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EDITORIAL

THE PRACTICE OF KNOWLEDGE MANAGEMENT POST-COVID-19: LOOKING BACKWARD FOR FUTURE IMPLEMENTATION

Johnny Masego Pietersen[1]

The advent of COVID-19 disrupted the world in all facets of life. Knowledge Management (KM) was not an exception, particularly since all organisations manage information and the use of knowledge. To reduce the spread of the novel disease COVID-19, governments had to implement measures like national lockdowns and restrictions on some goods and services (Mkhize and Thusi 2023). These restrictive activities to control the spread of severe acute respiratory coronavirus 2 (COVID-19), followed the declaration of COVID-19 as a pandemic by the World Health Organisation (WHO) on 11 March 2020. The public sector was also affected differently all over the world, but it was common for governments to operate mainly with essential services. However, all other public institutions had to operate with officials working from home. Thus, the public sector was open, implying that technology would be the main conduit.

KM was one of the critical fields that became of concern since officials had to access information from home and make decisions. Dayal's article states that the South African government-wide KM strategy and framework of 2019 defines KM as a process and activities that involve collecting, collating, sharing, packaging, dissemination, and use of knowledge in decision-making and enhancing the processes as well as efficiency of service delivery within departments and public service. KM evolves rapidly as it is linked with technological developments. Since technology is applicable in both private and public sectors, KM is a constant phenomenon in issues of governance, public administration, Public-Private Partnerships, and technological innovations.

This journal issue is predominantly occupied by articles on KM for two main reasons. First, KM attracted attention during COVID-19 when the value of knowledge was explicitly acknowledged. Second, policy considerations for KM as a discipline and practice are not new; as a result, there is a need for institutionalisation beyond COVID-19 or any pandemic and disaster. In this regard, volume 6 of the

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Africa Journal of Public Sector Development and Governance contributes to the generation of knowledge about KM and its implications for the public sector post-pandemic. Often, governments have disaster management strategies, but COVID-19 seems to have exposed their inadequacy to mobilise resources and ensure participation by all stakeholders in the intergovernmental contexts.

Allee (2011) posits that knowledge is inherently about questions of definitions, nature, orders, roles, dynamic relationships and best practices. The articles covered in this edition have invariably discussed some of these aspects of knowledge and the extent to which they are incubated in organisations, institutions, processes, traditions and cultures.

The published articles focus on the post-COVID-19 era as an indication of optimism around the end of the COVID-19 pandemic but also an anticipation of similar disruptors. As such, a glimpse of the post-COVID-19 trajectory should provide a reflection on lessons and practice of models that emanate from earlier lessons as well as the prevention mechanisms. KM is a critical field to embody such emergent knowledge in the form of occurrences, decisions, lessons and possible scenarios.

Mutonda *et al*. explore the implementation of ISO 9001:2015 to measure the implementation of KM in the Kenya School of Government. This study is applicable to all organisations since all countries and institutions must have some unique standards to adhere to. Adherence to standards that are pertinent to KM assists with the necessary competencies to respond to disruptive pandemics like COVID-19. The authors also highlighted the importance of knowledge sharing. Based on the policy considerations and knowledge sharing, among others, the Kenya School of Government managed to develop training manuals during COVID-19 and continued with virtual training as an attestation of available technology and innovation. A negative aspect was an inability to conduct exit interviews with retiring employees during lockdowns as retirees did not have technological access, unlike serving employees for whom plans were made. Also, there was less participation in international conferences, which indicates that organisers were slow to catch up with means for online conferences.

