

Importance of Research in Medical Education. (EDITORIAL)

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Research is where we rise above more common sense to investigate and uncover knowledge. FN Kerlinger defined research in his article "Foundation of Behavioral Research" in 1973 as.

"Systemic, controlled, empirical and vertical investigation of natural Phenomenon guided by Theory and hypothesis about the presumed relations among such phenomenon".

For centuries, teachers have used their knowledge base and communication skills to lecture the students and considered those lectures as the basic instrument to develop good doctors.

However as "Evidence based practice" has stormed the world of medicine medical education could not escape its effects either. Now the small world of medical education requires both the gathering of evidence and its critical interpretation. The former is bringing more medical educationalists into the practice of research and the latter is requiring all the medical educationalists the ability to evaluate the research carried out the slogan of "Publish or perish has not spared the world of medical education either.

Although the specialty of research in medical education is just over 3.5 decades old when a small group of clinicians and medical researchers started it at the medical school in Buffalo, New York, yet it has contributed substantially in understanding the learning process. The medical education community is much more aware of evidence in educational decision making than ever before. Now important educational decisions can not be made on the basis of persuasion or policies as people will demand evidence to guide educational decision making. Research has changed the mind and attitude of medical educational community.

Areas of major development include.

- Basic research on the nature of medical expertise.
- Problem based learning.
- Performance assessment
- Continued Medical Education (Life long learners)
- Assessment of practicing physicians (Recertification, Revalidation, Appraisal)

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However, there are differences between research in Medical Education and research in epidemiology and clinical medicine.

Perhaps one of the most important difference is that while doing research in medical education, we deal with small, non random sample, secondly we rely on descriptive statistics, i.e. statistics that merely describe the sample without drawing any generalized conclusion for the population. Thirdly we focus on substantive importance instead of statistical significance fourthly we often describe our results in percentages and means.

Fifth difference is that we often use bi-variable analysis as the most advanced analysis, this is because sample size is small. When sample size is a lot larger, chi square and measure of association are used to examine relationship and lastly since we are skill in the exploratory stage and lack measures which have been tested and validated, we rely on interviews and open ended questions to bring out variables for future research.