

was excised 30% produced viable tubercle bacillae in the calcified substance.

Surgery—If the policy of chemotherapy has been changed to a short-term regimen then current surgical policy must be reconsidered. Latimer has thought for many years that long-term chemotherapy will sterilise most tuberculous genitourinary lesions. He has gone so far as to say that chemotherapy has replaced the knife.⁷ It is illogical, however, to treat useless organs in the hope of ultimately destroying the causative organisms. We believe that surgical treatment should be carried out during the three months of intensive chemotherapy. Our present policy is to admit all patients to hospital for this first three months of intensive chemotherapy because if short courses are to be successful then the utmost care must be taken to ensure that the drugs are ingested at the right time in the right amount and without interruption. It is our intention that patients are discharged from hospital only when all surgical

treatment has been completed, thus allowing the chemotherapeutic agents to destroy organisms in small and occult lesions which at that stage have an adequate blood supply.

We thank Dr G Acocella and the Vienna Academy of Medicine for permission to reproduce the figure.

References

- ¹ Semb, C, *Journal of the Oslo City Hospitals*, 1953, 3, 45.
- ² Gow, J G, *Annals of the Royal College of Surgeons of England*, 1972, 49, 50.
- ³ Aquinus, M, *et al*, *British Medical Journal*, 1972, 1, 765.
- ⁴ Campbell, I A, *BTTA Review* (Supplement to *Tubercle*), 1974, 4, 48.
- ⁵ Acocella, G, in *Proceedings of the Fifth International Congress of Chemotherapy*, ed K H Spitzzy and H Haschek, suppl 1, p 87. Vienna, Academy of Medicine, 1967.
- ⁶ Pearce, S J, and Horne, N W, *Lancet*, 2, 641.
- ⁷ Latimer, J K, *et al*, *Journal of Urology*, 1969, 102, 2.

Social Medicine

Social network diagram

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Summary

A diagram that shows at a glance the social network and support of patients was found useful in a follow-up study of patients with strokes. We believe that the diagram would prove valuable in medical case records and should be an essential part of medical-social reports, particularly for patients at risk of losing their independence.

Introduction

Medical case records often contain little information on the social background of patients and give little idea of the environment or problems a patient convalescing from an illness may face when returning home. When referral has been made to a social worker the reports are often kept in a separate file in the social work department and may be so detailed that the patient's dependency is not readily appreciated. In view of the persisting shortage of skilled social workers and the frequency with which social problems prevent patients from being discharged from hospital it is important to have a summary of a patient's social circumstances as soon as possible after admission.

In a domiciliary follow-up study of patients with strokes a social network diagram was devised to show how the patient was supported at home by family and friends. The diagram was found useful in indicating the social needs of any patient, particularly those at risk of losing their independence, so that the

necessary help to maintain these patients at home could be arranged—for example, home aid, domiciliary services, or contact with hospital or area social workers. We describe here the social network diagram and give two illustrative case histories.

Method

On a sheet of paper a box is drawn to indicate the patient's home. When the patient lives in a flat in a converted house boxes are drawn to indicate the flats immediately above and below the patient's flat. When the patient lives in a purpose-built block of flats other boxes are drawn only when immediate neighbours are frequent visitors. All persons, whether family, friends, or others, living in the patient's home are included in the box; other relatives are named on the right side of the page and friends on the left. Lines of communication are drawn to indicate contact with the patient and also the direction of contact. A solid line is drawn when a relative or friend visits the patient daily, but when visits are less frequent the line is dotted, with abbreviations above the line to indicate the frequency of the visits—for example, 3/7 = three visits a week; 2/52 = a visit every two weeks. Other lines of support, such as Meals on Wheels, a district nurse, etc, are drawn on the left side of the page, again with the frequency of the service above the line. Means of support that have been lost are shown by a cross through the appropriate line.

Case histories

CASE 1

A 91-year-old woman was admitted to hospital on 13 July 1973 after a right cerebral infarction causing dense left hemiplegia. She had had diabetes for six years, was receiving insulin, and had been attending the Charing Cross Diabetic Clinic for three years. She was transferred to the West London Rehabilitation Unit after three weeks, being discharged home after a further three weeks. There had been no recovery in the left arm, although the leg had improved enough for her to walk with a Zimmer frame and the help of one person. At home, further progress was made despite osteoarthritis of the left hip. One year later she was able to walk slowly unaided. She could also wash and dress herself and continued to exercise her left arm despite there being no recovery of power.

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Social circumstances—The patient was a widow living on the ground floor of a two-storey terraced house owned by her son-in-law. Her part of the flat, to which she was confined, was not self-contained and consisted of bedroom, sitting-room, outside lavatory, and kitchenette. The social network diagram (fig 1) shows strong social ties. Upstairs was her daughter, who had recently developed diabetes, son-in-law, granddaughter, and great-granddaughter, who all helped to look after her, especially at night. During the day another daughter came to look after her, doing the shopping and household tasks; both daughters were able to give insulin injections when the district nurse could not visit. The rest of the available family members visited at least weekly. Clearly the family had made all the arrangements necessary to look after the patient.

