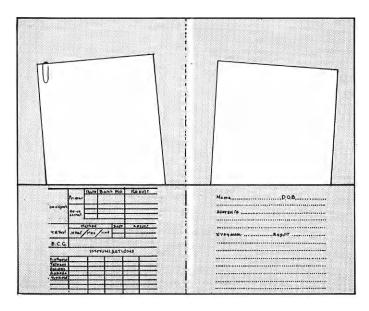


Fig. 1(b)

NAME	D.O.B
ALLERGIC TO:	
	***************************************
X-Ray examination on:Resu	It:

#### Introductory Letter to New Staff

As soon as possible after they start at the hospital, it is most helpful if new staff are informed of the facilities available, and each should be sent a letter with the necessary information. (Fig. 2.)

#### 

#### STAFF HEALTH SERVICE

Dear

Protective Immunisation, Chest x-rays and Blood Counts

#### Immunisation

Serious infectious diseases are now rare in this country mainly because of the use of protective inoculations. Hospital staff are especially advised to avail themselves of the opportunity to be protected from smallpox, tuberculosis, poliomyelitis, tetanus and typhoid. To help us keep you up to date with this protection, would you please complete the attached form and return it to Staff Health Service. If you are in any doubt as to whether you need further inoculations, please contact the secretary in Staff Health. There is no compulsion to have these inoculations, but the occasional case of smallpox in this country emphasises the importance of hospital staff being protected from this and other serious infectious diseases

#### Chest x-rays

Unless you have had a chest x-ray within the last year, it is advisable that you have one now. If you contact the x-ray department, they will make an appointment for you. It is quite in order for you to make a direct approach and you will not need a form. It will be necessary for you to fill in a notification card at the time of your x-ray so that the result may be sent to you.

#### Blood Counts - Female Staff

If you wish to avail yourself of this facility, please make direct contact with Pathology Reception. The results will be notified to the Staff Health Service, and if there is anything that requires investigation or treatment you will be contacted. If you wish to know details of the result, please enquire at the Staff Health Service. If you also wish to know your blood group this should be mentioned to the phlebotomist before your blood is taken, and again the results may be obtained from the Staff Health Service.

#### Treatment

It is particularly important that all staff with infectious conditions receive early treatment, not only for their individual benefit but for the sake of the hospital as a whole. The staff health service is available for treating this type of acute short-term illness, whether or not you are registered under the general practitioner care system for resident staff. Please do not use the Accident and Emergency Department except for conditions requiring emergency treatment, but attend the Staff Health Service Clinic in the event of minor illness or injury at work.

Yours sincerely

Fig. 2.

#### Medical Questionnaire

A simple form is usually sufficient for the majority of non-medical staff (Fig. 3, page 90) and a more detailed one will be found necessary for nursing staff (Fig. 4, page 91).

#### . . . . . . . . HOSPITAL

#### STAFF HEALTH SERVICE

# Health Questionnaire for Non-nursing Candidates

CONFIDENTIAL	
FULL NAME (in capitals).  DATE OF BIRTH.  PROPOSED EMPLOYMENT.  DEPARTMENT.	· · · · · ·
Have you had any of the following: - Please answer Y	ES or
NO. (A positive answer will not necessarily prevent y	ou from
working here.)	
(1) Eczema, dermatitis, or any other skin condition	
(2) Fits, black-outs or epilepsy	
(3) Discharge or infection of the ears	
(4) Nervous or mental trouble	• • • • •
(5) Chest trouble, including asthma and hayfever	• • • • •
(6) Heart disease – shortness of breath	• • • •
<ul><li>(7) Prolonged backache, or disc trouble</li><li>(8) Dysentery, food poisoning, or gastro-enteritis</li></ul>	• • • • •
(9) Are you registered disabled or in receipt of a	
disability pension?	
If yes, please specify	
(10) Have you had any major accidents or operations?	
If yes, please give date(s)	
(11) Please give dates of any absences from work due	to
ill-health during the past year	
•••••••	
To the best of my knowledge my answers to the above questions are true and complete  Signed	
This form to be returned to the Staff Health Service.	

