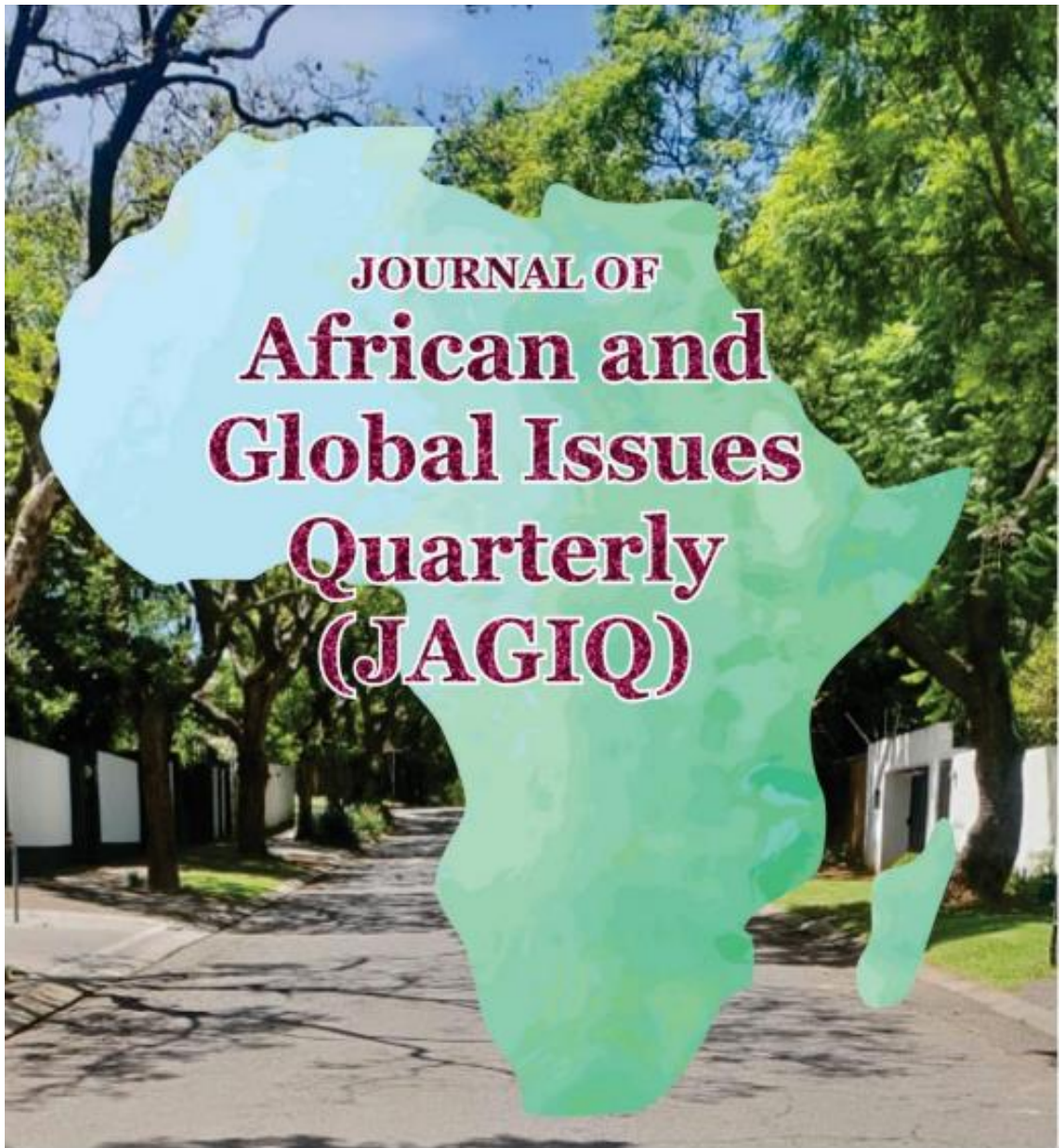




ISSN: 2709-8478 (PRINT)  
2710-0073 (ONLINE)

## EDITORIAL NOTE

This volume represents concerted calls within and outside Africa on the need for multidisciplinary collaboration and research output. Specifically, papers were drawn from all disciplines and research focuses, which has further increased the quality of research and collegial engagement. Hence, topics covered in this volume cut across the areas of economics, politics, security, ICT, indigenous knowledge, development studies, finance, trade, youth engagement, agriculture, democratization, and nation-building, among others.

For instance, Thizwilondi Josephine Mudau in *African Youths and the Promotion of Sustainable Development through the Lens of Indigenous Knowledge (IKS) in the 21st Century* employed qualitative desktop research methodology in synthesizing existing literature to argue that IKS represents a dynamic body of wisdom encompassing sustainable agriculture, natural resource management, and community resilience and offers proven, contextually grounded solutions to modern challenges like climate change and food insecurity. The analysis highlights youth-led initiatives across the continent that are revitalizing indigenous crops, integrating traditional ecological knowledge with climate adaptation strategies, and using digital platforms for cultural preservation. Mudau concluded that for Africa to achieve authentic and sustainable development, a concerted effort is needed to empower youth through inclusive education, supportive policy frameworks, and intergenerational dialogue, thereby transforming indigenous knowledge from a cultural heritage into a living toolkit for a resilient future.

Masila Joshua Masipa in *Beneficiaries of Corruption? An analysis of the function of South African banks in handling and making money from crime proceeds* adopted institutional theory and the political economy of corruption and a qualitative research design that combines semi-structured interviews with compliance officers, financial regulators, and civil society actors with document analysis of Zondo Commission and Financial Intelligence Centre (FIC) reports, legal statutes, and policy papers in examining how, in spite of strict anti-money-laundering (AML) and anti-corruption laws, South African banks may profit from, handle, or ineffectively stop the flow of monies associated with corruption. Specifically, with an emphasis on whether banks directly or indirectly benefit from the proceeds of crime, Masipa investigated the relationship between financial institutions and illegal financial flows within the following objectives: (1) assess the regulatory framework that oversees AML compliance; (2) examine high-profile cases of corruption in which banks are implicated; (3) evaluate due diligence and institutional accountability; and (4) suggest changes to improve ethical banking governance.

Then Sipho Patrick Bhengu-Mancosa & Andrishah Beharry-Ramraj in *Advancing Small, Medium, and Micro Enterprise Growth through Digitalized Enterprise and Supplier Development in South Africa* examined the current state of Enterprise and Supplier Development (ESD) in South Africa, investigated the role of digitalization in enhancing ESD, identified the challenges and opportunities in digitalizing ESD, and provided recommendations for policymakers, corporates, and Small, Medium, and Micro Enterprises (SMMEs). A qualitative secondary data approach was employed, drawing on thematic analysis of existing literature, reports, and industry initiatives. For key findings, Bhengu-Mancosa & Beharry-Ramraj indicated that ESD adoption remains limited; digitalization (Mancosa) significantly enhances market access and supplier diversity; infrastructure and skills gaps persist; and strategic digital integration can unlock growth opportunities for SMMEs.

Lere Amusan & Ebenezer O. Oni, in their study, *Disinvestment of Multinational Corporations (MNCs) in Developing Areas: An Assessment of Shoprite Disengagement in*

**Nigeria, started by reflecting on why**, at the global level, many MNCs have started to disengage from their host states. In a bid to respond to the possible reasons, Amusan & Oni pushed further into examining possible reasons that could explain why Shoprite, a large South African retailing company, disinvested from Nigeria after operating in the country for about 15 years, using secondary sources supported by primary data and personal observations. For them, the reasons range from political, economic, marketing, and legal to civil society attitudes towards their business. Employing the twin theories of neoliberalism and oligopoly that facilitate globalization, Amusan & Oni concluded that, aside from losing litigation to its erstwhile Nigerian business partners, competition from domestic and foreign retail companies contributed in no small measure to why Shoprite exited the Nigerian market.

***In A sober teacher is a problem”: Unpacking Political Ideology and Emancipatory Struggles Within teacher unionism***, Zwane Thembinkosi Trevor & Matsepe David adopted the grounded postcolonial theory in examining how teacher unions embody and deploy political stances and ideologies to promote the emancipation and freedom of education, as well as the broader communities they aim to serve. Clearly, Trevor and Matsepe employed a qualitative interpretivist approach to analyze data from narrative interviews with unionized educators, along with further examination of public union discussions. Key findings of their research indicated four interrelated themes: (1) political consciousness as both a threat to order and a driver of democratic emancipation; (2) teacher unions functioning as a counter-hegemonic force challenging neoliberal geopolitics and political norms; (3) the ideological repositioning of teacher unions as intellectual activists rather than compliant officials; and (4) tensions between political agency and professional identity.

