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Why basic research interest is reduced among under graduate medical students? – Short review

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1. INTRODUCTION

Medical institutions are supposed to educate and up skill the students in research to attain accreditation level to motivate student's academic activity and to produce a skillful research person. It is primary that future clinicians are furnished with sufficient research skills during their undergraduate studies to encourage critical thinking, increase critical appraisal skills and become a research-oriented competent person.

A space is created in research skill training are due to lack of funds, scarce infrastructure for research training, less competent and shortage of research staff. Previous studies have suggested that the most of the undergraduate had inadequate knowledge and skill of research indicating insufficient exposure to research training. Attitude to research knowledge and barriers to research are the key factors that have an impact on successful research. The findings of will help in identifying gaps in the research skill and recommend for better research skill (1).

Reasons for becoming a researcher:

- It will elevate my professional standing as a clinician.
- There are no fixed working hours.
- I enjoy the pleasure of doing research.
- There are monetary and financial benefits.
- There is no emergency, clinical duties and on-calls.

Reasons for becoming not a researcher

- Research is time consuming.
- Practice as clinician is more primary than research.
- Research is stressful due to academic work and negative influence from a person who is not really interested or incompetent skill towards research.
- There are no grants.

To study the impact of first year research in coursebased curriculum as follows

1) Do first year medical student willing to participate in the research will make any career choices?

2) Do first year medical undergraduate shows increases in participation and confidence resembling those of upper-level students?

Recent studies have reported that catching students in the first year undergraduate practice, either with research within a college or individually with a staff member. Furthermore, results from other study boost earlier research on the effect on undergraduates research, particularly the student's attitude and enthusiasm towards research is increases at the freshman level. Another study has reported that an increased interest in research in early carrier indicates students showed a significantly increased motivation in considering graduate school after taking the course. Therefore, students who are willing to do research in their first year should be identified and properly motivated.

2. ADVANTAGES AND DISADVANTAGES

Barriers to undergraduate student research at the college level:

- Lack of interest in research by faculty.
- Lack of adequate funding for student research.
- Time allocated to student research is insufficient.
- The medical curriculum is very demanding.
- Difficulty in following up patients or research subjects.
- Lack of supportive staff such as biostatisticians, bioethicists and proof editors.
- Lack of well-equipped laboratory facilities.
- Lack of competent and committed supervisors.

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- Lack of study subjects or samples for research.
- Difficulty in obtaining administrative approval.
- Difficulty in obtaining ethical approval.

The undergraduate student number is greatly increased by attaining research experience early and often. Recently this has been proved globally and explained at various disciplines, including physiology (Desai et al., 2008).

3. GENDER DIFFERENCE

Gender level perceptions towards research:

- Is research playing a vital role in the practice of medicine?
- Is performing research by students during first year medical school important?
- Should research skill and training be part of the medical curriculum?
- Should submission of a thesis be a requirement for partial fulfillment of the MBBS degrees?

4. IMPORTANCE OF RESEARCH SUPERVISORS/ GUIDES

Competent research guides are critical in motivating students to become research clinicians. The previous study have suggested 84.7 % of students reported the inefficient professional guides as a barrier to research [2]. The number of research guides over the past twenty years has declined internationally and clinical researchers are critically needed [1, 2, 3]. Previous studies have recommended that to shift from individual student supervision to small group supervision. More person make for less work load and two guides are better than one. Both students and guides can gain benefits from group supervision. This technique would allocate a small number of students to the few, but more capable supervisors. Group practice contribute positively to student learning, research skills and retention of knowledge. Overall college success which is very vital in the research field [5-8].

The small group model can be preferred to become a learning model. It can provide academic tutoring in the form of group research project supervision. The technique can build student confidence and build motivation. It would enable students to transform research knowledge into research practice. Research is best conducted in a group and students can learn from sharing ideas and discussing different perspectives. A proper group model may increase student numbers to pursue a career in research, relive distress compares with individual research. The small group research teaching technique is performed well, students will develop a real interest in research and not to think research as an academic burden. Supervisors can create a positive attitude and provide guidance for students to be more aware of health problems within their society [9, 10]

5. CONCLUSIONS & RECOMMENDATIONS

This review paper discussed a change in student's career interests to wards research experience occurring in the undergraduate careers. We believe that first year students trained in the research may be more chance to think and adequate knowledge about future career. Most of the students are given effective feedback that their professors not knowing the outcome of an experiment or not knowing all of the answers for them, rather than should motivate and increase the confidence level of undertake graduates.

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