

Review Article

Qualitative research: where science meets philosophy – the way forward for researches in Ayurveda

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ABSTRACT

Researches in Ayurveda are in the limelight for decades for many reasons. There are positive and negative developments in this area from time to time. But the core issue is lack of clarity regarding the way in which research to be done in Ayurveda. There is no consensus hitherto regarding the smooth and fruitful conduction of researches in the field of Ayurveda. Also, the uncertainty and chaos in deciding the components of research and in connecting the research ideas into apt designs creates a huge divide among the researchers themselves as well as between researchers and clinicians. Under these circumstances, it becomes imperative to discuss the philosophical background of these issues and to find out their solutions from the grass root level. This article is an attempt to trace out the qualitative issues faced by Ayurveda researchers and their solutions from the philosophical as well as scientific background.

Keywords: Qualitative research, Ayurveda, Philosophy, Science, Ontology, Epistemology

INTRODUCTION

Research is an inevitable element for the future of Ayurveda. The primary intention of all researches is evidence generation. As far as Ayurveda is concerned, the value of evidence generated depends upon the sum total of background work done in the subject. The incorporation of research elements on Ayurvedic topics and their designing into a fruitful study are extremely important for the development of Ayurveda. The hierarchy of research designs, when weighed against the theoretical background of Ayurveda, can be used in a technically perfect manner if due importance is given to the exploratory phase.

The holistic nature of Ayurveda makes it more or less incompatible with the quantitative methods. Meanwhile, qualitative Researches can be used to bridge between the clinical wisdom of Ayurveda with quantitative research elements. We need Qualitative research for better and

fruitful results and also as a stepping stone into more generalised studies on various quantitative researches including tool development

To begin with, qualitative research can be defined as those research works which try to find answers for what, why and how; while quantitative researches try to find answers for which, how many and how much. Qualitative research is characterised by its aims, which relate to understanding some aspect of social life, and its methods which (in general) generate words, rather than numbers, as data for analysis. Qualitative methods generally aim to understand the experiences and attitudes of patients, the community or health care worker. For researchers more familiar with quantitative methods, which aim to measure something (such as the percentage of people with a particular disease in a community, or the number of households owning a bed net), the aims and methods of qualitative research can seem imprecise. Common criticisms include:

Samples are small and not necessarily representative of the broader population, so it is difficult to know how far we can generalize the results; the findings lack rigor; it is difficult to tell how far the findings are biased by the researcher's own opinions.¹⁻⁴

Still, going for quantitative research works without being supported by the background qualitative works and well developed tool (either discriminative or evaluative) is detrimental. Some of the quantitative concepts such as sensitivity, specificity and agreement analysis can be mixed with the qualitative approaches for delivering better tangible results. To have progressive research and development in Ayurveda, we have to execute the fundamental research incorporating the conceptual domains of Ayurveda either with objective parameters of Modern Medicine or with validated tools developed after a series of qualitative research works.

Criticizing the entire research methodology for want of evidence generation in Ayurveda is like a bad worker blaming his tools. It is not the research methodology but the unscientific method followed in adopting the apt designs and approaches for Ayurvedic researches that has to be blamed for the regressive nature of research works in Ayurveda. To deal with the common language of research, the Ayurvedic fraternity need to get rid of the linguistic code of beliefs and have to opt for better understandable and clinically applicable conceptualizations. To plan, design and execute futuristic and fruitful research works; these basic understandings are vital.⁵⁻⁷

ADVANTAGES OVER QUANTITATIVE METHODS

Qualitative research is well suited for understanding phenomena within their context, uncovering links among concepts and behaviors, and generating and refining theory. Qualitative data are reliable because they document the word in the view point of the people studied rather than presenting it from the perceptive of the researcher. When the constructs, their ontology and epistemology are not well defined, qualitative research is the method of choice. Only after making the construct, its ontology and epistemology clear by a series of qualitative researches, further researches can be carried out.⁸⁻¹⁶

This evolution of concepts forms the backbone of further researches and the advancements of the system. Owing to the philosophical background and holistic approach of Ayurveda, this understanding on the basic conceptualizations, evolution of principles and execution of practices become highly essential from a beginner's point of view. This type of approaches peculiar for exploration of the concepts of Ayurveda can be developed in accordance with the mixed methods of research, for which the qualitative research tools like FGDs, in-depth interviews and Delphi method can be used for better results. If some mistakes happen at this level of conceptualizations, the entire research process

which depends upon these concepts and their application go wrong and out of control.

In qualitative research works, researcher is the tool and everything including the outcome of the study depends upon the quality of the researcher. The decision on sample, areas of study as well as method adopted is exclusively taken by the researchers and this discretion power has great value in determining the fate of the study. Unlike quantitative research, researcher is highly active and has the right to modify the study as per the situations in qualitative research.¹⁷ This discretion and decision making ability of the researcher, if not applied correctly or if not at all applied, can spoil the essence of qualitative approaches. Without understanding this basic difference between qualitative and quantitative approaches; opting for qualitative research in every situation of 'less explored areas' is meaningless.