***Douglas Nyath in Rural Youth and the Future of Farming in Sub-Saharan Africa: Revisiting the Abandonment Debate*** explored whether rural youth are truly abandoning agriculture or are instead redefining their involvement through diversified livelihood strategies. It examines the socio-economic, institutional, and cultural factors influencing youth decisions and analyzes how emerging hybrid forms of engagement—such as agripreneurship and part-time farming—are reshaping rural economies. A systematic desktop synthesis of peer-reviewed literature (2000–2025) was conducted using databases like Google Scholar, Scopus, and Web of Science. Nyaath observed that youth disengagement from agriculture is not uniform but context-specific, and the key determinants to such disengagement include land scarcity, education, labor market structures, gender norms, and limited access to finance and technology.

Then, in ***Equal Ideals, Unequal Realities: Gender Dynamics in the Workplace of an International Religious Non-governmental Organisation in Eswatini***, Thembumenzi Jomo Ntshalintshali & Innocent Simphiwe Nojiyeza examined attitudes, experiences, and organizational practices regarding gender roles, power dynamics, and inclusivity by drawing on in-depth interviews and focus groups with 20 employees from a range of departments and hierarchical levels. The results of their findings show that male participants, who were primarily ideologically devoted to gender equality, showed conflicted feelings about shifting power dynamics. Unconscious bias, policy implementation gaps, and organizational culture were equally identified as the primary obstacles to change. The results emphasize that in order to guarantee changes in gender equality, context-specific solutions are required that go beyond the adoption of policies.

**In Indigenous Knowledge Systems and Environmental Conservation** *Ngugi's Petals of Blood*, Thabo Prince Zondo started by reflecting on members of the impoverished and socio-economically disadvantaged community who are distressed by incessant drought and who consult a seer and offer sacrifices to seek solutions. Using this as a point of departure, Zondo explored how text gestures and Indigenous Knowledge Systems (IKS) address the real dilemmas faced by Africans following the extensive and cross-generational crises that accompany coloniality. In this, Zondo provided an ecocritical reading of the text, drawing on relevant postcolonial/decolonial ideas to illustrate the ways in which indigenous African epistemologies can indeed boost efforts at environmental conservation and poverty alleviation in rural communities today.

Also, **Rendani Tshifhumul in Exploring the Role of African Indigenous Knowledge Systems in Healing Practices and Resilience During the COVID-19 pandemic in Thohoyandou**, presented a narrative inquiry into the experiences of individuals who survived COVID-19 without requiring hospitalization, based on in-depth interviews with three respondents. For Tshifhumul, among the identified practices were the inhalation of steam treated with stones and salt, as well as the application of various herbal concoctions, including *Tshiumbeumbe*, *Musese*, *Mufula Musudzungwane*, *Miora*, and *Mubomo*, guava leaves, and lemon grass tea, including a mixture that comprises onion, ginger, lemon, honey, and garlic. Therefore, Tshifhumul concludes that these findings not only shed light on the adaptive strategies employed by individuals in response to the pandemic but also underscore the significance of traditional healing practices in the context of contemporary health crises. Khulisile Judith Nkuna & Sikhumbuzo Sibuso Khoza, in their work, **Capturing Cultural Heritage: Exploring the Poetic Elements of Domesticated Animal Praise**, carried out an analytical analysis of the lyrical components found in the praises of Siswati domestic animals. Nkuna & Khoza observed that expressing gratitude to animals for their contributions to human life remains a significant goal of animal praise. Reflecting on case studies, they noted that the Nguni people view domestic animals as very close environmental companions, particularly for those who live in rural areas. Praise poetry's primary goal is to commemorate great men's accomplishments. However, the reverse is the case for the Swati people, who have a tradition of honoring non-human animals in their poetry, including the wild animals they encounter in their environs as well as the domestic livestock they raise.

Intaher M. Ambe, Ellsworth C. Jonathan, Phathutshedzo D. Lavhelani,\* and David H. Selby, in their study, **Exploring the landscape of demand management practices in the public health sector in the Gauteng Province, South Africa: An Empirical Analysis**, employed secondary sources in determining what demand management practices are employed within Gauteng, South Africa, and public health sector institutions. Findings in their study revealed substantial obstacles in organizational structure, demand management techniques, budget, and alignment between demand planning and strategic goals, as well as supply chain management (SCM) rules, regulations, and specifications. They conclude that the paucity of demand management implementation in public sector organizations reveals a misalignment between strategic goals, demand management, and demand planning, resulting in a loss of value for public sector organizations.

**Aderinsola E. Kayode, Shalini Sing, & Patricia P. Badenhorst's research, ICT for Indigenous Knowledge Dissemination and Education in Africa: A Systematic Review**, conducted a systematic review of literature published between 2015 and 2025 to examine how ICT tools and platforms have been deployed to support indigenous knowledge dissemination and education in African contexts. The findings of their research indicated that

ICT can enhance indigenous knowledge preservation, improve youth engagement, facilitate intergenerational learning, and broaden global visibility of African knowledge systems when implemented with community participation. However, challenges remain regarding digital access, cultural sensitivity, intellectual property rights, and the sustainability of technology-driven initiatives.

In ***Donald Trump-Twitter Diplomatic Disruptions And Impact On The Post-World War II International Order.***, Ndivhoniswani Aaron Tshidzumba & Puseletso Nthate examine how President Donald Trump's unprecedented use of Twitter as a direct channel for foreign policy communication disrupted established diplomatic norms inherited from the post-World War II international order. Through content analysis of Trump's social media communications, examination of foreign policy outcomes, and comparative analysis with traditional diplomatic practices, Tshidzumba & Nthate demonstrated that Trump's social media presidency constituted a significant departure from institutional diplomacy and contributed to broader challenges facing the established international order. Further findings reveal that digital direct engagement by heads of state bypasses institutional constraints, undermines multilateral consensus-building, and creates new vulnerabilities in international relations.

Furthermore, in ***Determinants And Effect Of Small-Scale Livestock Production On Household Income In Malawi: Evidence From Fifth Integrated Household Survey***, Gladson Andrew Chipala, Christopher Chombo & Hannah Dunga examined the determinants and effects of small-scale livestock production on household income among farmers in Malawi, using cross-sectional data from the Fifth Integrated Household Survey (IHS5) with a sample of 8,795 households. Their key findings indicate that household size, access to credit, access to extension services, landholding size, distance to the market, and location in the Northern region significantly increase the likelihood of participation in livestock production. Notably, households engaged in livestock production earned, on average, an additional MWK 36,405.76 compared to non-producing households, demonstrating its important role in improving economic welfare.

In ***Navigating Artificial Intelligence Personalization and Consumer Privacy in Digital Marketing across South Africa and Global Contexts***, Suraksha Moothura and Andrishah Beharry-Ramraj critically examined how AI-driven hyper-personalization in digital marketing influences consumer privacy, with a specific focus on its ethical implications and regulatory challenges in South Africa in comparison to global standards using desktop literature review methodology. Moothura & Beharry—Ramraj observed that ethical concerns such as manipulation, algorithmic bias, and reduced consumer autonomy were found to be inadequately addressed in South Africa, where legal instruments like POPIA lack the specificity and enforcement capacity evident in global standards like the GDPR. Taleat, Bisiriyu Abiodun & Lukamba, Muhlya Tshombe's article, ***Energy Sustainability and Sustainable Development Agenda: The Role of Public-Private Partnership in South Africa***, investigated the role and effectiveness of Public-Private Partnerships (PPPs) in South Africa's energy development towards sustainability using a qualitative desk research methodology to analyze secondary data from policy documents, scholarly literature, and government publications. For Abiodun & Tshombe, key findings demonstrate that PPPs have attracted a substantial amount of private investment and benefited the economy through job creation and community development. However, institutional and systemic barriers, e.g., Eskom monopoly, regulatory uncertainty, grid integration constraints, and institutionalized dependency on coal, impede the full implementation of PPPs in accelerating the energy transformation. Hence, they recommend policy stability, energy regulation reform, enhancing financial methods, and ensuring that social equity consideration is factored into PPP structures.

For Olukayode Idris Lasisi in ***The Governance–Development Nexus in Nigeria: A Conceptual Synthesis of Good Governance and Policy Discourse Theories***, a qualitative, conceptual, and desk-based review approach was employed, relying on the literature, policy documents, and theoretical frameworks in reevaluating the governance development interface in Nigeria in terms of the role of institutional weaknesses, the inconsistency of policies, and discursive framing in the determination of sustainable development outcomes. Findings revealed that weak institutions, corruption, bureaucratic inefficiencies, low accountability, and marginalization in policymaking processes bedeviled Nigeria’s sustainable development, thereby distorting policy implementation and weakening effective service delivery. Lasisi concludes by calling for the need to strengthen institutions, improve transparency, guarantee policy sustainability, encourage civic participation, and apply digital governance solutions, which is essential to attaining sustainable development.

