mediator. The people outside, he conveyed, would not go away unless Dr Meissner promised to leave the town. Though wearing the mantle of a peacemaker, Wolfram clearly endorsed the troublemakers' demand. Eduard had the unenviable choice of an uncertain future or the risk of being assaulted, to which his wife and child were also exposed. So he accepted what amounted to an ultimatum, especially as their house had been damaged also by a thunderstorm and no longer offered protection from the weather, let alone defence against aggressive force. The mayor told the crowd of this decision, and after their "victory" they dispersed.

The only man who behaved towards Eduard and his family in this crisis in a correct, decent, and humane way was the commanding officer of the local soldiers' convalescent home, the only military establishment at Teplitz. Major von Schwaiger offered them shelter until their departure and also requested from the nearest garrison a detachment of troops to guard the contents of the Meissners' house against looters. (Did he serve as a model for Ibsen's Captain Horster?) Two days later, having packed their possessions on a horse drawn cart, the family left at daybreak. They reached Saaz, some 50 kilometres to the south west, in time for an overnight break, and arrived at Carlsbad the following day, where they found temporary accommodation. There was no hostile feeling towards Eduard Meissner; on the contrary, he was shown great sympathy and consideration by the local people. This,

he felt, was a thin veil for their glee at the calamity in their rival watering place.

Ibsen's play ends in a gloomy mood, but Meissner's story has a happier outcome. Within weeks Eduard had established a practice in Carlsbad, which in due course became as busy as the one he had left behind and rather more lucrative. After a few years he limited his professional activity in Carlsbad to four months a year—that is, to "the season"—and spent the rest of the year either travelling in milder climes or in Prague, where his practice was small and select—a matter of prestige rather than a major source of income. Eventually he went to Carlsbad every summer only to take the waters himself and to maintain social contacts with friends and former patients. He died of renal failure aged 83, the "doyen of the medical fraternity in Prague."⁴

I am indebted to Drs K Litsch and M Kunštat of the Prague University Archives for information based on Eduard Meissner's student records.

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(Accepted 22 January 1990)

Everyday Aids and Appliances

Bed aids for home nursing

A F Travers, P W Belfield

FIG 1—Lifting pole

Department of Medicine
for the Elderly, St James's
University Hospital, Leeds
LS9 7TF
A F Travers, MRCP, senior
registrar

Medical Department for
the Elderly, Leeds General
Infirmary, Leeds LS1 3EX
P W Belfield, MRCP,
consultant physician

Series edited by: Professor
Graham Mulley.

Br Med J 1990;300:1126-7

The able bodied among us spend a third of our lives in bed. We take for granted our ability to turn over and get up when we please. In contrast, the disabled patient may spend considerably longer in bed and may have difficulty moving in the bed or getting in and out of it. Many aids and accessories are available and these fall into two broad categories: those for improving mobility around the bed and those for comfort.

Mobility aids

These aim at improving independence in movement on the bed and help in getting in and out of the bed. The type of bed—for example, a simple divan or a tilted hospital bed—will influence fixation of the aid to the bed. Most aids therefore come in several forms, depending on which bed is used.

Lifting (monkey) poles (fig 1) consist of a cantilever gantry with a support chain or strap from which hangs a handle. They are used to help the patient raise himself or herself off the bed or to move up the bed and their usefulness depends on good strength in the arms. They are most useful for paraplegic patients and other people with problems with their legs. The handle should be large enough for two hands, and the support strap should be adjusted to the correct length, just near enough for the patient to grasp the handle from a lying position. Attendants should take care to avoid head injury on the dangling handle. The lifting pole must be well anchored—that is, clamped to a hospital type bed or screwed to a divan—and its stability should be checked in use. Direct fixing to the ceiling or wall is also possible. Costs range from £40 to £150.

Rope ladders (fig 2) enable the user to pull himself or herself up from lying to a sitting position and require strength in both arms as the user "climbs" the ladder, rung by rung. They are fixed to the foot of the bed and usually consist of synthetic ropes with wooden or plastic rungs. They are cheap at £5 to £10.

Grab handles (fig 3) help patients to get into and out of bed and are particularly useful for those with unilateral hemiparesis. They also provide something to pull on for movements around the bed. They are adjustable in height and rotate through 360°, locking in eight different positions (for example, the Divan Bed Aid). The most commonly used types are the Lewisham and King's Fund frames, which clamp on to hospital type beds, and the Divan Bed Aid, which

FIG 2—Rope ladder

FIG 3—Grab handle

screws to the floor and the bed. Firm anchorage is important: patients and their carers should be shown by a nurse or therapist how to use the grab handle. Costs vary from £45 to £60.

