Future Direction of Emergency Medicine Research; Can We Overcome the Difficulties and Fill in Knowledge Gaps?

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Pace of medical research development heralded an escalation in recent years. Groundbreaking evidences have been provided for managing dyslipidemia in 2017. Beside statins, alternatives of Anti PCSK-9 monoclonal antibodies in human (1) and AT04A anti PCSK-9 vaccine (2) in mice have shown to significant decrease in total cholesterol level. Wonderful!

Apart from this, dual pathway inhibition by using aspirin with very low dose Rivaroxaban has been shown to be more effective in mitigating ischemic event rate than aspirin alone in patients with stable coronary artery disease or peripheral artery disease (3). Furthermore, patients with atrial fibrillation undergo percutaneous coronary intervention will benefit more from double antithrombotic therapy than triple one (4, 5). Besides, a novel risk score of PRECISE-DAPT has determine the optimal duration of antiplatelet therapy in patients implanting coronary stents (6); and many other medical research advances which grabs our attention on 2018.

In order to translate recent advances in medical research into clinical practice we need to design, conduct and apply high quality research in different medical subspecialties. The emergency medicine (EM) environment defined as overburdened with inability to afford more than a few minutes per patients. Where, time for research might be considered as a potential risk of interruption in clinical practice.

EM is a broad field involving multiple disciplines and crosscutting themes with the unique features in research including urgency and location of the treatment. Art of research in EM comprises hybridization of clinical research, basic science and health services research. Accordingly, research priority setting should be put forwarded based on these three areas, examining existing gaps in EM knowledge, system design issues, educational predicament and disparities between diagnostic skills and clinical decisions (7-9).

Where the most appropriate research questions arise? Definitely, it comes from critical thinking in patient care setting, regular reading habit, teaching, journal clubs, collaborations and society.

To alleviate the issue of immense question and limited time in EM field which tangles decision makers mind we recommend to prioritize questions in line with; patients well- being, learners need, feasibility to answer, inquiries that most likely to recur in your practice and most interesting foreground research query.

A research need has been defined as a gap in existing knowledge on practice, learner,s education, patient values and societal demands. To examine the gaps in EM research knowledge we can provide research time and facilities, training new investigators, develop multicenter research networks, improve research coordination and involving funding agencies to make practical attempts for filling pre specified gaps (10, 11).

In conclusion, since patient oriented outcome research will provide us with the most important endpoints for clinical policy making and patient care standard setting, I totally agree with the advocates of involving stakeholders including clinicians, society and patients in EM research process to mitigate the existence knowledge gaps for dedicating high quality EM care.

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