**Eyitayo Francis Adanlawo & Mpho Chaka** in ***The Effect of Ethnicity And Politics on the Democratization of African Nations*** examined the theoretical challenge that ethnicity poses to the African state and the challenges it poses for democratization on the continent. To guide the discourse, critical questions are raised: What kind of connection exists in Africa between politics and ethnicity? Under what conditions may ethnicity either support or undermine democracy? Can citizenship rights be reconciled with ethnicity? . Furthermore, Adanlawo & Chaka explored the evolution of ethnicity from the viewpoints of development communication and provided it with a psycho-social meaning. In their conclusion, Adalanwo & Chaka posited that, if ethnicity has an informative component, we should anticipate that voters' reliance on ethnic cues will decrease when certain forms of higher-quality information become available.

Lindokuhle Senamile Ntuli & Innocent Simphiwe Nojiyeza in ***Does Resource Scarcity Constrain Rural Women’s Entrepreneurial Performance in KwaZulu-Natal, South Africa?***, examined whether resource scarcity significantly constrains the entrepreneurial performance of rural women in KwaZulu-Natal (KZN), South Africa. Anchored in the Resource-Based View (RBV), the study adopts a quantitative research design using survey data collected from 273 rural women entrepreneurs across uMhlabuyalingana, Big5Hlabisa, and eJozini municipalities. **Ntuli & Nojiyeza** revealed statistically significant relationships between entrepreneurial performance and seven resource-based constraints: leadership skills, financial institutional barriers, entrepreneurial experience, regulatory constraints, access to financial resources, technological limitations, and limited training opportunities. Lastly, in ***Transformative Governance Frontiers: Relational Public Administration for Smart City Inclusivity***, Melvin Diedericks examined the conceptualization of informal systems in the context of South African smart city initiatives. By repositioning informal systems as co-creators in urban governance, this study advocates for a paradigm shift from technocratic optimization to relational inclusion. This reframing aligns with South Africa's constitutional and developmental goals, enabling transformative governance and the effective localization of SDGs in sustainable cities.

It is expected that these works compiled in this volume will further enrich the discourse and provide policy options to individuals, governments, and countries, particularly in Africa.

**Nicholas Idris ERAMEH, PhD**  
**Nigerian Institute of International Affairs (NIIA),**  
**Lagos State, Nigeria.**

**TABLE OF CONTENT-AGIQ APRIL 2026 EDITION**

|                                                                                                                                                                                         |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1. African Youths and the Promotion of Sustainable Development through the Lens of Indigenous Knowledge in the 21st Century<br><b>Thizwilondi Josephine Mudau</b>                       | <b>9</b>   |
| 2. Beneficiaries of Corruption? An Analysis of the Function of South African Banks in Handling and Making Money from Crime Proceeds<br><b>Masila Joshua Masipa</b>                      | <b>25</b>  |
| 3. Advancing Small, Medium and Micro Enterprise Growth through Digitalised Enterprise and Supplier Development in South Africa<br><b>Sipho Patrick Bhengu, Andrishah Beharry-Ramraj</b> | <b>40</b>  |
| 4. Disinvestment of Multinational Corporations in Developing Areas: An Assessment of Shoprite Disengagement in Nigeria<br><b>Lere Amusan and Ebenezer O. Oni</b>                        | <b>64</b>  |
| 5. A sober teacher is a problem”: Unpacking Political ideology and Emancipatory Struggles Within Teacher Unionism<br><b>Zwane Thembinkosi Trevor, Matsepe David</b>                     | <b>78</b>  |
| 6. Rural Youth and the Future of Farming in Sub-Saharan Africa: Revisiting the Abandonment Debate<br><b>Douglas Nyathi, Stanley Maphosa</b>                                             | <b>98</b>  |
| 7. Does Resource Scarcity Constrain Rural Women’s Entrepreneurial Performance in KwaZulu-Natal, South Africa?<br><b>Lindokuhle Senamile Ntuli, Innocent Simphiwe Nojiyeza</b>           | <b>114</b> |
| 8. Indigenous Knowledge Systems and Environmental Conservation in Ngugi’s <i>Petals of Blood</i><br><b>Thabo Prince Zondo</b>                                                           | <b>128</b> |
| 9. Exploring the Role of African Indigenous Knowledge(IKS) Systems in Healing Practices and Resilience During the COVID-19 Pandemic in Thohoyandou<br><b>Rendani Tshifhumulo</b>        | <b>144</b> |
| 10. Capturing Cultural Heritage: Exploring the Poetic Elements of Domesticated Animal Praise<br><b>Khulisile Judith Nkuna &amp; Sikhumbuzo Sibusiso Khoza</b>                           | <b>164</b> |

11. Exploring the landscape of demand management practices in public health sector in the Gauteng Province, South Africa: An Empirical Analysis  
*Ellsworth C Jonathan, Phathutshedzo D Lavhelani, David H Selby*  
**178**
12. ICT For Indigenous Knowledge Dissemination And Education In Africa: (A Systematic Review)  
*Aderinsola E. Kayode, Shalini Sing, Patricia P. Badenhorst*  
**198**
13. Donald Trump-Twitter Diplomatic Disruptions And Impact On The Post-World War II International Order.  
*Ndivhoniswani Aaron Tshidzumba*  
**222**
14. Determinants And Effect Of Small-Scale Livestock Production On Household Income In Malawi: Evidence From Fifth Integrated Household Survey  
*Gladson Andrew Chipala, Christopher Chombo, Hannah Dunga*  
**239**
15. Navigating Artificial Intelligence Personalisation and Consumer Privacy in Digital Marketing across South Africa and Global Contexts  
*Suraksha Moothura and Andrishah Beharry-Ramraj*  
**261**
16. Energy Sustainability and Sustainable Development Agenda: The Role of Public-Private Partnership in South African  
*Taleat, Bisiriyu Abiodun, Lukamba, Muhlya Tshombe*  
**286**
17. The Governance–Development Nexus in Nigeria: A Conceptual Synthesis of Good Governance and Policy Discourse Theories  
*Olukayode Idris Lasisi*  
**311**
18. Equal Ideals, Unequal Realities: Gender Dynamics in the Workplace of an International Religious Non-governmental Organisation in Eswatini  
*Thembumenzi Jomo Ntshalintshali, Innocent Simphiwe Nojiyeza*  
**324**
19. The effect of ethnicity and politics on the democratisation of African nations  
*Eyitayo Francis Adanlawo, Mpho Chaka*  
**340**
20. Transformative Governance Frontiers: Relational Public Administration for Smart City Inclusivity  
*S Sikwela & M Diedericks*  
**352**

## EXPLORING THE ROLE OF AFRICAN INDIGENOUS KNOWLEDGE (IKS) SYSTEMS IN HEALING PRACTICES AND RESILIENCE DURING THE COVID-19 PANDEMIC IN THOHoyANDOU

**Rendani Tshifhumulo,**

University of Venda,

[rendani.tshifhumulo2@univen.ac.za](mailto:rendani.tshifhumulo2@univen.ac.za)

DOI: <https://orcid.org/0000-0003-4133-3656>

### **Abstract**

*The onset of the COVID-19 pandemic in 2020 was marked by widespread confusion due to limited therapeutic interventions. Concurrent with escalating infection rates was a pervasive atmosphere of fear and despondency, exacerbated by continually increasing death tolls. In Thohoyandou, a notable proportion of the population turned to traditional healing practices historically employed to alleviate influenza-like symptoms. This shift towards non-hospitalised care was attributed partly to apprehension about hospitalisation, influenced by perceived low recovery rates among those admitted to medical facilities. This study presents a narrative inquiry into the experiences of individuals who survived COVID-19 without requiring hospitalisation, based on in-depth interviews with three respondents. The qualitative data were subjected to thematic analysis, revealing diverse traditional remedies utilised by participants. Among the identified practices were inhalation of steam treated with stones and salt, and application of herbal concoctions including Tshiumbeumbe, Musese, Mufula Musudzungwane, Miora, and Mubomo, guava leaves, lemon grass tea, and a mixture comprising onion, ginger, lemon, honey, and garlic. These findings illuminate adaptive strategies individuals employ in response to the pandemic and the importance of traditional healing practices in contemporary health crises. The observed recovery rates show the need for rigorous scientific testing to establish the validity of these findings.*

**Keywords:** African Indigenous Knowledge Systems, traditional medicine, COVID-19, resilience, Thohoyandou, narrative inquiry

### **Introduction**

The COVID-19 pandemic, caused by the SARS-CoV-2 virus, emerged as an unprecedented global health crisis that deeply disrupted healthcare systems and exposed vulnerabilities in biomedical approaches to disease management (Cucinotta & Vanelli, 2020). As the virus spread rapidly across continents, communities worldwide grappled with limited therapeutic options,

overwhelming healthcare infrastructure, and escalating mortality rates (Dong et al., 2020). In this context of uncertainty and fear, many populations, particularly in Africa, turned to indigenous knowledge systems and traditional healing practices as additional or alternative.

