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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/20081

DOI URL: <http://dx.doi.org/10.21474/IJAR01/20081>



RESEARCH ARTICLE

AN EVALUATION OF DIFFICULTIES DURING RESEARCH BY THE POST GRADUATE STUDENTS IN A TERTIARY CARE HOSPITAL IN SOUTH KERALA

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Manuscript Info

Manuscript History

Received: 15 October 2024

Final Accepted: 18 November 2024

Published: December 2024

Key words:-

Research, Difficulty Level, Post Graduate Students

Abstract

The value and integrity of Research are dependent on the integrity of the researcher. They have the responsibilities to prevent Research misconduct and misuse of Research. All members of the research team are expected to maintain high standards and to uphold the fundamental values of research. Research is done by a person or a small group of persons. But it requires acceptance or approval of several others like Guide, supervisors, Institutional research Committee, Institutional ethics Committee etc. This might create a lot of hindrances or hardships for the researchers.

Objectives: 1. To find out the problems faced by the Researchers while conducting the postgraduate thesis/ dissertation 2. To formulate some support system for the PG students

Methods: All the Postgraduate students willing for the study were asked to fill up the questionnaire in google form.

Results: Selecting the topic of study, meeting the deadlines fixed by the authorities, getting materials for review of literature, getting adequate number of cases are the stages found difficult by the most of the participants. During the critical phase of postgraduate studies, they feel incompetent to choose a topic of study by their own. Difficulty is felt in selecting the relevant materials from the vast information available in internet and identifying standard journals. They have apprehension of rejection of simple studies by IRC and of questions put forth in IEC. They cannot dedicate enough time for research related work after their routine duties. They feel stressful when corrections suggested repeatedly by the committees and guides. Some of the suggestions made by them to reduce difficulties in research are (a) constant motivation by the guide, (b) multiple review meetings for follow up of the study, (c) Appraise the PG students to conduct research by discussing accepted thesis in methodology workshop instead of theory of Research. (d) Establishing a dedicated Research Helpline by Community Medicine Department.

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Introduction:-

The value and integrity of Research are dependent on the integrity of the researcher. They have the responsibilities to prevent Research misconduct and misuse of Research. All members of the research team are expected to maintain high standards and to uphold the fundamental values of research.

The responsible conduct of Research (RCR) involves values ,policies, planning and conducting research , reviewing and reporting , responsible authorship and publication .Responsible conduct of Research is guided by values like honesty , accuracy,efficiency , fairness, objectivity , reliability . Integrity and knowledge . These should be reflected in the current research practices .

All research components depend on the cooperation and shared expectations as part of interprofessional ethics .¹

We believe that with the clinical practice being the primary focus of the medical environment in India, doctors rarely develop or hone their research skill set. In our study, lack of access to journals for literature review and references, difficulty performing statistics, inadequate knowledge of research methodology, inability to identify research topics and deficiency in skill set for collection of data were the most commonly faced challenges . Institutions should develop programs aimed at training physicians/students in research in addition to providing support and encouragement in their pursuits.

The right support leads to a better research environment which in turn leads to a better support system resulting in a positive and constructive cycle. In addition, researchers themselves play an influential role in their colleagues, encouraging them to get involved in research as well. Lack of proper mentors, insufficient funding points towards foundational problems in the research environment of doctors.

A mentor is defined as “**that person directly responsible for the professional development of a research trainee**”.They not only serve as role models but influence and hone the skills of their mentees through guidance, advice, critique and more. While the right mentor can inspire, the wrong one can be equally detrimental to the growth of his/her student. The challenges encountered in a mentor-mentee relationship can arise from misaligned priorities, lack of communication, absence of mutual respect and understanding, mentor's inadequate knowledge and ability to fill in the mentee's knowledge gaps.The academic expertise together with communication and organization skills are essential qualities to take on the role of a mentor.

Review of Literature:-

Research is the process of gathering information to discover and understand new information that would initiate, modify or terminate present understanding.²

The Responsible conduct of Research (RCR) involves the following major components like values, policies, planning, conducting research, review, reporting, Authorship and publication.

Values of Research -

RCR is guided by shared values like honesty, accuracy, efficiency, fairness, objectivity, reliability, integrity and knowledge.

Mentoring -

It is one of the primary means for one generation of scientists to pass on their knowledge, values and principles to succeeding generation. The relationship between the guide and researcher should enable the latter to become responsible researchers.

Mentors should be knowledgeable, teach and lead by example and understand that trainees differ in their abilities. They should devote sufficient time and be available to discuss, debate and guide trainees ably. Quality Research requires attention to detail at every step. Proper protocols need to be established and the results accurately recorded and interpreted and published.

