The practising public health researcher

Sijmen A. Reijneveld

Progress in public health practice has often been reached by professionals who worked in routine practice and solved the problems they met with scientific methods. A classic example is John Snow’s intervention in the London cholera epidemic, closing a water pump after analysing the spread of cholera cases.1 However, the expansion of the knowledge base of public health leaves to be answered whether this combination of work in practice and scientific research is still possible, in particular for public health professionals. With this editorial, I hope to convince the reader of a well-considered ‘yes’.

The advantages of a close link between practice and scientific research tend to be acknowledged mostly, even if not combined in one person. Good examples are the generating of new ideas on the aetiology of health and disease, and the accrual of evidence on the effectiveness of interventions. In fact, John Snow contributed to both of these. For better linking practice and research on the effectiveness of interventions, the term ‘translational research’ has been coined recently. Lean and co-authors defined this as the process ‘from evidence-based medicine to sustainable solutions for public health problems’.2 This process starts with getting evidence on the effectiveness of a treatment, using randomized trials in highly controlled settings. That may be a new drug on diabetes mellitus or a diet intervention for it. Next, these evidence-based interventions should be evaluated in routine care. For instance, interventions to postpone smoking initiation should then be evaluated in routine education, also using the term translational research.

Translational research may speed up the accrual and application of evidence in public health, but a next question is whether a combination of research and practice in one person has added value. What are the advantages, and are there any disadvantages as well? Some of the advantages are apparent. Research is more likely targeted at problems met in routine public health practice. And evidence obtained is likely to be put into practice more quickly. Quality of routine practice may thus improve, also because involvement in research may sensitize professionals for the evidence base of daily practice anyhow. Moreover, it may lead to job enrichment, making public health more attractive to high-quality professionals in general.

However, there are some caveats too regarding the combination of public health practice and research in one person. First and foremost, the professional runs the risk to get stuck between these two worlds, for instance, if he or she evaluates the effects of an intervention that is provided by the own organization. A negative finding, the intervention being ineffective, may then lead to severe pressure on the practitioner–researcher to mitigate scientific rigor. Protection against this pressure can be obtained by a dual embedding of the professional, within both a research institution and a public health service. If not available, the added value of the practitioner–researcher may better be utilized regarding research on the aetiology of health and disease, the other aforementioned strength.

Moreover, working in two worlds, routine public health (including occupational health) practice and scientific research require a wide range of competencies. On the one hand, it requires scientific rigor and quality. On the other hand, flexibility is needed to cope with daily public health problems, often without much evidence base. Moreover, if embedded in two or more organizations, the overhead for the person concerned will inevitably increase.

The balance between advantages and disadvantages in my opinion certainly favours the combining of practice and scientific research in one public health professional. In fact, I myself combined scientific research and public health practice for over 10 years. Similarly, our department currently hosts over 20 professionals who combine practice and PhD research. It is only feasible, though, if the individual professional has sufficient support from both sides. Then it is an ideal type of research that can highly contribute to public health. I would applaud finding many more examples of this type of research in the Journal.

References