AIMS For a better birth...

The age of research

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Sara Wickham takes a critical look at research knowledge: making space for new and old

In this age of information, no matter whether you are a parent seeking information online, a midwifery or childbirth education student writing an essay, an activist listening to the radio or a health care professional reading the latest journal, you are likely to hear, read or otherwise encounter reference to a recent research study approximately every 17.94 minutes. (Actually, I made that statistic up, but it's probably not that far off the truth.) Emphasis often seems to be placed on the fact that the research is new (and, by implication, way more sparkly and interesting than the study on the same topic that was mentioned last week), but this is an important aspect of research that I think is worth questioning.

For example, many students of midwifery, childbirth education and related areas will, as you are reading this, be beavering away writing their own essays, dissertations and assignments; probably following the guidelines set out for them by their tutors and the institution at which they are studying. As the AIMS Committee has been hearing more and more of late (which I know because they asked me to write this piece as a consequence of their experiences of this trend), these guidelines increasingly insist that the research and other papers that students are discussing and referencing in their essays have been published within the past ten years. I have noticed the same trend when submitting details of continuing education workshops in countries where midwives need to under take a certain number of 'approved' study days in order to maintain their registration. Some of the proformas which are sent out for such purposes insist that the reference list should be current within the last three or four years, and, while I understand that the aim is probably to ensure that sessions are current and relevant, it often makes me wonder how people who are lecturing on the historical aspects of a topic fare when filling them out. Concurrently, many libraries are dispensing with older stock, which also includes the discontinuation of subscriptions to older issues of online or print journals, and we increasingly encounter the idea that 'newer is better' as we stumble upon, navigate and trawl information throughout the day. I am writing this article as a response to this trend, which has the potential to influence us all, yet which carries a number of negative consequences in relation to the richness, depth and contextualisation of our knowledge.

Before I defend the role of 'older' research though, I do want to emphasise the importance of current thinking. None of what I am about to say should be taken to mean that it is not important to read the latest research, evidence, guidance and discussion, because this is paramount. I do have some concern, though, about the moves described above, because older studies can offer us so much, in a number of areas, and for a variety of reasons. Perhaps the most important reason for reading older research relates

to its importance in framing current debates, and I would like to offer a couple of examples to illustrate this.

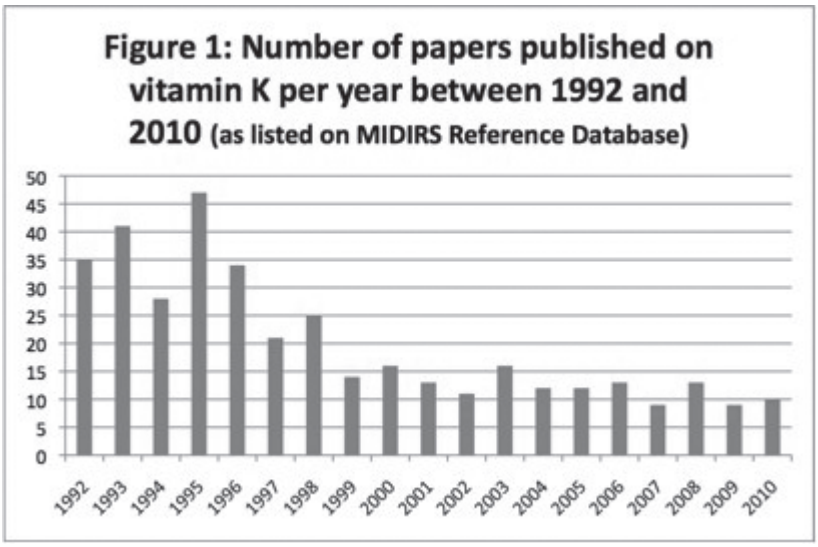
I am often asked to speak about the use of anti-D immunoglobulin in maternity care and one of the questions I am often asked by participants in these sessions is about the 'window' of 72 hours within which we are told that anti-D should be offered following a sensitising event. Many people are surprised when I tell them the origin of this window. It made its way into the recommendations because the first trials of this product were undertaken on prisoners prior to the introduction of anti-D in the 1970s (which is a whole other ethical debate, but we'll perhaps save that for a different article) and the researchers chose the 72-hour window because it fitted their protocol, probably for practical reasons. It may well be that anti-D is effective after 84 hours; perhaps even after 96 or more, but we don't know that because the research didn't use that timeframe. So I tell midwives: it's worth giving it even if you miss the window by a bit, though probably six weeks later is too late, because the limitation in our knowledge comes from the early research and no-one has gone back to test it since, not least because of ethical concerns. I probably don't need to add the implication: someone who looked at research only from the past ten years would have no idea of the origins of this window and would have nowhere to turn to gain this knowledge. (Well, unless they read this article, but surely we need to spend at least some of our time generating and discussing new ideas rather than reiterating old ones so that the latest generation of readers will see them?)

