

Assessment of SDG 3 to Achieve Health Objectives in South African Context

Prof Shikha Vyas-Doorgapersad¹

Abstract

Every person has a right to live in a healthy environment, have access to healthy food and medications. Non-realisation of such health benefits may lead to negative impact on people's overall wellness. This is the aim of the article to examine the status quo of sustainable development goal (SDG) 3 (focus) in the South African context (locus). The article uses a qualitative research approach to compile information that is already published. The secondary data is gathered using document review and further assessed through document analysis. The findings explore that there are various factors that may cause effective achievement of health objectives in the country. Some of them could be linked to poverty and unemployment whereby people cannot afford medical services; geography whereby community members living in marginalised areas struggle to get access to hospitals and doctors; other factors could be political, technological and infrastructure-related, all requiring strategic decisions and policies to improve the health context. Based on the findings, the article offers suggestions for consideration by policymakers, strategic decision-makers and stakeholders to be participatory, aware and diligent in health and wellness decisions and programmes to receive the desired benefits.

Keywords: Health, National Health Insurance, Qualitative, South Africa, Sustainable Development Goal 3.

Introduction

This introductory section critically examines the progress, challenges, and prospects of achieving Sustainable Development Goal 3 within the South African context. Despite significant post-apartheid reforms aimed at universal healthcare coverage, persistent inequities in service provision and a substantial burden of disease continue to impede the nation's health objectives (Villiers, 2021). The South African health system is currently navigating the complex transition towards universal health coverage, aiming to deliver comprehensive, accessible, affordable, and acceptable care to its populace amidst these significant pressures (Villiers, 2021). This endeavour involves addressing the historical legacy of a fragmented health system, characterized by pronounced disparities in access and quality between public and private sectors, which necessitates substantial re-engineering of primary healthcare services (Vuuren et al., 2025) (Ataguba et al., 2014). This includes the implementation of a national health insurance scheme, intended to centralise funding and ensure equitable access regardless of socio-economic status (Michel et al., 2020). This ambitious undertaking seeks to overcome the substantial social, economic, and health inequalities inherited from the colonial and apartheid eras, which have significantly hindered the nation's human development index, particularly exacerbated by the HIV epidemic (Ataguba et al., 2014). The proposed National Health Insurance (NHI) programme is central to South Africa's strategy for achieving universal health coverage, aiming to create a single fund for all citizens to ensure equitable access to quality healthcare services, irrespective of income (Michel et al., 2020).

South Africa's commitment to values of equitable health service provision, as envisioned in the universal health coverage, faces significant obstacles, particularly in critical areas such as maternal, child health, the ballooning burden of communicable and non-communicable diseases which impede the full realisation of Sustainable Development Goal 3 (Lang'at et al., 2025). The challenges persist due to the dualistic nature of the South African health system, which mirrors the enduring apartheid system characterised by discrepancies in access and utilisation, further exacerbating the impossibility of closing the gaps (Gani, 2023). Moreover, the enduring legacy of fragmentation within the health sector, characterised by numerous disparate health information systems, makes it difficult to gather accurate up to date information about the

¹ School of Public Management, Governance and Public Policy; College of Business and Economics; University of Johannesburg; South Africa
Telephone: 011 559 5115/ 072 463 8685, Email: svyas-doorgapersad@uj.ac.za, Orcid Number: <https://orcid.org/0000-0002-8146-344X>

real challenges and gaps that government should focus on to facilitate efficient service delivery and comprehensive data integration, undermining efforts to track progress towards SDG3 targets (Katu, 2016). Furthermore, the effective implementation of the well-structured referral systems remain conceptually good but practically far from full implementation impacting the continuity and quality of care (Matolengwe et al., 2024). This fragmentation not only hinders the effective monitoring of health outcomes but hinders the possibility of effective coordination of primary health service provision which is at the centre of achieving SDG 3 targets across different levels of the health system (Muthathi et al., 2021).

The article takes a qualitative stance. The focus of qualitative research is the value-laden nature of inquiry. They are searching for answers to questions that center on how social experience is constructed and interpreted, according to Bangani and Vyas-Doorgapersad (2020) and Chiware (2021). Qualitative research in this study is considered noteworthy since it aims to gain a comprehensive knowledge [and] takes a holistic approach to social issues (in Nyikadzino & Vyas-Doorgapersad 2020; Vyas-Doorgapersad 2021; 2023; 2024a; 2024b). The study builds on the information gathered through document review. Document review offers a venue for interactive method complementarity. Documents also provide more research information. A knowledge base can benefit from the information and insights gleaned from records, which provide a means of monitoring progress and change (Bowen 2009:27-29; Vyas-Doorgapersad, 2024c). The researcher can identify changes made to a document by comparing its many drafts. Additionally, documents can be analyzed to validate data from other sources or confirm results, as emphasised by Bowen (2009:27-29; Vyas-Doorgapersad, 2024c). The information is reviewed through document analysis. Frey (2018:1, in Mutandwa 2023:49-50; Vyas-Doorgapersad, 2024c) stated that a systematic procedure is used in document analysis, a qualitative research method, to analyze documentary material and address certain research objectives. Document analysis is like other qualitative research analytical methods in that it requires careful examination and interpretation of the data as well as several reviews to get empirical knowledge and significance about the construct under study.

SDG 3 in South African Context

The review of existing documents helps to contextualise South Africa's progress towards Universal Health Coverage within global frameworks, identifying both successes and persistent challenges in health financing and service delivery (Atim et al., 2021). Specifically, policy implications and health system innovations are reviewed and discussed drawing lessons from other countries, considering their applicability to the South African context. The discussions critically assess the intersecting socio-economic determinants influencing health outcomes in South Africa, examining how they affect healthcare access and equity.

Sustainable Development Goal 3 (SDG 3) seeks to “ensure healthy lives and promote well-being for all at all ages,”, an aspiration that aligns closely with South Africa’s National Development Plan (NDP) 2030 and the African Union’s Agenda 2063 (United Nations South Africa, n.d.). Since the end of apartheid, notable strides have been made in South Africa’s quest to reduce negative health outcomes, including reductions in maternal and child mortality, and a decline in HIV and tuberculosis incidence (Statistics South Africa, 2023).