#### CONFIDENTIAL STAFF HEALTH SERVICE MEDICAL QUESTIONNAIRE FOR NURSING STAFF Medical Ouestionnaire Have you a history of the following – if yes, please give brief details: 1. Nervous, or mental trouble 2. Severe headaches or migraine 3. Fits, convulsions or epilepsy 4. Bronchitis, pneumonia or lung tuberculosis 5. Asthma or hay fever or any other allergic conditions, including antibiotics 6. Recurrent sore throats or sinusitis 7. Rheumatic fever or joint pains 8. Gastric or duodenal ulcer or frequent and prolonged indigestion 9. Dysentery, food poisoning or gastro-enteritis 10. Any kidney or bladder infection 11. Episodes of chest pain or breathlessness 12. Prolonged or severe backache, or disc trouble 13. Varicose veins, or foot ailments 14. Eye conditions or injuries 15. Ear infections, deafness or ear discharge 16. Eczema, dermatitis or other skin conditions 17. Diabetes 18. Have you had any operations? 19. Any other condition requiring hospital treatment? 20. Awarded a disability pension? 21. Number of days' absence due to ill-health in the past year 22. Female applicants i. are your periods regular? ii. do you suffer severe or abnormal pain during your periods? 23. Have you been: i. vaccinated against smallpox? ii. inoculated against — Tetanus **Poliomvelitis** Typhoid **Tuberculosis** Diphtheria 24. Date of last chest x-ray 25. Are you taking any medication - if yes, please give details To the best of my knowledge and belief my Signed. . . . . . . answers to the above questions are true and Date. . . . . . . . complete.

Where full clinical examinations are considered necessary, there is an endless variety of forms for recording the results. It is hardly worth giving details, but it is obviously necessary to allow space for recording the important and more easily and accurately observed aspects of this examination which include urine analysis blood pressure, eyesight, height, weight, condition of hands, ears and teeth.

#### **Routine Investigations**

#### X-rays

The standard hospital form will be used for requesting these. The vast majority will be routine examinations, with normal results. Most people, however, like to have definite information after a chest x-ray, rather than be told to assume the result is normal unless told to the contrary. Much secretarial time can be saved if, at the time of the x-ray, staff fill in a card with their name and department. This card provides notification of a normal chest x-ray (Fig. 5). The majority of routine films are normal, so this card caters for practically all results. When an occasional result is abnormal, an individual notification is obviously necessary, but use of the standard card will save an enormous amount of secretarial time.

	HOSPITAL
	STAFF HEALTH SERVICE
NAM	E
DEPA	RTMENT
Your	chest x-ray is within normal limits.

#### Blood counts

A simple notification form (Fig. 6) will be found adequate. Where there is an opportunity to have rubella antibody estimation done at the same time as the routine blood count, the form should also provide for the rubella antibody results.

# ..... HOSPITAL STAFF HEALTH SERVICE

The results of your recent tests are as follows:—

BLOOD TEST

Satisfactory

\*needs further investigation

RUBELLA ANTIBODIES (German Measles)

Natural protection \*no natural protection; immunisation advised

\* PLEASE CONTACT STAFF HEALTH SERVICE

Fig. 6

#### Immunisation

The majority of hospital staff will not be certain which inoculations they have had, or when a previous course was completed. Because of this uncertainty, it is usually better to request that new staff attend the department, rather than complete a form. In the latter case the information received is likely to be so incomplete that it will still be necessary for the person to attend the department. Once the basic details have been given and recorded on a card index system, there will be a constant need to send reminders to most staff to attend for follow-up inoculations. A simple document (Fig. 7) will be found to be helpful for sending out these reminders.