Institutional Research Committee(IRC):

The scientific aspects of the protocol should be scrutinised by the IRC.³

Institutional Ethics committee:

For proper communication and regulation there is need of well- structured committee formed by experts including social workers, philosophers, lay persons, medical experts etc. The ethical aspects are considered and if needed the researcher will be asked to present the protocol before the committee.⁴

IEC should review the protocol in the local, social and cultural context and should ensure that interest and rights of participants are protected.

ECs in India are still struggling with some basic requirements and are generally viewed as signing authorities only. There are studies reporting that several ECS do not comply with recommendations of the regulatory bodies.⁵

Informed Consent Process

The participant should be given a copy of the Participant Information Sheet and a copy of the signed Informed Consent Form. The Researcher has an obligation to convey the details of how confidentiality would be maintained.¹

Challenges faced by researchers

1. **Lack of Research teaching:** - If the previous generation of teachers do not have fine mindset initiation or commitment to do good research, then each subsequent generation will inherit the lacuna.⁶
2. **Lack of Scientific training in research methodology:-** Many researchers are ignorant about the Research methods resulting in research work of low quality.^{6,7}
3. **Lack of Communication with the supervisor:** -Poor communication with the supervisor / Mentor /Guide gets on the way of the progress of the Research.
4. **Lack of Confidence:-**Researches with Low self esteem feel less motivated and this lead to lack of confidence thereby affecting the quality of work.⁷
5. **Challenges of knowledge:** Lack of access to journals for literature review and reference, difficulty in performing statistics inadequate knowledge of Research methodology, inability to identify research topics and deficiency in skill set for collection of data were the most commonly faced challenges by Researchers.⁸
6. **Challenges in support:** The right support leads to a better research environment which in turn leads to a better support system resulting in a positive and constructive cycle. Lack of proper mentors insufficient funding points towards fundamental problems in the research environment of doctors.⁸
7. **Quality of writing:** The researcher should interpret the literature and be able to position within the context of study. This requires careful and measured interpretation and writing in which the materials have to be synthesized and brought together.⁷
8. **Literature Search:** Search for materials for review by tracing books, journals, internet etc. takes a lot of time and energy. Researches use internet data for their Research. Majority of International Journals are available online in full text format.⁴
9. **Inadequate data :** Not getting enough cases due to various reasons is one factor that hinders quality of research.⁴
10. **Deadlines :** not having deadlines will be troublesome though stressful⁴
11. **Authorship:-** According to International Committee of Medical Journal Editors (ICMJE), authorship entails the following criteria like,
 - (a) substantial contribution to the conception or design, acquisition, analysis or interpretation of data.
 - (b) Drafting the work
 - (c) Final approval of the version to be published
 - (d) Agreement to be accountable for the work
 To avoid disputes, authorship should be decided at the start of research study. Expectations regarding contributions should be clearly describe and agreed upon⁹
12. **Compromised Ethics :** There is an unfortunate pervasive culture to fatten the CV with Research article. This pressure can result in a compromise of ethics in performing research or short comings in publishing articles with honest information and arguments. Poorly conceived or compromised publications generated in order to embellish a CV may have a short term benefit, but harms the long terms status and reputation of Indian Research⁶

A study about the sustained support for postgraduate students showed that the sustained support to the PG students by their guides, extracting research paper from dissertation is possible.¹⁰ The reported factors hindering the students from publishing are lack of time, lack of staff support and lack of confidence in writing ability.¹¹ Sustained commitment from supervisor, practical support as seminars, workshops, effective supervision, students engagement, funding and setting as expectation of publication could improve publication status.¹¹

Background & Rationale

Research is done by a person or a small group of persons . But it requires acceptance or approval of several others like Guide, supervisors , Institutional research Committee , Institutional ethics Committee etc . This might create a lot of hindrances or hardships for the researchers .

This study to probe into the challenges faced by the Researchers the knowledge of which may help in making some changes in the Research policies of the Institution .

Objectives:-

1. To find out the problems faced by the Researchers while conducting the postgraduate thesis/ dissertation
2. To formulate some support system for the PG students

Materials and Methods:-

Study Design : **Descriptive study**
Study Setting : Sree Gokulam Medical College and Research Foundation
Study Population : Entire population of PG students of Sree Gokulam Medical College and Research Foundation
Duration : 1 month from 1st of April to 30th of April 2021
Study Tool : Questionnaire method through Google form
Method Of Data Collection :

All the Post graduate students will be sent the link of the questionnaire in google form along with the participant Information sheet and the Informed consent form .

