The Day Hospitals Organisation

THE FIRST 4 YEARS

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SUMMARY

The background to the creation of an organisation successfully catering for the efficient, decentralised, primary medical care of the indigent public in adequate, self-contained buildings in the Cape Peninsula is described. The *modus operandi* of the Day Hospitals Organisation and subsequent developments, including the suggested use in developing countries, are detailed.

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The seemingly insatiable demand for hospital services since World War II has put a severe strain on hospitals throughout the world. South Africa has been no exception, and like elsewhere, has tried to stem the tide by building as many hospitals as possible.

This, unfortunately, has not altogether been the answer, since the demand has always been greater than the supply. Other factors such as the chronic scarcity of medical practitioners, rapidly-escalating building and equipment costs and the long period taken in planning before construction (which in itself takes several years), also played a role in keeping the number of new hospitals down. In 1967, Barzilay,[1] at the Wynberg Group of Hospitals in the southern Cape Peninsula, conducted a survey of the type of patients seen at a typical, non-teaching, general hospital, and found that 77% had ailments that could easily be handled at detached outpatient clinics staffed by general practitioners.

Barzilay also found that the cost per outpatient in a decentralised (and detached) clinic could be better controlled than in a general hospital where overheads are high.

In October 1968, in my capacity as Medical Superintendent of Somerset Hospital, I presented a paper at the biennial Conference of Medical Superintendents on the utilisation of specially-trained nurses ('nurse practitioners') for certain procedures, in outpatient departments, thereby easing the load on hard-pressed medical practitioners and at the same time adequately compensating for their shortage. This paper was inspired by and based on Lewis and Resnick's[2] findings in Kansas City, USA, the result of which was that these nurse practitioners could (and did) alleviate the shortage of doctors at their particular teaching hospital. A controlled trial had been done and the results (especially the patients' response) had been most encouraging. With this in mind and being aware, not only of our own problems, but of those of emergent states of Africa, the paper was presented to the Conference. It had, however, been modified and adapted to conditions in Southern Africa.

Perhaps there was nothing startlingly new in the fact that certain functions could be delegated to nurses, but nevertheless Lewis and Resnick's excellent paper refocused attention on this aspect. In Kansas, registered nurses are given a special post-basic course to help equip them for their additional duties. These nurses, under indirect medical control and for certain specified periods, treat certain outpatients who are in a relatively stable phase of their illness and are referred to them by staff doctors, e.g. patients with diabetes mellitus, epilepsy, hypertensive cardiovascular disease, arteriosclerotic heart disease, obesity, rheumatoid and osteo-arthritis, dyspepsia, etc.

INVESTIGATION OF EXISTING CLINICS

I was asked to investigate the Provincial Administration's existing 10 clinics in the Cape Peninsula with the object of determining whether it would be feasible to decentralise the treatment of outpatients there, bearing in mind the results of Barzilay's survey. The possibilities of using nurse practitioners had to be especially considered in the investigation.

The investigation took place in December 1968. The 10 clinics were, with 3 notable exceptions, accommodated in converted houses. They were grossly inadequate, poorly equipped and understaffed. As a result they could deal with trivial ailments only—anything else had to be referred to the general and teaching hospitals. The net result was that the public mostly by-passed them and went direct to the hospitals. In the 2 outlying townships for Blacks in the Peninsula and near metropolitan Cape Town, where the old 'Free Dispensary' polyclinic was situated, there were better buildings. Of these, the Free Dispensary was self-contained, i.e. it had its own X-ray plant, physiotherapy and laboratory cover, etc., thereby enabling its medical staff to do a complete investigation. It even had specialist sessions and an operating theatre. Guguletu and Langa Townships also, had better facilities, inasmuch as their clinics were housed in buildings originally designed for that purpose, but they sadly lacked equipment and paramedical services to give a comprehensive service.

There was a district nursing and maternity service attached to the group of clinics, which in turn was affiliated to a small hospital.

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RECOMMENDATIONS

A report was submitted in December 1968, and the following were my recommendations:

A decentralised chain of clinics should be established in the Cape Peninsula as soon as possible. (These were later called 'day hospitals'.) Each clinic was to be erected in an area where the population needs were the greatest and it could serve the lower-income groups.

