Editorial

“Hypothesis”: The infrastructure of a research project

In general, proposing a hypothesis is the first step towards resolving a problem. In order for a hypothesis to be a scientific hypothesis, it requires that one can test it with a scientific method. To achieve this goal, research centers and dental schools have the responsibility to provide a suitable environment to optimize the potential of researchers in conduction and dissemination of scientific knowledge. In other words, hypotheses should be practical and operable not only on paper but also in practice. Clearly, the outcome of a research project should aim at scientific advancements and generation of science and wealth and its intellectual property should be recorded as a national treasure. Therefore, we emphasize that setting a goal for only quantitative growth of article publication that is currently inconspicuous in the strategic plan of research centers is of no avail.

In conduction of research projects, it is especially important to focus on the priorities. However, the priorities are not always in agreement with the “researchers” field of interest” or “scientific nature of projects”. Expertise, experience and knowledge of the research project manager as well as available equipment and technology in research centers play a determining role in this respect. Requests, needs and encouragements for implementation of research projects are confronted by “limitations”. The first limitation may be the “budget”. Since the budget allocated to each center for conduction of research projects is strictly limited, multicenter projects usually have a better chance of being accepted and implemented. Another limitation is the dependence of most projects to graduate and postgraduate doctoral or PhD theses. Duration of study in the mentioned fields is relatively short and students usually start their thesis projects at the end of their academic education. Besides the time issue, physical attendance of students and residents in classes is another obstacle against the conduction of research projects since classes, laboratories and research centers usually share the same closing hours.

In the end, considering the limited financial and human resources and in other words the high “cost” of research projects, we hope that the proposed hypotheses which are the start point of projects measure up in terms of scientific value, priority and being highly cost-effective (both economically and intellectually).