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## EDITORIAL

# RESEARCH IN MEDICINE: ESSENTIALS FOR DEVELOPING COUNTRIES

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The well-being has been the highest topic for humanity throughout the adventure of mankind on the earth. Therefore, extensive efforts have been performed on the science of medicine, and glorious advances have been gained especially in the last two centuries. Research is essential for medicine to develop new therapeutic methods and to monitor the results of the current treatment given to the patient. These are possibly the simplest reasons for investigations in medicine. On the other hand, qualified human resource, research ethics, financial supports, regular data recording and analysis, and publication are important issues for improvement of the medical researches in the developing countries.

Well-trained staff is one of the most vital resources for scientific investigations. Therefore, medical schools and health science institutes are the critical foundations. Medical faculties must update their education programs according to the latest scientific standards. These standards must be continuously developing, translucent, and competitive. Hence, Bologna Process has been onset by 29 European countries in 1999, and today, total 47 countries are signatories for this process. Bologna declaration is an agreement between the participant states on to ensure comparability in the standards and quality of higher education qualifications for graduate level, and for master and doctorate educations [1],. Additionally, international exchange programs are very helpful for student and researcher to develop their skills. Therefore, it will be better for countries to make their agreements with the suitable foreign universities or governments to train their human resources.

University hospitals and research institutes are the main study fields for the medical sciences. Therefore, diagnostic departments including radiologic imaging and clinical laboratories such as histopathology, biochemistry, microbiology are very essential for investigations in surgical sciences. Such departments must be renewed according to latest standards, and high-tech equipments must be supplied for these units. Another important facility is the experimental animal laboratory. This facility is particularly indispensable for researchers to perform experimental investigations which are very important for surgical and interventional studies.

Almost always, human or animals (for experimental studies) are the subjects of medical research. However, the researchers are not unlimitedly free of their procedures performed on their subjects. Therefore, World Medical Association has outlined Helsinki Declaration [2]. This document includes a set of principles regarding human research ethics. Today, it is expected from all medical researchers to obey universal ethic rules while they carry

out their investigations, and many journals in medical sciences ask for ethic confirmation for studies before publication. Hence, governments (Health Ministries) or medical research institutions must establish their ethic councils for evaluation of the study protocols to prevent human or animal abuse.

The issue of financial fund is another challenge for medical research. In developed countries, majority of the researches are supported by the industry or private foundations. However, in developing countries, the governments are the main sponsors for these activities. Therefore, health authorities or scientific research councils may adopt their laws of regulations to provide sufficient amount of funds for research from external resources, and/ or they can generate funds from their research and development budgets.

The researchers need to follow international literature simultaneously with their colleagues in the other countries. This provides for researchers to keep their knowledge upto-date about their interest areas. Therefore, universities or governments may establish internet accesses for academicians to freely and easily reach the current literature. Additionally, information technologies are very important for researchers because of the fact that data recording and statistical analyses are one of the most vital requirements for researchers. Particularly medical faculties and their training hospitals should update their patient data recording and automation systems.

Publication is one of the most important products of the all efforts performed during study. However, this process requires some standards for the researchers to produce a scientifically valuable paper. Today, almost 80% of the scientific journals are published in English Language [3], and many editors do not evaluate any submitted paper if they cannot exactly understand the text, regardless of the scientific content. In this point, if the authors are not native English speaker, they can get help for English Language peer editing from professional companies. Another requirement is the selection of the right materials and methods. Possibly, this issue is the most critical step for the researchers for publication, due to fact that using of inappropriate methodology or unsuitable materials makes the current results be speculative. Therefore, authors must improve their knowledge about study protocols with a comprehensive literature review.

The number of scientific journals in the developing countries is markedly lower than those in the developed countries, and less number of journals published in developing countries is listed in the international journal indexes. Additionally, these journals have relatively low impact factors. These issues are significant handicaps for the researchers in the developing world. Therefore, it will be better for such countries to onset new scientific journals to give chance to authors for publication of their work in a scientific media. These journals can play role onto increase the scientific quality of the submitted papers, with the recommendations of the qualified reviewers and editors.

Here, we congratulate the founders of International Journal of Medicine and Surgery. We hope this journal will elevate the scientific level of Morocco, with publishing the papers with rich scientific content, and it will encourage the researchers to perform more scientific studies and to generate high quality articles.

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