Facilities

The clinics were to be completely self-contained to obviate referring patients to general hospitals. In addition to its 4 - 6 doctors and 12 - 15 nurses, paramedical services were envisaged as follows:

(*i*) A physiotherapy clinic for the numerous simpler types of procedures that could be performed, e.g. diathermy, ultrasound, massage, breathing, and other remedial exercises, etc. In addition to their own patients, outpatients from the general (including teaching) hospitals could be referred there for therapy and referred back for review as and when desired.

(*ii*) A modified X-ray department for X-ray films of the chest, skull and limbs to be undertaken and read by the doctors, but the plates also to be sent to a central department at headquarters for control by a specialist radiologist. Patients should take their plates with them when referred to large hospitals, thereby saving time and money.

(*iii*) A Social Workers' department—social workers should not only see patients in the day hospitals but at home. They could also provide a link with the larger hospitals' social work departments by seeing referred patients at home.

(*iv*) A pharmacy run by 1 or 2 pharmacists and unqualified assistants, along the lines mentioned earlier, could not only provide a service to its own day hospital but provide medicaments for patients referred to it from the larger provincial hospitals.

Registered nurses belonging to this proposed organisation would have to undergo a short post-basic study course of 3 months to equip them for the delegated additional functions expected of them. Of particular importance, each clinic should have provision for these nurses to do history-taking (Fig. 1). My report emphasised that this could be the most exhausting part of an outpatient doctor's functions and cause mental fatigue, with the result that by 1500 h doctors would often start ordering numerous laboratory tests and X-ray films in order 'to get the long queues moving', and to salve their consciences until they could see their patients again the next day! This is not meant as criticism, but it is a well-known factor when doctors are stale and over-worked. This delegation alone will help the doctors to be alert throughout the day. In order to prevent these nurses from becoming stale, it was recommended that after a period of a month they be moved to another duty in the clinic, e.g. the dressing rooms, theatre (if there was one), and after another month be put on district domiciliary visiting.

Fig. 1. A nurse takes the history of a patient.

District Nursing

This was to be an important link between the clinics and the patients' homes. It was recommended that the District Nursing and Maternity Services become part of this decentralised clinic organisation, i.e. under the same matron. As previously stated, they could have a rota system with the nurses in the new clinics to prevent staleness as well as fatigue from too much travelling.

Once the organisation was at full strength, both from the amount of clinic buildings erected and professional staff, it could arrange with the general hospitals to discharge their inpatients earlier wherever possible. The social workers and district nurses (notified timeously by the general hospital) could thereupon investigate a patient's home conditions before discharge, and if satisfactory, could notify the hospital accordingly. With the District Nurses and social workers in attendance, the patients could convalesce in their own homes. This in effect could mean more admissions to general hospitals because of a more efficient bed turnover.

Central Headquarters

The administrative control of the combined clinic, district and maternity nurse organisation was to be effected from a central headquarters. It was stressed in my report that these clinics should under no circumstances become appendages or satellites of neighbouring general hospitals. It had previously been experienced that when such was the case, the clinics never became 100% effective and merely ended up either as 'sorting-houses' for, or 'stepping-stones' to, the general hospital. Experience in general hospitals has shown that medical and nursing administrators involuntarily concentrate on the wards and theatres. For all the above reasons, therefore, it was emphasised that the proposed organisation be administered by its own Medical Superintendent, Matron and Secretary, plus its own staff and pay offices, supplies office, transport office, etc. It was also important to have its own engineering workshops (based at headquarters) with speedy transport to effect maintenance and repairs in the group's outlying branches.

It was further recommended that a depot should be established at headquarters for bottling and packaging of the various items required for the outpatient clinics. The bulk of the items required constantly could easily be established and pre-packed accordingly. A formulary was to be drawn up immediately and issued to all doctors to guide them as to what would be available. Anything extraordinary would have to be ordered especially (with the Medical Superintendent's countersignature). By having such a depot, which could supply the outlying clinics on a regular basis, dispensing in the clinics could be kept down to a minimum, and its staff need not exceed 2 qualified pharmacists, and a few assistants. In such a manner, costs associated with pharmaceuticals could be kept down.

