A model to describe social performance levels in elderly people

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SUMMARY. In elderly patients illness clearly affects both their social activity and their ability to care for themselves. It is important in general practice to recognize this effect when managing old people with acute and chronic illness. A model is described which aims to facilitate estimations of social performance at various levels. By carrying out this estimation the type of 'social' help needed can be better assessed. The model's usefulness in anticipatory care is also described.

Introduction

THE biopsychosocial model proposed by Engels¹⁻³ for defin-I ing patients' problems is widely accepted as a fundamental precept of general practice and many other disciplines involved in health and social care. Much lip-service is paid to this in undergraduate and vocational teaching, but little has been written about the important social component. By comparison with the well-understood processes leading to diagnosis and therapy when dealing with mental and physical illness, there is little detailed review of patients' social disabilities and the management of these problems suffers as a result.

This is particularly highlighted in the case of elderly people, where there is a close inter-relationship between physical and psychological illness and the person's social and environmental circumstances. It is often important to assess the social situation when dealing with illness in old age so that the most appropriate support can be provided to the old person. To assist in this a model has been developed which has proved helpful in practice for assessing social performance levels in the elderly.

The model — social decline

It is usual when undertaking social surveys of elderly people to measure aspects of housing and household amenities: whether, for example, they live in a terraced house or flat, or have an inside lavatory or piped hot water. Such environmental assessment, although important, does not say much about how the old person copes with life. Some idea of process or function is therefore necessary. Based on what have been called 'activities of daily living', three levels of function have emerged:4-7

- Sociability which describes activities outside the home.
 Domestic which describes activities inside the home.
- 3. Personal which describes tasks specific to the individual. These factors have usually been listed separately and the dynamic relationship between the three levels of activity has not been appreciated. If they are represented as three concentric rings surrounding the person, the outer ring represents sociability, the social interaction with the world outside, the middle ring represents the basic activities to preserve domestic equilibrium and the inner ring represents the necessities for personal autonomy (Figure 1). Examples of activities at each level are

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The outer ring of 'sociability' contains the largest number of possibilities. Elderly people differ in the extent of their social involvement outside the home and this is illustrated by the wide variety of the activities shown. It is not expected that each old person will undertake every activity but they are given as examples. The activities fall, however, into the same general domain and changes in them are significant. At the middle and inner ring, it is not necessary for a person to perform every task for himself (others can sometimes carry out the task) but to function adequately in a social way, each ring needs to be intact. Ageing is not only a physical process but also a social one; the natural progression is one of social deterioration. In the model the process of deterioration generally takes place from the outside inwards. Thus the first sign of breakdown tends to occur at the outer ring, for example the old person ceases going to the theatre, to church or on long-distance shopping trips or stops taking holidays. Signs of more serious decline occur at the level of the middle ring and herald domestic deterioration, for example the house is left uncleaned, repairs are not undertaken, cooking becomes hazardous. The final level of social breakdown is at the inner ring where personal tasks are neglected or the person becomes incapable of undertaking them, for example bathing, toe-nail cutting, attending to make-up, or shaving. Sometimes there are early indicators at each level which signal change and are worth identifying. For example, at level one, giving up a hobby or a social activity are early signs; at level two shopping is given up, especially if a bus journey is necessary; and at level three, an activity which is often the first to cause a problem is bathing unaided.

Other related factors are important when considering the dynamics of social decline between the three levels. There is a gradual deterioration of social ability associated with the ageing process and this commonly takes place over a long period, often with intervening stable intervals. In general, illness, either physical or mental, causes an accelerated decline and change

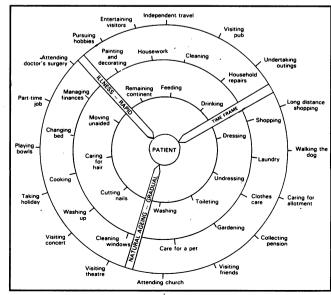


Figure 1. A model of social performance levels in elderly people.

given.

