

Discussing special care dentistry

It is important for dental professionals to recommend more suitable toothbrushes, as opposed to “traditional” manual or electric toothbrushes, to patients with a disability. **ANDREW ROBERTON** explains why, and suggests a solution....

PROFESSORS Meckstroth and Weller, 20 years ago, wrote a study about dental care in US nursing homes. They concluded that: “*dental health is the greatest unmet need of the institutionalised population*”. More recently, the issue has been taken up in Britain and Ireland. The British Society for Disability and Oral Health (BSDOH) has issued a series of guidelines; and The University of Cardiff has created a similar report in Wales.

Furthermore, an Irish dentist has newly founded Irish Residential Dental Care, to address the issue in nursing homes across the country. Here, we can easily assume that the patient group is mostly elderly. Where that is the case, we need to grasp

The Collis Curve toothbrush features three rows of bristles, two of them curved



that more and more senior patients are retaining their own teeth, and also carrying dental implants. But, this is not the end of the story.

The BSDOH report also highlights learning disabilities, such as autism; mental health problems like Alzheimer’s; some palliative care, and dental anxiety and phobia. Adults in these categories primarily suffer with gingival disease, and this is a growing problem, as more and more people are cared for.

Other conditions impact adversely on good dental health. Even arthritis in the hands may make tooth brushing very difficult for an individual. Chemotherapy and HIV Aids will ulcerate gums, and make it painful to use a regular toothbrush. Homelessness and poverty also undermine dental health.

The Cardiff University report highlights as well, the plight of rural patients with reduced mobility. Clearly, the whole range of difficulties presented with all of these people are challenging for dentists, and, in many cases, demand innovative solutions.

The solutions

In Ireland and Wales, dental surgery vans are being commissioned to carry a service to these patients. This has many advantages. People will be treated in familiar surroundings where they feel comfortable. Staff can be helped with techniques for improving their patients’ oral health. Such interventions can produce very positive results.

The director of nursing, in a large group of Irish residential homes, has said, “Residents are much better off having had these assessments. We are now confident, as care providers, that our

clients are free from potential suffering and pain. This leads in turn to a happier and more content resident with a better quality of life”.

Conventional toothbrushes

At the heart of this debate is the question of equipment. Conventional toothbrushes fail to address these problems easily. In order to use them effectively, various techniques need to be learned. Many of these are beyond the physical and mental abilities of institutionalised patients.

Since the greatest problem with this group is gingival disease, the various methods used to remove plaque from below the gum line, are tricky for patients to use consistently; and even more difficult for carers brushing another person’s teeth.

In addition, once the brush head is rotated to address the sides of the teeth, many patients with autism, for example, may feel this is a threatening intrusion as it impacts on the cheek or tongue.

The greatest problem, however, is that pressure is transmitted down a straight bristle and passes out at the tip. A clumsy patient can easily damage themselves, and carers find it particularly difficult to judge what may be acceptable.

The first step often taken, will be to try an electric toothbrush; perhaps with a sonic cleaning action. This is an advance and offers improved care, as long as the patient can tolerate it. However, the growing group on the autism spectrum may find that really difficult. Not only do they have to accept the intrusion into tongue and cheek, but the noise can make them nervous. There are others who may react in this way too; dementia patients, for example.

Positive step to independence

Some years ago, US dentist, Dr George Collis was faced with these problems in

The Collis Curve straddles the teeth in an aim to simplify brushing



the case of his own father, who had suffered a stroke.

His response was to design a toothbrush, the Collis Curve, with three rows of bristles; two of them curved. He intended it to straddle the teeth and, therefore, simplify brushing. It replaces all the previous methods with a simple backwards and forwards scrubbing motion.

Because the outer bristles are curved, they cannot transmit damaging forces to the point. Instead, they enter under the gum line and deploy a flicking action to remove plaque and debris. They also gently massage the gums, promoting circulation and good oral health.

The Collis Curve is said to be making considerable headway in the UK and Ireland.

It has been the subject of five clinical trials in the USA. In one, by the ADA, it removed 40 per cent more plaque, and improved gum health by 68 per cent, in comparison with conventional brushes.

It is described as very easy for carers to use, and, for many patients who struggle to maintain their own dental health, it offers a positive step to independence. ■

Reader enquiry: 109

About the author

Andrew Roberton has been involved with the Collis Curve brush for seven years now.

He is also the author of a number of magazine articles.