African Indigenous Knowledge Systems represent complex, integrated approaches of understanding health,

illness, and healing that have evolved over millennia through the accumulation of observations, experimentation, and intergenerational knowledge transmission (Nakata et al., 2021). These systems are deeply embedded in African cosmologies, spirituality, and cultural practices, conceptualizing health not merely as the absence of disease but as a harmonious balance between physical, spiritual, social, and environmental dimensions (Mpofu, 2021). Traditional medicine, as an applied manifestation of AIKS, encompasses diverse therapeutic modalities including herbal remedies, spiritual healing, dietary modifications, and ritualistic practices (World Health Organization, 2022).

The prevalence of traditional medicine use in Africa remains remarkably high, with the World Health Organization (2019) estimating that up to 80% of the African population relies on traditional medicine for primary healthcare needs. This widespread utilization reflects multiple factors, including cultural congruence, accessibility, affordability, and perceived efficacy (James et al., 2018). In South Africa, specifically, traditional healing practices coexist alongside biomedical healthcare in a pluralistic medical environment, with a substantial proportion of the population consulting traditional healers for various ailments (Peltzer et al., 2019). The Vhavenda people of Limpopo Province maintain particularly strong connections to traditional healing practices, with extensive ethnobotanical knowledge of medicinal plants used to treat respiratory infections, fever, and other conditions (Semenya & Maroyi, 2018).

Recent scholarship has increasingly recognized the legitimacy and potential contributions of indigenous knowledge systems to contemporary healthcare

challenges. Researchers argue that AIKS embody advanced understandings of disease etiology, prevention, and treatment that warrant serious scientific consideration rather than dismissal as mere superstition (Sodi et al., 2020). The South African government's recognition of traditional healers through the Traditional Health Practitioners Act of 2007 reflects a growing institutional acknowledgment.

### **Literature Review**

This literature review examines the role of African Indigenous Knowledge Systems (AIKS) in health and healing, their application during the COVID-19 pandemic, and the intersection between traditional and biomedical approaches to disease management.

### **Traditional Medicine Responses to Respiratory Infections**

Traditional African medicine has long addressed respiratory infections, which have historically constituted notable health burdens in African communities (Telefo et al., 2020). Ethnobotanical studies document extensive repertoires of medicinal plants used to manage symptoms associated with influenza, pneumonia, tuberculosis, and other respiratory conditions across diverse African ethnic groups (Cock & van Vuuren, 2020). Many of these traditional remedies exhibit antimicrobial, anti-inflammatory, and immunomodulatory properties, as demonstrated through phytochemical analyses, suggesting potential bioactive mechanisms underlying their therapeutic effects (Tilwani et al., 2021).

Steam inhalation therapy, a practice documented across multiple African cultures, is a particularly relevant traditional intervention for respiratory

symptoms. The practice typically involves inhaling steam infused with medicinal plants, salts, or other substances, with the dual purposes of delivering therapeutic compounds and providing mechanical relief through airway humidification (Mudau et al., 2022). Various Southern African communities have historically employed steam inhalation to treat colds, flu, and respiratory congestion, often combining this practice with the oral consumption of herbal preparations (Maroyi, 2020). Specific medicinal plants, including guava leaves (*Psidium guajava*) and lemongrass (*Cymbopogon citratus*), as well as various indigenous Venda medicinal plants, have been documented for treating respiratory conditions. Guava leaves have demonstrated antimicrobial and anti-inflammatory properties and are widely used throughout Africa to treat coughs and respiratory infections (Naseer et al., 2018). Lemongrass contains bioactive compounds with antiviral, antibacterial, and immunomodulatory effects, supporting its traditional use in managing infectious diseases (Shah et al., 2021). The combination remedy of onion, ginger, lemon, honey, and garlic mentioned in the abstract reflects a synergistic formulation incorporating ingredients with individually documented antimicrobial and immune-enhancing properties (Mani et al., 2020).

### **COVID-19 and Traditional Medicine in Africa**

The COVID-19 pandemic catalysed unprecedented interest in traditional medicine across Africa, with numerous countries documenting increased use of traditional remedies as populations sought accessible interventions amid limited biomedical treatment options

(Kasaven et al., 2020). Several African governments, including those of Madagascar, Tanzania, and Nigeria, have actively promoted traditional medicine approaches for COVID-19 prevention and treatment, sparking international debates about evidence, safety, and the role of indigenous knowledge in pandemic response (Nordling, 2020; Ekor, 2021).

Research conducted during the pandemic documented substantial reliance on traditional medicine for COVID-19 management across diverse African contexts. A study in Ghana found that 54% of respondents used herbal medicines for the prevention or treatment of COVID-19, citing accessibility, cultural beliefs, and distrust of biomedical interventions as motivating factors (Gyasi et al., 2021). Similarly, research in Nigeria revealed that 73.5% of participants utilized traditional remedies during the pandemic, with many reporting perceived effectiveness in symptom relief (Chukwuma et al., 2021). South African studies documented continued consultation with traditional healers during the pandemic despite lockdown restrictions, highlighting the persistence of traditional healthcare-seeking behaviours even during public health emergencies (Gqaleni et al., 2021).

Several factors contributed to the increased reliance on traditional medicine during COVID-19 in African contexts. First, the initial absence of proven biomedical treatments created a therapeutic vacuum that traditional medicine filled (Boateng & Avornyo, 2021). Second, fear of hospitalization, particularly related to perceptions of high mortality rates among hospitalized COVID-19 patients and concerns about nosocomial infection, deterred many

individuals from seeking biomedical care (Oleribe et al., 2020). Third, economic constraints and healthcare access barriers intensified during pandemic-related lockdowns, making traditional remedies more attractive as affordable, locally available alternatives (Gyasi et al., 2021). Fourth, cultural beliefs about disease causation, including spiritual interpretations of the pandemic, aligned more readily with traditional healing approaches than biomedical explanations (Olakunde et al., 2021).

### **Scientific Investigation of Traditional COVID-19 Remedies**

The pandemic stimulated scientific interest in evaluating traditional remedies for potential anti-SARS-CoV-2 activity. Researchers conducted *in silico*, *in vitro*, and limited clinical studies to examine the antiviral properties, immunomodulatory effects, and clinical efficacy of various African medicinal plants against COVID-19 (Mukandiwa et al., 2021). Some studies have identified promising candidates through molecular docking simulations, suggesting potential binding affinity for SARS-CoV-2 viral proteins (Gyebi et al., 2021). However, the scientific community has emphasized the necessity of rigorous clinical trials to establish the safety and efficacy of traditional medicines for COVID-19 treatment (Tolo et al., 2020).

The World Health Organization (2020) acknowledged the potential role of traditional medicine in COVID-19 management while cautioning against unproven claims and emphasizing the importance of evidence-based evaluation. The organization established an expert advisory group on traditional medicine for COVID-19 to guide

research and policy development (WHO, 2020). This position reflects the delicate balance between respecting indigenous knowledge systems and maintaining scientific standards for therapeutic interventions.

Critical views have emerged regarding the uncritical promotion of traditional medicine for COVID-19 without adequate evidence. Scholars caution that unvalidated claims about the efficacy of traditional remedies may delay appropriate medical care, contribute to false security, and potentially cause harm through adverse effects or drug interactions (Nkeck et al., 2020). The controversy surrounding Madagascar's COVID-Organics herbal tonic exemplifies the tensions between indigenous knowledge advocacy and evidence-based medicine, with proponents citing the tonic's traditional efficacy and critics demanding scientific validation through randomized controlled trials (Nordling, 2020).

### **Resilience, Indigenous Knowledge, and Pandemic Response**

Beyond specific therapeutic interventions, indigenous knowledge systems contributed to broader dimensions of resilience during the COVID-19 pandemic. Resilience, conceptualized as the capacity to adjust positively in the face of adversity, operates at individual, community, and system-wide levels (Ungar, 2018). Research suggests that cultural resources, including traditional knowledge and practices, serve as notable resilience factors during health crises by providing meaning-making approaches, social cohesion, and coping mechanisms (Kirmayer et al., 2021).

Studies examining pandemic resilience in African contexts highlight the role of

indigenous knowledge in fostering adaptive responses. Traditional practices provided psychological comfort, maintained cultural continuity amid disruption, and activated community support networks that buffered pandemic-related stress (Mhango et al., 2021). The act of using traditional remedies, regardless of their biomedical efficacy, may have conferred psychosocial benefits by restoring a sense of agency, connecting individuals to their cultural heritage, and reducing anxiety associated with perceived vulnerability (Olakunde et al., 2021). This perspective aligns with biopsychosocial models of health, which recognise the interconnectedness of biological, psychological, and social factors in the healing process (Engel, 1977; Wade & Halligan, 2017).