Those willing to participate can digitally agree to it .

All the questions except the descriptive ones to describe the difficulties were made mandatory to attend .

Ethical Issues:

No ethical issues involved

Observations and Results:-

The study was conducted among the Postgraduate students of a tertiary Care Centre of South Kerala and the following results were obtained, out of the 80 students to whom questionnaire was sent, only 25 were willing to participate.

Table 1:- Distribution depending upon the difficulty level at each stage of Research.

Sl. No.	Stages of Research	Difficulty level				
		Very difficult (%)	Difficulty (%)	Neither %	Easy %	Very Easy %
1	Selecting the topic of study	8	68	12	8	4
2	Getting Yours guide/co-guide allotted	0	12	12	56	20
3	Registration in University	0	20	40	36	4
4	Getting adequate Guidance from your guide	0	4	4	80	12
5	Getting adequate guidance from your co-guide	0	4	20	68	8
6	Getting Materials for Review of Literature	0	52	24	20	4
7	Presentation of project proposal	0	24	36	4	36

	in Institutional Research Committee					
8	Presentation of project proposal in Institutional Ethics Committee	0	44	28	24	4
9	Getting adequate member cares	8	40	12	28	12
10	Getting Informed consent for participants	8	20	32	32	8
11	Getting financial aid	16	16	44	16	8
12	Meeting the deadlines fixed by authorities	8	60	20	8	4
13	Fixing the authorship for publication	0	28	44	24	4

Difficulties while selecting the topic of Study

- 1 In the initial phase of post graduate studies, not competent enough to select a topic
- 2 Many Research areas require expensive Investigations.
- 3 Very difficult to find a novel, relevant and feasible topic beneficial for the patients.
- 4 Majority of the topic are already studied
- 5 Apprehension of getting adequate number of cases
- 6 Apprehension of getting a relevant result
7. Difficulties faced during selection of topic

76% of the participants found either very difficult or difficult to in selecting the topic. Only 12% from some difficulty in getting guide / co guide allotted. It was attributed to some conflicts in choosing them or some personal inconveniences of co-guide.

Difficulties in getting the study Registered in the University

1. Technical problems
2. The procedure is not detailed anywhere ,hence had a lot of confusions
3. Long process in getting approval from IRC and IEC

Only 20% found some difficulty in getting the study registered in the University.

All the candidates had undergone workshop in Research methodology before the start of their study and 76% of them found themselves competent to conduct the research work.

Only 4% of the participants found difficulty in getting guidance from guide and co guide. One of them opined that the guide has limitation and difficulty is in finding free time of guide after their clinical work.

Majority of the participants seek the help of Journals (52%) and internet (40%) for Literature search. 4% each resorted to book and previous thesis works.

Difficulties in getting materials for Review of Literature

- 1.Finding the relevant ones from vast amount of information available in Internet.
 - 2.Selecting the standard journal
 - 3.Some relevant materials are paid articles not free online
 - 4.Cannot access all the journals freely as all the journals are not subscribed the library
- Almost 52% of participants found getting relevant materials for review difficult.

Only 24% had some difficulty in present the project proposal in Institutional Research Committee & Repeated correction, rejection of simple studies and new concepts like protocol, word limit and different procedures related to research are the difficult areas.

44% had difficulty in presenting the project proposal in the Institutional Ethics Committee. Apprehension about the question put forth by IEC members. Instead of Ethical screening, IEC looks at the topic viability which should have been already done by IRC.

Differences faced in getting adequate number of cases as samples.

1. Difficulty in getting adequate number of cases
2. Covid Scenario
3. Nobody informs the researcher when relevant cases are available
4. Difficulty in making patients / bystanders willing when they want only treatment

48% of participants found difficulty in getting adequate numbers of cases as sample. Only 28% of the participants found difficulty in getting informed consent form the subjects. They found it time consuming and found the parents apprehensive when asked for consent to participate in the study even when it was a routinely done procedure. There was difficulty to talk about the study in situations like sick patients and anxious bystanders. They may be in mental trauma of the disease situation and they hate being studied and not in an emotional state to be enrolled for the study.

32% of the participants found getting financial support for the study very difficult or difficult. One opined that the study got rejected while applied for financial aid.

68% found difficulty in meeting deadlines fixed by the authorities. Some of the reasons attributed were hectic PG duty hours and difficult to find free time for research work.

28% of participants found that fixing the authorship for publication difficult. It may be due to conflicts or due to hesitation to publish due to unfamiliarity about the procedure for publishing.

