

## Do's and Dont's of Research: What, Why and How

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The new year have started with new opportunities and prospects gleaming with hope of better and quality research. The word research, as simple as it sounds include in itself a wide array of challenges, hurdles as well as rewards. This editorial would like to explain and emphasize the importance of quality research.

Every research starts with a question; how and why, should be the motto. The research question should be specific and have a clear understanding of the expected outcome. The PICO protocol (Population/Patient, Intervention, Comparison, Outcome) is a better way to design a study. The research could be devised from numerous sources, may it be previous literature or an idea of the discussion, curiosity for finding the answers is the driving force here.

The second step is to formulate the objectives and hypothesis. The objectives include the goals which are intended out of the research being undertaken. They should be concise, quantifiable and time bound and it results in formation of a clear hypothesis which is to be tested. This will provide an idea about how to proceed further. FINER criteria (Feasible, Interesting, Novel, Ethical, Relevant) are an excellent method to judge your research hypothesis and its objectives.

Once done, next step is to plan and analyse about data collection and organization. Proper tools and parameter are crucial else it may result in inaccurate data leading to false interpretations. After data collection is completed as per the required sample size, it is organized in software preferably excel sheets. It is then analysed statistically using various software. The most preferred is SPSS (Statistical package for social sciences, IBM). The result will help in accepting or rejecting the null hypothesis and now it is new evidence which has been obtained.

This will help in opening new realms in that particular field. The new finding should be published and put out for better understanding in the scientific community, it will require documentation of the work done and preparing a quality manuscript. However, there are certain things to be avoided while performing the study. These are Falsification, Fabrication and Plagiarism. Falsification refers to generating false information in form of manipulation of data, leaving out data which may not give desired result or misrepresentation of the research outcome. Fabrication is the forging of the data without undergoing the research but rather making a new outcome based on previous studies or as per the wish of the researcher. Plagiarism is the copying of someone else's work and presenting it as your own. It includes data as well as the literature.

Thus, research is a carefully planned, well executed form of efforts undertaken in the path of new breakthrough. I wish all the readers will get a new direction in this editorial. The issue comprises of marvellous such completed projects which will help unveil the critical points of a well performed research projects.

Anticipating success in your future projects.

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