

Editorial

More or Less Healthcare Research or, Healthcare Research 'More or Less'?

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“You do one experiment in medicine to convince yourself, then 99 to convince others”.
(Alphonse Dochez 1966)

‘More research is required...’ is the not unfamiliar conclusion to a large number of healthcare research publications; however, in many instances more and in particular of the same research may actually be unnecessary, and questionably unethical¹. The *‘more research is required...’* caveat presupposes that more is fundamentally better than less and if not, then one may question at what point would less research be better than more research.

In resource-poor countries funding constraints often translate into 'less' healthcare research, which in turn has given rise to an unfairly held perception that much healthcare research in these lower resourced countries may be of 'more or less' quality². Therefore, to ensure that there is less of the 'more or less' research might one infer that the *‘more research is required’* premise may be somehow inappropriate? Clearly not, and it is patently inadmissible and unacceptable to expect lower-resourced countries to reduce their level of healthcare research on the basis of what are arguably inappropriate research quality criteria that have been 'shaped' by well resourced countries.

Paradoxical though it may seem, this presents a somewhat incomprehensible conundrum of how 'more research', in certain instances, may possibly equate to 'more' (more or less) healthcare research.

The British Medical Journal published an editorial several years ago which highlighted *“the scandal of poor medical research”*, it included a recommendation for *“less research better research, and research done for the right reasons”*, and emphasized the necessity for maximizing the quality of research³. However, as it adheres more closely to recommended standards in design and reporting, the quality of clinical research is continuing to improve, but bad and unnecessary research is still conducted and widely published⁴. The reasons vary but most are well known and freely acknowledged⁵.

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Healthcare research capacity in the Eastern Mediterranean Region (EMR) is constrained by factors that have been identified and were clearly articulated by the Regional Director of the WHO as, “*inadequate political commitment; an unfavourable research environment; lack of leadership and weak management and coordination of research; near absence of linkages and networking among scientists; poorly developed research capacity and inadequate resources*”⁶.

Over the last twenty years, a number of publications in regional journals have explored the quantity of research conducted in the different countries within the Eastern Mediterranean Region^{7,8}. The most comprehensive study of this kind in the Gulf Cooperation Council (GCC) countries was conducted in 2001⁹. Although the study objectives were to provide a quantitative assessment as well as an overview of the quality of research in the region, the assessment of quality consisted of unfair and unreasonable comparisons with publication rates in developing countries.

Methods currently in use to assess the quality of research are complex and varied, quality check lists used during peer review are helpful but may reflect the quality of reporting rather than the methodological quality of the research, and there is continuing disagreement on the validity of using proxy measures such as the Science Citation Index or journal impact factor to assess quality¹⁰. A review of the journals included in the Science Citation Index database in 2003 clearly demonstrated a bias towards journals published in the English language and even though many journals in the EMR are in English few are indexed to the major databases and only a handful have an impact factor¹¹. Some of the difficulties faced by researchers in developing countries, although not specifically by researchers in the EMR, were highlighted by Abu-Zidan and Rizk, and in the EMR by Fedorowicz *et al*^{12,13}.

‘*More research is required*’, if that research makes strident and reasonable attempts to reduce resource-sapping duplication and builds on and complements previous research. Whilst clinical relevance, appropriateness and capacity for translation of that research into practice are of paramount importance, healthcare policymakers and other stakeholders also have an interest in ensuring that any more research matches the health priorities of their constituencies and populations and represents value for money in terms of resources that are allocated for research. More research should in any event be titrated against these key criteria and requirements and, seemingly increasingly these days, directed towards the much vaunted UN Millennium Development Goals.

Less of ‘more or less’ or bad healthcare research can be problematic because what may appear bad or unnecessary to one may not be the same or as bad for the other. And even though unnecessary research falls in between the good and the bad, clearly it is not necessary. Bad healthcare research includes methodologically unsound, ethically inappropriate as well as ‘conflicted’ research¹⁴. These commercial and academic conflicts have a well acknowledged capacity for ‘distracting’ research which then fails to address the issues that are likely to make a difference to patients. It is of paramount importance for clinicians and in the overwhelming interest of patients that research should be

rigorous and that treatment recommendations are based on sound evidence. [See Letters to the Editor]

“More research is required...”, and yet every year studies in to the effects of treatments generate a mountain of results, sadly much of which fails to address the needs of patients in terms of the relevance or outcomes of interest and even when it does the evidence is often unreliable.

When planning new research, investigators often fail to conduct a comprehensive systematic and up to date review of the literature and in this way may not be aware that uncertainties of treatment and in diagnostic test accuracy have already been convincingly addressed. This may mean that some clinical trial participants are subjected to unnecessary and unethical research. Research should be inseparable from and relevant to clinical practice. Regrettably, this is not always the case and not infrequently outcome reporting bias in the selection of outcomes which may, at first glance appear to show benefit may not be the outcomes of relevance to patients and may lead to ineffective or harmful interventions being promoted.

For most researchers their stated aims are to contribute information to improve people’s health but how many research publications actually achieve this ambitious goal? Even when research may appear relevant to patients, researchers often appear to overlook patients’ individual preferences and choices when they design their studies. This distorted research agenda raises concerns not only about the research that has already been conducted but also the research that does not get done in its place.

Diversion of resources when ‘more research is required’ may be significant particularly to resource-poor countries, it is essential therefore that appropriate steps are taken by research funders to ensure that precious resources for healthcare are not being diverted to and wasted on bad, unnecessary and ‘more or less’ quality of healthcare research.

KEY POINTS

- Much research is of poor quality, often done unnecessarily and for the wrong reasons.
- There are pernicious and not infrequently contradictory influences on the research agenda from both the pharmaceutical industry and academic institutions.
- Questions of great importance to patients are often not adequately addressed.

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