However, systemic challenges remain despite the gains made in the last three decades. The ballooning cases of communicable diseases, uneven access to quality care, and under-resourced health infrastructure are some of the current bottlenecks that postpone the possibility of achieving SDG 3 in the country. While the implementation of National Health Insurance (NHI) provides a golden opportunity and proves to be a cornerstone reform aimed at achieving universal health coverage (UHC) directly supporting SDG Target 3.8-achieve universal health coverage (South African Institute of Chartered Accountants (SAICA), 2023), it remains to be seen how this policy intention will go in addressing the inherited apartheid health disparities that affect access of health to majority of South Africans. Similarly, national efforts to address mental health, substance abuse, and road safety reflect alignment with Targets 3.4, 3.5, and 3.6 respectively remain a challenge as policing and security sector clusters continue to face challenges to curb drug peddling and distribution particularly to young South Africans.

Ensuring healthy lives and promoting well-being for all at all ages is a progressive yet aspirational comprehensive agenda for global health transformation which fits into South Africa’s three decade old

democracy encompassing the desire to reducing maternal and child mortality, combating communicable diseases such as HIV/AIDS, tuberculosis, and malaria, and addressing non-communicable diseases and mental health (Roomaney et al., 2023). Through the NHI policy, South Africa emphasises achieving universal health coverage, ensuring access to essential medicines and vaccines, and strengthening the capacity for early warning, risk reduction, and management of national and global health risks (Gordon et al., 2020) (White & Rispel, 2021). South Africa require robust integrated health systems that facilitates efficient patient referral systems, improved access to essential medicines and supplies, enhanced communications to achieve SDG 3 (Matolengwe et al., 2024). This is particularly urgent in an increasingly resource constrained environment like south Africa.

South Africa's strategic approach of integrating SDG 3 into multi-sectoral development frameworks, emphasising equity, resilience, and inclusive well-being presents a golden opportunity to address the three-decade aspirations to correct the apartheid era health inequalities. Interventions like strengthening health financing, workforce capacity, and early warning systems will be essential to meeting the 2030 targets and sustaining progress beyond them (Statistics South Africa, 2023).

Discussion and Findings

This section present details of some of the progress made towards achieving SDG 3 targets in South Africa. While the country has made measurable strides across several targets, persistent challenges still exist across the health spectrum due to health inequities, non-communicable disease burdens, and systemic constraints that require sustained investment and innovation.

On indicator 3.1 -Maternal Mortality, the country has updated maternal care protocols such as the Basic Antenatal Care (BANC) Plus, magnesium sulphate use which have improved outcomes, though mortality remains above SDG thresholds (National Department of Health, 2024). South Africa continues to show commitment towards achieving SDG 3 by prioritising maternal health through updated clinical guidelines and expanded antenatal care. For example, the implementation of the *BANC Plus* schedule has improved intrapartum monitoring (National Department of Health, 2024), see Figure 1.

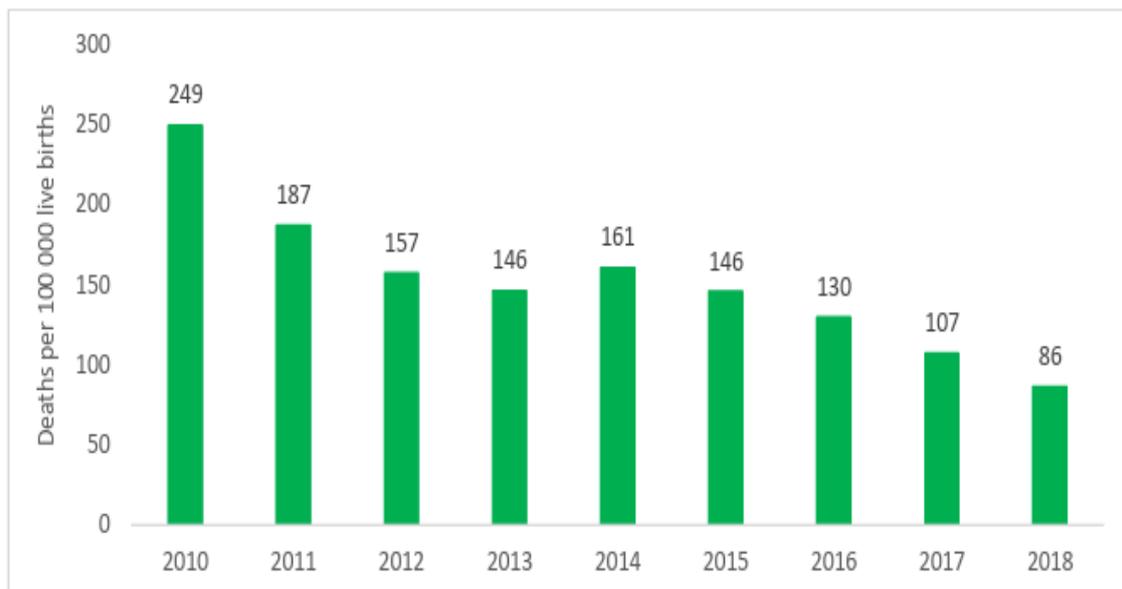


Figure 1: Maternal Maternity Ratio

Source: Statistics South Africa, 2023.

While maternal mortality remains above the SDG threshold, the strengthened protocols such as magnesium sulphate for pre-eclampsia and massive transfusion protocols are reducing preventable deaths.

There is also evidence suggesting that South Africa has made strides in addressing target 3.2 - *End Preventable Deaths of Newborns and Children Under 5 years* (Statistics South Africa, 2021), see Figure 2.



Figure 2: Under-5 Mortality Per 1 000 Live Births

Source: Statistics South Africa, 2023.

