Editorial

Mixed-methods research in pharmacy practice and its implications

Over the years, research in pharmacy has relied on "numbers," be it the experiments conducted in laboratories or clinical data obtained from patients. However, introduction of the comparatively newer field named "pharmacy practice" has proven to be a rebellion in terms of the research methods used to conduct research in this specialized area. The "wordy" qualitative approach has previously been strictly associated with areas such as psychology and sociology, whereas scientific fields like pharmacy mostly used the "scientific methods," otherwise known as a quantitative approach.

In recent years, there has been increased use and acceptance of qualitative methods in pharmacy practice research as a single approach or combination with quantitative methods. Mixed-methods research is what it is termed as when both qualitative and quantitative methods are used together in a single piece of research in order to understand a research problem. Both qualitative and quantitative methods have their own sets of strengths and shortcomings, and none of them is ideal, neither combining both approaches is a gateway to perfection. Whereas quantitative methods give you numerical data that can be analyzed statistically in order to make statements about the data, qualitative data give detailed and in-depth answer to the research question. Combining the strengths of both methods is likely to improve the quality of research by nullifying the respective pitfalls.

As the scope of pharmacy practice research is mostly to improve the overall healthcare scenario of patients and public, studying their behaviors and understanding of healthcare system, medicine policies, diseases, and misconceptions is inevitable which could be achieved more effectively using qualitative approach. Each one of qualitative and quantitative approach has a number of well-established designs, but choosing the best for your research depends on the research question, your personal preference, circumstances, and available resources.[1]

Qualitative methods are mostly inductive in nature and are often used to generate a hypothesis or theory whereas quantitative methods which are deductive in nature are used to test the hypothesis or theory and to quantify and measure the variables.[2] There are multiple ways of integrating these methods such as collecting both qualitative and quantitative data concurrently (convergent design), collecting qualitative data first followed by quantitative data (exploratory design) and starting off with quantitative part followed by qualitative part (explanatory design). Again, the choice depends on the research question and your personal preference.

The importance of mixed-methods approach in pharmacy practice research cannot be denied in general and particularly in the context of developing countries where the concept of pharmacy practice is still new. Qualitative methods in such settings could be used to generate the baseline information and identify the research problem which could be testified by employing quantitative methods.[3]

To conclude, mixed-methods research has a potential to generate more complete and higher quality data in pharmacy practice research.[4] However, equal grasp on both methods is required, and the approach is embedded with numerous challenges which should be duly addressed by the researchers prior to making a decision to use this approach.[5]

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