

Evidence-based practice in wound cleansing



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Introduction

This essay defines the concept of evidence-based practice and discusses the importance of evidence-based practice for professional practice. The essay also selects an aspect of practice that is relevant to adult nursing, namely the use of water *vs.* saline for wound cleansing, provides a rationale for choosing that aspect within the context of evidence based practice, and, drawing on practice experience and examples of approbate evidence, discusses the extent to which the aspect of professional practice is informed by different types of evidence. In addition, the essay, with reference to the selected aspect of professional practice, discusses the factors that can hinder, or hinder the implementation of, evidence-based practice.

Evidence-based practice is usually taken to mean using “ the current best evidence in making decisions about the care of individual patients” (see Sackett *et al.*, 1996), with a more recent definition being, “ Evidence-based practice requires that decisions about health care are based on best available, current, valid and relevant evidence. These decisions should be made by those receiving care, informed by the tacit and explicit knowledge of those providing care, within the context of available resources” (see Dawes *et al.*, 2005).

The importance of evidence-based practice for professional practice

In terms of the importance of evidence-based practice for professional nursing practice, offering evidence-based assessments and treatments has become widespread across the nursing profession due to the need for the NHS to be seen to be accountable to their patients as part of the NHS Plan <https://assignbuster.com/evidence-based-practice-in-wound-cleansing/>

(see Griep, 1992). In essence, in the context of the NHS Plan and the consequences of this for professional practice, the aim of evidence-based nursing practice is to treat the patient in the best possible way, as dictated by the most up-to-date evidence available, in a timely manner, in order to ensure the highest possible quality of care for that individual patient (Cluett and Bluff, 2000).

Within the framework of the NHS, the NHS Plan has meant many changes to nursing practice, including improvements in the delivery of service but mainly placing emphasis on the prompt delivery of evidence-based care and the pro-active involvement of the patient in their own care. As part of this change, which is a sea-change in the way in which the NHS has traditionally viewed care, nursing staff need to commit themselves to lifelong learning and professional development, within an evidence-based practice framework. This evidence-based framework dictates that nursing staff must use the current best evidence when making decisions about patient care, in order to conform to the dictates of their particular guidelines for professional practice.

This is especially pertinent considering the need to empower patients through involvement in patient care, under the dictates of the NHS Plan: as Playle and Keeley (1998) argue, patients are no longer passive receivers of care as the NHS now needs to be seen to be accountable to their patients. Offering evidence-based assessments and treatments fulfills the requirements to be accountable to patients through the use of up-to-date research to inform treatment practices, for example (see also Griep, 1992).

Rationale for choosing the use of water vs. saline in wound cleansing

This section of the essay discusses an aspect of practice that is relevant to adult nursing, namely the use of water vs. saline for wound cleansing, and provides a rationale for choosing that aspect within the context of evidence-based practice. This aspect practice has been chosen as it is commonly found in nursing practice: many individuals present with wounds at all nursing levels, including A&E, community nursing and intensive care, amongst others. The issue thus has widespread importance in nursing practice across many different areas of practice.

An analysis of the extent to which the use of water vs. saline for wound cleansing is informed by different types of evidence

This section of the essay will now draw on my practice experience, and, using examples of appropriate evidence, will discuss the extent to which the use of water vs. saline for wound cleansing is informed by different types of evidence.

Cunliffe and Fawcett (2002) found that nurses are presented with a variety of wound cleansing options, from the products that can be used to cleanse wounds to the dressings that can be used. The work found that this makes it difficult for nurses to make decisions about patient treatment, which means that nursing staff, instead of looking to the literature for advice, turn to the RCN guidelines, which is not an ideal basis for evidence-based practice (Cunliffe and Fawcett, 2002).

Betts (2003) found that wound cleansing with water does not differ from wound cleansing with other substances, in terms of wound infection and

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wound healing (similarly to Gannon, 2007; Hall, 2007 and Griffiths *et al.*, 2001). Fernandez and Griffiths (2008) conducted a systematic review of the literature on the use of water for wound cleansing and found that, whilst saline is usually favoured for wound cleansing, tap water is also a viable alternative, as it does not increase infection and there is some evidence that using tap water actually reduces the risk of infection, even in acute wounds. Their conclusion was that boiled tap water can be used as a wound cleansing agent (Fernandez and Griffiths, 2008), a conclusion also reached by Moscati *et al.* (2007), O'Neill (2002), Valente *et al.* (2003), Whaley (2004) and Riyat and Quinton (1997).

Thus, the evidence from the research conducted on this subject suggests, overwhelmingly, that tap water is a viable alternative to saline for wound cleansing. The RCN guidelines for wound cleansing still, however, state that saline should be used for wound cleansing. The next section will look at this discrepancy in detail.

