Assisting people with disabilities to bathe and shower

Julie Swann

Some people with disabilities require advice, assistive equipment or adaptations to their homes in order to be able to wash their bodies. A wide range of bathing and showering aids and specialist baths and showers is available to help with this personal care activity and it is important for occupational therapists to know what equipment is available so they can help service users to make an informed choice.

This article explores some of the bathing and showering equipment currently available. It emphasizes the importance of empowering individuals to make the right choice for themselves. The key to providing a good service is to ensure that advice provided follows an appropriate assessment that takes into account individual needs.

Key words: equipment, assessment, bathing, showering, adaptation

For most people, washing themselves is an automatic routine and is taken for granted. However, people with disabilities or with increasing frailty may experience mild to substantial problems with showering or bathing.

Before recommending any intervention, it is vital for occupational therapists to carry out a full assessment of need and to take into consideration individual preferences. A clinical diagnosis will enable therapists to forward plan and to consider various options to overcome future physical and cognitive problems.

There are four main dimensions to consider when offering assistance with bathing:
- General advice
- Assistive equipment and adaptations
- Alternative baths and showers
- Personal care assistance.
Each of these will be considered in turn.

OFFERING GENERAL ADVICE

Before recommending any equipment or adaptations, therapists need to consider whether guidance can resolve the problem. Sometimes, people struggle with bathing merely because they have not learned techniques to overcome specific problems. Advice needs to take into consideration the individual’s preferences and compromises may be needed.

For example, using different techniques, more manageable clothes and small assistive equipment can help. Readers should refer to the Disabled Living Foundation’s (2003) website, which has downloadable booklets on aspects of dressing, bathing and showering.

ASSISTIVE EQUIPMENT AND ADAPTATIONS

There is a wide range of equipment available to help people bath or shower. This can be obtained from specialist companies such as Nottingham Rehab Supplies (www.nrs-uk.co.uk) or Invacare (www.invacare.co.uk), or from local retailers such as chemists and supermarkets. Alternatively, equipment can be loaned from some charities such as the Red Cross. Equipment can be grouped under different headings, as follows.

Transfers
Several assistive devices have dual uses for bathing and showering:
- Handrails: These provide additional support when moving from sitting to standing or transferring. Smooth, ribbed and contrasting handrails are available. Plastic rails are quicker to install than metal, as they do not need earth bonding. Approved Document M – Access to and Use of Buildings (Office of the Deputy Prime Minister, 2004) provides details and diagrams of recommended handrail positions. Guidelines are useful but individual anthropometrics should be applied; for example, looking at the reach and hand function of individuals.
- Floor-to-ceiling poles: These can assist with standing and balancing, particularly when a carer is helping with clothing. However, they can impede transfers, particular when using a bathlift or bathboard, because they can restrict access beside a bath.

Julie Swann is an independent occupational therapist.
Correspondence to: Beaumaris, 64 Close Lane, Alsager, Stoke-on-Trent, Staffordshire ST7 2JT, UK

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- Rails attached to the taps: These can give security when stepping into a bath, but should not be used to pull up on or to rise from the bottom of the bath. Detachable rails can impede transfers in and out of the bath and integral bath rails or wall-fixed rails are safer.

- Bath boards: Some of these are slatted or have drainage holes to allow use as a shower board and to be dried upon. Following several adverse incidents, apertures must now be less than 8 mm or more than 75 mm (Medicines and Healthcare products Regulatory Agencies, 2003). Several have handgrips to assist with balance and transfers.

- Bath seats: These enable a person to sit about halfway down a bath, at the water level. Full immersion is impossible, unless the seat is removed and replaced to assist egress.

- Bath lifts: Standard baths can accommodate removable bath lifts. Some have side flaps to assist safe transfer and avoid flesh being trapped, such as the Bathmaster from Homecraft (www.homecraftabilityone.com) (Figure 1). They transport a person from the top of the bath to below the water level. A safety strap provides added security when the bath lift is moving and a vertical rail will give stability when a carer is helping with washing and security when the bath lift is operating. Other examples are the Neptune bath lift from Mountway (www.mountway.co.uk), the Aquatec Beluga from Invacare and the Revolution from Nottingham Rehab Supplies (Figure 2).