The country's integrated school health programme contributed to reduced under-five mortality through aggressive roll-out of immunisation, nutrition, and neonatal care programmes. However, recent evidence suggests that neonatal deaths still account for nearly half of under-five deaths. There is still window of opportunity to reverse the negative outcomes in this health category through Integrated School Health Programme and expanded breastfeeding support which are key interventions (Statistics South Africa, 2021). The new approach includes expanded neonatal care guidelines and targeted nutrition interventions in vulnerable districts (Statistics South Africa, 2021).

In the area of *ending epidemics such as HIV, TB, and Malaria-target 3.3*, South Africa has not fully met the United Nations AIDS (UNAIDS) triple 95 targets with an achievement of 96-79-94 for those who know their HIV status, on Antiretroviral medicines and those with virally suppressed load respectively. TB incidence is declining, and malaria remains low due to strong surveillance (National Department of Health, 2025), see Figure 3.

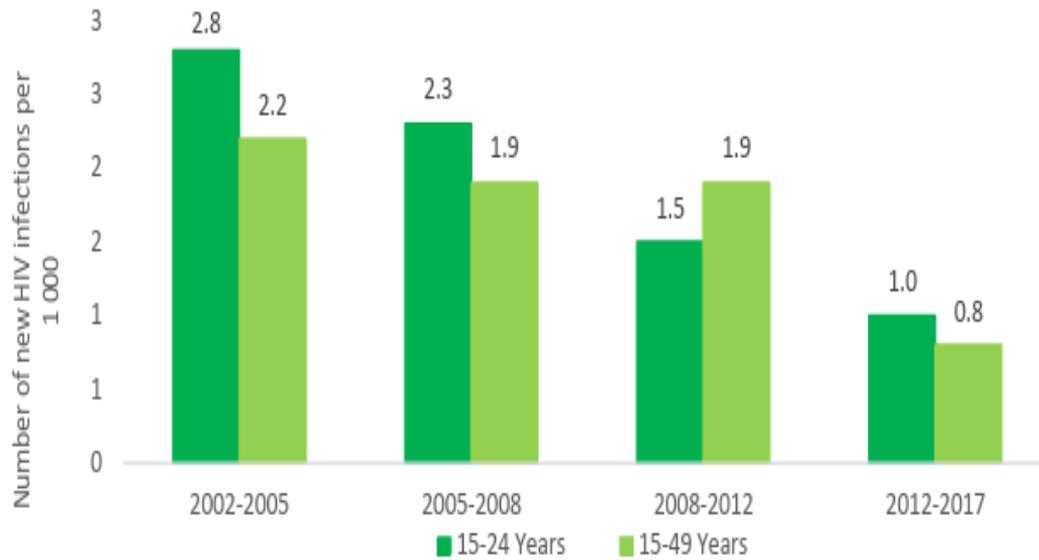


Figure 3: Number of New HIV Infections Per 1 000 Un-Infected Population by Age

Source: Statistics South Africa, 2023.

Recent efforts to accelerate results in this area include the launch of the Strategic Plan 2025–2030 which prioritises integrated electronic health records and community outreach to improve HIV and TB outcomes (National Department of Health, 2025).

Likewise, South Africa is struggling to contain or reduce Premature Mortality from NCDs and Promote Mental Health under target 3.4 of SDG 3. A worrying trend of non-communicable diseases (NCDs) outpacing infectious diseases in South Africa persists and threatens to undermine many years of investments and gains in the health sector. However, the National Strategic Plan for NCDs (2022–2027) provides a structured effort to promote integrated care cascades for hypertension, diabetes, and mental health (National Department of Health, 2022), see Figure 4.

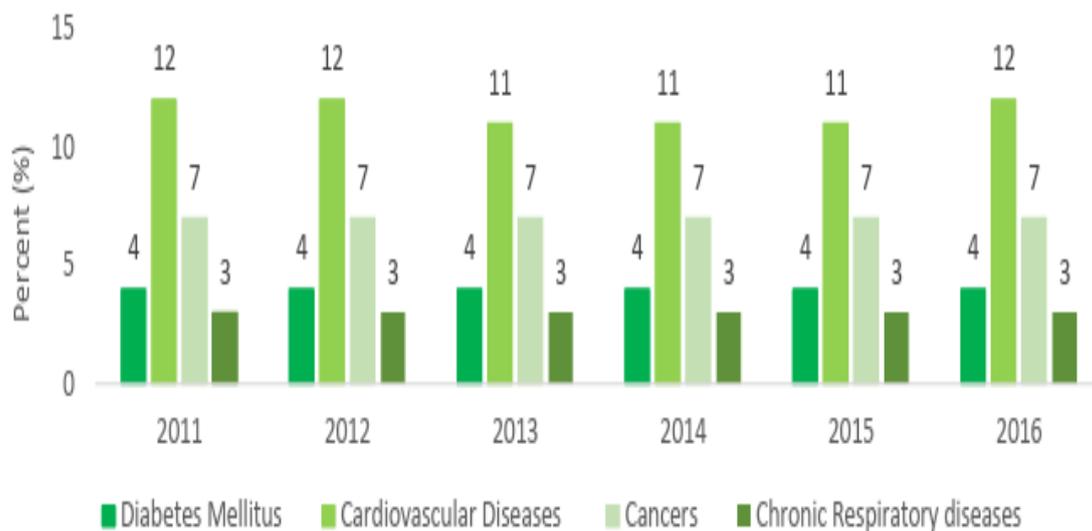


Figure 4: Mortality Rate Attributed to Cardiovascular Disease, Cancer, Diabetes, Or Chronic Respiratory Disease

Source: Statistics South Africa, 2023.

Recent interventions such as the provision of scaled district mental health services are a welcome strategy that could mitigate the spiralling mental health crisis in south Africa. Similarly, the launch of person-centred NCD care pathways and mental health integration into Primar Health Care (PHC) is anticipated to provide guidance and breakthrough in this area (National Department of Health, 2022).

The fifth target 3.5 aims to prevent and treat substance abuse, am important intervention aimed at achieving SDG 3. However, with staggering statistics of alcohol and drug abuse, South Africa faces an uphill task to contain and reverse the negative outcomes of this rising pandemic especially among youths (WHO, 2023), see Figure 5.