Furthermore, integrated health conceptualizations within indigenous knowledge systems encouraged practices such as dietary modifications, physical activity, stress reduction, and spiritual practices that may have supported immune function and overall well-being during the pandemic (Semenya & Letsela, 2021). Community-based interventions grounded in traditional knowledge facilitated health education, contact tracing, and mutual aid networks that complemented formal public health responses (Gavi et al., 2022)

The literature reveals complex dynamics surrounding the role of African Indigenous Knowledge Systems in health and healing, particularly during the COVID-19 pandemic. While substantial populations across Africa have used traditional medicine to manage COVID-19, scientific evidence of its efficacy remains limited, highlighting the tension between

validating indigenous knowledge and adhering to evidence-based medicine standards. Traditional medicine's contributions extended beyond specific therapeutic interventions to include psychosocial support, cultural continuity, and community resilience. Moving forward, research that respectfully engages with indigenous knowledge while maintaining scientific rigor is essential for understanding the potential contributions of traditional medicines to health challenges. The experiences documented during COVID-19 underscore the need to develop pluralistic healthcare systems that honour diverse healing traditions while ensuring patient safety and therapeutic efficacy.

## **Research Methodology**

### **Research Design**

This study adopts a qualitative narrative inquiry approach to examine and understand the lived experiences of COVID-19 survivors in Thohoyandou who utilized African Indigenous Knowledge Systems (AIKS) for healing without requiring hospitalization. Narrative inquiry is particularly suitable for this study, as it enables researchers to understand how individuals make sense of their experiences through the stories they share (Clandinin & Connelly, 2000). This methodological approach aligns with the interpretive paradigm, which emphasizes the subjective meanings that individuals attach to their experiences (Creswell & Poth, 2018). The narrative approach is particularly well-suited to exploring indigenous knowledge systems, as storytelling is a fundamental method of knowledge transmission in African communities (Chilisa, 2012).

The choice of qualitative methodology is justified by the exploratory nature of the research question and the need to capture the depth and intricacy of participants' experiences with traditional healing practices during an unprecedented health crisis (Merriam & Tisdell, 2016). Unlike quantitative approaches that aim to measure and generalize, this study seeks to provide a rich, contextual understanding of how individuals drew on indigenous knowledge systems as a source of resilience during the pandemic (Patton, 2015).

### **Study Population and Sampling**

The target population for this study comprises residents of Thohoyandou, Limpopo Province, South Africa, who contracted and recovered from COVID-19 during the pandemic period (2020-2021) without requiring hospitalization. Thohoyandou, situated in the Vhembe District, is a semi-urban context where traditional healing practices remain deeply ingrained in the community's cultural fabric (Makhado & Davhana-Maselesele, 2016).

Purposive sampling, a non-probability sampling technique commonly employed in qualitative research, was utilized to identify and recruit participants (Palinkas et al., 2015). This sampling strategy enabled the researcher to deliberately select information-rich cases that could provide in-depth findings into the phenomenon under investigation (Patton, 2015). The inclusion criteria for participant selection were:

- Individuals aged 18 years and above
- Confirmed or symptomatic COVID-19 infection during 2020-2021

- Recovery without hospital admission or oxygen supplementation
- Documented use of traditional healing practices during illness
- Willingness to participate and share detailed narratives of their experiences
- Ability to provide informed consent

The sample size of three (3) participants was determined based on the principles of information power and data saturation appropriate for narrative inquiry studies (Malterud et al., 2016). In narrative research, smaller sample sizes enable a deep and detailed exploration of individual experiences, aligning with the study's aim to understand the subtle ways in which AIKS contributed to healing and resilience (Riessman, 2008). This sample size is consistent with recommendations for narrative inquiry studies that focus on depth rather than breadth (Clandinin, 2013).

### **Data Collection Methods**

#### **Primary Data Collection: In-Depth Semi-Structured Interviews**

In-depth semi-structured interviews served as the primary data collection method for this study. This approach allowed for flexibility in exploring participants' narratives while ensuring that key areas of interest were addressed (Kallio et al., 2016). Semi-structured interviews are particularly useful in narrative inquiry as they provide participants with the freedom to construct their stories while enabling researchers to probe for deeper understanding (Rabionet, 2011).

Each interview lasted 60 to 90 minutes, allowing sufficient time for participants to share thorough narratives of their experiences. The interviews were

conducted either face-to-face at mutually agreed-upon locations or virtually via video conferencing platforms, depending on participant preference and prevailing COVID-19 safety protocols (Archibald et al., 2019). All face-to-face interviews adhered to COVID-19 prevention measures, including wearing masks, maintaining physical distancing, and using hand sanitizer, as recommended by the World Health Organization (2020).

Recognizing the multilingual context of Thohoyandou and the importance of linguistic accessibility, interviews were conducted in Tshivenda and/or English, based on the participant's preference (Squires, 2009). This approach aligns with culturally responsive research methodologies that honour participants' linguistic rights and enable more authentic expression of experiences (Holmes et al., 2013).

### **Data Recording and Documentation**

With participants' informed consent, all interviews were audio-recorded using digital recording devices to ensure accurate capture of verbal data (Tessier, 2012). Audio recording is essential in narrative research as it preserves the nuances of participants' storytelling, including pauses, emphases, and emotional tone (Halcomb & Davidson, 2006).

In addition to audio recordings, the researcher maintained detailed field notes during and immediately after each interview. These notes documented non-verbal communication such as body language, facial expressions, and emotional responses, as well as contextual information about the interview setting (Phillippi & Lauderdale, 2018). Field notes serve as an important complement to audio

recordings by capturing dimensions of the interview that are not captured through audio alone (Sutton & Austin, 2015).

### **Data Analysis**

The qualitative data collected through interviews were analyzed using thematic analysis, following the systematic six-phase approach developed by Braun and Clarke (2006). Thematic analysis is a flexible and widely used method for identifying, analyzing, and reporting patterns (themes) within qualitative data (Nowell et al., 2017). The phases of analysis were conducted as follows:

Phase 1: Familiarization with the Data

All audio-recorded interviews were transcribed verbatim by the researcher, with careful attention to preserving participants' language choices, including code-switching between Tshivenda and English (McLellan et al., 2003). Transcription was treated as an interpretive act and an initial stage of analysis (Bird, 2005). The researcher then engaged in repeated reading of the transcripts while listening to the audio recordings to achieve deep immersion in the data (Braun & Clarke, 2006).

Phase 2: Generating Initial Codes

Inductive coding was employed to generate initial codes from the data, allowing themes to emerge from participants' narratives rather than being imposed by pre-existing theoretical approaches (Fereday & Muir-Cochrane, 2006). The researcher methodically worked through each transcript, identifying and labeling meaningful segments of data using NVivo 12 software to enable organization and retrieval of coded data (Jackson & Bazeley, 2019). Codes were generated for both the explicit meanings (semantic content) and the underlying ideas and

assumptions (latent content) (Braun & Clarke, 2006).

#### Phase 3: Searching for Themes

Codes were then collated and organized into potential themes by examining relationships and patterns across the coded data (Braun & Clarke, 2006). This phase involved sorting codes into theme piles and considering how different codes combined to form main themes (Vaismoradi et al., 2013). Visual mapping techniques, such as thematic maps, were used to examine relationships between codes and potential themes (Attride-Stirling, 2001).

#### Phase 4: Reviewing Themes

Potential themes were reviewed and refined through a two-level process. First, coded data extracts within each theme were reviewed to ensure internal coherence (Braun & Clarke, 2006). Themes that lacked sufficient data support were collapsed into other themes or discarded. Second, the validity of individual themes in relation to the entire dataset was considered to ensure that the thematic map accurately reflected the meanings evident in the dataset as a whole (Patton, 2015).

#### Phase 5: Defining and Naming Themes

Each theme was clearly defined and named to capture its essence. Detailed analysis was conducted to identify the story that each theme told and how it fit into the broader narrative about indigenous knowledge systems and COVID-19 healing experiences (Braun & Clarke, 2006). Sub-themes were identified where appropriate to provide structure to particularly complex themes (Vaismoradi et al., 2016).

#### Phase 6: Producing the Report

The final phase involved weaving together the analytic narrative with vivid and compelling data extracts that

illustrated each theme (Braun & Clarke, 2006). The analysis moved beyond description to provide interpretation that addressed the research questions and situated findings within the broader scholarly conversation about indigenous knowledge systems and pandemic resilience (Nowell et al., 2017).

Throughout the analysis process, interviews conducted in Tshivenda were analysed in the original language to preserve cultural meanings and linguistic nuances, with careful translation undertaken for reporting purposes (Squires, 2009). Translation was treated as an interpretive process that required cultural sensitivity and consultation when necessary (Santos et al., 2015).