- Shallow baths: These are lightweight resin ‘baths’ with drainage plugs, which fit over a standard bath. They are suitable for children or adults and raise the person higher than when using a normal bath and equipment.

- Bath steps and step stools: These are rarely recommended, as the problem of getting down to the water level still arises and a bath board and bath seat will provide a safer method of accessing. They are, however, useful in helping a client to access a shower with a high step.

- Hoisting devices: There is a wide range of hoisting devices, from turning discs and portable hoists to wall-fixed hoists and ceiling track hoists. Ceiling tracks are useful if space is limited, and can transfer a user from the bed to the bath to a chair. Many baths are designed to allow either ‘end-on’ or side access by a portable hoist, but a dripping hoist sling can be a safety hazard on flooring. Equipment should be regularly checked and the manufacturer’s service schedules should be maintained.

Additional equipment for showering

- Shower seats: These can be fixed to a solid wall and many can be folded away when not in use. Some have integral armrests and can be adjustable in height – for example, Pressalit (www.pressalit.dk/pressalit/en-GH) and Chiltern Invadex (www.chilterninvadex.co.uk) have a range of shower seats.

- Shower controls: These should be easily reachable from a seated position and from the carer’s position.

- Shower chairs can be wheeled into the shower area or can be static, such as the Aquatec Pico from Invacare (Figure 3). Wheeled shower chairs reduce the need for transferring into the shower area. Porcelain and modern acrylic bases will support most shower chairs; however, if bariatric equipment is used, it is advisable to check the maximum load with the base manufacturer.

- Shower tray: High shower bases can be replaced with a lower-height tray or level-access tray. If
drainage is a problem, waste pumps can be fitted externally (some are integral to a unit).

- Shower trolleys and showering plinths: These are very useful for frail or severely disabled people. Assistance is given at the carer’s waist height and bending is avoided. All have drainage holes and can be used in conjunction with hoists. They can double as a ‘dressing table’. Chil tern Invadex produces a range of easy-steer shower trolleys with hydraulic height adjustment.

**Washing and drying the body**

Bathing can be medicinal, particularly if preparations are used, although care is needed as perfumed bath preparations can irritate the skin. Nazarof (2005) notes that ‘prolonged soaks in a bath can lead to macerated skin’ and advises on products to use to prevent skin damage.

Many people could wash themselves with the provision of some long-handled equipment or larger-grip equipment. Examples are:

- Long-handled brushes and sponges
- A wash mitt
- Suction nailbrushes
- Towels with loops.

Several companies manufacture body dryers; for example, the Après Shower (Après Shower Dryers Ltd, www.apresshower.com) can be placed strategically to enable independent bathing and drying.

**ALTERNATIVE BATHS AND SHOWERS**

**Baths**

There are several different types of baths, including those with integral lifting devices for disabled people. Preferably, baths should be sited to allow access at either side by a wheelchair or a carer with room to allow hoisting, if needed. However, a standard bath with strategically placed handrails and a removable bathlift may be more effective, and may be cheaper. Table 1 gives an outline of some of the many baths available.

**Showers**

There are many different types of showers and what is suitable for one person is not necessarily suitable for another person. Over time, manufacturers have recognized access problems that wheelchair users or people with limited mobility encounter. Rather than having to sink a shower tray and put ‘duckboards’ over, level-access (wheeled-access) bases have evolved. For example, Neaco (www.neaco.co.uk) produces the Neatdek 3 true-level access shower grille system (Figure 3a).

Manufacturers have also developed shower cabinets – for example, Chil tern Invadex produces the Sandwell MK3 (Figure 3b), which has floor-level access. Some cabinets have integral seats or swing-out seats to facilitate transferring onto a wheelchair after the person is dried. Several can be fitted in place of a bath. Cabinets with a ‘stable’ door at the front or side enable carers to assist without getting wet in the process, or portable screens can channel water.