X-ray films from the outlying clinics should be sent in daily to be reported on by a radiologist stationed at the organisation's headquarters, and should be limited to chests, limbs and spines, but at the headquarters gastrointestinal and renal radiography would be undertaken.

Medical Staff

There should be not less than 4, but possibly 6, general practitioners, depending on the size of the clinic. With the help of registered nursing personnel (especially trained) and paramedical staff, at least 100 000 patients could be seen annually without rushing the patients and also without the staff working under pressure.

The same sliding scale of fees should be levied as in the non-teaching general hospitals (i.e. ranging from R1 down to nothing, if the patient could not afford to pay). It was important *not* to have a lower scale of fees lest patients assumed that their treatment and medications were of an inferior nature.

THE INTENDED SERVICE

The aim was to provide primary medical care in the patient's own suburb. This primary care would be centered on patients in the community and not on illnesses in hospital, and at a reasonable cost. These clinics would have the same meaning for the general practitioner as the general hospital had for the specialist. It was recommended that the clinics be named 'Day Hospitals' (i.e. *general* day hospitals as opposed to geriatric and psychiatric day hospitals), because the word 'Hospital' appeared in its name and therefore had a greater significance to the public and the 'day' part in turn signified that there would be no beds. Unlike in Europe, here the word 'clinic' means to the public places where one can only be examined and treated for tuberculosis and venereal diseases, or advised on feeding problems in infants.

Admirable as these objectives were, the public unfortunately looked upon the general hospitals as the only places (besides the private practitioners) where they could acquire curative treatment, and by giving them a 'hospital' image, the new clinic organisation won almost immediate recognition by patients and professional staff of all categories.

Simple outpatient clinics with reasonably situated consulting rooms for the respective medical, nursing and paramedical staffs could go a long way to eliminate undue delays. New patients would have all their preliminaries such as urine-testing, haemoglobin estimations and history-taking done before the doctor saw them, and the doctor in the meantime could be seeing 'old' patients returning for review of their illnesses. The economic value of allowing patients to get back to work or go home as soon as possible was also of great importance.

By having these new day hospitals in those areas where the population was most dense, the cost of transportation of patients to and from outpatient clinics should be markedly reduced, particularly if each day hospital was sited near public transport.

Day hospitals would encourage patients to seek earlier treatment, thereby possibly obviating major outpatient treatment and/or admission as an inpatient later.

Decongestion of large hospitals' outpatient departments would follow naturally if there were sufficient day hospitals in the Peninsula to fulfil their suggested role. In turn, the specialist general hospital outpatient services would at last be able to cope with their appropriate cases.

When sufficient day hospitals have been erected, all new patients (or those with new complaints) should first be screened by a day hospital, or by their private doctors, before arriving at a general hospital for specialised attention.

More facilities for general practitioners (part-time and full-time) to work in pleasant and adequate conditions with all the necessary ancillary services immediately available, would halt and reverse the trend (world-wide) for the family doctor to be ousted from hospitals. Instead of being a member of the chorus, the family doctor could revert to his original role of being the main actor.

The doctors, paramedics and nurses would be given the opportunity to attend regular seminars at a central venue on medical topics conducted by experts in their particular field. The emphasis in the day hospitals was to be on teamwork, and these seminars could help towards binding the team together and getting them to treat the patient as a whole. In time, professional categories not in the employ of the day hospitals could also be invited to attend these seminars.

In time of war, major disaster or national emergency, these day hospitals could act as advanced casualty clearing stations for the major hospitals.

ACCEPTANCE OF RECOMMENDATIONS

These recommendations were immediately accepted in December 1968, and Dr A. H. Barzilay, Principal Medical Superintendent, Wynberg Group of Hospitals, was requested to do a detailed survey of the detached outpatient facilities in existence, and to ascertain to what use they could be put until purpose-built day hospitals could be erected. In this survey, which took 6 weeks, Dr Barzilay was accompanied by Miss M. Clifford,

Principal Matron of the proposed new organisation. The resulting comprehensive booklet was a most valuable source of information and helped me tremendously in the early stages.