Figure 5: Alcohol Consumption Per Capita

Source: Statistics South Africa, 2023.

In 2022, WHO reported that the country consumed 5.0 litres of pure alcohol per capita, with alcohol-related deaths accounting for nearly 5% of all deaths globally (World Health Organisation (WHO), 2023). National efforts include awareness campaigns, treatment access, and regulation of advertising. The country is expanding psychosocial and rehabilitation services and integration of substance abuse screening into PHC (WHO, 2023).

Regarding road safety, target, the UN Global Campaign for Road Safety was launched in 2024, with helmet use and youth education as priorities (UN South Africa, 2024). Road traffic injuries remain a leading cause of death among youth (UN South Africa, 2024). Interventions such as Helmet4Life campaign and school-based road safety education were rolled out nationally and more positive health outcomes are expected (UN South Africa, 2024).

Target 3.7 aims to reduce sexual and reproductive health with the country expanding access to contraception and adolescent health services. However, the high teenage pregnancy shows the limited impacts of current interventions in South Africa. According to Rural Health Advocacy Project (2024), “in 2024, South Africa had a birth rate of 40.7 per 1,000 girls between 15 to 19 years of age.³ In the younger age group, the birth rate was much lower at 10 per 1,000 for 10 to 14 year olds.³ According to the 2022/23 District Health Barometer, there was a 5% decrease in deliveries in facilities among 10 to 19 year olds between the 2021/22 and 2022/23 period (from 139,361 to 132,28³”. The Rural Health Advocacy Project (2024) report further states that, Adolescent pregnancy rates are also increasing in South Africa with an

increase from 26.8 per 1,000 in 2017/18 to 30.5 per 1,000 in 2021/22 for girls 10 to 19 years of age.⁷ In South Africa, there was a notable increase in the proportion of pregnant girls aged 14 to 19 years between 2021 and 2022 (from 2.7% to 3.8%), however, this is still lower than in previous years (e.g. in 2019 the proportion was 5.7%).⁸ Another study in South Africa's public health sector calculated that there would be a total of 80,093 pregnancies (including deliveries and terminations) for the combined age group of 10 to 19 year olds in the 2021/22 period.⁷ However, despite this apparent decrease, the actual number of pregnancies had been increasing annually from 2017/18 to 2020/21 resulting in a percentage increase of 16% for that period.” This illustrates how urgent it is to solve this issue, which has consequences for SDG 3's negative mother and child health targets and outcomes.

Indicator 3.8- Universal Health Coverage is aligned to the government's aspirations under the National Health Insurance (NHI) reforms and digital health integration which aims to close equity gaps (National Department of Health, 2025). The NHI reform is central to achieving universal health coverage (UHC). Key reforms under NHI include ideal clinic accreditation, integrated electronic health records, and PHC outreach teams (National Department of Health, 2025). These initiatives under the NHI rollout and digital health systems integration promises hope to improve health outcomes towards achieving SDG 3 in South Africa (National Department of Health, 2025).

Target 3.9 aims to reduce deaths from pollution and hazardous chemicals. According to the report of the Clean Air Fund (2025, “air pollution was responsible for 25,800 premature deaths in South Africa in 2019. The country had the fourth highest number of deaths linked to particulate matter pollution (PM2.5) in Africa. Nearly 100% of the population breathes air that exceeds the World Health Organization's (WHO) guideline levels. 5”).

Target 3.A aims to strengthen tobacco control. South Africa's Tobacco Bill (2025) introduces plain packaging, smoke-free zones, and e-cigarette regulations. It is hailed as a landmark public health measure (Independent Online (IOL), 2025). The Tobacco Products and Electronic Delivery Systems Control Bill tabled in the South African Parliament in December 2022 aims to strengthen tobacco regulation and align with the WHO Framework Convention on Tobacco Control. The Bill introduces stricter measures, including banning smoking in all indoor public areas, regulating certain outdoor spaces, prohibiting vending machines and point-of-sale displays, and mandating plain packaging with graphic health warnings. These regulatory requirements extend to electronic delivery systems such as e-cigarettes, which were previously under-regulated, and repeals the outdated 1993 Tobacco Control Act (Parliament of South Africa, 2025). These regulations when implemented contribute towards target 3A and ultimately to SDG 3. Fear associated with these regulatory requirements include possibility of increased illicit trading of tobacco products (Parliament of South Africa, 2025). (IOL, 2025). This could undermine the good intentions of these regulations.

Target 3.B: aims to support access to medicines and vaccines. South Africa's immunisation coverage for DTP3 rebounded to 85% in 2024. South Africa's performance on DTP3 (the third dose of the diphtheria, tetanus, and pertussis vaccine) has experienced worrying declines in recent years (WHO, 2025), see Figure 6.

