Chapter 21

Studying Medical Records Management in the Public Healthcare Sector of South Africa Using Multi-Method

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ABSTRACT

This chapter reflects on the lesson learnt from the application of multi-methods in a quantitative study that was conducted to study patient record management in the public healthcare sector. In this study, a questionnaire was the main data collection tool, which was supported by interviews, observations, and document/system analysis data. In conducting the study, triangulation of multi-methods data was performed at different stages of the study. Currently there is no clear framework in social science research about the application of multi-method, mono-method, and mixed method research, which the study intends to clear. The study revealed that quantitative data need to be augmented with some narrative/qualitative data to make an empirical conclusion and recommendations because alone, it may not be completely reliable. Triangulation of multi-methods eliminates bias and closes some gaps where data leave some questions unanswered. The study provides a framework to guide on research method based on methods ingredients.

INTRODUCTION AND BACKGROUND

This chapter focuses on the research methodology applied in conducting the study because “knowledge that is produced in any scientific field primarily depends on the methodology that is used” (Ngulube, 2015). Multi-method research played an incredible role in the study to ensure that everything is clear, understandable, makes sense, and is seen as valid and empirical. The study was more quantitative-focused. However, it was supported by multi-methods to make more sense, hence, most of the research elements from paradigm to analysis were more related to the quantitative method.

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The worldviews or paradigm applied by the researcher in this study was a positivist paradigm. The positivist paradigm informed the application of the quantitative approach in this study. This is because its focus is on the measurements of respondents’ attitudes and feedback or results, which are based on the objectives and problem statement. Generally, the focus was on assessing causes and effects to eventually recommend solutions (Babbie & Mouton, 2001; Creswell, 2009). The main research approach used in this study was the quantitative approach, which was supported with the triangulation of a limited scope of qualitative data-collection methods to close certain gaps or answer certain questions. This equates to be a multi-method quantitative research study.

Many researchers see the multi-method from different perspectives, define and apply it in many various ways. Some researchers do not see the differences between multi-methods and mixed-methods, particularly when it pertains to the definition and abbreviation. In some instances, they use the concepts interchangeably as if they are synonymous. Some also use the concepts multimethod or multi-method and not multi-methods. For instance, Guetterman, Fetter and Creswell (2015) used what they call the qualitative multimethod. This method uses interviews, observation and audio-recordings to collect and analyse more qualitative data in conjunction with limited quantitative data to support the interpretation of the findings by analysing patterns and characteristics. Mingers and Brocklesby (1997) also talk about several applications such as, multimethodology (more than one methodology is applied), and multiparadigm (more than one paradigm is applied). There are various methods that may be utilised or combined in social scientific research; however, these depend on how the researcher combines, deploys, and implements them in relation to one another (Hunter & Brewer, 2015). According to Hunter and Brewer (2015), multi-method research is the kind of study where the researcher utilises more than one method or style, that are not the same, to conduct the same study. This is not like mixed-methods research, where the researcher combines a variety of relevant methodologies.


If we are to understand the nature and potential of multi-method research, we must first pose fundamental questions about the interrelationships among methods, data, and research problems… Only once we have achieved a better understanding of the philosophical grounding of research strategies will the opportunities afforded by multi-method research be fully realised. Multi-method research design may be appropriate to some research projects but not to others, with appropriateness being judged in relation to the nature of the research question and the sources of information we have at our disposal to answer that question. Whether or not we should use multi-methods would thus be determined by the data sources already identified and the research questions already formulated (Graham, 2010, p. 76).

Many researchers find it difficult to differentiate between the multi-method and mixed-methods research. The difference for Hunter and Brewer (2015) is that multi-method research occurs when the researcher combines different kinds of methods in their study, regardless of whether they are quantitative or qualitative. They further state that mixed-methods research only occurs when the researcher combines qualitative and quantitative methods in their particular study and not in any other manner. They consider mixed-method research as a subset of multi-method research (Hunter and Brewer 2015). Meetoo and Temple (2003) also refer to multi-method as “complementary methods”. It uses a wide range of possible sources to support statements in the research in cases where the different methods are triangulated to enhance validity in the study. Meetoo and Temple (2003), and Graham (2010) also refer to multi-method as “multiple method” research. It helps the researcher to gain confidence regarding the data from the audience, respondents or participants (McKendrick, 1999). It is further stated that qualita-