Level-access bases cater for all mobility requirements as they avoid the need to negotiate a step. A complete shower floor can be laid to a fall with a half-wall by the shower area to act as protection from water for carers. Flooring should be either slip-resist tiling or specialized floor covering, such as that by Impy UK Ltd (www.impy-uk.com). Wet rooms have the advantage of space and some

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**TABLE 1.**

A guide to some of the different baths available

<table>
<thead>
<tr>
<th>Type of bath</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard bath</td>
<td>Adaptable for people with many disabilities, using equipment like bathboards, bath seats, bathlifts, lever taps and handrails. No major adaptations are required. Fibreglass baths will split if a bath seat is used, unless a ‘hanging’ seat is obtained.</td>
</tr>
<tr>
<td>Low baths</td>
<td>Less leg movement is needed to step in but the bath rim is too low to be of any support and lowering to the water level is difficult.</td>
</tr>
<tr>
<td>Step-in baths and walk-in baths</td>
<td>Less lower limb mobility is required to access and most have an integral seat. The step can cause access problems for people with lower limb problems or wheelchair users. However, some seat units slide forward to avoid the need to manage the step.</td>
</tr>
<tr>
<td>Baths with integral bathlifts</td>
<td>Several have seats that allow easy sideways transfer for a wheelchair user. Additional seating strapping is available. Reduces the need for moving and handling.</td>
</tr>
<tr>
<td>Rising baths &amp; high–low baths</td>
<td>People are transferred onto a platform and the filled bath then rises. They are larger than an average bath and should be installed with good clearance at either side to facilitate transfers and to prevent trapping of limbs when the bath is moving. They can be used with a hoist to reduce the need for moving and handling. Carers do not need to bend down to assist with washing; therefore, back strain is avoided.</td>
</tr>
<tr>
<td>Tilting baths</td>
<td>These permit sideways transfer at one side, then the door is closed and the bath fills and tilts. A hoist can be used, reducing manual handling.</td>
</tr>
</tbody>
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**Figure 3. The Aquatec Pico shower chair from Invacare.**
may accommodate a fixed shower seat, a shower chair, a shower stool or a shower trolley.

**PERSONAL CARE ASSISTANCE**

**Individual preferences**
It is important to remember that bathing and showering are normally private activities. Reluctance to accept assistance, whether at home or in a residential care setting, can be for many reasons. Overcoming this may be as simple as making sure the help is offered at the preferred time of day. People may want to continue with old habits; this should be respected and methods that are appropriate and safe for an individual should be encouraged.

If embarrassment is the reason for refusing help then tact, sensitivity and persuasion are required. Bonner (2005) reports:

‘At changeover, the carers are complaining about how aggressive Mrs J is when being showered. A junior carer pipes up, “I don’t have any trouble. I ask her to turn on the water, which I adjust, and I give her the soap while I use another cake”.’

**Environmental safety**
Hard, smooth surfaces in a bathroom can become dangerously slippery when wet and falls may occur. The provision of slip-resistant flooring and bath mats is recommended. Additional slip-resistant shapes can be used in the bath or on the rim of the bath to give greater stability and should be regularly replaced.

In public facilities, it is rare to find alarm cords placed within a person’s reach while in the bath, shower and on the toilet. Red bangles should be known how to move people safely using correct manual handling techniques. As manual handling should be kept to a minimum, it is important to ensure that safe transfers into the bath are possible.

More than a third of all injuries lasting over 3 days reported each year to the Health and Safety Executive are caused by manual handling (Health and Safety Executive, 2004).

**Ensuring safety**

Human beings are not static loads and a watery environment can turn them into slippery objects, requiring extra care to handle and control. The *Manual Handling Operations Regulations* (Department of Health, 1992), which came into force on 1 January 1993, state that risk assessment is vital and policies and procedures on moving and handling must be followed.

The Health and Safety Executive (2004) booklet *Getting to Grips with Manual Handling* is based upon the 1992 *Manual Handling Operations Regulations*, which were amended in 2002. This short guide applies to a wide range of manual handling activities, including lifting, lowering, pushing, pulling and carrying.

