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Medical Research Education

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ABSTRACT

Research for clinical practice becomes robust if appropriate researchers are identified and trained. Utilization of research findings and its ownership can assure the appropriateness and real time research in society. Research on felt need would carry the better applicability than the observed need by external researcher. Thus the structured education program in medical research would be worth to start with.

Keywords: Education program; medical research; research gap

The term 'research' became a fashion at one point of time without knowing its value and process. This facilitated owners of majority of privately run health care delivery centers to get tax reduction, get charity on goods to import and show off academic prestige in the society. These undue misinformation to the society are under close to the regulatory body now. This part was from non-clinical/medical personnel.¹

Health personnel had misconception of labeling every clinical procedure and cases as research in one hand; and using high sounding research design like randomized trial for comparative studies on the other hand. Reporting cases is considered research by layman and layman like leadership in extreme scenario. Even for the scientific researcher the true bench to bed research or clinical problem-based research have not become the priority because of inadequate research training and limited supporting resources.²

Research should not be taken as an activity for one's own benefit but as a beneficial product to the people and society because the use of public resources should be destined to the public. This should serve the people and should not be limited to publication and library/museum. There is always positive balance of input or investment in research; nevertheless, even a small product may be worth for the society. If any research yields a negative balance, that means the value of product is more than the expected end point, that would be worth doing it; and our target should always be directed to such expectation. Thus, whenever we select the priority area, generate research questions, prepare proposal and define the methods, there should always be a scientific as well as a clinical rationale.³

Biomedical research is closely related to livelihood that persists for life in real sense. Livelihood and its attributes vary from place to place and in different time frame. So, real benefit comes only if the research addresses particular population with respect to time. Otherwise, one formula derived for an object or subject may not be suitable for another subject. It applies to all reference values of life conditions from every step of life; disease and sickness pattern; affordable and customizable system; and accessible and acceptable care. To address on these areas the specific group of researchers should be prepared to carry out translational research.^{4,5}

For instance, antihypertensive treatment cut-off has been generalized irrespective of ethnic, geographical or climatic variation; same biochemical values have been used for geriatric population; normal nutritional cut-off values have not been revised yet; geo-genetic variation in disease expression has not been studied in different population cohorts; and unmet gap in between available natural resources and their utilization by research is unimaginably wide.⁶ To materialize such a research concept for the therapeutic aspect, a structured capacity building program destined for its actors is a paramount important. Only those actors can generate the specific research questions in day-to-day encounter and can set the expected outcomes or end points. Thus, from every clinical specialty some robust research question and the research design to explain the conditions would come up as their felt need during health care delivery. The programmatic method as to bridge the research and education in health care delivery setting would be a structured education program like clinical or medical research on priority basis to begin with.⁷

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Two components namely diagnosis/investigation/address in the assessment component and link to provide care in assurance component out of 10 essential public health services as described by an authority have not been accurately pronounced by its actors which tends to address therapeutic part that has direct effect in health condition.⁸ Linking disease prevention and health promotion to customizable therapeutics though not the personalized medicine is the observed need in the current concept of public health.⁹

CONCLUSIONS

Researchers should be qualified by knowledge of subject matter and skills to perform a medical research in order to translate it onto clinical practice. To build up research capacity of the medical professionals, a structured education program is required. Evidence based clinical practice by identifying real research gap, generating appropriate research questions and their solution is the need of the day.

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