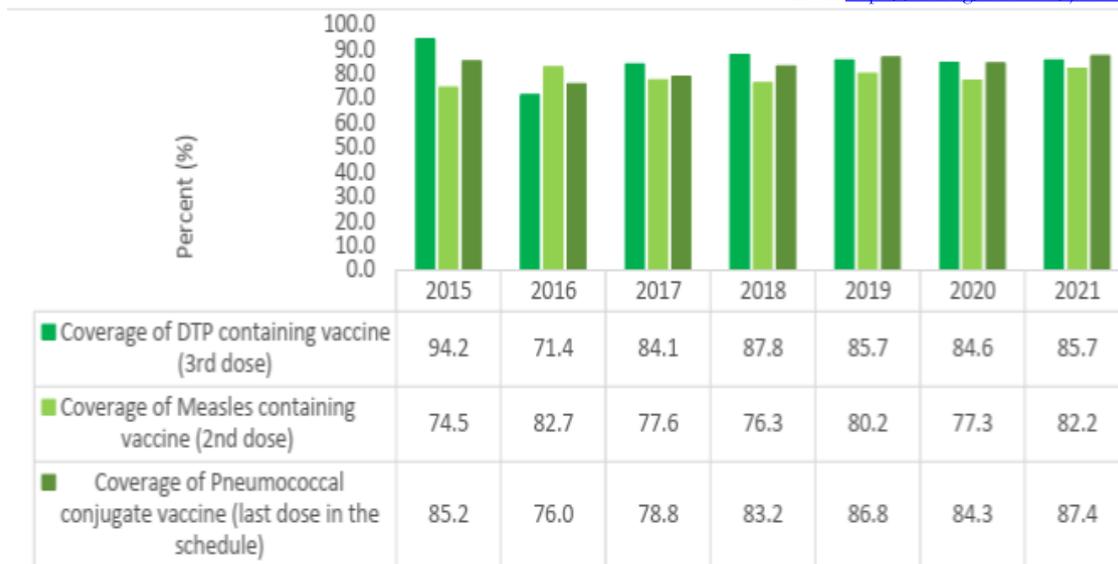


Figure 6: Proportion of the Target Population Covered by All Vaccines in National Programme

Source: Statistics South Africa, 2023

Most recent available data from the World Health Organization and United Nations Children's Fund (UNICEF) show worrying trends with national coverage falling from approximately 85% in 2022 to 79% in 2023, a drop of six percentage points (WHO, 2025). While this coverage reflects a rebound from the COVID-19 disruptions, it remains worryingly below the country's immunisation target of 90%. The statistics reflects persistent gaps in access and delivery of childhood vaccines in South Africa (WHO, 2025).

Target 3.C on Health Workforce Development for South Africa shows a projected shortfall of 97,000 health workers by 2025, requiring R34 billion in funding (Accountancy SA, 2020). The NHI reform includes workforce expansion and digital training. Interventions to address this challenge include strategic workforce planning and digital health training initiatives (Accountancy SA, 2020).

The last target, 3.D, is strengthen risk management. The South African government has enhanced early warning systems and integrated health risk management into its strategic planning. However, COVID-19 exposed gaps which also accelerated positive reforms (WHO, 2025). The government's strengthened surveillance and digital health infrastructure for risk response are some of the positive interventions introduced in recent times (WHO, 2025).

Pandemics have slowed South Africa's progress towards achieving SDG 3 by exposing weaknesses in the health system and widening social inequalities. The COVID-19 pandemic placed enormous pressure on healthcare facilities, diverting resources away from critical services such as HIV care, childhood immunisations, and chronic disease management. This disruption increased preventable illness and death, particularly among vulnerable groups such as women, migrants, and low-income communities who already faced barriers to accessing health services (Vearey et al., 2021; Abdalla et al., 2022; Mukumbang & Adebisi, 2025). By highlighting these gaps, the pandemic revealed how fragile the system is in responding to large-scale health threats and showed the importance of building a more resilient and integrated approach to healthcare delivery (Nyasulu & Pandya, 2020; Gruchy et al., 2021). These challenges directly impacted on the country's progress towards achieving key targets and indicators for SDG 3 for maternal and child health, childhood immunisations and chronic disease management.

The strict lockdown measures introduced to curb the spread of COVID-19 also disrupted everyday health services. Many women and young people struggled to access antenatal care, contraceptives, HIV and TB testing, which in turn led to late diagnoses, interrupted treatment, and poor health outcomes (Pillay et al.,

2021; Hrynick et al., 2021). Thus, investments and milestones achieved prior to Covid-19 were reversed particularly through adolescent girls and young women who were affected due to reduced access to sexual and reproductive health services as noted in the increase of teenage and unintended pregnancies and other risks (Duby et al., 2022). At the same time, the redeployment of staff and resources towards pandemic response left primary healthcare clinics understaffed and overstretched (Adu et al., 2022). These challenges undermined public confidence in the health system and revealed how fragile service delivery remains in the face of external shocks (Mosadeghrad et al., 2024; Tumusiime et al., 2019).

Theoretical Implications

As a new politico-economic system—capitalism—arose, so did the field of political economy research. The private ownership of capital goods, or "the means of production," by capitalists or the capitalist class, is, the assets utilized to create the commodities and services required for human existence, such as factories, machinery, buildings, land, and raw materials—defines this system. The working class is forced to labor for the capitalist class in the businesses they own to exist. Participating in the means of production to create commodities that are then sold on the market for a profit constitutes this employment. Workers receive a share of the profits as pay, while the corporation keeps the rest to either reinvest or retain as additional riches for the capitalist owners (Harvey, 2021).

The study of political and economic influences on health outcomes and health resource allocation is known as the political economy of health. This viewpoint, which considers how power relationships, legislative choices, and economic systems influence health governance, is essential for comprehending the wider ramifications of NHI policies (Jakovljevic et al. 2021:25).

The framework of political economy emphasizes the role of the government in controlling health markets and guaranteeing the equitable provision of healthcare services. It highlights the significance of political will and the impact of interest groups on policymaking, such as insurance corporations and healthcare providers. Navigating these intricate political environments to advance laws that put public health before profit is necessary for the successful implementation of NHI. Additionally, the 'political economy approach' emphasises the necessity of long-term financial methods to support NHI, guaranteeing its long-term political viability and economic viability (Jakovljevic et al. 2021:25).

In general, the term "political economics of health" refers to the application of political economy and politico-economic systems research to the field of health to investigate the connections between these subjects and how epidemiological distributions change over time. The historical public health literature, which dates back centuries, provides a very good description of the relationships between political economy and health (Du Bois, 2010; Engels, 2009; Hamilton, 1985; Rosen, 1947; Virchow, 2006 in Harvey, 2021).

Practical and Policy Implications

The information may assist medical practitioners to align the processes with the NHI. However, a consensus needs to be established within the medical context as private hospitals may hold their discretionary authority to decide to what extent government regulations can be imposed within their environment.

The information may assist various stakeholders. However, community members may have a right to opt for an option not to abide by the NHI route and still use private medical insurance services to draw benefits that are financially affordable to their privileged socio-economic status.

Limitation and Future Research

Lack of empirical data is considered as a limitation to the study. Due to timely constraints and geographical distribution of hospitals, it was not possible to conduct interviews with doctors, personnel and stakeholders justifying a sample to represent the total population related to the areas of exploration.