### **Ethical Considerations**

This study adhered to rigorous ethical standards in accordance with the principles outlined in the Declaration of Helsinki and the Belmont Report (World Medical Association, 2013; National Commission for the Protection of Human Subjects, 1979). Informed consent was obtained from all participants through a thorough consent process. Participants received detailed information sheets explaining the study's purpose, procedures, potential risks and benefits, and their rights as research participants (Grady, 2015). Consent forms were provided in both Tshivenda and English, and the researcher ensured that participants fully understood the information before signing (Nijhawan et al., 2013). Participants were informed of their right to withdraw from the study at any time without penalty or negative consequences (Miller & Brody, 2003). Confidentiality and anonymity were maintained throughout the research process and in all publications.

Participants' identities were protected through the use of pseudonyms, and all identifying information was removed from transcripts and research reports (Kaiser, 2009). Data were stored securely in password-protected digital files and locked cabinets accessible only to the researcher (Petrova et al., 2016).

## **Results and Discussions**

This section presents the thematic analysis of qualitative data obtained from in-depth interviews with three participants who recovered from COVID-19 in Thohoyandou without requiring hospitalization. Following Braun and Clarke's (2006) six-phase approach for thematic analysis, the data were methodically coded and organized into coherent themes that illuminate the role of African Indigenous Knowledge Systems (AIKS) in healing practices and resilience during the pandemic. The analysis reveals participants' experiences with traditional remedies, their decision-making processes, and the cultural meanings they attached to their healing journeys. Four major themes emerged from the data: (1) Fear of Hospitalization and the Turn to Traditional Medicine, (2) Diversity of Traditional Healing Practices, (3) Perceived Efficacy and Recovery Narratives, and (4) Cultural Knowledge as a Source of Resilience.

### **Theme 1: Fear of Hospitalization and the Turn to Traditional Medicine**

A dominant theme across all three participant narratives was the deep fear of hospitalization that influenced their decision to pursue traditional healing approaches. Participants articulated deep anxieties about entering medical facilities during the pandemic, driven primarily by perceptions of high mortality rates among hospitalized

COVID-19 patients. This fear was not merely an abstract concern but was grounded in concrete observations of community members who had been admitted to hospitals and subsequently died.

One participant explained that the decision to avoid hospitalization stemmed from witnessing "*many people going to the hospital and not coming back.*" This observation created a powerful deterrent effect, leading to the perception that hospitalization represented a death sentence rather than a pathway to recovery. The widespread media reporting of death tolls, combined with limited information about successful recoveries in formal healthcare settings, reinforced these fears and contributed to a pervasive sense of hopelessness regarding biomedical interventions.

The atmosphere of confusion and uncertainty that marked the early pandemic period further amplified participants' reluctance to seek hospital care. Participants described feeling overwhelmed by conflicting information about COVID-19 treatment, the absence of proven therapeutic interventions, and rapidly changing public health guidance. In this context of medical uncertainty, traditional healing practices emerged as familiar, accessible, and culturally congruent alternatives that offered both physiological and psychological comfort.

The decision to utilize traditional medicine rather than seeking hospital care also reflected issues of trust and cultural alignment. Participants expressed greater confidence in healing systems they understood and had witnessed working throughout their lives compared to biomedical interventions that felt foreign and

impersonal. Traditional healing provided a sense of agency and control in a situation marked by powerlessness, allowing individuals to actively participate in their own healing rather than passively submitting to medical authority.

## **Theme 2: Diversity of Traditional Healing Practices**

The second major theme that emerged from the data was the remarkable diversity of traditional healing practices participants used to manage COVID-19 symptoms. This diversity reflects the rich ethnobotanical knowledge embedded within Vhavenda culture and the adaptive capacity of traditional medicine to address novel health challenges. Participants described utilizing multiple remedies simultaneously or sequentially, often combining different preparation methods and administration routes to maximize therapeutic effects.

Steam inhalation therapy emerged as a nearly universal practice among participants. Participants described preparing steam treatments by boiling water with various additives, including stones, salt, and medicinal plant materials. The practice involved covering one's head with a towel or blanket and inhaling the aromatic steam for extended periods, typically 15 to 30 minutes, multiple times daily. Participants explained that this practice helped to "open the airways," relieve congestion, enable expectoration, and provide immediate symptomatic relief from the respiratory distress associated with COVID-19.

The use of indigenous Vhavenda medicinal plants constituted a central component of participants' healing strategies. Specific plants mentioned included *Tshiumbeumbe*, *Musese*,

*Mufula*, *Musudzungwane*, *Miora*, and *Mubomo*: plants that have been traditionally used within Vhavenda communities to treat influenza-like illnesses. Participants obtained these plants from their own gardens, the surrounding natural environment, or from networks of family members and neighbours who shared medicinal resources during the pandemic. The knowledge of which plants to use, how to prepare them, and in what combinations came primarily from elders, particularly grandmothers and mothers who served as repositories of traditional healing knowledge.

Preparation methods for these indigenous plants varied but typically involved boiling plant materials to create decoctions that were consumed orally, often multiple times per day. Some participants used roots, while others used leaves, bark, or combinations of plant parts. The specific dosages and frequencies were guided by traditional knowledge rather than standardized measurements, with participants adjusting their consumption based on symptom severity and their perceived response to the treatment.

Combination remedies incorporating common household ingredients represented another notable category of traditional healing practices. Participants universally mentioned using a mixture comprising onion, ginger, lemon, honey, and garlic, a formulation that circulated widely through social networks during the pandemic. This remedy was typically prepared by finely chopping or grating the ingredients, combining them in a container, and allowing the mixture to steep overnight to create a syrup-like concoction. Participants consumed this mixture by the spoonful, often several times daily,

particularly when experiencing severe symptoms such as cough, sore throat, or fever.

Additional plant-based remedies mentioned by participants included guava leaves (*Psidium guajava*), which were boiled to create a tea consumed for its purported antiviral and anti-inflammatory properties. Lemongrass tea (*Cymbopogon citratus*) was also frequently utilized, with participants describing it as soothing and helpful for reducing fever and promoting rest. Notably, one participant mentioned using marijuana leaves (*Cannabis sativa*) boiled into a tea, reflecting the incorporation of cannabis into traditional healing repertoires despite its controversial legal status. Other remedies included *Linana* and *Tshinungu*, plants specific to the Vhavenda pharmacopeia whose uses have been passed down through generations.

The diversity of remedies reflects both individual variation in knowledge and access to resources, as well as a pragmatic approach that involves trying multiple interventions simultaneously or sequentially. Participants did not view these diverse remedies as mutually exclusive but rather as additional approaches that could work synergistically to support healing. This pluralistic approach to treatment aligns with traditional African medical epistemologies that embrace intricacy and multiplicity rather than seeking single-cause explanations or monotherapies.

### **Theme 3: Perceived Efficacy and Recovery Narratives**

The third theme centers on participants' perceptions of the efficacy of traditional remedies and their narratives of recovery. All three participants

attributed their survival and recovery to the traditional healing practices they employed, constructing causal narratives that linked their use of indigenous remedies directly to positive health outcomes. These recovery narratives served important functions in validating traditional knowledge, affirming cultural identity, and providing testimony that could guide others facing similar health challenges. Participants described experiencing symptomatic improvement relatively quickly after initiating traditional remedies. Specific improvements mentioned included reduced fever, eased cough and chest congestion, improved breathing, restored appetite, and a gradual return of energy. The timeline of recovery varied among participants, with some reporting notable improvement within three to five days and others describing a more gradual recovery over one to two weeks. Importantly, all participants emphasized that they had recovered completely without requiring hospitalization or oxygen supplementation, which they viewed as powerful evidence of the efficacy of traditional medicine.

The subjective experience of healing was marked by increasing confidence and hope as symptoms improved. Participants described feeling empowered by their active role in self-care and encouraged by visible signs of recovery. The familiarity of the remedies, many of which they had used throughout their lives for various ailments, provided psychological comfort and reduced anxiety. Several participants explicitly contrasted their positive experiences with traditional remedies against the negative outcomes they had observed among family members or community members who

had been hospitalized, reinforcing their conviction that traditional medicine had saved their lives.

Participants also constructed their recovery narratives within broader approaches of ancestral protection and spiritual wellbeing. While the focus of treatment was on physical remedies, participants emphasized the importance of spiritual factors in healing, including prayer, ancestral veneration, and maintaining a positive mental attitude. This integrated understanding of healing reflects traditional African cosmologies that do not separate physical health from spiritual and social well-being. The act of using traditional remedies was thus not merely a physiological intervention but also a way of accessing ancestral wisdom.

It is important to note that participants' attributions of recovery to traditional remedies reflect subjective interpretations rather than objectively verifiable causal relationships. From a biomedical perspective, several alternative explanations could account for their recovery, including mild disease severity, natural immune response, and spontaneous resolution that would have occurred regardless of intervention. However, within participants' meaning-making approaches, the traditional remedies were understood as the primary agents of healing, and this belief held deep significance for their sense of empowerment and cultural affirmation. The perceived efficacy of traditional remedies also had social dimensions. Participants reported sharing information about remedies with family members, neighbours, and broader social networks via phone calls, social media, and word of mouth. This knowledge exchange fostered communities of practice around

traditional healing and strengthened collective resilience during the pandemic. Several participants noted that their recovery stories inspired others to use traditional remedies, creating a cascading effect throughout their social networks.

