

# The 4IR-Health Service Delivery Nexus: Can AI Address Challenges Facing South Africa's Healthcare Services That Affect Domestic Politics?

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## ABSTRACT

The delivery of quality healthcare services to citizens is not only a constitutional right, but also the task and obligation of every government. However, bribery, lack of financial accountability and counterfeit drugs, a shortage of human resources, poor hygiene and ineffective infection control measures, and poor medical record keeping have been identified as major challenges for the implementation of a successful public healthcare system. Fraudulent orders, tender irregularities, fiscal dumping, and over-pricing have also been identified as additional challenges. Due to the lack of quality healthcare services, people have lost trust and hope in the African National Congress (ANC). The paper found that to deliver adequate healthcare services, government needs to establish mechanisms that promote efficiency, quality, transparency, and safety. AI is a mechanism that can increase transparency, efficiency, and detect diseases before they become critical. The paper adopted a qualitative research methodology with an exploratory approach.

## KEYWORDS

Artificial Intelligence (AI), Domestic Politics and South Africa, Fourth Industrial Revolution (4IR), Health Services Delivery, Healthcare System

## INTRODUCTION

This paper aims to examine the effects of poor healthcare services delivery on domestic politics, and the nexus between Fourth Industrial Revolution (4IR) technologies and the provision of adequate and sustainable healthcare services. It focuses on one of the 4IR technologies, namely artificial intelligence (AI), to understand its ability to transform the healthcare industry and promote the provision of adequate healthcare services that enable citizens to overcome diseases and achieve good health (Organisation for Economic Cooperation and Development, 2020). Globally, local political governance is the main benchmark of national government because it directly serves all spheres of the community. All government institutions are based on successful political governance because it determines the efficacy of immediate intervention, which provides sustainable services to citizens, thus affecting social order and stability. The failure of political institutions of governance in delivering

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adequate service ignite rebellions, revolutionary movements, and the intensification of civil wars. In Africa for example, the prevalence of conflicts, civil wars, and social disorders are fuelled by the provisions of inadequate or poor healthcare services to citizens by African governments and their institutions. This is the case in South Africa, where the prevalence of social protests is linked to the delivery of poor healthcare services to the citizens.

There is direct linkage between healthcare delivery and politics (Coburn, 2004). The delivery of poor healthcare services affects politics because it affects electoral behaviour and makes citizens' lack of trust in their political leaders (Borrell et al., 2007). Past studies showed that protests, conflicts, and civil wars feed health inequalities (Bambra et al., 2008; Borrell et al., 2007; Hutchinson et al., 2019; Naher et al., 2020). The prevalence of poor healthcare services delivery in South Africa has had a negative effect on domestic politics and election outcomes in many local municipalities. The delivery of poor healthcare services by the post-apartheid regime have resulted in citizens losing their trust and hope in the current political leadership, thus affecting the outcomes of political elections. AI technologies have the ability to transform the healthcare industry and can lead to the delivery of adequate healthcare services to citizens. The author argues that AI is very effective in the healthcare industry, with the possibility of enabling citizens to achieve good health and well-being. Unfortunately, the delivery of poor health services (i.e., services that cannot alleviate the burden of diseases of the people in South Africa) is due to the failure of understanding the role of AI in healthcare as well as the lack of technological skills to apply those technologies in South Africa's healthcare system.

As a political party that was benefitted from the failure of the apartheid regime to deliver quality services to all citizens, the African National Congress (ANC) regime, controlled by the Black community, has also failed in delivering quality services to all citizens. Lack of good governance to ensure a sustainable and successful service delivery has caused many community protests that have, in turn, negatively affected the perception citizens have about the political leaders, thus effecting domestic politics and election results. For example, many issues, such as inequality, still have a negative effect on the delivery of quality healthcare services in South Africa. A case in point is the poor standards of the delivery of healthcare services. Obuaku-Igwe (2015) presented that the delivery of healthcare services is affected by the existence of deep-rooted inequality. Inequality in public healthcare is determined by social factors that include race, education, ethnicity, gender, geographical location, and income, amongst others (Obuaku-Igwe, 2015). These social factors are a reflection of and affect political leadership, domestic politics, and election outcomes. Indeed, these factors lead to an unjust healthcare system that intensifies the poor delivery of healthcare services, which, in turn, increase mortalities and financial losses.

Accordingly, governments that suffer financial difficulties because of the softening of revenue may feel pressured to cut back on nonessential functions and outsource them, instead (Aik, 2016). However, Kinyua (2015) argued that some duties must remain responsibilities of the state, including services of good quality and transparency, social equity, and accountability. Until now, few studies analysed the effects of poor healthcare services on domestic politics and political elections outcomes. Additionally, few studies examined the nexus between 4IR technologies and healthcare services, as well as the role and effects of AI technology, when addressing the challenges that face healthcare systems in South Africa. Maphumulo and Bhengu (2019) examined the challenges facing South Africa's public healthcare systems, and Jalghoum et al. (2019) examined the role of information communications and technologies in the healthcare industry to promote e-healthcare services to citizens.

However, these studies did not focus on the role of the 4IR in promoting sustainable healthcare services, or the effects of poor healthcare services on domestic politics and elections outcomes. The studies have not also examined how AI technology, if applied to the public healthcare industry in South Africa, would improve the quality of healthcare services and promote good health and well-being. Against this background, the research questions the author seeks to answer are: To what extent is poor healthcare service delivery affecting domestic politics and election outcomes? And how can

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