

Editorial

Research Capacity Building: 'Newer Strategy of Boosting Research, Medical Education and Health Care Services Delivery' in Medical College Hospitals

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Research capacity building (**RCB**) remains a crucial step towards the initiation and development of research activities in any medical college hospitals that adjuncts medical education and health care service delivery more prudently.

RCB is defined as 'a process of developing sustainable abilities and skills enabling individuals/ organization to perform high quality research'.¹ In recent years interest in strategic planning for RCB for healthcare professionals has boomed in Australia² -which, based on my widely acquired in-depth experiences in organizations/universities, home and abroad, seems that no medical faculty/university teachers can reach the peak of success solely by virtue of completing academic curriculum. Rather, teaching-learning (T-L) facilitates following modern medical education can excel with best outcome when adjunct with internationally collaborated research, as Barrett et al experienced on comparative education learnt through Ed-Qual experiences.³ **RCB** contributes prudent impact not only research and developmental (R & D) issues but it impacts on policy issues as the gate way in building institutional research capacity.³

Janine Matus et al in their systematic review identified existing integrated models & framework to guide **RCB** for health care professionals showing some future directions like, behaviour change (BCC) and knowledge translation theories to guide as evidenced in some developed countries to engage in research is a priority issues, particularly in **Australia**. Thus, RCB brings

multifaceted benefit, for: i) healthcare professionals, ii) given organization, and iii) for the patient themselves; which in turn, translated consequently, into overall societal development.⁴

Further, **RCB** accelerated medical research in Australian hospitals improved research productivity within acute & allied health departments towards improving service delivery & cost-effectiveness towards optimizing health care to maximize benefits in Australia's healthcare system. It enhances clinician's level of attitude, increased uptake of research utilizing evidence-based practice and experience more job satisfactions, too.^{5, 6, 7}

According to *Hulcombe J et al* **RCB-framework** includes leadership and governance, to support **public health**, in several phases of **RCB** implementation. Starting from preliminary phase of establishing research positions to run research activity with several successes of **capacity-building strategies**, with some success stories. These successes were crucially linked to solid partnerships/ **collaborations** with **universities**,⁸ with additional benefit that yields quality healthcare and efficient services delivery⁶ prioritizing healthcare workforces,⁹ and professionals involved in quality research that positively influence on infrastructure and patient care¹⁰ with stronger strategic planning and policy making.¹¹

Though **RCB** has been introduced in some developing countries as WHO reports,¹² RCB tends to mobilize added resources to boost department specific research aptitude targeting academic and clinical faculties, in Bangladesh, **RCB drives** is noticed only in few medical research departments/units in Bangladesh where it has been developed, though medical research in Bangladesh still remains primitive¹³ and sub-standard.¹⁴

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Received Date : 01 June, 2020

Accepted Date : 01 July, 2020

In 2016, Biswas RS et al., commented in their paper titled **“Success and failure in medical research”** that most Bangladeshi doctors lack in knowledge in medical research, both among the physicians and students. This deficiency start growing up right from their MBBS course when preliminary foundation on research (biostats & epidemiol) are introduced in their early learning process. This inadequacy often leaves our MBBS doctors ignorant in research unless some of them gets little exposure during their post-graduation. Even, then, those processes (biostats, research methodology for due to postgraduate thesis/dissertation) that often lack honesty in conceptualizing, writing protocol and getting it accepted including often lacks in data collection, analysis and report writing, as Rajat Sanker, RB commented in this paper. He also added “due to premeditated outcomes, being a major shortcoming in dealing with their data management, that often creates a wider range of issues in getting their own thesis published in time.”¹⁴

RCB Bangladeshi perspectives:

In Bangladesh, drives on RCB have been noticed, rarely, except few large NGOs like institutions like, **icddr, b, BRAC, CIPRB**, etc. and few GoB institutions like **BSMMU, DMCH, DSH**, etc.

