



## **MEDICAL TEACHERS AS RESEARCHERS AND RESEARCH IN MEDICAL COLLEGE**

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A popular quote from Ernest Boyer is “Poor surgeon hurts 1 person at a time. Poor teacher hurts 130.” But then, somebody added “Poor Surgeon hurts one person, Poor Teacher hurts 130 but Poor Researcher Hurts Millions”.

Last year I attended a seminar on “Research opportunities in medical college and role of medical faculties as researcher” at PDU Medical College Rajkot<sup>1</sup> and the seminar forced me to ponder on creating an enabling environment in medical colleges in developing research evidences for national health policy for various disease control, achieving MGD (millennium Development Goal), new drug development, poor drug withdrawal from market, disease registry, evaluation and monitoring of various national health programme and many more.

SWOT analysis of Scope of Research in Medical Colleges: The primary focus should be on SWOT analysis of current status of research in medical colleges. There are many strengths but weakness are also large. Main areas of weakness are lack of research aptitude, complicated institutional mechanism, no incentive or recognition to active researchers, poor partnerships with various stakeholders, interdisciplinary communication gaps, no research leadership positions in private or government setup, relative lack of research competencies, lack of teaching of research concept in medical curriculum and poor programme and policy partnership. It is important that we understand the concept of an active researcher. At present there is no clear definition of ‘active researcher’. But one faculty in seminar had opined that we can say a medical person who is getting one grant per year or publishing one or

two publications in a year can be considered as ‘Active Researcher’.

**Weakness and opportunities:** Medical teachers can try to convert all weaknesses to opportunities, like it is possible to collaborate interdepartmental in college, with government or private agencies, training opportunities to create researchers, create research environment in medical college and develop research skills among undergraduates so they can become good future researchers and many more.

**Research as team work:** This is a changing concept in a new era. Previously people were conducting independent research and innovation. But the newer concept is team work and research is not successful without a team. In this team, medical teachers can play a crucial role in leading or training teams. Medical teachers can act as a principle investigator in the research, teach research designs to students, collect data and compile for registry use and contribute to database, teach and write articles in journals, and most importantly that conduct responsible and ethical research. Thus medical teachers, particularly of the Department of Community Medicine, can take up the lead in research teams. There are few examples are already available which shows that department of community medicine can play key role; like PSBH (Problem Solving for Better Health)<sup>2</sup> and EviGenCHIP<sup>3</sup> model of Sumandeep Vidyapeeth.

All medical colleges can develop excellent Institutional Ethics Committee and Institutional Research Board for active researchers. Now regulatory authority DCGI (Drug Controller General of

India) has made it mandatory to get registration of institutional Ethics Committee in India.

Research as Evidence and its uses- It is very high time to understand that basically researches are generating evidence for scientific pool, so it is requested that we do not take it as a casual affair and even a small research can be a seed for a big change. It is known fact that research is the tool to create knowledge for the scientific community and generated knowledge should be translated to action for community benefits. We also need to understand the Research-Policy-Programme loop. All policies and programme are based on available adequate evidences. If the numbers of evidences are inadequate or poor quality evidences, government is unable to frame policies and programme supporting the community. Hence researchers need to focus on the knowledge generated out of research.

There are lots of missing evidences in our country. Often our policy makers are unable to find evidences when they are deciding policy and programme for country citizens. In such a scenario they are using other country's evidences which may not be appropriate in our set up and medical teachers have a big role here. Since we have more than 350 medical colleges and even if each college just reports small evidences, it will be great help to our policy makers in terms of various guidelines and standard operating systems (SOP) in the context of evidence based guidelines or SOPs.

Scope and opportunities for Research in India for medical teacher: Department of Health Research (DHR)<sup>4</sup> and ICMR<sup>5</sup> are playing key roles in research in our country. The Govt. of India has set up department of health research with nine new functions and the tenth one is ICMR. These nine new functions are promotion and coordination for applied and outcome research in country; focus on research governance issue; intersectoral coordination; advance training; technical support for epidemics and calamities; investigation of outbreak; support to scientific association and societies and last is coordination with government, institutions and other organizations. DHR is focusing mainly on human resource development in research and grant-in-aid for various projects. For human resource development ICMR is conducting series of research methodology workshops in country. They are motivating medical teachers for project proposal writing and submitting. The responses are very good from various part of country. The DHR is also focus-

ing to develop MRU (Multidisciplinary Research Unit) in medical colleges. This is a very good opportunities for medical colleges. The budget for one MRU is 55 million INR. Also regularly ICMR and DHR are inviting various research proposals from all active researchers from country for priority areas. The current research funding proposal evaluation mechanism is quite transparent and one can apply online at <http://icmrextramural.in/ICMR/>. The govt. has shown its resolve to promote research and it is time that medical colleges contribute their might. There are many other governmental and non-government funding agencies that are also supporting fund for research like Wellcome Trust, CARE etc. There are NGOs who are in search of consultant for research activities and medical college can take this up benefitting the faculty and the institute alike.

As regards the sharing of research evidence or the writing and the publication of research work, the medical teachers can act as guides and trainers for the capacity building of students in all aspects including plagiarism.

Incidentally, it is high time we rationalize incentives to researchers alike developed countries and their need for a clear policy on this crucial issue. A few suggestions are offered here to enable a research culture in medical colleges in our country:

**Research leadership in medical college:** This is the right time to start Research Cell in each medical college like Medical Education Unit. Recently MCI has taken a step in this direction. This leadership needs to develop and monitor at state level, regional level and national level. The functions and activities of the research cell could encompass:

1. Regular training and capacity building for research and ethical issues.
2. Development of Research Development Committee to mentor lead topics for research and these could be encouraged for thesis writing in post graduate departments.
3. Development of a fully functional laboratory to measure all chemical levels in blood including drug assays study in central laboratory. With department of pharmacy one can plan animal trial for drugs.
4. Multidisciplinary Research Unit (MRU) under Research cell where all different disciplines come closer and work together for re-

search, i.e. collaborative research and multi-centric research.

5. Organising of capacity building workshops for grant support, particularly for active researchers and creating an enabling research environment.
6. Institutions can explore on undertaking consultancies for external bodies, both governmental and private.

## REFERENCES

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