A *Manchester bed raise bar* helps people to get in and out of bed. It is a horizontal bar screwed to the frame of the bed so that the bar runs level with the top of the mattress. The user can pull on the bar. She or he can also use it for counter pressure when attempting to rise from sitting on the side of the bed, when the bar provides firmer support than a sprung mattress. The cost is about £22.

Cot sides and side rails—There is a wide range of these available and many are adjustable for height and width (fig 4). They can be fitted to domestic divans. When not in use they fold or drop down. They provide a rail for patients to pull on to enable turning over in bed. They can prevent rolling out of bed, but they should not be used as a method of restraint as determined and

FIG 4—Side rail

restless patients will climb over them (and thus fall from an even greater height) and may injure their legs.¹ For these reasons their routine use should be avoided. Costs range from £40 to £120.

Bed raisers—It is difficult to stand from sitting on a low bed. People with muscle wasting or joint stiffness find getting up easier from a higher bed. Wheelchair

FIG 5—Bed raisers

FIG 6—Bed cradle

users need a bed of the same height as the wheelchair, usually about 48 cm, or higher if a wheelchair cushion is used. The commonest type of bed raiser is the wooden block, which can increase the height of the bed off the floor by 7 to 25 cm (fig 5). Screw in extensions for divan bed legs are also available. Other reasons for selectively raising the head or the foot of the bed respectively are reflux oesophagitis and ankle swelling. A set of bed blocks costs under £10.

Aids for comfort

Backrests adjust to different positions and fold flat when not in use. The frames are metal or wooden. Pneumatic mattress raisers can be placed between the

bed base and the mattress and a handheld control system allows the patient to lower or raise the bedhead into variable positions. A back rest costs between £10 and £40.

Wedges and support pillows—Like backrests these provide comfort and support, enabling the user to sit up in bed, but may lead to the user sliding forward as the flexed position of the hips is unopposed by any flexion of the knees. This can be prevented by raising the foot of the bed a few centimetres. In patients with problems with sensation or severe weakness of the legs, however, this measure will not prevent the increased risk of pressure sores caused by the forward slide. Pillows should be flame retardant and washable. The “wishbone” shaped pillow supports the back, shoulders, arms, and neck. A wide range of foam wedge supports is available for use under legs, shoulders, and back, and to help positioning in bed. The costs range from £10 to £50.

Bed cradles (fig 6) support the weight of bedclothes over a patient's legs and feet. They are cantilever in shape and are usually made of coated tubular steel. They are anchored by sliding under the mattress. Some fold when not in use for easier storage. Disadvantages of their use are the possible risk of trauma to the legs and that they may make the legs or feet cold. They cost £10 to £25.

Bed mirrors—Viewing mirrors clamped to the side of the bed may enable the user to see more of her or his environment.

Bed tables—There are over 70 types of bed table available. The commonest is the cantilever table (fig 7). These may have press button height and tilt adjustment to suit individual needs. Usually the base has castors to allow movement and open ended legs to slip easily under the bed. Most tables have lipped edges to prevent objects rolling off the top. Some tables are overbed—that is, bridge shaped—and others are trays on folding legs. Book rests and reading frames, some with devices for turning pages, are also available.

Provision of aids and accessories

There are no formal studies of the provision, use, and usefulness of the equipment discussed above nor of the number of people at home who have difficulty with mobility in bed and with transfers into and out of bed. We know from clinical experience that people with stroke and Parkinson's disease often have such problems.

Bed aids needed for home nursing are usually supplied free of charge by health authorities. Social services may supply some of the aids designed for comfort, but there is widespread variation in arrangements.² Unfortunately, the vast range of bed aids makes it possible for people (or families acting on their behalf) to buy or accept aids that are not fully appropriate for their needs. Proper assessment including home visits by the occupational therapist and nursing staff will avoid these problems.³ Further information can be obtained from books and leaflets,⁴ and if possible a visit to a disabled living centre should be made.⁵ Doctors and other health workers can make use of the numerous aids and accessories that are available to improve appreciably the quality of home life for the patient “stranded” in bed.

FIG 7—Cantilever bed table

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