Future research works may consider using two hospitals in one province to draw opinions on NHI and other aspects of SDG 3. With time, more hospitals may be covered to create a comparative analytical database to draw information on SDG 3. However, ethical considerations may be a challenge whereby obtaining permission to conduct research in the premises of selected hospitals may be time consuming. Future research works may consider all these challenges to establish an adequate research methodology to advance research exploring the status quo of SDG 3 in South African context.

Conclusion

The introduction of NHI is intended to bring health benefits to all residents in South Africa. However, there are various challenges that require attention and strategies to correction. There are financial challenges whereby poor community members cannot have access to better health services and use services that are compromised. The hospitals may not be well equipped, there may be shortages of doctors and medical practitioners, there may be issues surrounding hygiene levels, shortages of medicines, to state a few. It can also be considered that community members who reside in geographically far areas, marginalized regions and rural areas, may struggle to get better health services within their areas of jurisdiction. Technology is playing an important role in the health sector. There are countries where all health practices, practitioners, and services are inter-linked to a common digitalised platform to access with ease. Although the system is not fully developed in South Africa, it raises a question: to what extent poor and marginalised community members can have access to such technological platforms to fully receive the benefits of health procedures, prescriptions, and guidance. Such concerns demand future research and publications.

NHI therefore cannot be a one size fits all solution to health-related challenges in the country. Varied social, economic, political, technological and infrastructure related aspects require attention to provide a holistic solution to people deserving better and affordable health services. Then only SDG 3 can be considered fully realised in a country-specific context.

References

- Abdalla, S., Katz, E., Hartley, A., & Darmstadt, G. L. (2022). Gender and the impact of COVID-19 on demand for and access to health care: Intersectional analysis of before-and-after data from Kenya, Nigeria, and South Africa. *Journal of Global Health*, 12. <https://doi.org/10.7189/jogh.12.05024>
- Accountancy SA. (2020). SDG 3: Tip 9 – Financing Our Health Workforce. <https://www.accountancysa.org.za/sdg-3-tip-9-financing-our-health-workforce-sdg-3-c>
- Adu, P., Stallwood, L., Adebola, S. O., Abah, T., & Okpani, A. I. (2022). The direct and indirect impact of COVID-19 pandemic on maternal and child health services in Africa: a scoping review [Review of The direct and indirect impact of COVID-19 pandemic on maternal and child health services in Africa: a scoping review]. *Global Health Research and Policy*, 7(1). BioMed Central. <https://doi.org/10.1186/s41256-022-00257-z>
- Ataguba, J. E., Day, C., & McIntyre, D. (2014). Monitoring and Evaluating Progress towards Universal Health Coverage in South Africa [Review of Monitoring and Evaluating Progress towards Universal Health Coverage in South Africa]. *PLoS Medicine*, 11(9). Public Library of Science. <https://doi.org/10.1371/journal.pmed.1001686>
- Atim, C., Bhushan, I., Blecher, M., Gandham, R. N. V., Rajan, V., Davén, J., & Adeyi, O. (2021). Health financing reforms for Universal Health Coverage in five emerging economies. *Journal of Global Health*, 11. <https://doi.org/10.7189/jogh.11.16005>
- Bangani, A. & Vyas-Doorgapersad, S. (2020). The implementation of gender equality within the South African Public Service (1994–2019). *Africa's Public Service Delivery and Performance Review*, 8(1), a353. <https://doi.org/10.4102/apsdpr.v8i1.353>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Chiwara, M. (2020). Variables influencing human resource performance management in the Ministry of Health and Child Care in Zimbabwe. Unpublished PhD Thesis. Johannesburg: University of Johannesburg.
- Clean Air Fund. (2025). South Africa. <https://www.cleanairfund.org/geography/south-africa/>
- Du Bois, W. (2010). *The Philadelphia Negro: A Social Study*. Philadelphia: University of Pennsylvania Press. <https://doi.org/10.9783/9780812201802>
- Engels, F. (2009). *The Condition of the Working Class in England*. Oxford, UK: Oxford University Press. <https://doi.org/10.1017/CBO9780511792700>
- Frey, B.B. (2018). Document analysis. Available at: <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-educational-research-measurement-and-evaluation/i7603.xml>
- Gani, S. (2023). A Critical Review of the Sustainability of South Africa's Health System, User's Satisfaction and Key Performance Scores [Review of A Critical Review of the Sustainability of South Africa's Health System, User's