#### **Theme 4: Cultural Knowledge as a Source of Resilience**

The fourth major theme highlights how African Indigenous Knowledge Systems served as an important source of resilience during the pandemic, extending beyond their purported therapeutic effects. This theme encompasses the psychosocial, cultural, and communal dimensions of traditional healing that enabled participants to cope with the unprecedented crisis.

Intergenerational knowledge transmission emerged as a critical resilience factor. Participants consistently identified elder family members, particularly grandmothers, as the primary sources of knowledge about traditional remedies. These elders served as living repositories of ethnobotanical and therapeutic knowledge accumulated over lifetimes of observation and practice. During the pandemic, when formal healthcare systems were overwhelmed and information was scarce, this intergenerational knowledge proved extremely useful. The act of consulting elders and receiving their guidance provided both practical information and emotional reassurance, strengthening family bonds and affirming the value of cultural knowledge.

The pandemic experience reinforced for many participants the importance of preserving traditional knowledge that they had previously taken for granted or viewed as less relevant in a modernizing society. Faced with a novel pathogen for

which biomedical science initially had no effective treatments, participants experienced a renewed appreciation for the wisdom embedded in traditional healing systems. Participants expressed intentions to ensure that their own children learned about medicinal plants and preparation methods, viewing the pandemic as a wake-up call about the potential need for such knowledge in future crises.

Cultural identity and continuity constituted another dimension of resilience supported by traditional healing practices. Using traditional remedies allowed participants to maintain a connection with Vhavenda cultural heritage during a period of deep social disruption. The pandemic necessitated physical distancing, disrupted traditional social practices, and created feelings of isolation and disconnection. Engaging with traditional healing practices provided a form of cultural continuity and identity affirmation that buffered against the psychological impacts of pandemic-related disruptions.

Community solidarity and mutual support networks organized around traditional knowledge also contributed to resilience. Participants described how neighbours and family members shared medicinal plants, remedies, and information during the pandemic, creating informal support systems that operated parallel to formal healthcare. These networks of reciprocity and mutual aid exemplify the communal orientation that characterizes many African societies, demonstrating how the cultural values of ubuntu (humanness, interconnectedness) manifest in health crisis responses.

The theme of resilience also encompasses participants' sense of

agency and empowerment derived from taking an active role in their own healing. Rather than feeling helpless or dependent on external authorities, participants experienced themselves as capable agents who possessed knowledge and resources to protect their health. This sense of efficacy likely contributed to reduced anxiety and enhanced psychological well-being, both of which can influence immune function and recovery through psychoneuroimmunological mechanisms.

Ultimately, traditional healing practices offered hope and meaning during a time marked by fear and uncertainty. When mainstream media emphasized death tolls and therapeutic limitations, traditional medicine offered an alternative narrative of hope grounded in cultural knowledge and community experience. Participants' recovery stories became testimonies to the power of indigenous knowledge, encouraging others and boosting collective morale within communities.

## **Conclusion**

The thematic analysis reveals that African Indigenous Knowledge Systems played varied roles in healing and resilience during the COVID-19 pandemic in Thohoyandou. The four major themes: fear of hospitalization, driving traditional medicine use, diversity of traditional healing practices, perceived efficacy and recovery narratives, and cultural knowledge as a source of resilience, illuminate the complex interplay of practical, psychological, cultural, and social factors that shaped participants' pandemic experiences. While participants' recovery cannot be definitively attributed to traditional

remedies without rigorous scientific investigation, their experiences underscore the significance of indigenous knowledge systems in providing accessible, culturally congruent, and psychologically supportive responses to health crises. These findings underscore the importance of lay knowledge while emphasizing the need for respectful and

rigorous scientific evaluation of traditional healing practices to better understand their potential contributions to health and well-being.

### **Implication for Policy**

There is a need for governments to invest in indigenous knowledge and protect it as modernity threatens their survival.

### **References**

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bodeker, G., Mullally, S., & Naidoo, V. (2020). The evolution of African traditional medicine in South Africa: Integration with the formal health sector. In M. Heinrich & A. K. Jäger (Eds.), *Ethnopharmacology* (pp. 319-332). Wiley.
- Boateng, M. A., & Avornyo, C. (2021). COVID-19 and herbal remedies in Africa: A systematic review. *Journal of Additional and Integrative Medicine*, 18(4), 677-688.
- Chukwuma, E., Adekoya, A. O., & Okafor, C. J. (2021). Traditional medicine utilization during COVID-19 pandemic in Nigeria: A cross-sectional survey. *African Health Sciences*, 21(3), 1302-1310.
- Cock, I. E., & van Vuuren, S. F. (2020). The potential of selected South African plants with anti-Klebsiella activity for the treatment and prevention of infections. *BMC Additional Medicine and Therapies*, 20, 374.
- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Biomedica*, 91(1), 157-160.
- Dong, E., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *The Lancet Infectious Diseases*, 20(5), 533-534.
- Ekor, M. (2021). Traditional Medicines in Africa during the COVID-19 Pandemic: Facts and Fallacies. *The Pan African Medical Journal*, 38, 177.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129-136.
- Freeman, M., & Motsei, M. (2022). Planning health care in South Africa: Is there a role for traditional healers? *International Journal of Health Planning and Management*, 37(1), 158-175.
- Gavi, S., Tshitangano, T. G., & Maphasha, T. E. (2022). Traditional health practitioners' role during COVID-19 pandemic in Vhembe District, Limpopo Province, South Africa. *African Journal of Primary Health Care & Family Medicine*, 14(1), e1-e7.

- Gqaleni, N., Moodley, I., Kruger, H., Ntuli, A., & McLeod, H. (2021). Traditional and additional medicine: Policy and public health views. In *South African Health Review 2021* (pp. 189-200). Health Systems Trust.
- Gyasi, R. M., Abass, K., Adu-Gyamfi, S., & Accam, B. T. (2021). Additional and alternative medicine use during the COVID-19 pandemic in Ghana: A nationally representative cross-sectional survey. *Social Science & Medicine*, 285, 114281.
- Gyebi, G. A., Ogunro, O. B., Adegunloye, A. P., Ogunyemi, O. M., & Afolabi, S. O. (2021). Potential inhibitors of coronavirus 3-chymotrypsin-like protease (3CLpro): An in silico screening of alkaloids and terpenoids from African medicinal plants. *Journal of Biomolecular Structure and Dynamics*, 39(9), 3396-3408.
- James, P. B., Wardle, J., Steel, A., & Adams, J. (2018). Traditional, additional and alternative medicine use in Sub-Saharan Africa: A systematic review. *BMJ Global Health*, 3(5), e000895.
- Kasaven, L. S., Away, A., Maharaj, A., Zaw, W., & Khine, W. W. T. (2020). Knowledge, attitudes, and practices towards COVID-19 amongst Ethiopians during the early phase of the pandemic: A cross-sectional study. *PLoS ONE*, 15(10), e0240415.
- Kasilo, O. M. J., & Trapsida, J. M. (2019). Decade of African traditional medicine, 2001–2010. *African Health Monitor*, 14, 30-35.
- Kirmayer, L. J., Gone, J. P., & Moses, J. (2021). Rethinking historical trauma. *Transcultural Psychiatry*, 58(1), 3-24.
- Mani, J. S., Johnson, J. B., Steel, J. C., Broszczak, D. A., Neilsen, P. M., Walsh, K. B., & Naiker, M. (2020). Natural product-derived phytochemicals as potential agents against coronaviruses: A review. *Virus Research*, 284, 197989.
- Maroyi, A. (2020). Use of traditional medicines for treatment of respiratory diseases in rural areas of Eastern Cape Province, South Africa. *African Journal of Primary Health Care & Family Medicine*, 12(1), e1-e10.
- Mhango, M., Dzobo, M., Chitungo, I., & Dzinamarira, T. (2021). COVID-19 risk factors among health workers: A rapid review. *Safety and Health at Work*, 11(3), 262-265.
- Mpofu, E. (2021). Health psychology in Africa: Toward indigenous views. In E. Mpofu (Ed.), *Rehabilitation and health assessment: Applying ICF guidelines* (pp. 39-56). Springer.
- Mudau, L. S., Bapela, N. B., & Chivandi, E. (2022). Views on African indigenous plants as sources of phytomedicines against COVID-19. *Frontiers in Pharmacology*, 13, 815956.
- Mukandiwa, L., Ahmed, A., Elujoba, A., & Sibanda, M. (2021). A review of medicinal plants used in Southern African traditional medicine for the treatment and management of viral respiratory tract infections. *Journal of Ethnopharmacology*, 280, 114476.
- Nakata, M. N., Nakata, V., Byrne, A., McKeough, J., Gardiner, G., & Gibson, J. (2021). Indigenous knowledge systems and research: Mapping the context. In M. N.