The Hospitals Department was instructed to start the new organisation as soon as possible, and this began on 1 April 1969. It was immediately decided that since it would take some years before purpose-built day hospitals could be erected, it would be desirable to use the existing resources, improving and adding wherever possible. Also, the experience thereby gained could be best utilised in the future day hospitals (Fig. 2).

The various staff members were called together and were told what the aims of the new organisation were and what roles they were expected to play. As events later proved, this was the first important step in building up team spirit and enthusiasm.

Besides acquiring additional staff, and the ordinary day-to-day running of this widespread organisation, it took about 2 years just to explore the 5 000 km² of the Cape Peninsula to ascertain where the indigent population was most concentrated, where future townships were planned, what land was still available, etc., bearing in mind the original propositions of the report. After much research it was decided that each township with a population of at least 50 000 warranted its own day hospital.

ESTABLISHING THE DAY HOSPITALS

It was important that the existing day hospitals were to be made clearly known to the public and the medical, paramedical and nursing professions. In this regard the press and radio co-operated very well. Articles were published also in certain professional and semiprofessional journals.

Clearly-marked and distinctive orange signboards were erected at numerous street corners indicating where these day hospitals could be found. Timetables printed on equally distinctive orange sheets were distributed to every hospital, other health organisations, and each doctor in the Cape Peninsula.

Guguletu Bantu Day Hospital, situated in a township with a population of about 75 000, was the nearest to the ideal day hospital at that stage, and it was here that we could determine what would be required elsewhere. X-ray and physiotherapy equipment was installed, paramedics engaged, the pharmacy was better stocked, and a start was made with the various delegations mentioned before. In no time the turnover escalated, but without the feeling of overcrowding. Experiments were also tried with 'colour-coding', i.e. different coloured walls for each subwaiting-room and subdepartment to make it easier for patients to find their way back to their respective doctors/

Fig. 2. Entrance to a newly opened Day Hospital.

nurses/paramedics. Their folders had corresponding colours.

Geriatric Long-Term Clinics

At the Cape Town Day Hospital an experiment is now being conducted with patients on long-term therapy referred by the general hospitals. In one of the clinics, elderly and/or long-term patients are seen by a family doctor well experienced in these complaints. He is assisted by a social worker and a registered nurse. These patients, because they are mostly elderly, do not have to present themselves before 1000 h, and consultations are by prior appointment. By giving that extra amount of attention (tender loving care) which is not possible in a busy general hospital outpatient department, it has been found possible to reduce drastically the amount of items prescribed for them. In addition, follow-up group therapy clinics to be conducted by specially-trained social workers or registered nurses are envisaged for these patients. Between these patients' visits to the day hospital, the social worker and/or registered nurse will call on the patient at home if deemed necessary. This type of clinic has been enthusiastically accepted by patients and staff.

The point to be made is that these day hospitals are flexible units, and can be altered to whatever medical needs are required. There is no reason why other clinics cannot be established in conjunction with, and instructed by, referring general hospitals, e.g. for obesity, asthma, enuresis, etc.

Paediatric 'Specialoids'

At the invitation of the Red Cross War Memorial Children's Hospital, medical officers in turn have been undergoing 6 months of special training at that hospital. The object is to have one (at least) of these specially-instructed doctors at every day hospital whose forte will be infants' illnesses. It is hoped ultimately to reduce the enormous pressure on the specialised paediatric outpatient departments at the general hospitals once the public become aware of the paediatric wings in the day hospitals.

Laboratory Facilities

As in the case of the non-teaching general hospitals, specimens are sent to a private laboratory which undertakes the laboratory examinations for the group.

Occupational Therapy

It is too expensive and too elaborate to have such a department in a small institution such as a general day hospital. However, it is the intention to have occupational therapists, who will visit patients' homes following discharge from general hospitals where they had been undergoing occupational therapy. The basic idea is to instruct patients, in addition to hospital occupational therapy, wherever possible, at home, e.g. a woman who has had a cerebrovascular accident will be taught how to cook on her own stove, how to operate her own appliances, etc.

Operating Theatres

Four of the day hospitals have theatres for certain operations. These are at Cape Town, Elsies River, Bishop Lavis and Heideveld day hospitals. Some examples of the type of operations envisaged are biopsy, circumcision, repair of inguinal hernia, manipulation, dilatation and curettage and vasectomy.