- Satisfaction and Key Performance Scores]. *International Journal of Environmental Sustainability and Social Science*, 4(3), 925. <https://doi.org/10.38142/ijess.v4i3.419> Gordon et
- Gruchy, T. de, Vearey, J., Opiti, C., Mlotshwa, L., Manji, K. & Hanefeld, J. (2021). Research on the move: exploring WhatsApp as a tool for understanding the intersections between migration, mobility, health and gender in South Africa. *Globalization and Health*, 17(1). <https://doi.org/10.1186/s12992-021-00727-y>
- Hamilton, A. (1985). *Exploring the Dangerous Trades—The Autobiography of Alice Hamilton*. Boston, MA: Northeastern University Press.
- Harvey, M. (2021). The Political Economy of Health: Revisiting Its Marxian Origins to Address 21st-Century Health Inequalities. *American Journal of Public Health*. 111(2):293–300. doi: 10.2105/AJPH.2020.305996
- Hrynck, T., Lorenzo, S. R., & Carter, S. (2021). COVID-19 response: mitigating negative impacts on other areas of health [Review of COVID-19 response: mitigating negative impacts on other areas of health]. *BMJ Global Health*, 6(4). *BMJ*. <https://doi.org/10.1136/bmjgh-2020-004110>
- Independent Online (IOL). (2025). SA's Tobacco Bill landmark for public health, lobby group says. <https://iol.co.za/business-report/economy/2025-09-03-sas-tobacco-bill-landmark-for-public-health-lobby-group-says/>
- Jakovljevic, M., Liu, Y., Cerda, A., Simonyan, M., Correia, T., Mariita, R.M., Kumara, A.S., Garcia, L., Krstic, K., Osabohien, R. and Toan, T.K. (2021). The Global South political economy of health financing and spending landscape—history and presence. *Journal of medical economics*, 24(sup1), 25–33.
- Katuu, S. (2016). Transforming South Africa's health sector. *Journal of Science and Technology Policy Management*, 7(3), 330. <https://doi.org/10.1108/jstpm-02-2016-0001>
- Lang'at, E., Ward, P., Gesesew, H. A., & Mwanri, L. (2025). Challenges and Opportunities of Universal Health Coverage in Africa: A Scoping Review [Review of Challenges and Opportunities of Universal Health Coverage in Africa: A Scoping Review]. *International Journal of Environmental Research and Public Health*, 22(1), 86. Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/ijerph22010086>
- Matolengwe, A., Murray, D., & Okafor, U. B. (2024). The Challenges of Implementing a Health Referral System in South Africa: A Qualitative Study. *Risk Management and Healthcare Policy*, 855. <https://doi.org/10.2147/rmhp.s450998>
- Michel, J., Mohlakoana, N., Bärnighausen, T., Tediosi, F., Evans, D., McIntyre, D., Bressers, H., & Tanner, M. (2022). Testing the contextual interaction theory in a UHC pilot district in South Africa. *BMC Health Services Research*, 22(1). <https://doi.org/10.1186/s12913-022-07705-z>
- Michel, J., Tediosi, F., Egger, M., Bärnighausen, T., McIntyre, D., Tanner, M., & Evans, D. (2020). Universal health coverage financing in South Africa wishes vs reality. *Journal of Global Health Reports*, 4. <https://doi.org/10.29392/001c.13509>
- Mosadeghrad, A. M., Afshari, M., Isfahani, P., Ezzati, F., Abbasi, M., Farahani, S. A., Zahmatkesh, M., & Eslambolchi, L. (2024). Strategies to strengthen the resilience of primary health care in the COVID-19 pandemic: a scoping review [Review of Strategies to strengthen the resilience of primary health care in the COVID-19 pandemic: a scoping review]. *BMC Health Services Research*, 24(1). *BioMed Central*. <https://doi.org/10.1186/s12913-024-11278-4>
- Mosadeghrad, A. M., Isfahani, P., Eslambolchi, L., Zahmatkesh, M., & Afshari, M. (2023). Strategies to strengthen a climate-resilient health system: a scoping review [Review of Strategies to strengthen a climate-resilient health system: a scoping review]. *Globalization and Health*, 19(1). *BioMed Central*. <https://doi.org/10.1186/s12992-023-00965-2>
- Mukumbang, F. C., & Adebisi, B. O. (2025). Using the resilience theory to understand and address migrant pandemic precarity among South African migrant populations. *Archives of Public Health*, 83(1). <https://doi.org/10.1186/s13690-025-01573-9>
- Mutandwa, H. (2023). *Urban water infrastructure development in Zimbabwe: The role of public private partnerships*. Unpublished PhD Thesis. Johannesburg: University of Johannesburg
- Muthathi, I. S., & Rispel, L. C. (2020). Policy context, coherence and disjuncture in the implementation of the Ideal Clinic Realisation and Maintenance programme in the Gauteng and Mpumalanga provinces of South Africa. *Health Research Policy and Systems*, 18(1). <https://doi.org/10.1186/s12961-020-00567-z>
- Muthathi, I. S., Kawonga, M., & Rispel, L. C. (2021). Using social network analysis to examine inter-governmental relations in the implementation of the Ideal Clinic Realisation and Maintenance programme in two South African provinces. *PLoS ONE*, 16(5). <https://doi.org/10.1371/journal.pone.0251472>
- National Department of Health. (2022). *National Strategic Plan for NCDs 2022–2027*. <https://www.health.gov.za/wp-content/uploads/2025/05/NCD-NSP-FINAL-VERSION-20-SEPT-22-1.pdf>
- National Department of Health. (2024). *Integrated Maternal and Perinatal Care Guidelines*. <https://knowledgehub.health.gov.za>
- National Department of Health. (2025). *Strategic Plan 2025–2030*. <https://www.health.gov.za/wp-content/uploads/2025/08/NATIONAL-DEPARTMENT-OF-HEALTH-STRATEGIC-PLAN-2025-2030-FINAL.pdf>
- National Department of Health. (2025). *Strategic Plan 2025–2030*. <https://www.health.gov.za/wp-content/uploads/2025/08/NATIONAL-DEPARTMENT-OF-HEALTH-STRATEGIC-PLAN-2025-2030-FINAL.pdf>
- Nyasulu, J. C. Y., & Pandya, H. (2020). The effects of coronavirus disease 2019 pandemic on the South African health system: A call to maintain essential health services. *African Journal of Primary Health Care & Family Medicine*, 12(1). <https://doi.org/10.4102/phcfm.v12i1.2480>
- Nyikadzino, T. & Vyas-Doorgapersad, S. (2020). Understanding the impact of devolutionary reforms on poverty reduction in Zimbabwean rural local authorities. *Loyola Journal of Social Sciences*, XXXIV (1), pp.29–48.

