

New cheaper, faster way to heal

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A 'green' medicated wound dressing that can help patients heal faster, could soon be in the market.

Made from bitter melon, the patent-pending innovation was developed by Universiti Putra Malaysia (UPM) researchers.

Its biotechnology and biomolecule faculty (research and graduate studies) deputy dean Prof Dr Rosfarizan Mohamad said the dressing promotes healing by preventing infection to the wound.

The innovation won the Gold Award at the International Invention, Innovation & Technology Exhibition (ITEX) 2019, which was held in Kuala Lumpur from May 2 to 4.

Prof Rosfarizan said the dressing could be used for all types of wounds and is particularly useful for diabetics.

"There are about three million diabetic patients in Malaysia - the highest number in Asia.

"The Government spends over RM2.04bil yearly to treat these patients and clean the wounds with pricey, imported dressings.

"Our locally produced green dressing is much cheaper and more effective than what's in the market today.

"It can heal wounds in less than 48 hours whereas products in the market take more than two days," Prof Rosfarizan, who is also the product's principal investigator, told a

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Prof Rosfarizan

press conference last Wednesday.

She said a diabetic patient spends about RM900 per month just to clean their wounds. The bitter melon dressing would only cost RM180 per month.

"That's because our bitter melon dressing is much cheaper to produce. And it's environmentally-friendly."

Bacterial nanocellulose produced from rotten starfruit, and silver nanoparticles from bitter melon extract, create a green composite that's used in the dressing.

"This green composite is a new and novel



Prof Rosfarizan unveiling the medicated wound dressing made from bitter melon extract.

product that can be used for chronic wound healing and dressing materials," she said, adding that the idea for the dressing came about after her diabetic father was involved in a bad road accident three years ago.

"We were about to celebrate Hari Raya when he was hurt. I ended up being by his hospital bed for three months, caring for him and cleaning his wounds.

"I saw the financial burden other patients like him were faced with.

"That's when I decided to find a better and cheaper way to clean and heal wounds."

The anti-microbial dressing can be applied on the wound as a gel, a bandage film or as a spray solution.

The team has been working on the dressing since 2016. It is expected to be market-ready by 2021 after clinical trials are done. Prof Rosfarizan said there are plans to commercialise the product as there is a huge export market to tap into.