**Risk assessment**

If a person is to be left to manage unassisted, or is at risk of falling, then a risk assessment of his or her abilities should be undertaken, documented and regularly reviewed. A confused mobile person should never be unattended during bathing.

**Manual handling**

Repeated lifting can cause orthopaedic problems that may not materialize until many years later. Assessment of needs should include the avoidance of lifting and handling; therefore, the use of equipment and a ‘no-lifting’ policy should be encouraged. It is important that therapists ensure that carers know how to move people safely using correct manual handling techniques. As manual handling should be kept to a minimum, it is important to ensure that safe transfers into the bath are possible.

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![Figure 3. (a) The Neatdek 3 true-level access shower grille system from Neaco; (b) the Sandwell MK3 from Chiltern Invadex.](image-url)
placed at 100 mm and at 800–1000 mm above floor level (Office of the Deputy Prime Minister, 2004). In multioccupancy dwellings, such as nursing homes, signage is useful but people with visual problems may prefer contrasting pictorial images or differentiation of bathrooms from other rooms. The ‘yellow’ or ‘blue’ door is easier to find than the ‘second door on the left’.

**Temperature control and detection**

Temperature control is very important when considering bathing and showering. The *National Minimum Standards* (Department of Health, 2002a) emphasize that water temperatures should be at maximum limits to ensure safe practices in nursing and residential care homes. Standard 25.8 states:

‘To prevent risks from scalding, pre-set valves of a type unaffected by changes in water pressure and which have fail-safe devices are fitted locally to provide water close to 43°C.’

Bathing has been associated with a high number of reported fatal or serious scalding incidents and safe water temperatures are essential. Several companies retail products (‘smart’ plastics) that change colour if the temperature is over 37°C, or 47°C floating thermometers can be used rather than a subjective ‘elbow test’.

Single-action lever taps are easier to manage and there are many taps operated by sensor controls. However, both cross and crystal taps can be operated using a tap turner that effectively converts taps to lever operation. Rather than change the whole tap, lever conversion kits can be purchased, but these are similar in price to a new lever tap.

Shower units must be thermostatically controlled to avoid a change in water temperature. Many showers have ‘temperature locks’ that ensure the temperature of the water is 40°C, such as the Redring (www.applied-energy.com/en/redring/index.php) Selectronic.

**Key points**

- Assessment that takes into consideration a person’s future needs is vital.
- Assistive equipment can prolong independence in washing.
- Make bathing pleasurable by adopting a facilitative and positive approach.
- Good bathroom design makes bathing safe by reducing environmental hazards.
- Care needs to be taken when purchasing assistive baths, as not all are suitable for people with physical disabilities.
- Ensure that correct moving and handling procedures are followed.

**Sources of equipment**

There is a plethora of information on the internet and in the media for the disabled customer. The Medical Devices Agency regularly sends reports on comparisons of equipment and highlights adverse incidents. All health professionals have a duty to ensure that equipment is used safely. Several companies run annual exhibitions; for example, Naidex (held in Birmingham, UK), The Care Show and the Disability North Exhibition.

Companies such as Nottingham Rehab Supplies are beginning to invite occupational therapists onto product development boards. The Department of Health (2002b) states:

‘The Medicines and Healthcare products Regulatory Agency welcomes reports of adverse incidents about medical devices and equipment from anyone, regardless of whether they are an individual or work for an organization.’

**Conclusion**

Washing our bodies is part of a personal care routine that has many facets. It can be a positive experience, used as a form of relaxation or enjoyment as well as to cleanse and refresh. For people who have problems with bathing or showering, sometimes just receiving a little advice on more appropriate techniques is required. Where there is a need for equipment, there is a wide range of products available.

Some people may need more specialist provision or adaptation to their shower or bath, for which there are guidelines that need following. For those people who need personal assistance, then it is very important to provide this in a safe but respectful and individually tailored way. By following this approach, it is possible to maximize independence.

**Conflict of interest: none.**


Department of Health (2002b) How do I report an adverse incident with a piece of equipment? What types of equipment have been affected recently? www.icedoh.org.uk/faq.asp?FAQ=23 (accessed 12/05)