- Parliament of South Africa. (2025). Media Statement: Health Committee Deliberates on Tobacco Bill. <https://www.parliament.gov.za/Press-Releases/Media-Statement-Health-Committee-Deliberates-Tobacco-Bill>
- Pillay, Y., Pienaar, S., Barron, P., & Zondi, T. (2021). Impact of COVID-19 on routine primary healthcare services in South Africa. *South African Medical Journal*, 111(8), 714. <https://doi.org/10.7196/samj.2021.v111i8.15786>
- Roomaney, R. A., Wyk, B. van, & Wyk, V. P. (2023). Multimorbidity in South Africa: Is the health system ready? *Journal of Multimorbidity and Comorbidity*, 13. <https://doi.org/10.1177/26335565231182483>
- Roomaney, R. A., Wyk, B. van, Cois, A., & van-Wyk, V. P. (2023). Multimorbidity patterns in South Africa: A latent class analysis. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.1082587>
- Rosen, G. 1947. What is social medicine? A genetic analysis of the concept. *Bull History Medical*. 21(5):674–733. doi: 10.1093/jhmas/ii.1.137.
- Rural Health Advocacy Project. (2024). Rural Realities: Navigating Early Pregnancy in Vulnerable Communities. https://rhap.org.za/wp-content/uploads/2024/06/Policy-brief_early-pregnancy_Final.pdf
- Statistics South Africa. (2021). Trends in Selected Health Indicators Regarding Children Under 5. <https://www.statssa.gov.za/publications/03-00-16/03-00-162020.pdf>
- Statistics South Africa. (2023). SDG Country Report 2023. https://www.statssa.gov.za/MDG/SDG_Country_report.pdf
- South African Institute of Chartered Accountants (SAICA). (2023). SDG 3: Ensure healthy lives and promote wellbeing for all at all ages. South African Institute of Chartered Accountants. <https://www2.saica.org.za/news/sdg-3-ensure-healthy-lives-and-promote-wellbeing-for-all-at-all-ages>
- Tumusiime, P., Nabyonga-Orem, J., Karamagi, H., Lehmann, U., Elongo, T., Nikiéma, J.-B., Kabaniha, G., & Okeibunor, J. (2019). Resilient health systems for attaining universal health coverage. *BMJ Global Health*, 4. <https://doi.org/10.1136/bmjgh-2019-002006>
- United Nations Children's Fund (UNICEF). (2025). UN Inter-agency Group for Child Mortality Estimation. <http://childmortality.org>
- United Nations South Africa. (2024). UN Global Campaign for Road Safety. <https://southafrica.un.org/en/280065-south-africa-launches-un-global-campaign-road-safety-milestone-reducing-road-fatalities>
- United Nations South Africa. (n.d.). Goal 3: Good health and well-being. <https://southafrica.un.org/en/sdgs/3>
- Vearey, J., Gruchy, T. de, & Maple, N. (2021). Global health (security), immigration governance and Covid-19 in South(ern) Africa: An evolving research agenda. *Journal of Migration and Health*, 100040. <https://doi.org/10.1016/j.jmh.2021.100040>
- Villiers, K. de. (2021). Bridging the health inequality gap: an examination of South Africa's social innovation in health landscape. *Infectious Diseases of Poverty*, 10(1). <https://doi.org/10.1186/s40249-021-00804-9>
- Virchow, RC. 2006. Report on the typhus epidemic in Upper Silesia. *American Journal of Public Health*. 96(12):2102–2105. doi: 10.2105/AJPH.96.12.2102
- Vuuren, E. C. J. van, Lowe, Z., & Bodenstein, K. (2025). Moving Towards a South African NHI System of Excellence: Recommendations Based on the Insider Perspectives of CHWs as Key Role-Players. *International Journal of Environmental Research and Public Health*, 22(5), 807. <https://doi.org/10.3390/ijerph22050807>
- Vyas-Doorgapersad, S. (2021). Global governance reforms to achieve Sustainable Development Goal One (no poverty) in BRICS. *Africa's Public Service Delivery and Performance Review*, 9(1), pp. 1– 9. <https://doi.org/10.4102/apsdpr.v9i1.545>
- Vyas-Doorgapersad S. (2023). Gender inequality in South African municipalities. *International Journal of Educational Review, Law and Social Sciences (IJERLAS)*, 3(6): 2060–2067. <https://doi.org/10.54443/ijerlas.v3i6.1173>
- Vyas-Doorgapersad, S. 2024. Understanding Employee Wellness for Improved Performance and Achieving Sustainable Development Goal 3. *International Journal of Religion*. 5 (11): 2889–2899. <https://doi.org/10.61707/vvd0qw27>
- Vyas-Doorgapersad, S. (2024a). Employee wellness programmes for improved performance. *International Journal of Educational Review, Law and Social Sciences*, 4 (1): 1–12. <https://doi.org/10.54443/ijerlas.v4i1.1206>
- Vyas-Doorgapersad, S. (2024b). Assessment of e-government interventions to achieve sustainable development goal 11 in South Africa. *Journal of Law and Sustainable Development*. 12 (9): 1–21. <https://doi.org/10.55908/sdgs.v12i9>
- Vyas-Doorgapersad, S. (2024c). Corruption in South Africa: an ongoing challenge to good governance. *Business Ecosystem & Strategy*. 6 (4): 453–462. <http://dx.doi.org/10.36096/ijbes.v6i4.636>
- White, J. A., & Rispel, L. C. (2021). Policy exclusion or confusion? Perspectives on universal health coverage for migrants and refugees in South Africa [Review of Policy exclusion or confusion? Perspectives on universal health coverage for migrants and refugees in South Africa]. *Health Policy and Planning*, 36(8), 1292. Oxford University Press. <https://doi.org/10.1093/heapol/czab038>
- World Health Organisation (WHO). (2023). SDG Target 3.5 Substance Abuse. https://www.who.int/data/gho/data/themes/topics/sdg-target-3_5-substance-abuse
- World Health Organisation (WHO). (2025). SDG Target 3.7 Sexual and Reproductive Health. https://www.who.int/data/gho/data/themes/topics/sdg-target-3_7-sexual-and-reproductive-health
- World Health Organisation (WHO). (2025). SDG Target 3.B Essential Medicines and Vaccines. https://www.who.int/data/gho/data/themes/topics/sdg-target-3_b-development-assistance-and-vaccine-coverage
- World Health Organisation (WHO). (2023). Trends in Maternal Mortality. [http:// who.int/news/item/23-02-2023-a-woman-dies-every-two-minutes-due-to-pregnancy-or-childbirth--un-agencies](http://who.int/news/item/23-02-2023-a-woman-dies-every-two-minutes-due-to-pregnancy-or-childbirth--un-agencies)
- World Health Organisation (WHO). (2025). Immunization coverage. <https://www.who.int/news-room/factsheets/detail/immunization-coverage>.