

Read the **WHOLE** research paper



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My clinical students submit a research paper each week that is relevant to their current patient. A student was caring for a patient with heart failure in the intensive care unit and submitted a paper that discussed the benefits of exercise for patients with a similar condition. She chose a nice paper in the references which, on the surface at least, had a good correlation to the patient. Except ... the subjects of the paper were mice! I guess she missed that! She did not have much to explain to me, except that she only read the discussion section and thought the paper looked good because the title contained the words “heart failure”.

Today, more than ever, our practice is supposed to be evidence based and reflective of established best practice. The number of journals that currently publish papers is in the thousands. So, my question is this: how can we sift relevant evidence that will drive service improvement for our patients from other so-called “evidence” that may just be opinion? It is not under the remit of this editorial to teach research, but I am more than happy to impart my experience and knowledge so that those embarking on their wound care careers can avoid common problems.

Reading a journal article is a completely different process than reading an article about science in a blog or newspaper. It takes a while to understand what the question was that the study was trying to answer, how they chose the subjects, what was done to the treatment group and how alike or different the two groups were at the end of the study. Avoiding bias is crucial, so you are looking for any signs of it specifically in the studies you read. Bias is any tendency that prevents unprejudiced conclusions from the study. Remember, bias does have not to be intentional.

Here are a couple of common errors encountered in research papers on wounds: the goal of a study examining the effect of an intervention is to have two groups of patients and randomly assign them to the control group or the treatment group and then measure the outcome. Examine the methods section of the paper to see how subjects were randomly placed in one group or the other. If one group is being cared for today and the comparison group was last year, they are not comparable groups.

If the intervention worked, the treatment group should have less of that outcome (for example, pressure ulcers). But what if the control group was at higher risk for pressure ulcers? How would you know if the intervention worked or not? Each research paper should include a table where specific aspects of the two groups are compared (for example, age). There should not be a significant difference in the two groups in areas that affect the outcome.

A common bias occurs in wound care studies when they are comparing one dressing versus another. The person measuring the outcome — for example, healing rates — knows what dressing is in use. Therefore, they were not “blinded” to the treatment groups. So, there could be a bias in measurement of healing that benefits the treatment group.

What do the authors think the results mean? Do they state that this study is definitive proof that their treatment works? That is seldom, if ever, the case. However, studies do not need to be carried out in your locality for you to use the results to inform your practice.

We are fortunate to have great research being done in wound care, more than at any other time. Our practices can be guided by evidence and our products can be chosen from the evidence. However, to use that research effectively, be sure you examine it well and look for any bias that could alter the outcome. **WINT**

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If you would like to contribute to a future issue of the journal, please contact Adam Bushby at: abushby@omniamed.com