KEY IN INTEGRATION AND STANDARDIZATION

The backbone of Ayurveda lies in some unique concepts, their evolution into principles and finally their execution in clinical practice. Following the hierarchy of these stages, we can find it easy to 'follow' Ayurveda in its real sense and apply in a research scenario. The lack of uniformity in assessment and interpretation can be solved through the approaches of qualitative research. The holistic principles of Ayurveda can incorporate concepts derived from the reductionist approach of modern medicine without damaging its core conceptualization. The synchronization of modern and Ayurvedic interface for better results in research is a herculean task and it demands high standard qualitative research at various levels as well as their adaptation into tool development. As far as Ayurveda is concerned, qualitative researches are intended to determine how much quantification is possible on the subject whether it is the action of a drug, diagnosis of the type and severity of a condition or designing a treatment protocol.

In the treatment protocol development; large scale collection of opinions, treatment experiences and visions from the technically valid and purposefully selected sample in a research-friendly manner provides the path for developing a protocol which can embrace the benefits of evidence based medicine. Inter-observer variability is a serious issue as far as research in Ayurveda is concerned and demands immediate solution, which can be provided by qualitative research and tool development. The synchronised and focussed research work can bring huge differences.⁷

APPROACHES IN QUALITATIVE RESEARCH AND THEIR INTEGRATION IN MIXED METHODS

A popular and helpful categorization separate qualitative methods into five groups: ethnography, narrative, phenomenological, grounded theory, case study.

Ethnography is probably the most familiar and applicable type of qualitative method. Here, the researcher immerses himself in the target participants' environment to understand the goals, cultures, challenges, motivations, and themes that emerge. In narrative approach, the researcher weaves together a sequence of events, usually from one or few individuals to form a cohesive story. Phenomenological approach is apt when you want to describe an event, activity, or phenomenon. Grounded theory approach provides an explanation or theory behind the events. Primarily interviews and existing documents are used to build a theory based on the data. A case study involves a deep understanding through multiple types of data sources. Case studies can be explanatory, exploratory, or describing an event.

Mixed designs incorporating qualitative and quantitative elements to their maximum potential are ideal for the development of Ayurveda. Reason for adopting mixed method can be listed as the insufficient argument – either quantitative or qualitative may be insufficient by itself; multiple angles argument – quantitative and qualitative approaches provide different “pictures”; the more-evidence-the-better argument – combined quantitative and qualitative methods provide more evidence; community of practice argument – mixed methods may be the preferred approach within a scholarly community; eager-to-learn argument – it is the latest methodology-“Its intuitive” argument – it mirrors “real life”.

Thus, mixed method designs are recommended to enhance the value of evidences generated through qualitative research as well as to minimize the bias involved. Sequential explanatory design involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. The priority is given to the quantitative data, and the findings are integrated during the interpretation phase of the study. Example: The researcher collects data about people's risk and benefit perceptions of red meat using a survey and follows up with interviews with a few individuals who participated in the survey to learn in more detail about their survey responses (e.g., to understand the thought process of people with low risk perceptions).

In sequential exploratory design, qualitative data collection and analysis is followed by quantitative data collection and analysis. The priority is given to the qualitative aspect of the study, and the findings are integrated during the interpretation phase of the study. Example: The researcher explores people's beliefs and knowledge regarding nutritional information by starting with in-store interviews and then uses an analysis of the information to develop a survey instrument that is administered later to a sample from a population.

In concurrent triangulation design, only one data collection phase is used, during which quantitative and qualitative data collection and analysis are conducted separately yet concurrently. The findings are integrated

during the interpretation phase of the study. Usually, equal priority is given to both types of research. Example: The researcher uses a survey to assess people's self-reported food safety practices and also observes those practices in their natural environment. By comparing the two types of data, the researcher can see if there is a match between what people think they are doing and what they are actually doing in terms of food safety practices.

In concurrent nested design, only one data collection phase is used, during which a predominant method (quantitative or qualitative) nests or embeds the other less priority method (qualitative or quantitative, respectively). This nesting may mean that the embedded method addresses a different question than the dominant method or seeks information from different levels. The data collected from the two methods are mixed during the analysis phase of the project. Example: The researcher collects data to assess people's knowledge and risk perceptions about genetically modified food by using a survey instrument that mixes qualitative (open-ended) and quantitative (closed-ended) questions, and both forms of data are integrated and analysed.¹⁸⁻²⁰

By mixing both quantitative and qualitative research and data, the researcher gains in breadth and depth of understanding and corroboration, while offsetting the weaknesses inherent to using each approach by itself. One of the most advantageous characteristics of conducting mixed methods research is the possibility of triangulation, i.e., the use of several means (methods, data sources and researchers) to examine the same phenomenon.

CONCLUSION

From a broader perspective, some general issues stand up in the practical situation when exploratory research on Ayurveda is initiated in the present settings. Hence; there is wastage of time, money and other resources as a result of going after unnecessary research projects. To avoid this, we should have preference setting in our mind which can be traced out from the holistic principles of Ayurveda. The order that we have to give preference is humanity > medical profession > ayurveda > specialty. This can prevent majority of unwanted and untimely works. Never make illogical comparison between Evidence based Ayurveda and Classical Ayurveda. The purpose and value of both are different and they never compete with each other.

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