Recently, Biswas RS commented that medical research in Bangladesh remains in a very primitive way, even in 2016.¹³

So, we few academicians, clinical experts and public health physicians got involved to start RCB to strengthen research activities in **AWMC** led by the Ad-din Research unit (**ARU**) through our Director General (Hospitals & Nursing) which later on transformed into Medical Research Unit (**MRU**) by the Executive Director. We at the **MRU** envision to bring all the 4 existing Ad-din Medical Colleges located in two large cities (Dhaka & Khulna) and in two district towns (Jessore & Kushtia), under one umbrella, through imbedding a Hi-Fi Satellite Server.

Thus, based on literature showing globally practiced RCB in a wide range of medical institutions and hospitals, we at the AWMCH can foresee the impact RCB on our new initiative to run our MRU, more fruitfully yet prudently enough. We now need to develop it further to provide our talented academicians and clinical experts a modest yet sound ready-to-go platform to facilitate scientific growth and research potentiality so that they can ventilate their research potentiality nationally and globally through publishing important findings by the talented Ad-din hub.

To train up our clinicians, bio-medical experts, nurses and technicians with adequate input, technical support and proper training under the modest umbrella we definitely need some financial assistance in this expensive endeavor with costly logistic back up and prudent laboratory support. Since ARC currently suffer from a bit of inadequate financing, we essentially require extra funding/grant from other sources. Such grants will help boost up running our ARC in full swing, more smoothly yet effectively and sustainably.

Applied for a good Funding to run AWMC's RCB mission

With this view, we from MRU (earlier ARC) had already applied for a 'Research Capacity Building' project from the Ministry of Health & Welfare GOB (PM initiated **IHSRD Fund activities 2021**), as a praise-worthy initiative of releasing a grand research funding to strengthen research potentials in health sector. **The objective of this RCB project in AWMC, was, to:**

- i) Facilitate our clinicians/medical teachers in boosting knowledge, skill expertise on research,
- ii) Provide a strong platform for them in producing quality research, and,
- iii) Assisting them in growing their departmental capability of conducting a wide range of research projects to produce quality research output.

Further, we, share knowledge and research skills through bi-lateral collaborations with some national (DU, JNU, NSU, DMCH, DSH, BIRDEM, BSMMU, etc.) and international institutes/ universities (with Malaysia, Japan, and recently, trying with Univ of NSW in Sydney).

Impact of RCB in future research:

Global reports evidence that RCB drives assist in establishing good rapport in health through doctor's enhanced training and intensive research. However, it is less observed in Bangladesh, though doctors at the icddr, b and/or other GoB-ran universities/hospitals (like BSMMU, DMCH, DSH, etc.) yielded better research, based on good training/exposure that provenly impacted on patients care in those hospitals. So, outcome of this RCB should also impact on patient's management and in clinical research, in our AWMCH, as well.

Impact of this RCB at the National Level

Since good quality research reportedly provide improved healthcare service delivery, globally, outcome of this RCB may logically derive positive impact on patients care at Ad-din hospitals. And, outcome of this

RCB will be translated into better patient management and care leading to better public health consequences at least among catchment population. Further, once our ARU proves to be beneficial, profitable and income generating organ then this idea may be translated to copy by some of other medical colleges and hospitals. This is how the urge towards, and positive vibrations inside our doctor's mind/thought on medical research can be seeded in, speeded up & spread out through medical research countrywide. This will not only intensify interest in research in among our clinical/non-clinical academicians but also will pave ways to develop, nurture & practice medical research in other medical colleges/institutes/ Universities!

How RCB will influence UN's SDG goals

This RCB project has got a definite link with the 3rd point of Sustainable Development Goal (Goal-3: Good health and well-being: seeks to ensure health and well-being for all, at every stage of life). Since public health is not possible to improve without a strong health service delivery system in any hospital and recent literature yielded to achieve that we need to develop our clinical and bio-medical research, further. That is what we have aimed to achieve through this RCB drive.

Now that our ARC suffers from a degree of financial hardship, we, essentially, look for certain funding to cover up **RCB** research & development activities by Ad-din medical college clinical professionals with the ultimate goal of improved patient care and management.

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