Have maggots, will travel: reflections on my career

Mary Jones

'What do you think of maggots?'. It was a question I wasn't expecting in my first week in my new job. It was 1995 and I had just taken over as senior clinical research nurse at the Surgical Material Testing Laboratory at Princess of Wales Hospital, Bridgend, when my new boss Steve Thomas asked me this unexpected question. This is when I first became aware of the possibility of using maggots in wound care. This introduction would colour the rest of my career as I became an advocate for the use of maggots, spreading the word to an often unconvinced audience of healthcare professionals.

Dr Thomas explained how he thought that maggots might prove a very useful tool in wound care after seeing a *Tomorrow's World* feature on Dr John Church explaining how he had used maggots on a few patients and how this therapy should be used by the NHS. After obtaining permission from the trust I used maggots with a few patients with wounds that had become difficult to debride using conventional dressings and was amazed by the ease of use and speed with which they debrided the wounds. Maggots do not bite or chew on devitalised tissue to remove it, but instead use enzymes secreted from their mouths to liquify tissue which they then ingest. There is no sensation within the wound and we quickly discovered that this was not only a quick method of debridement but also that it needed no pain relief for application or removal. The shortened debridement times meant that the wound bed was quickly prepared for the application of more conventional treatments. I felt that this could result in savings for the NHS and great improvements in patient care, and used my contacts to pass on my opinions and clinical findings to my tissue viability and wound care colleagues.

We began to devise a strategy to introduce maggots to the nursing community across the UK. It began with treating patients in our own trust who had wounds that had become problematic. Patients were quite keen to use the therapy once all aspects of the treatments were explained to them. In the early years we would get calls from former soldiers who were keen to share their experiences of maggots used for wound care during the war. Hearing about their experiences was often very humbling..

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When I first started using maggots in wound care there was no precedent to follow and no-one to teach me how to apply the maggots to patient's wounds. I read all the articles I could find on maggot therapy — most of which were more than 40 years old — so in the end I made it up as I went along (not a strategy I would recommend). This approach led to many a happy hour chasing maggots around a sterile field getting to know just how fast they can move! In the early days if I needed to apply one pot of maggots to a patient's wound I would bring six pots as I would invariably waste five of them. We kept our newly hatched maggots in a special fridge in the lab to slow their metabolic rate down so they would be at their best when applied to wounds. When we sent them out we included an ice pack to keep them cool and this gradually warmed up by the time the maggots reached their destination so they were ready to be applied to wounds. When I used the maggots, they were taken directly from the fridge and given to me, so to warm them up quickly for use I did what most 'old' nurses did to warm things up — I put them down my jumper and carried them in my bra. I often drove down the motorway with a few pots of maggots up my jumper — we joked that this particular piece of multi-tasking should be on my job description!

I always used the word maggots rather than larvae, as I felt it was a less confusing term. This way I felt I was obtaining more meaningful informed consent. I always answered patient's questions honestly and produced a leaflet which I would leave with the patient to read and would discuss it with them before applying the maggots. In the 13 years I have been using maggots on patient's wound I have only had three refusals from patients. The objections came from healthcare professionals — it's what I call the 'yuck factor'. It was the practitioners that needed the support and education as maggots are often associated with dirt and they were often

Mary Jones is Senior Clinical Research Nurse, BroMorgannwg NHS Trust, seconded to Zoobiotic Ltd

reluctant to initiate maggot therapy with their patients as they were unsure of how the treatment would progress. They needed a great deal of support – that is why we set up the out-of-hours clinical helpline (manned by me, I've been 'on call' since 1996!).

I travelled all over the UK in order to educate professionals. I'm sure I was treated as the 'light relief' lecture to end a study session. I always brought live maggots with me and when I held training sessions I always used a 'plastic bum' and lots of live maggots to demystify and try and take the fear out of the treatment. I became known as 'The Maggot Woman'. Indeed when I appeared on *Richard & Judy* in 2003 Richard Madeley actually finished the session by thanking 'Mary the Maggot Woman' — much to the mortification of my family!

As we began to see an improvement in patient's wounds I wrote of my experiences in nursing journals and was invited to participate at various national and international nursing and wound care conferences, and tried to encourage nurses to try the therapy for themselves. I also held training days on maggot therapy at the hospital which were always well attended by clinicians from across the country where there was a need I would take these training days to other hospitals.

It took a while but these days maggot therapy is regarded as a mainstream wound treatment. The treatment went from strength to strength and eventually maggots were no longer seen as an 'off-the-wall' treatment of last resort, but began to be incorporated in wound care formularies across the UK. Maggots were found to be particularly useful for patients with diabetic foot ulcers as these can be very difficult and time-consuming to debride, sometimes taking a few months to clean, but using maggots we could see the extent of the wounds within a few days.

As the therapy became more mainstream we began to turn our efforts to sharing best practice and making maggot therapy more accessible and easier to coordinate. In 2005 a separate department — the Biosurgical Research Unit — was set up within SMTL to concentrate on maggot therapy. This meant that we had more time to liaise with colleagues utilising the treatment to advance practice. We also organised annual biotherapy conferences at Porthcawl where clinicians from across the world could share experiences and best practice. At the evening meal we would have epic maggot races which became a popular feature of the event!

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When maggots became available on prescription in 2004 demand for them increased, as before this it was difficult for patients in the primary sector to obtain them. The service we provide includes assessing patients' wounds for their suitability for maggot therapy. We now have a small team of nurse advisers covering the country, assisting clinicians in application or providing educational sessions to nurses and other healthcare professionals. All maggots are dispatched by carrier for overnight delivery to hospitals, clinics and pharmacies, and at present we are the only facility in the UK providing this service. Our six nurse advisers cover the country and this means that I no longer have to travel great distances to support colleagues across the UK. I will certainly miss the trips to exotic places such as Slovenia, Paris, Jerusalem, Vancouver, Amsterdam, and Malta. It used to be a case of have maggots, will travel.

It now seems a far cry from the early days as maggots are now available on the drug tariff. Back in 2000, maggots could only be obtained through hospitals by the hospital pharmacy contacting us directly on instructions from the TVN or the consultant, or in primary care if the GP agreed to fund it, although we often provided them free it the GP agreed that the treatment would benefit their patient but they were unable or unwilling to pay for them.

This is an exciting time for maggot therapy as we have developed a new way to apply maggots called a Biofoam dressing where the maggots are contained within a 'teabag' type dressing. This is simpler to apply and is much loved by nurses as it is easier to apply and monitor and overcomes the 'yuck' factor.

Throughout the time I have spent working with maggots I have been fortunate to meet and enjoy the friendship of a great many wonderful people in the wound care arena who gave me support and encouragement to carry on when sometimes it seemed an impossible task. I am now in my final year of nursing and I hope that this year will prove to be just as rewarding and pleasurable as the past 30. The crowning glory this year will be my visit to Buckingham Palace to receive the MBE I was awarded in this year's New Years Honours List for my work in wound care. When I was asked how I felt about maggots back in 1996 I had no idea it would lead me to the palace to accept such an honour.

As the magic age of the bus pass beckons, I have plans for my retirement but I will miss the maggots a little (I have grown very fond of them and call them all Gareth), but I will miss my fantastic colleagues in wound care even more. I have made a lot of very good friends in the past 13 years. As for the future of maggot therapy, I am sure it will go from strength to strength — maggots were on earth before man and will probably outlast us. During the history of wound care their fortunes have waxed and waned but I am sure they will still be around and used in wound care well into the next millennium. WUK