Short-Stay Labour Units and Family Planning

Not originally envisaged was the use of surplus space for labour units in the newer day hospitals. For various reasons it had become increasingly difficult for the midwives attached to the organisation to undertake deliveries at the homes of patients. Dr J. A. Smith, the Senior Medical Superintendent, and Dr F. van der Merwe, a member of his staff, ingeniously adapted the system in use in the Transvaal and Rhodesia to local conditions. In this they received invaluable help from Assistant-Matron M. Geach. The results have already exceeded all expectations and are a tribute to their enthusiasm and efficiency. Family planning is also being extensively practised at these units. Great success has been achieved by convincing patients in these labour units of the necessity for sensible and economical family planning.

Comprehensive and Community Medicine

Although the majority of the day hospitals are to be run by general practitioners, it is also intended to co-operate in a few of them with these departments at both the local universities (i.e. Cape Town and Stellenbosch). An important beginning has been made at the new Epping Day Hospital, which is functioning in co-operation with Professor C. L. Wicht, and his department of Comprehensive and Community Medicine, University of Stellenbosch. At Heideveld Day Hospital Professor Spencer, Head of the Department of Community Medicine, University of Cape Town, has made a similar beginning.

Design of the Day Hospitals

The ideal design for any outpatient clinic system still has to be evolved. No two people seem to agree on which design is the best for a proper flow. It must be remembered that patients are sick people with various complaints and not just components on a regular conveyor belt, e.g. on one occasion the patient may need to visit the doctor and pharmacist only; on another perhaps the treatment-nurse. On other visits physiotherapy may be all that is needed, and so on. Although the new, purpose-built day hospitals are reasonably satisfactory, no claim is made that they are

ideal. A compromise has had to be effected in order to meet all the various needs.

DISCUSSION AND CONCLUSION

The Day Hospitals Organisation has emphasised and shown that primary care is necessary for the patient. The poorer section of a community could become a burden on the State if primary medical care was not provided by such an organisation. Exceeding original expectations, this organisation is able to cope with 95% of its patients, with a mere 5% having to be referred elsewhere. Noteworthy is the comparatively small staff that is comfortably coping with large numbers monthly. At the time of writing there are 17 day hospitals already in existence, with 6 or 7 scheduled for erection. There are others erected or being erected in Kimberley, Port Elizabeth, Graaff-Reinet, Paarl, Stellenbosch and Beaufort West.

The attendance is now well over 120 000 patient-visits/consultations per month for the group. There are 398 doctors, nurses and paramedics.

Most of the general hospitals and the ambulance (transport) service have reported an easing of the pressure on their services. In due course, when there are adequate numbers of these day hospitals, it is confidently expected that their turnover will drop still further. In the past, one of the problems peculiar to medicine in the Republic was that of different authorities (such as municipal, provincial, etc.) operating from separate buildings in order to give health coverage to the population. Quite understandably this confuses the public, and it is gratifying that the new trend is for these to be all housed in the same building albeit still controlled by the different authorities. The new day hospitals are being planned with this in mind. In addition to a day hospital's many uses enumerated in this article, it has now been found that when a new general hospital is to be built, it is advisable for a day hospital to be erected first on the site and called Phase I. The day hospital with its domiciliary nursing and social welfare can thus give immediate cover to an area while the rest of the hospital complex is being planned and built. Thereafter, Phase II is the addition of a theatre and approximately 10 - 20 beds. Phase III, which may be many years later, is the addition of the rest of the hospital complex. The success of the Day Hospitals Organisation could very probably be the answer to shortages of hospitals and staff elsewhere in the Republic and in the emergent countries of Africa, if not elsewhere in the world.

I wish to thank the Director of Hospital Services, Dr R. L. M. Kotzé and my sincere appreciation goes to Dr L. A. P. A. Munnik, MP, who was originally responsible for this whole concept of decentralisation of health care in the Cape Peninsula, and thereafter in the rest of the Province.

I should also like to thank the original members of the Headquarters team, Principal-Matron M. Clifford and Mr J. J. le Roux, Group Secretary, and all the members of the staff of the Day Hospitals Organisation, who have helped to pioneer a worthy service to the public.

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