Nakata et al. (Eds.), *Indigenous knowledge and the integration of knowledge systems* (pp. 1-20). Routledge.

Naseer, S., Hussain, S., Naeem, N., Pervaiz, M., & Rahman, M. (2018). The phytochemistry and medicinal value of *Psidium guajava* (guava). *Clinical Phytoscience*, 4, 32.

Nkeck, J. R., Ndoadougue, A. L., Kago-Tagne, F., & Mboua, P. C. (2020). Herbal medicine to fight COVID-19 in Cameroon and Africa: An assessment of social media content. *Pan African Medical Journal*, 37, 327.

Nordling, L. (2020). Unproven herbal remedy against COVID-19 could fuel drug-resistant malaria, scientists warn. *Science*, 368(6490), 457.

Olakunde, B. O., Adeyinka, D. A., Mavegam, O. B., Ogundipe, T., Kowobari, O. E., & Akinmurele, T. (2021). Behavioral response to COVID-19 in Nigeria: A mixed-methods study. *Preventive Medicine Reports*, 24, 101587.

Oleribe, O. O., Salako, B. L., Ka, M. M., Akpalu, A., McConnochie, M., Encourage, M., & Taylor-Robinson, S. D. (2020). Ebola virus disease epidemic in West Africa: Lessons learned and issues arising from West African countries. *Clinical Medicine*, 15(1), 54-57.

Peltzer, K., Pengpid, S., Puckpinyo, A., Yi, S., & Vu Anh, L. (2019). The utilization of traditional, additional and alternative medicine for non-communicable diseases and mental disorders in health care patients in Cambodia, Thailand and Vietnam. *BMC Additional and Alternative Medicine*, 19, 92.

Semenya, S. S., & Letsela, T. (2021). Ethnobotanical survey of plants used by Bapedi traditional healers to treat COVID-19 related symptoms in Limpopo Province, South Africa. *Plants*, 10(9), 1965.

Semenya, S. S., & Maroyi, A. (2018). Medicinal plants used for the treatment of tuberculosis by Bapedi traditional healers in three districts of the Limpopo Province, South Africa. *African Journal of Traditional, Additional and Alternative Medicines*, 15(4), 316-323.

Shah, G., Shri, R., Panchal, V., Sharma, N., Singh, B., & Mann, A. S. (2021). Scientific basis for the therapeutic use of *Cymbopogon citratus*, stapf (Lemon grass). *Journal of Advanced Pharmaceutical Technology & Research*, 2(1), 3-8.

Sodi, T., Ndlovu, M., & Nkosi, V. (2020). Indigenous African healing practices: Contemporary issues and challenges. In T. Sodi, F. Terblanche, C. Fourie, & M. Gobodo-Madikizela (Eds.), *Decolonising community psychology: Global views* (pp. 235-250). Springer.

Telefo, P. B., Lienou, L. L., Yemele, M. D., Lemfack, M. C., Mouokeu, C., Goka, C. S., & Moundipa, P. F. (2020). Ethnopharmacological survey of plants used for the treatment of female infertility in Baham, West Cameroon. *Journal of Ethnopharmacology*, 247, 112238.

- Tilwani, Y. M., Shukla, N. P., & Rao, C. V. (2021). Medicinal plants used in treatment of respiratory ailments: A review. *International Journal of Herbal Medicine*, 9(1), 54-61.
- Tolo, C. U., Ogwang, P. E., Yekka, C. C., & Nakityo, R. (2020). The current status of research on herbal medicines for COVID-19 treatment in Africa. *Pharmaceutical Sciences Asia*, 47(4), 311-319.
- Ungar, M. (2018). System-wide resilience: Principles and processes for a science of change in contexts of adversity. *Ecology and Society*, 23(4), 34.
- Wade, D. T., & Halligan, P. W. (2017). The biopsychosocial model of illness: A model whose time has come. *Clinical Rehabilitation*, 31(8), 995-1004.
- World Health Organization. (2013). *WHO traditional medicine strategy 2014-2023*. WHO.
- World Health Organization. (2019). *WHO global report on traditional and additional medicine 2019*. WHO.
- World Health Organization. (2020). *WHO supports scientifically-proven traditional medicine*. WHO.
- World Health Organization. (2022). *WHO global report on traditional and additional medicine 2022*. WHO.
- References**
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18, 1-8.
- Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405.
- Bergen, N., & Labonté, R. (2020). "Everything is perfect, and we have no problems": Detecting and limiting social desirability bias in qualitative research. *Qualitative Health Research*, 30(5), 783-792.
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219-234.
- Bird, C. M. (2005). How I stopped dreading and learned to love transcription. *Qualitative Inquiry*, 11(2), 226-248.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to improve trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Bradburn, N. M., Rips, L. J., & Shevell, S. K. (1987). Answering autobiographical questions: The impact of memory and inference on surveys. *Science*, 236(4798), 157-161.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

- Candela, A. G. (2019). Exploring the function of member checking. *The Qualitative Report*, 24(3), 619-628.
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement approach. *The Qualitative Report*, 21(5), 811-831.
- Chilisa, B. (2012). *Indigenous research methodologies*. Sage Publications.
- Clandinin, D. J. (2013). *Engaging in narrative inquiry*. Routledge.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-92.
- Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In *The interpretation of cultures: Selected essays* (pp. 3-30). Basic Books.
- Grady, C. (2015). Enduring and emerging challenges of informed consent. *New England Journal of Medicine*, 372(9), 855-862.
- Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary? *Applied Nursing Research*, 19(1), 38-42.
- Hassan, E. (2006). Recall bias can be a threat to retrospective and prospective research designs. *The Internet Journal of Epidemiology*, 3(2), 339-412.
- Hayden, J. A. (2009). Introduction to health behaviour theory. Jones & Bartlett Learning.
- Holmes, P., Fay, R., Andrews, J., & Attia, M. (2013). Researching multilingually: New theoretical and methodological directions. *International Journal of Applied Linguistics*, 23(3), 285-299.
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher*, 20(4), 12-17.
- Jackson, K., & Bazeley, P. (2019). *Qualitative data analysis with NVivo* (3rd ed.). Sage Publications.
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632-1641.
- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a approach for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954-2965.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Makhado, L., & Davhana-Maselesele, M. (2016). Knowledge and uptake of cervical cancer screening services among women aged 25–65 years attending primary healthcare clinics in Vhembe district, Limpopo Province, South Africa. *African Journal of Primary Health Care & Family Medicine*, 8(1), 1-8.

- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753-1760.
- McLellan, E., MacQueen, K. M., & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, 15(1), 63-84.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Miller, F. G., & Brody, H. (2003). A analysis of clinical equipoise: Therapeutic misconception in the ethics of clinical trials. *Hastings Centre Report*, 33(3), 19-28.
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research*. US Department of Health and Human Services.
- Nijhawan, L. P., Janodia, M. D., Muddukrishna, B. S., Bhat, K. M., Bairy, K. L., Udupa, N., & Musmade, P. B. (2013). Informed consent: Issues and challenges. *Journal of Advanced Pharmaceutical Technology & Research*, 4(3), 134-140.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13.
- Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *The Qualitative Report*, 13(4), 695-705.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Sage Publications.
- Petrova, E., Dewing, J., & Camilleri, M. (2016). Confidentiality in participatory research: Challenges from one study. *Nursing Ethics*, 23(4), 442-454.
- Phillippi, J., & Lauderdale, J. (2018). A guide to field notes for qualitative research: Context and conversation. *Qualitative Health Research*, 28(3), 381-388.
- Rabionet, S. E. (2011). How I learned to design and conduct semi-structured interviews: An ongoing and continuous journey. *The Qualitative Report*, 16(2), 563-566.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Sage Publications.
- Santos, H. P., Black, A. M., & Sandelowski, M. (2015). Timing of translation in cross-language qualitative research. *Qualitative Health Research*, 25(1), 134-144.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples* (2nd ed.). Zed Books.
- Squires, A. (2009). Methodological challenges in cross-language qualitative research: A research review. *International Journal of Nursing Studies*, 46(2), 277-287.

- Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226-231.
- Tessier, S. (2012). From field notes, to transcripts, to tape recordings: Evolution or combination? *International Journal of Qualitative Methods*, 11(4), 446-460.
- Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative approach. *Journal of Advanced Nursing*, 48(4), 388-396.
- Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work*, 11(1), 80-96.
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6(5), 100-110.
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Consequences for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
- World Health Organization. (2020). *Coronavirus disease (COVID-19): Masks*. WHO.
- World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, 310(20), 2191-2194.