EVALUATION OF AIDS AND EQUIPMENT FOR THE BATH:
II. A POSSIBLE SOLUTION TO THE PROBLEM

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SUMMARY

One hundred patients needing bath aids leaving Leeds hospitals in 1978 were randomly allocated
into control and treated groups. The former 50 patients received aids through the usual channels,
the latter obtained bath aids immediately on discharge and were instructed in their use at home by
the peripatetic occupational therapist. All were assessed independently at three to six months.

Prompt, correct prescription of aids and supervision of their use in bathing shortly after
discharge by a hospital-based occupational therapist resulted in safe bathing by all treated subjects.

In contrast, only 82% of controls bathed, 50% of these from the seated position (compared with
90% of the treated group) and only 39% of controls received their aids within two weeks of
discharge (compared with 74% of the treated group).

A survey of bath aids and equipment which had previously been carried out at the
Rheumatism Research Unit in Leeds revealed that two-thirds of the aids were received
weeks or months after the patient returned home from hospital. Moreover, the overall
usage rate was only 68% (falling to 48% for bath-boards). It was felt that this situation
might well be improved (Thornley et al., 1977; Chamberlain et al., 1978). The initial
survey was thus extended and a peripatetic occupational therapist was appointed.

We aimed to prove that, with prompt provision of aids together with supervision and
reinforced teaching of the patient and his helper in the use of the aids at home immediately
after discharge from hospital, we could achieve a higher usage rate of aids, and that the
aids supplied would be more satisfactory. Finally, we wished to see whether the patient
would achieve a better level of functioning.

METHOD

One hundred patients were admitted to the study, having been discharged from one of
the four hospitals in Leeds. They had been assessed by an occupational therapist in
hospital as being in need of bath and w.c. aids. The patients were randomly allocated
according to a predetermined schedule to either the treated or the control group. No
attempt was made to match patients for age, sex, diagnosis or domestic circumstances
(Hill, 1967).

Treated patients were visited at home by the peripatetic occupational therapist
(P/O.T.) (J.S.) on two or three occasions. The first visit took place within 10 days of
leaving hospital, the second or third was arranged when possible to coincide with the
arrival of the definitive aids or when bath-rails were fixed. During the first visit the P/O.T.
took on temporary loan to the patient the aids assessed as needed by the hospital O.T.
Instruction in their use was given when necessary. She contacted the Aids Officer of the
Local Authority with recommendations for further aids when required, and attempted to

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liaise with the Community Nurse in order to ensure that patients were receiving the same instructions from both nurse and occupational therapist.

On the second visit a bath was taken by the patient with a relative assisting, where available. Aids were checked for safety and correct fitting. If the procedure was well understood and performed satisfactorily with the permanent aids, a third visit was not made.

At each visit the P/O.T. recorded information on the mobility of the patient and level of independence, the use of bathing attendant or community nurse, use of helpers and the aids provided.

All patients, including controls (none of whom had been seen by the P/O.T.) were visited by an independent research occupational therapist (R/O.T.) (G.T.) three to six months after discharge. Information was recorded as in the first part of this survey on: the patient's disease state, functional level, housing facilities, use of helpers and use of aids. Delay in the supply of aids was noted and we attempted to assess the patients' confidence in their use.

RESULTS

One hundred and seventeen persons were approached. Replies were received from 111, giving a response rate of 95%. One hundred patients were used in the study.

Fifty-nine per cent were arthritics, 29% had suffered strokes and the remainder had mainly neurological and orthopaedic diagnoses. The proportions of the various diagnoses in the treated patients and control groups were similar (Table I).

Most of the patients were elderly, 81% of the total being over the age of 60 years and 5% over the age of 80 (Table II). Twenty-three of the treated group and 11 of the control group were male (Table II).

Environmental factors

Housing conditions were better than those found in the previous survey two years earlier. All patients were able to reach the bathroom and w.c., although fewer had facilities on one level (Kira, 1976).

Instruction to the treated group by the P/O.T. resulted in 90% of them sitting on a board, stool or chair when getting into the bath, whereas only 50% of the controls used this method.

Numbers bathing

All the treated subjects bathed at the time they were seen by the R/O.T. (Table III).

TABLE I

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treated group</td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>24</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>26</td>
</tr>
<tr>
<td>Other arthritis</td>
<td>4</td>
</tr>
<tr>
<td>Strokes</td>
<td>34</td>
</tr>
<tr>
<td>Neurological</td>
<td>4</td>
</tr>
<tr>
<td>Orthopaedic</td>
<td>0</td>
</tr>
<tr>
<td>Other diagnosis</td>
<td>8</td>
</tr>
<tr>
<td>With additional diagnosis</td>
<td>56</td>
</tr>
</tbody>
</table>
Of these, 12 lived alone and yet managed to bathe using their aids but without calling in a helper. Nine controls were not bathing (usually because of inability to get in or out of the bath), a figure which includes four subjects still awaiting aids.

