Inculcating Research Culture; The Sooner the Better

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All the advancement in health and its services rely to a large extent on Research; the best source of evidence based medicine. Unfortunately research in developing countries is lagging far behind, being placed quite low in their priority list, as they are still struggling to cater to the essential health needs of their people, with innumerable problems and limited resources. Even the trends in developed countries are also not very encouraging revealing a decrease in the number of physician scientist over few decades\(^1\). This alarming situation calls for prompt and effective solutions; one of that can be inculcating a research culture in the health care professional right from their undergraduate levels, a concept that is now being well comprehended and valued by undergraduates themselves.\(^2\).

Medical Undergraduates are mainstays of our past, present and future Health System. A lot of effort has been directed towards improvement and modification of their education to produce competent proficient future doctors in all parts of the world. Attempts have been made to integrate innovative programs into medical education leading to enhancement of skills and the professional preparation of medical students.\(^3\) Educating and training the students in their earlier years of education can be of potential benefit and investing in their training in every kind of skill at this formative stage can be fruitful in their later professional life. Exposure of undergraduates to research evidently contributes in grooming their research and publication skills in future post graduate life.\(^4\)

Notwithstanding its perceived benefits and importance, undergraduate research leads to a new debate by those with divergent opinion. The commonest assertion on intensive involvement in research is; leading to disruption in the progress of students through the core medical curriculum.\(^5\) Whether undergraduate research is beneficent or not; it relies on substantiation through appropriate evaluation. And those evidences can also give insight to a pertinent query; should we make undergraduate research mandatory, elective or extracurricular? Whether mandatory, elective or extracurricular, the foremost requisite is that undergraduate research should be effective. An effective Undergraduate research has been defined as “an inquiry or investigation conducted by an undergraduate that makes an original intellectual or creative contribution to the discipline”.

Provision of an effective undergraduate research in our part of the world is hampered by a number of factors. In addition to lack of knowledge and interest and indifferent attitudes towards research amongst undergraduates, problems like curriculum overload, conventional curricula, time limitation, lack of proper training, uncooperative staff, and lack of motivation and incentives play their roles in distancing undergraduates from research.\(^6\)-\(^11\). There is a dire need that such factors should be timely identified and addressed appropriately.\(^12\) A lot of contribution is existent currently in identification and estimating magnitude of this problem but now the call of the day is timely and necessary attention towards the solution and has finally opened pavements to interventional research in this regards. Many Interventional studies have lead to encouraging and positive results in improving the knowledge and skills of undergraduates in research and has also resulted in positive trends in their attitudes, improving their levels of interest and practices.\(^10, 13-16\) Keen interest of undergraduates in research is existent who also have perception of its significance and benefits.\(^2, 7, 17\)

In the present times, when we look towards the International studies as gold standard when compared to ours and underestimate our own research abilities, there is an ominous need to produce young, proficient researchers with ample knowledge, determination and skill to conduct research meeting all international standards. Undergraduates, who not only are highly receptive to new concepts but already perceive the importance of research in their professional development, should be our focal point. This is the high time to initiate action rather than to remain inactive and look forward to time and ambience that may never emerge to be conducive.

Albert Szent-Gyorgyi , a Hungarian Physician and a Nobel Laureate beautifully stated; “Research is to see what everybody else has seen, and to think what nobody else has thought”. So it is paramount time to make propitious decision of involving our young students in research and imparting them the skill, ingenuity and dexterity of thinking what nobody else has ever thought.
References