Unquoted, unchallenged, general practice research will be casting pearls before swine

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Research is the major driving factor in further improving health care and should be directed at the clinical decisions that have the greatest impact on the health status of the population. Most people receive formal medical care in general practice,\textsuperscript{1,2} and GPs are in many countries the only physicians directly accessible to the public.\textsuperscript{3} Primary care is where research will contribute most to improve medical care for all. But the profile of primary care research is surprisingly low. Against this background the World Organization of Family Doctors (Wonca) has developed a policy to improve the status of general practice research, expand the evidence-base for GPs, and contribute to better health care worldwide—named after the place of the policy-initiating conference ‘the Kingston report’.\textsuperscript{4} Priorities in building primary care research capacity are:

- the establishment of (university based) research centres;
- linking these centres to practices (practice-based research networks)\textsuperscript{5};
- the training of GPs as researchers (and retain them in clinical and academic work); and
- more forums for the presentation and discussion of research: scientific journals and conferences.

There is an urgent need to establish a culture of science and research in general practice, and the first responses to the Kingston report give cause for optimism: in a number of Wonca regions general practice research initiatives are under development for the first time and primary care research is scheduled prominently in development conferences. It is important to keep the momentum going, and one must realise that general practice does not stand alone: there is a general concern of the status of clinical research, resulting in initiatives to revitalise it.\textsuperscript{6} Primary care scientists should exploit this opportunity for collaboration with other clinicians and share the burden of research development. International collaboration is vital for the development of science and research culture.

At present, journal publication is the established method of sharing information around the world and through PubMed it is possible to establish markers of research quality on the basis of citations by peers. In this issue Mendis and Solangarachchi present an impressive analysis of general practice research on the basis of PubMed.\textsuperscript{7} They conclude that compared to other medical disciplines, the number of general practice citations is negligible and restricted to a few countries and centres. Their distressing findings echo the experiences of an earlier Australian study.\textsuperscript{8} Particularly interesting are the methodological problems the study encountered. The emphasis on randomised clinical trials and the difficulty of tracing qualitative research through PubMed may signal a problem with this method, rather than the status of general practice research. And only 15 English language general practice journals—including Family Practice—are indexed in Index Medicus, while GPs will often publish in their own tongue, in unindexed journals. But the recent inclusion in Index Medicus of two important general practice journals should be seen as a clear sign of progress.

The most intriguing problem in the study was in identifying general practice publications as such. Lack of consistent terminology—general practice, family medicine, primary care—hampers the collection of all publications of our discipline for citation analysis, or for that matter for systematic review, as was illustrated in comparing guidelines of otitis media from different countries.\textsuperscript{9} In addition, the dominating structure of clinical and organ system related domains in PubMed and Index Medicus complicate the recognition of research from general practice. The distressing implication is that the researcher who in all probability will have studied the most general health problem or population must make a particular effort to forestall

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his/her publication from immersing in a sub-specialty
domain.\textsuperscript{10} It can be assumed that even the most solid
search will miss general practice publications. The data
of Mendis and Solangarachchi\textsuperscript{7} present therefore an
underestimation of the true research performance. This
is in line with the Wonca findings: impressive general
practice research is there, but remains unnoticed (and
undervalued) despite its quality\textsuperscript{4} which in fact makes it
even worse.

Part of general practice papers will be published—
and cited—outside the PubMed domain. Research is to
be published for the purpose of improving the care of
patients and national journals are the best way to reach
local GPs. In addition, research evidence must find its
way into guidelines, CME programmes and other tools
to implement changes in care, and analysis of citations
in those areas will help drawing a picture of relevant
science. Though it will not be simple to assess the
scientific impact of research on these markers—
the undisputed value of PubMed analysis—it will
mark the societal impact\textsuperscript{11} of research and this is an
undervalued aspect of clinical research.