The factors that facilitate or hinder the implementation of evidence-based practice in wound cleansing

This section makes reference to the selected aspect of professional practice in order to discuss the factors that facilitate or hinder the implementation of evidence-based practice. There are many structures designed to support evidence-based nursing practice, including research and development that translates in to best practice guidelines. However, whilst it is clear that nursing staff, under the dictates of the NHS Plan, need to work within an evidence-based care framework, there are no guidelines as to how research

is best incorporated in to their practice, in terms of what research should be used or what questions should be asked of that research, and so nursing staff often end up following guidelines that are produced for them, by the NHS. These guidelines are based on current research, and so do provide evidence-based care for patients, in some sense, but following guidelines does not involve nursing staff being *directly* involved in evidence-based care.

As one of the main principles of evidence-based practice is that decisions about care should be based on the best currently available evidence from research, this situation is not ideal. Under a true evidence-based practice framework, nursing staff should be regularly undertaking literature searches themselves, to ensure that they themselves keep up to date with the research, and that they are aware of any new recommendations for nursing practice that are suggested by this research. They should then be implementing these new recommendations.

This, however, provides difficulties, in that nurses are bound, by their professional training, to provide the usual standards of care, with the possible implication that, should a nurse try a new treatment method on a patient, following their research on a subject, as part of the evidence-based framework, and this treatment is not successful, the nurse would have let the patient down, under the guidelines provided for their professional practice. This, thus, provides a dilemma for nursing staff, who are bound to work under an evidence-based framework, but who are – in practice – reliant on the timely provision of updates to treatment guidelines, which are based on an evidence-based framework but which have not been researched individually by the nursing staff.

For example, as has been seen, there are many research publications that show how water can be beneficial in cleansing wounds, but the current recommended practice from the RCN guidelines is that “irrigation of the wound with saline is usually sufficient” with the provided rationale for this being that, “cleansing traumatic wounds with saline was associated with a lower rate of clinical infection when compared to tap water (Angeras *et al.*, 1992)”, the RCN guidelines do concede that no clinical trials have been performed comparing tap water and saline water in wound cleansing and, as such, that there is no *real* evidence-base for these recommendations.

Nursing staff working within an evidence-based framework could read the literature supporting water as an effective wound cleanser, and could base their treatment on this literature, which, whilst being within the scope of evidence-based practice, as recommended by the NHS Plan, would go against what they are recommended to do by their professional body. In the example discussed in this essay, therefore, the evidence as provided by the research has not yet been translated in to an up-to-date set of guidelines for nursing staff to follow. It seems, therefore, that patients are not being treated according to the best possible set of treatments according to the research, but, as the RCN guidelines state, there has, as yet, been no clinical trial of wound cleansing with water *vs.* saline, and so, even if the research suggests tap water is an effective, if not more effective wound cleanser than saline, until a clinical trial has been undertaken testing this, the recommendations for treatment will not change.

In this case, however, a clinical trial is extremely difficult to imagine, due to the temporary and highly individual nature of wounds, which makes it

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impossible to provide clinical trial conditions to test water *vs.* saline as wound cleansing agents. As such, even though the literature suggests that tap water is an effective, if not more effective, wound cleanser than saline, saline will still continue to be used, as this has been used historically, and because no clinical trial has been set up proving the effectiveness of tap water, meaning that tap water cannot be recommended as a wound cleanser, in that it is not recommended in the RCN guidelines for nursing staff.

Nursing staff are, however, under the evidence-based practice framework, able to apply, monitor and record wound cleansing using tap water. This approach allows nursing staff to approach the process of evidence-based practice in a series of steps (as recommended by Cluett and Bluff, 2000), within the guidelines provided by the RCN. The first step is defining the research question, based on evidence gained from treating patients in practice, which, in this case would be, “ What is the best way to cleanse a patients wound, using tap water or saline?”. The next step would be to search for and to read all the relevant literature, and then to decide, on the basis of that literature, what the best treatment options are for the patient. This would, as has been seen, overwhelmingly suggest that tap water is the best treatment option, but the RCN guidelines would suggest that saline is the best treatment option. The nurse would thus be obliged to use saline but could apply, monitor and record wound cleansing using tap water, as part of the evidence-based framework they are encouraged to follow.

Evaluation of the care provided and the processes through which the care was decided upon and administered would constitute the third and final step

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of the evidence-based framework (as given by Cluett and Bluff, 2000), which would gather all the relevant information and then would evaluate the results of this treatment in terms of finding a better solution for wound cleansing. This step-by-step approach to evidence-based practice allows for gradual improvements in the delivery of patient care through a process of gathering evidence of best practice. As has been seen, however, often nursing staff are not encouraged to follow this pathway as they are obliged to be bound by the guidelines for treatment provided by their professional body, the RCN, which, in this case, recommends a treatment option that seems outdated, according to the current research.

Conclusion

As shown by the appraisal of evidence for the use of tap water vs. saline as a wound cleanser, evidence-based practice in a nurses working life can be hindered by their professional guidelines, which, in this case, have not been updated based on the findings of current research. Whilst evidence-based practice facilitates best treatment practice for patients (as dictated by the NHS Plan) through the step-by-step approach outlined by Cluett and Bluff (2000), in this case, this facilitation is not enabled through the failure of the RCN to update their guidelines.

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