Further analysis of the treated group reveals a shift towards independent bathing between the first and last visits of the P/O.T. Forty-four per cent were not bathing at the first visit, but only 8% were unable to carry out this activity a few weeks later. In addition, over half the treated groups were bathing entirely without help at this time (Table IV).

We were unsuccessful in contacting the Community Nurse and were unable to show her the safer method of entering the bath that the patients used. We would also have liked to alert her to the patients' increased independence so that her help could have been gradually withdrawn.

**Supply and use of bath aids**

Two hundred and seventy bath aids were supplied; 149 to the treated group and 121 to the control group. The overall usage rate for bath aids was 80%. This represented an improvement in their use compared with the 68% of two years earlier, as documented in Survey I (Table V).

The P/O.T. considered that 20 further aids were needed in addition to those assessed by the hospital occupational therapist.

**Waiting time for bath aids (Table VI)**

Seventy-four per cent of treated patients but only 39 per cent of the control group received their aids within two weeks. Two weeks was considered the maximum time-lag
after discharge from hospital for patients to retain the instruction given in hospital. In order to achieve our aims, the P/O.T. had to lend her own aids.

Six of the treated group and 17 of the control group were still awaiting bath aids at our final assessment three months after discharge. This we consider to be totally unacceptable.

**Unsatisfactory aids (Table VII)**

Thirty-one per cent of the aids supplied by social services and 7% of those supplied by hospitals were considered to be unsatisfactory.

The fault usually lay with ill-fitting bath-seats which were either fixed too high or shifted during use. Sideways wedging bath-seats were unsuitable for acrylic baths as they might split the bath. Top-hanging seats were supplied to the treated subjects. In addition, 13 bath-boards were of unsatisfactory design, either being too narrow, or having an unsuitable surface (for example, of cork, which cracks and breaks away). Also there was movement in some of the boards and this was unacceptable to the user.
TABLE VII
UNSATISFACTORY AIDS AND THEIR SUPPLIERS

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Total percentage of aids supplied</th>
<th>Unsatisfactory aids supplied</th>
<th>Percentage of total supply unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>(58) 19%</td>
<td>(4) 8%</td>
<td>6.9%</td>
</tr>
<tr>
<td>P/O.T.</td>
<td>(67) 22%</td>
<td>(1) 2%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Social Services</td>
<td>(126) 42%</td>
<td>(39) 81%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Patients</td>
<td>(52) 17%</td>
<td>(4) 8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Total</td>
<td>(303) 100%*</td>
<td>(48) 100%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

* This total takes account of unsatisfactory aids which were replaced.

DISCUSSION

It is known from our own and the other surveys that the unsatisfactory situation experienced by our controls is common. Keeble (1979) has documented the numerous steps usually required in the prescription of aids and adaptations in various London boroughs. Even with small equipment, the request for which did not have to go to Social Services committees, a delay of many weeks was common, the request going through several persons. Where hospitals were the agents of social services and made (or bought) and prescribed the aids for their own patients, much delay was avoided.

Our treated group fared well. They received the correct aids from the peripatetic occupational therapist immediately after discharge, and the peripatetic occupational therapist was able to teach the patient in her real environment. It is not possible to separate the effect of personal instruction from prompt aid provision, but using the combination all subjects bathed with confidence (with or without helpers). Thus although this service requires an investment of occupational therapy time, it prevents misuse of the time of other professionals (social workers can use their skills more effectively than in trying to assess for and order aids, and the district nurses’ load of bathing is reduced); it also reduces wastage of money on inappropriate and unused aids. Thirty-one per cent of aids supplied from social services were unsatisfactory, a figure similar to the findings from Hillingdon (London Borough of Hillingdon Social Services Research, 1976). Even accepting that in arthritis where the degree of disability fluctuates, aids may be required for a relatively short time (Hollings and Haworth, 1978), we believe this figure is unacceptably high.

The usual method of standing on one leg to get in and out of the bath is potentially dangerous in the elderly and infirm. By sitting on a stool or board the legs can be swung over the side of the bath, and access thereby made much easier and safer.

We thus recommend that aids be provided from the hospital (as the social services agent if necessary) and that early instruction in their use at home be given by an occupational therapist who has known the patient and her problems in hospital and who is able to follow her at home on one or two occasions. The resulting great increase in confidence almost certainly benefits the patient in other domestic spheres and helps prevent readmission to hospital.

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REFERENCES