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tends to take place within a relatively short time. Exceptions would include slowly developing chronic diseases, although even here the decline would be consistent. Again the withdrawal from social activity may reflect temporary and transient difficulties. a period of depression following a bereavement for instance, rather than the beginning of permanent decline. It is therefore necessary to consider whether the decline in social ability is due to natural ageing or to illness and to ask about the timing of the loss of social function. If the breakdown is recent it should be regarded in the first place as a social symptom of a medical disorder and this should prompt an investigation of possible mental or physical causes. To take account of these points three further factors need introducing into the ring; time, natural ageing and illness. As they involve all three rings it is possible to represent these radially (Figure 1), thus highlighting the fact that the rate of decline differs depending on whether the cause is natural ageing or illness and emphasizing the need to be alert to the possibilities of treatment. For example, a patient may find it impossible to continue to tend the allotment and this will soon be followed by the inability to take a bus or do local shopping. and eventually bathing and toe-nail cutting become difficult. All four disabilities may appear within a short time because the same type of back movements are necessary for each of the tasks. Thus improvement of back mobility could restore functional ability at all three levels.

The model — services available

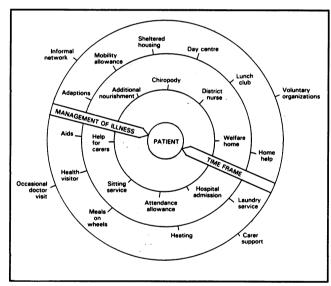


Figure 2. A model of services available to elderly people.

A complementary model (Figure 2) demonstrates the type of input usually necessary to restore equilibrium when deterioration in social function has occurred at each level. As deterioration progresses towards the centre, new services are needed to augment those already necessary owing to breakdown at the outer levels. Thus is is possible to restore the ring by providing appropriate additional assistance; for example difficulty with bathing may lead to deterioration at the level of the inner ring, but bath aids supplied in time could restore independence. Again the radial factors come into play. The reason for the loss of the social function should be explored, especially if it has occurred within a short time. Attention to physical and mental causes may mean that additional social support is unnecessary. What is important at all levels is the informal network which exists to support old people and which is quite distinct from statutory and voluntary help. The informal network is wider than simply the caring relatives and is important for maintaining old people in the community and arresting their decline.

Uses of the model

In acute situations where several problems coexist, the model is helpful in determining the level of social functioning of an elderly patient and the relevance to illness of any decline in function. Decisions may be influenced by understanding the timeframe of the deterioration. In continuing care a record of social ability and the rate of decline are important in monitoring the overall condition. In anticipatory care it is possible to review the social decline prophylactically so that steps are taken at an early stage to introduce appropriate help; in this situation the model is a useful screening tool. Finally, the relatives and carers are affected by a patient's social decline and the care provided by them for old people is often brittle and, as Sanford pointed out,8 the level of tolerance is finite. He was able to show which behaviour patterns of dependants produced low levels of tolerance among carers and were a frequent reason for hospital admission; these were often social deterioration factors at level three, such as inability to toilet independently, general immobility, inability to wash, inability to feed. Thus a further value of these rings is to anticipate possible carer breakdown, if those problems at level three which indicate carer stress can be identified and appropriate help introduced.

Value of the model

- It provides three useful check-lists in caring for the elderly.
- It takes account of the timing of social deterioration.
- It highlights the place of physical and mental illness in causing or accelerating social decline.
- It places emphasis on early restoration of function either by treatment or care input.
- It can help all carers to understand the significance of social deterioration.
- It is useful for identifying and managing problems earlier.
- It takes account of carer tolerance.
- Because of its emphasis on functional ability it facilitates independence among old people and therefore contributes to the quality of life.

References

- Engel GL. The need for a new medical model: a challenge for biomedicine. Science 1977; 196: 129-136.
- Engel GL. The biopsychosocial model and the education of health professionals. Ann NY Acad Sci 1978; 310: 169-181.
- 3. Engel GL. The clinical application of the biopsychosocial model. Am J Psychiatry 1980; 137: 535-544.
- 4. Brockington CF, Lempert SM. The social needs of the over-80s. Manchester University Press, 1966.
- Goldberg EM. Helping the aged. A field experiment in social work. London: George Allen and Unwin, 1970.
- Isaacs B, Neville Y. The measurement of need in old people. Edinburgh: Scottish Home and Health Department, 1972.
- 7. Hunt A. The elderly at home. London: HMSO, 1978.
- Sanford JRA. Tolerance of debility in elderly dependents by supporters at home. Br Med J 1975; 3: 471-473.

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