HOSPITAL
STAFF HEALTH SERVICE
To:
Department:
According to our records you are due for the following immunisation(s)
on
If this date is not convenient, please telephone Extension

Fig. 7

When dealing with a large number of people, as in the case when a new set of nurses or medical students arrive, it is difficult to give adequate explanations to individuals. A fairly extensive immunisation programme has to be completed within a reasonably short time, and also fit in with the introductory courses as far as possible. It is helpful for all concerned to have details of their immunisation programme in advance. Overlaps with important lectures can be avoided if sufficient time is allowed for altering the programme. Figure 8 is an example of a pre-arranged individual immunisation programme, which is helpful for new students and nurses to have.

#### Rubella

Because of the importance of avoiding giving this inoculation to women in the first two months of pregnancy, it is necessary to make sure that this is fully understood. The inoculation should be given only to those who are within nine days of the first day of their last period, and who understand the importance of avoiding pregnancy for two months after the inoculation. To emphasise

#### ..... HOSPITAL STAFF/STUDENT HEALTH SERVICE

#### PERSONAL IMMUNISATION PROGRAMME

For members of set

- OCTOBER 1973

#### NAME:

TYPE OF PROT	Required	Date/Time	
SMALLPOX	Primary/ Revaccination	YES/NO	WEDNESDAY 10 OCTOBER at
TETANUS TOXOID	First/Booster	YES/NO	12 noon
TUBERCULOSIS	Skin Test	YES/NO	MONDAY
			15 OCTOBER
			at 12 noon
TUBERCULOSIS	Read reaction	YES/NO	THURSDAY
Negative given			18 OCTOBER
B.C.G.			at 12 noon
POLIOMYELITIS	First/Booster	YES/NO	WEDNESDAY
	·	•	24 OCTOBER
			at 12 noon
TETANUS TOXOID	Second Dose	YES/NO	THURSDAY
POLIOMYELITIS	Second Dose	YES/NO	22 NOVEMBER
CHECK B.C.G.			at 12 noon
POLIOMYELITIS	Third Dose	YES/NO	THURSDAY
			20 DECEMBER
			at 12 noon
RUBELLA (German	Measles)	YES/NO	THURSDAY
			3 JAN. 1974
			at 12 noon
TETANUS	Third Dose	YES/NO	JUNE 1974

Service to make alternative arrangements.

this, and have written confirmation that the person has understood, it is recommended that an appropriate document (Fig. 9) be signed and kept in the notes.

# ..... HOSPITAL STAFF HEALTH SERVICE

#### RUBELLA INOCULATION

I confirm that I accept this inoculation and understand the following conditions:—

- 1. I must have the inoculation within nine days of the first day of my last period.
- 2. I must avoid pregnancy for the next two months.

Signed.	•	•	•	•	•		•	•		•	
Date											

Fig. 9

#### Tuberculosis: follow-up of staff exposed to open cases

During most years there will be several occasions when a case of open pulmonary tuberculosis is diagnosed in a general ward. All staff at risk will require checking to ensure they are tuberculin-positive or have had B.C.G. Those who are negative, will have to be removed from exposure and re-tested in approximately six weeks time before having B.C.G. Follow-up x-rays will be necessary. Most of the staff at risk will be doctors, nurses, nursing auxillaries and domestic staff. The numbers involved may be considerable and set forms for the various situations arising will be found helpful. For staff already known to be tuberculin-positive, or who have had B.C.G., a note (Fig. 10) regarding a follow-up chest x-ray may be all that is necessary. For staff who are known to be tuberculin-negative from previous testing, but who failed to attend for

### ......HOSPITAL STAFF HEALTH SERVICE

#### Contact with Tuberculous Patients

We have been informed that during the last few weeks you were working in a ward where there was a tuberculous patient.

\*Although you are probably protected by B.C.G. or a naturally acquired immunity, it would nevertheless be a wise precaution for you to have a chest x-ray in approximately 3 months time and you will be notified of the result.

If you have already had an x-ray as a result of contact with a tuberculous patient, then it is advisable to have this repeated annually.