One person has opined that the research work causes severe stress due to multiple correction suggested by guide / co guide.

Suggestion to reduce hardship during research

1. Constant motivation by guide
2. Recurrent follow up, review meetings and presentation of thesis updates.
3. Help from Co-postgraduate students and staff for sample collection
4. Training in critical appraisal of journals during UG period. Itself
5. No need for making Research work compulsory for all postgraduate students. Only those who are interviewed need to do it.
6. Better to choose an easy and feasible topic for study
7. Appraise the P.G. students of the methods of getting funding for the study
8. Research methodology workshop should address the methods of actual procedure of research and writing the thesis by discussion based on a few already accepted thesis work; Instead of theoretical aspects of research like steps of research, study design etc.
9. Establish a dedicated research helpline by the continuity medium department.

Discussion:-

The study showed that majority of the participants were of the age group 28-30 years and 80% were females, 48% of them are in their second year of study.

76% of the participants opined that finding an appropriate topic for study was difficult. The literature also shows that inability to identify research topics and deficiency in skill set for collections of data were the commonly faced challenges of researchers.⁵

Getting the guide / co guide allotted or sitting adequate advices from them has not posed a difficult situation for most of them. But the studies show that lack of proper mentors, their ignorance about research methodology and poor communication with them gets on the way of progress of the research.³

About 52% of participants for review of literature difficult. Vast information is available in the internet and journals. But it is difficult to identify the appropriate ones and the standard journals.

68% of them formed meeting the deadlines fixed by the authorities either difficult or very difficult. Literature also shows that not having deadlines will be troublesome though deadlines are stressful.⁴

28% found that getting informed consent from participants or bystanders difficult. During hospitalization and in the case of sick patients, they will be emotionally upset and may not be willing to be a part of the study.

Two suggestions given by the participants to reduce the Hardships of Research are conducting periodic review meetings by guides, giving an awareness about the actual conduct of Research on the basis of already accepted studies and establishing dedicated research helpline by the commonly Medicine Department.

Conclusions:-

1. Selecting the topic of study, meeting the deadlines fixed by the authorities, getting materials for review of literature, getting adequate number of cases are the stages found difficult by the most of the participants.
2. During the critical phase of postgraduate studies, they feel incompetent to choose a topic of study by their own.
3. Difficulty is felt in selecting the relevant materials from the vast information available in internet and identifying standard journals.
4. They have apprehension of rejection of simple studies by IRC and questions put forth in IEC.
5. They cannot dedicate enough time for research related work after their routine duties. They feel stressful when corrections suggested repeatedly by the committees and guides.
7. Some of the suggestions made by them to reduce difficulties in research are (a) constant motivation by the guide, (b) multiple review meetings for follow up of the study, (c) Apprise the PG students to conduct research by discussing accepted thesis in methodology workshop instead of theory of Research. (d) Establishing a dedicated Research Helpline by Community Medicine Department.

Limitations :

Sample size was relatively less. This has to be increased and should be conducted as a multicentric study for better results.

Bibliography:-

1. National Ethics guidelines for Biomedical and Health Research including Human Participants : ICMR 2017.
2. Princy Louis Palathy. A Text book of Bioethics for Health Care Professionals I. 2018 : 62 -78
3. <https://natboard.edu.in/pdoof/pbnotice2019/protocol/Annexure-2>. (Accessed on 18.04.2021)
5. Ethics Committee : Critical Issues and challenges, Indian Journal of Pharmneology; 2012 Nov – Dec : 44 (6) 663 – 664.
6. Challenges for Medical Research in India. Sengupta research academy can / challenges – Medical – research – India – ursekhar/(Accessed on 18.04.2021)
7. To 10 challenges faced by Researches in developing countries. <https://www.dissertationrevision.com/top-10-challenges-faced-by-researchers-in-developing-countries/> (Accessed on 18.04.2021)
8. Sanjana Chetana Shanmukhappa et al. Motivators and Burters to research among Doctors in the Indian Medical Scenario. A cross sectioned study from Karnataka; : Journal of Family medicine primary: 2000 Aug 9 (8) : 4053 – 4061. Published online on 25.08.2020.
9. Olinda Timms. Biomedical Ethics, I Edition. 2016:347-368
10. Kuttichira P et al. Sustained support for a Dissertation will facilitate postgraduate Research Publication, an experience from South India, Journal of Medical education, 19(1), e 103549. published online on Jun 1 2020
11. Bullen C R ,ReeveJ,Turning postgraduate Research into Publications; A survey of New Zealand masters in Public Health students ,Asia Pacific journal of Public Health. 2011;23950:801-9.