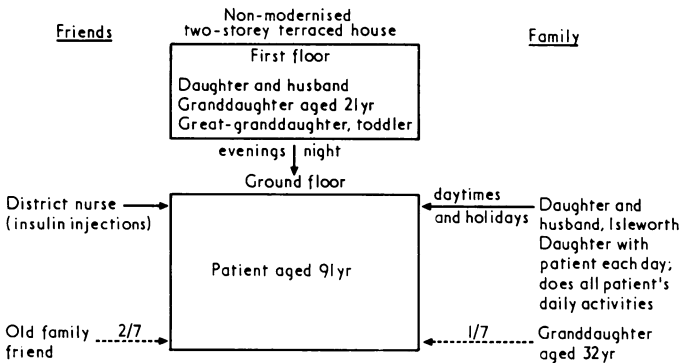


FIG 1—Social network diagram in case 1.

Comment—Although this patient had suffered a stroke at the age of 91, it was possible to discharge her from hospital because of her strong social network. A commode was initially provided because she could not manage the two steps to the kitchenette followed by one step to the outside lavatory. She continued to make progress at home, and when the follow-up domiciliary visit was made all the members of the family were present, as they wanted to see and tell the stroke team how well she was doing, especially with her exercises, which they encouraged.

CASE 2

A semi-retired bank clerk aged 64 was admitted to hospital on 15 May 1973 after a right posterior parietal infarction causing left homonymous hemianopia, left hemiparesis, and left sensory inattention. During his hospital stay moderate to severe dementia was found by psychometric testing, and angiography showed that the ventricles were dilated. He had a 10-year history of hypertension, although he was not receiving treatment at the time of admission. He was discharged home after five weeks with a persisting visual field defect and left sensory inattention, the left hemiparesis having resolved. His mental state had not improved and he was emotionally labile. The hypertension was controlled with methyldopa 250 mg thrice daily, bendrofluazide 5 mg daily, and Slow-K 600 mg twice daily.

Social circumstances—The patient's wife was 63 years old and they had no children. They had lived for 26 years in their two-storey terraced house, where there were inside and outside lavatories and 15 stairs up to the first floor. The social network diagram (fig 2) shows that he had no family and could rely only on a neighbour, who visited daily and looked after the patient when his wife went out. The patient did not improve at home and his dementia increased, causing frequent concern for his wife, who had fears of not being able to cope. Visits to an old friend were no longer possible.

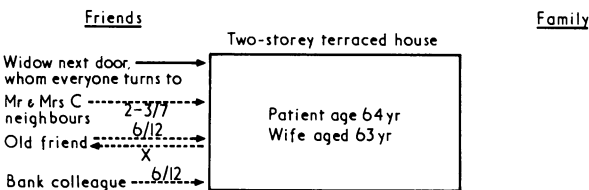


FIG 2—Social network diagram in case 2.

Comment—This case shows that provided the spouse can cope it is possible to discharge home a patient needing considerable nursing care. With deterioration in this patient's condition his wife made the home environment smaller, so that he used fewer rooms and would

not get lost. The area social services supplied incontinence pads and a laundry service. When the patient's wife was out a neighbour sat with him. Without the full-time care of his wife the patient would have needed permanent hospital care; it was anticipated, as his wife grew older and became less able to cope, that this would be necessary within two years. Because of this, so that he could be placed on a waiting list for a bed in a hospital for the chronically ill and be admitted as an emergency case to this type of bed if the need arose a specialist domiciliary visit was arranged, but just before this consultation took place the patient suffered a further stroke and died.

Discussion

Doctors have become increasingly aware that they cannot treat a patient's illness without regard to his social environment. The problems of discharge from hospital are often social, and if information regarding these is obtained as soon as possible plans may be made well in advance of discharge. The general practitioner could include a social network diagram with his letter at the time of admission to hospital, particularly when the patient is already receiving domiciliary or community services. If this has not been done the admitting houseman can quickly compile the diagram while clerking the patient and interviewing the relatives.

The particular value of the diagram is that the patient's social environment may be seen in detail at a glance, which lessens the need for lengthy social reports, reducing the pressures on the medical social work department. It is applicable to any patient admitted to hospital who is potentially at risk as well as to disabled or elderly patients at home. Any breakdown in the home environment may be identified easily and appropriate support given, thereby avoiding unnecessary admission.

The social network diagram is a suitable framework around which the rest of the social history can be built, and the diagram should be included in every patient's medical records, preferably on an easily identifiable social history sheet.

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Is there any treatment for alopecia areata on the chin, which has been present for six months and is getting larger? I am not keen to give local injections of triamcinolone as it may produce atrophy. The patient is a man aged 34.

There is no treatment other than local injection of a glucocorticoid (such as triamcinolone hexacetonide) by needle or air-jet, and an effective dose may well induce atrophy. Although the hair may regrow, if it is still spreading at six months the outlook is not good. The condition is not usually too obvious unless the hair is thick, dark, and grows rapidly, in which case close shaving with a razor may be required in the evenings as well as in the mornings. If the condition is still apparent then a grey-toned cosmetic should be used (such as Covermark).

How safe is untreated milk from an accredited herd of cows?

The term "accredited herd" signifies a herd which has been tested and shown to be free of any infection with brucella organisms. The frequency of breakdowns in these herds is so low that the possibility of untreated milk being infected is negligible. All dairy herds in Britain have to be licensed as such and frequently examined for their standards of hygiene and milking technique. Milk from a cow with a mastitic udder or undergoing antibiotic treatment for any reason cannot be marketed. Also, regular cell counts are performed on milk samples as an indication of infection at a clinical or subclinical level. Consequently milk from an accredited herd which has not been heat-treated should nevertheless be safe. At present about 3% of milk sold in Britain is untreated. Within a few years legislation may be passed making pasteurisation of all milk obligatory except in certain specific circumstances where this is not practicable.