There may be reason not to over-dramatise the
perspective of general practice research in PubMed, but
there are no reasons at all to underestimate the findings
of Mendis and Solangarachchi.\textsuperscript{7} It is not in the interest
of general practice when its research is invisible and
bringing it to the attention of the scientific community
is primarily the responsibility of GPs and their
researchers. This would require better acknowledge-
ment of the general practice domain of research and its
concepts and foundations.

General practice researchers collaborate more and
more with other groups—for example in cardiovascular,
gastrointestinal and respiratory fields—and publish
in subspecialty journals.\textsuperscript{12} This is to the benefit of
patients and of primary care research, but only when
such collaboration results in underlining the contribu-
tion of general practice expertise for that clinical field.
But one cannot escape the impression that a substantial
number of papers from general practice research cite,
and generate further citations, of all and sundry of the
(sub)specialised field of study, but ignore fellow pri-
mary care researchers and this could be an important
factor in low PubMed citations of the Mendis and
Solangarachchi study.\textsuperscript{7} There is a need of a better
citation culture in general practice, as a scientific
community is built upon common concepts and values.
Acknowledgement—through critical appraisal in
research—of the general practice paradigm is a binding
factor of the research culture. It would be important for
general practice leaders to stress that new knowledge
and insights are placed in the perspective of our
discipline’s paradigm and here is a key role for general
practice journals’ editors and conference organisers.

Conferences are another forum general practice
cannot dismiss in striving to develop the discipline.
Conference performance can also be analysed to assess
the status of general practice research, and that is what
a Danish group does,\textsuperscript{13} on the basis of their experiences
at the 2004 World Wonca conference in Orlando. Their
critical view echoes some of that of Mendis and
Solangarachchi: the status of general practice research
cannot stand the comparison with more specialised
groups. One may disagree with these (Danish, personal)
views, as the authors bag all to do: in their view the Orlando conference presented a very strong
link to research, and was prepared in close collabora-
tion with leading general practice research groups.\textsuperscript{14}
More important, though, is that the Danish observa-
tions have missed a vital point. There is, around the
world, a large variation in the status of research, with
different behaviour and expectations, which the
Orlando conference brought to the surface: against
critical appraisal the acceptance of information as the
ultimate truth, pursuing discussions versus just pre-
senting and listening. On top of this, unfortunately, a
surprisingly large number of (West European)
researchers submitted abstracts for Orlando and got
their slot to present, but did not bother to show-up at
the conference at all. Wonca and the scientific general
practice community at large have to face the reality and
build on it a global research culture in which its
paradigms are revisited and critically analysed. This
will serve our collective long-term self-interest as a
discipline and requires an inclusive commitment of
research leaders around the world.

More and more journal publications and conference
presentations will provide a forum for our scientific
discourse with citations and discussions as its noticeable
markers. It is vital to add quality to quantity and make
sure the scientific discourse is directed at, and cites,
paradigms and core values of general practice, for their
critical review.

References

\textsuperscript{2} Green LA, Fryer, GE, Yawn, BP, Lanier D, Dovey, SM. The
\textsuperscript{3} Weel C van. International research and the discipline of family
\textsuperscript{4} Weel C van, Rosser WW. Improving health care globally: a critical
review of the necessity of family medicine research and
recommendations to build research capacity. \textit{Ann Fam Med} 2004;
2(suppl 2): S5–S16.
\textsuperscript{5} International Federation of Primary Care Research Networks
http://www.ifpcrn.org/ also available http://globalfamilydoctor.
com (accessed July 13, 2005).
\textsuperscript{6} Clark J. (for the International Campaign to Revitalise Academic
Medicine). Five futures for academic medicine: the ICRAM
\textsuperscript{7} Mendis K, Solangarachchi I. PubMed perspective of family
medicine research: where does it stand? \textit{Fam Pract} 2005;
\textsuperscript{8} Askew DA, Glasziou PP, Del Mar CB. Research output of
Australian general practice: a comparison with medicine,


