

# An ANT Analysis of Healthcare Services for the Nomadic Patients of Namibia

*Tiko Iyamu, Namibia University of Science and Technology, Windhoek, Namibia*

*Suama Hamunyela, Namibia University of Science and Technology, Windhoek, Namibia*

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## ABSTRACT

*Patients seek attention and treatments to various types of diseases and symptoms. Diseases infection and symptoms are often not predictive. Normally, there is a spread and movement of people across the geographical locations, of both the rural and urban communities, in countries including Namibia. As such, healthcare could be needed at any location, and at any time. There is significant mobility of individuals and groups within a country. Unfortunately, the healthcare services are not always as mobile at the level and speed that individuals and groups does in Namibia. Hence, there is need for the mobility of healthcare services at both primary and secondary healthcare levels, particularly in the developing countries, such as Namibia. The population of Namibia is scantily spread among its towns and cities. The major towns and cities are situated, in the average of 175km far apart from each other, in the country's 825, 418km square landscape. The spread necessitates movements of individuals and groups, particularly the old, poor, and nomadic people. Unfortunately, healthcare records in the country are not centralised and virtualised, making accessibility into patients' records difficult or impossible, from any location. As a result, healthcare service delivering is challenged. This study therefore explored and examined the possibility of mobility of healthcare services to those who live in the country. The study employed the qualitative research method, within which data was gathered from primary healthcare service providers, using open-ended questionnaires. The Moments of Translation from the perspective of actor-network theory (ANT) was used as a lens in the analysis of the data, to examine and understand the power and factors, which influences mobility of healthcare service in Namibia. Categorisation of Patients, Response Time, Understanding the Actors, Actors' participatory to service delivery, and Actors' Alliance were found to be the influencing factors in the provision of mobility of healthcare services.*

*Keywords:* Actor-Network Theory, Healthcare, Namibia, Nomadic Patients, Patients

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## INTRODUCTION

The movement and spread of the population in developing countries is argued to impact healthcare service provision (Rygh & Hjortdahl, 2007). To ensure effective healthcare services

provision, states and healthcare organisations are engaged in transforming the industry. According to Sander Granlien and Hertzum (2012), to improve the quality and efficiency of healthcare many hospitals are involved in extensive efforts to substitute electronic patient

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records for paper records. Another effort that has been made by some organisations is the integration of health information systems to improve quality of healthcare service.

Also, the shift from curative to planning and preventing of disease outbreaks and control has significantly necessitated the need for healthcare data management, efficient service delivery, healthcare information flows between health practitioners and patients, as well as information sharing between healthcare levels of operandi (Chaulagai et al., 2005). The mission of curative, preventing and disease control can only be made possible if the information of the whole population based is made available to policy makers, healthcare profession, administrators, donors and all healthcare organisations.

However, different categories of patients exist in the healthcare sector and the needs for healthcare services are diverse. There is the nomadic patient. This inflates the need to investigate different dimensions of healthcare service provisions processes in a country. In Chang's (2011) argument, there is a scenario where the patient may visit a different healthcare organisation, either because the patient is dissatisfied with the treatment of his or her previous visit or the patient moves to a different location. Distinctively in this case is the mobility of healthcare services in Namibia.

Mobility in this paper refers to the state of easy accessibility of health services from any geographical location. The essentiality of mobility of healthcare is centred on factors such as portability, transferability and availability of healthcare information including real-time interaction between healthcare providers and the needing (Fardoun & Oadah, 2012). In healthcare, mobility is typically associated with mobile healthcare systems and applications, the use of health public kiosk, cellular phone devices, and other portable computing devices (Cisco, 2007), this paper argues that mobility can also be classified by the availability of healthcare services at different levels of healthcare operandi.

Mobility of healthcare services could be translated by various human actors (patients and healthcare workers), based on the different

moments. Translation is a key tenet of actor-network theory (Latour, 1991). In actor-network theory (ANT), translation is influenced by interest of the actors (Iyamu, 2013). Translation takes place between the object and the actors it encounters as the initial program or script is altered through interaction.

ANT is popular for its ability to provide a rich and dynamic way of bringing together the socio-technical and non-technical aspects of the organization (Wickramasinghe et al., 2011). In ANT, society and organisations are a formation of different agents, and the agents interact to form heterogeneous networks (Law, 1992; Tatnall & Gilding, 1999; Cresswell et al., 2010). Networks define, describe and provide substance to agents. ANT then, deeply question and provide retorts to the existence of strong and weak (thus power) networks.

The Namibian healthcare levels of operandi cover both rural and urban areas following the thirteen political and administrative regional demarcations of the country. As a developing country, majority of Namibians still resides in rural areas. There is a significance movement of people between urban and rural areas.

The remainder of the paper is divided into five main sections. The first and second sections cover the literature review and research methodology, respectively. The third section presents the data analysis, which the findings. Based on the findings, the implications for the mobility of healthcare services in Namibia context are discussed in the fourth section. Finally, a conclusion is drawn.

The research was guided by two main questions: (i) What are the factors which influence the mobility of healthcare services in Namibia? (ii) What are the roles of human and non-human actors in the mobility of the mobility of healthcare services?

## HEALTHCARE SERVICE

The healthcare sector in many countries consists of a large contingence of institutions and organisations, ranging from centres, small and medium to large and technologically advanced

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