Staff Health Service

*If you are in	dout	ot al	oou	ιt	tŀ	บ่ร	;	
please ring								

Fig. 10

B.C.G. the communication shown in Fig. 11 will apply. It is surprising how many staff are often found in this situation. All exposed staff who are tuberculin-negative must avoid contact with tuberculous patients until protected by B.C.G. In addition to informing the person concerned, it is essential to write to the nursing and domestic administrators and a standard document will apply for this purpose. (Fig. 12.)

## . . . . . . . . HOSPITAL Telephone extension

Dear

#### Protection against Tuberculosis

Your tuberculin test was negative, which means you have not acquired immunity to tuberculosis. You should therefore avail yourself of the opportunity to have B.C.G. protection. However, since you have recently been in contact with a case of tuberculosis, before giving you B.C.G. the tuberculin test should be repeated in six weeks time so that we can be certain that you have not been infected from your recent contact. If this later test is also negative, then we will give you the B.C.G. inoculation.

Meanwhile, it is important that you do not have any contact with tuberculous patients, and we have informed the Nursing Personnel accordingly.

Yours sincerely,

Staff Health Service

Fig. 11

	HOSPITAL Telephone extension
To:	Department
From: Staf	f Health Service
Name:	
	member of staff has been in contact with a case osis and has been found to be tuberculin negative.
Meanwhile	ary follow-up procedures are being carried out. , it is important that there is no further contact culous patients.
mately thre	following B.C.G. should be present in approxi- ee months from now. It will then be in order for contact with tuberculous patients again.

Fig. 12

### CONFIDENTIAL. .... HOSPITAL REPORT ON ACCIDENT OR UNUSUAL INCIDENT TO STAFF PART I Surname Forenames **Department** Post ACCIDENT DATE TIME **PLACE** \*On/Off Duty Description of Accident or Incident Witnesses (if any) Reported by Examined by 1. Reported to 2. Signature of Head of Department \*Delete as applicable. Date . . . . . . . . PART II To be completed by Doctor (if applicable) Consequences of Accident Treatment given General remarks Doctor's signature..... Date. . . . . . . . . Please send this completed report to the Staff Health Department within 24 hours of the incident.

Fig. 13

#### Accident Form

In addition to any medico-legal importance, recording accidents in a working community is a simple but valuable way of monitoring the physical hazards of an environment. The administrative structures of most hospitals do not provide for accident recording and it will be necessary for the staff health department, in cooperation with the administration, to make arrangements to obtain the information. It is recommended that when the accident form is completed it should be returned to the staff health department directly. Figure 13 shows an accident form which has proved effective.

### **Bibliography**

- Chester Beatty Research Institute (1966). Precautions for laboratory Workers who handle Carcinogenic Aromatic Amines, Royal Cancer Hospital, London.
- The Care of the Health of Hospital Staff (Tunbridge Report). 1968: H.M.S.O.
- Precautions against Tuberculous Infection in the Diagnostic Laboratory H.M. (70) 60.
- The Code of Practice for the Protection of Persons against Ionizing Radiations arising from Medical and Dental Use. 1972: H.M.S.
- Report of the Committee on Senior Nursing Staff Structure (Salmon Report). 1966: Ministry of Health.
- Report of the Advisory Group 1970-72 on Hepatitis and the Treatment of Chronic Renal Failure. 1972: Department of Health and Social Security, H.M.S.O.
- Viral Hepatitis. Report of a W.H.O. Scientific Group Geneva. 1973: W.H.O. Technical Report Series No. 512.
- Memorandum on Vaccination against Smallpox. 1972: H.M.S.O.
- Prevention of Tuberculosis among Hospital Staff H.M. (61) 84.
- B.C.G. Vaccination. Department of Health and Social Security. Memo 322/BCG (Revised 1972).
- Rubella Vaccination. Department of Health and Social Security. Reference C.M.O. 4/72.
- The Implementation of a Hospital Occupational Health Service. Royal College of Nursing. 1968: London.
- Hospital Infection, Causes and Prevention by R. E. O. Williams et al., 2nd edition. 1966: London. Lloyd-Luke.
- Safety in Pathology Laboratories. 1972: H.M.S.O.

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