What is the "Best Research" for Low Income Countries?

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Recently, I asked some prominent toxicologists in high income countries to contribute articles to inaugural issue of the newly established Asia Pacific Journal of Medical Toxicology (APJMT). I realized many of them seemed to be busy with other scientific engagements rather than publishing in a journal which is still not scientifically highly visible. They preferred, it seemed, to increase their personal h-index rather than promote science in middle and low income countries.

Are less expensive technologies such as diagnostic kits prioritized for scientists in developed countries? Are arsenic and organophosphorous poisoning pandemic in developed countries? The answer is clearly "No". Thus, who will answer to scientific challenges of medical toxicology in less developed countries? Also, where low budget applied research from the developing world could be published to be shared with similar societies?

The rules of the game, however, should be changed. We all encourage scientific research in the developing world. As the first prime minister of independent India, Jawaharlal Nehru, once said a "Scientific temper" should be formed in our nations (1). If it is not possible to persuade scientists from high income countries to co-operate with low budget applied research rather than publishing in reputable journals, scientists from the developing world should bear the responsibility themselves. In fact, we should put the blame on ourselves for the shortcomings in scientific research in Asia Pacific region. One solution could be South-South Collaboration (SSC).

SSC is known to be technology and knowledge exchange among developing countries. Dr. Margaret Chan – Director General of the World Health Organization- in her closing remarks at the Global South-South Development Expo Geneva, in 2010 addressed that SSC can be applied to meet the distinct scientific needs of the developing world (2). "Given the unique health challenges of this century, this approach has become, at once, more relevant and more vibrant" she said. "SSC allows ingenious, indigenous solutions to flourish and spread. Sometimes, experiences from the South show how simple, low-tech solutions can have a significant impact on a widespread problem" she added. In SSC, the emphasis should be firmly placed on applicability of research, capacity building, self-reliance, and sustainability.

Nevertheless, developing countries certainly need scientific aid from high income countries (North-South Collaboration). North-South collaboration should not just be a joint paper of two non-compatriots from different parts of the world. It should be towards creating true scientific leaders in developing world. "The best aid aims to eliminate the very need for aid" Dr. Chan emphasized.

The science strength resides in its quality as well as its representability. Due to diversity of human societies in terms of genetic, diet and life style; medical research in high income countries might not fit for less income countries. A tailor-made research to control heroin adulteration with lead or thallium in Iran (3,4), for example, could not be driven from research in developed world. If the importance of applicability and representability of medical sciences are accepted, efforts should be focused not only on the excellence of scientific research, but also on the benefits of the target population. In addition, perhaps an indigenous publication culture should be formed with the highest scientific standards to face the problems of the developing countries.

One of the scientific challenges of medical toxicology in Asia pacific region is limited available epidemiologic information. This field of study is rather neglected except in some countries such as Australia. Unfortunately, most available epidemiologic information in this region has been published in different formats, and some articles are extracted from hospital files while others from poison centers, in which the severity and frequency of poisonings are different. Thus, a clear picture of poisoning epidemiology is necessary in this region.

To be more pragmatic, APJMT can act as a platform to tackle this problem. As the first step to establish a unified format of reports, a data collecting sheet has been designed (http://apjmt.mums.ac.ir). I would like to invite all readers from different hospitals and poison centers across the region to participate in this initial study. We welcome opinions on this editorial to be published in the next issue of APJMT. Your contributions should not exceed 400 words and must be submitted before the end of April 2013.

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