The second example (and I am picking these fairly randomly from literally hundreds of possibilities) relates to what we know about the birth of the placenta. A few months ago, Nadine Edwards and I updated the AIMS booklet on this topic, and we gathered quite a few mounds of studies and papers in order to do this. These included many recent papers – because this is one area where research is very much ongoing; a point to which I shall return below – but also a lot of older ones. The older ones were important for a number of reasons to do with context. It is in the older papers that we could see – and thus critique – the trials and studies on which current policies are still based. (No-one has told the authors of many guidelines not to use older papers, by the way!) The older papers provide really important and often very interesting information about how perceptions and practices in this area have changed, and, again, they illustrate the way in which one idea that was published in a paper thirty or forty years ago can still impact practice today. Which is pretty important stuff, especially as these ideas may not have been the results of the research per se, but a one-line comment made by the researcher. For a great example of this you only need to look at Michel Odent's sentence about the theoretical risk of water embolism, which sadly influenced policies in many areas and limited thousands of women in their choices around the birth of their placenta.[1]

It is very important to bear in mind that, if one is looking at a study published thirty years ago, the practices that women were experiencing would have been rather different, and their lives would be different from the lives of women today in several important aspects. This is sometimes given as a justification for not using older research, and certainly I would agree that it is vital to look at the context of any research, which includes the setting in which a study was carried out. But, again, many of the

practices which women are facing – and sometimes challenging – today are based on this research, and so it continues to be important to look at it and see what it can tell us.

Another important issue is the quality of the study; and this is a key consideration no matter when it was published. Some years ago, Jo Alexander wrote an article called 'Midwives, research ... and the consumption of fine wine'[2] in which she compared research to wine and talked about the roles of the critical consumer, critical provider, producer and quality controller. I was reminded of her article when thinking about this one, because I think there is another sense in which research is like wine. Some studies and papers, like some wines, age really well and are still very palatable – perhaps even juicy – many years after publication, while others are best enjoyed young and perhaps do not have the 'legs' to last. I certainly have some 'old favourites'; papers that would not pass the ten-year rule, yet which I recommend to students because I believe they still have valuable things to say.



In some areas, it can be important to look at older research because, for whatever reason, the topic has not been the focus of recent studies. To use an AIMS example; we have, as above, recently updated the booklet relating to the birth of the placenta but not the one on vitamin K. This is for no other reason than the fact that there has been very little published on vitamin K in the past few years, and what has been published hasn't added anything of significance to our knowledge, so the content of the AIMS booklet on this topic is still up-to-date. By contrast, a fair amount had been published relating to placental birth, and some significant changes had occurred in our understanding of this area, so it was important to update that booklet to reflect this. In fact, I feel quite sorry for the student writing a dissertation on vitamin K who was trying to adhere to the ten-year rule: I just did a quick search on the MIDIRS database and made the graph above (figure 1), which shows the number of papers published on this topic for each year between 1992 and 2010. As the graph shows, the number of published papers has diminished significantly. Again, context is everything, and for the purposes of updating booklets it thus seems sensible to focus efforts on areas in which knowledge is rapidly evolving – a nuance which would easily be missed if one was choosing literature by publication date alone. Furthermore, while vitamin K is also a good example of an area that is desperately in need of a randomised controlled trial but within which

such studies have not been carried out, there are other areas where even the most recent trials are more than ten years old and it would seem imperative for someone writing a dissertation to include them.

As I write, I am also reflecting on just how often I have drawn on the idea of context in this article, and that is probably the key issue that concerns me when I consider the bias against older studies. No matter whether you are an activist seeking to effect change, a parent seeking information on which to base decisions, a midwife reflecting on what you do on a daily basis or a student seeking to understand an area in greater depth, it seems to me to be vitally important to be able to learn about the origin of certain knowledge and practices and to use research which may well be older but which is still the most relevant or most recent that we have. The context of knowledge cannot be separated from the knowledge itself, and if we limit ourselves by publication date, we limit our ability to understand where we have come from, to learn from the gems of past work and to stand on the shoulders of those who came before. Let's not force a choice between new sparkly studies and those that are more mature: it seems really clear to me that we need to make space for both.

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