Dayal interrogates the process and practices behind KM in the South African government, with reference to the management of the COVID-19 pandemic. The author indicates that KM was not adequately conceptualised in South Africa before 2019. Thus, the adoption of *Government-wide KM Strategy and Framework* in 2020 (KM strategy), led by the Department of Public Service and Administration, coincided with the inception of COVID-19. However, the KM strategy was developed in response to the National Development Plan: Vision 2030 (2012). Although the KM strategy seems to have been adopted late in relation to COVID-19 in 2020, the discussions leading to its adoption may have been useful in managing issues of working remotely and access to information and associated protocols. The article underscores the institutionalisation of KM but warns against the obstacles, which are bureaucratic culture, neglected relational function of knowledge and governance of multiple priorities in generating knowledge. In this regard, KM practice is relevant for COVID-19.

E-learning and virtual training became necessary for the continuation of Education, Training, and Development during the pandemic. An article by Musonda *et al.* was concerned about the underutilisation of e-learning as a sustainable KM system for Higher Education in the COVID-19 era in Zambia. The challenges in this post-COVID-19 period are two-fold: whether to adopt e-learning fully

or to revert to face-to-face training mode. Clearly, the lessons learnt and the trajectory of the world after COVID-19 require an integration of both modes by delivering blended learning and training modes.

Molala and Matseke placed their investigation in the health sector by analysing the health information exchange platform and healthcare workforce, respectively. Molala analysed the efficacy of health exchange systems in ensuring accurate information about patients and quality health care. Thus, the shared information about patients among practitioners is recommended for knowledge of patients' treatment history and correct interventions. Matseke was prompted by the centrality of healthcare workers as essential services during the pandemic. As such, taking stock of the healthcare workforce was necessary to determine the adequacy or lack of it. The article confirms that the South African healthcare workforce (medical doctors, nurses, and midwives) was lower than the required international norm as determined by the WHO. To illustrate, in March 2020, the South African ratio of healthcare workers per 1000 population was 2.87, which was lower than the 4.45 determined by the WHO. It is therefore necessary to accelerate various methods of recruitment in line with the *2030 Human Resources for the Health Strategy in South Africa.* A stark lesson from the pandemic is that planning for disasters must be made in advance, hence the need to consider an appropriate workforce for disasters and pandemics and the level of their disruptions.

Other articles address the issues of governance and public policy. Williams and Poshai tackle the urban housing policy community in Harare, Zimbabwe. They conclude that the housing policy community is beset with conflicts and powerplay among the actors to the extent that adequate and equitable housing is not provided to citizens. More importantly, it is difficult to implement housing policy imperatives such as affordable housing. Mdhluli and Jili evaluate the practice of constitutional basic values and principles of public administration in the Zululand district of KwaZulu-Natal in South Africa. Local government is an important sphere of government that is closest to the citizens. As a result, municipalities must actively provide services in accordance with good values and principles as provided for on section 195 of the Constitution of South Africa. The authors observe that although the Zululand municipality experiences frequent community protests about service delivery issues; the municipality shows efforts to implement service delivery improvement initiatives, development-oriented activities and encouragement of public participation.

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ÉDITORIAL

PRATIQUE DE LA GESTION DES CONNAISSANCES APRÈS LA PANDÉMIE DE COVID-19: UN REGARD EN ARRIÈRE POUR UNE MISE EN ŒUVRE FUTURE

Johnny Masego Pietersen

L'avènement de la COVID-19 a bouleversé le monde dans tous les domaines de la vie. La gestion des connaissances (GC) n'a pas fait exception, d'autant plus que toutes les organisations gèrent l'information et l'utilisation des connaissances. Pour réduire la propagation de la nouvelle maladie COVID-19, les gouvernements ont dû mettre en œuvre des mesures telles que des fermetures nationales et des restrictions sur certains biens et services (Mkhize et Thusi 2023). Ces activités restrictives visant à contrôler la propagation d'un coronavirus respiratoire aigu sévère 2 (COVID-19) ont fait suite à la déclaration de la COVID-19 comme pandémie par l'Organisation mondiale de la santé (OMS) le 11 mars 2020. Le secteur public a également été touché différemment dans le monde entier, mais il était courant que les gouvernements fonctionnent principalement avec des services essentiels. Cependant, toutes les autres institutions publiques ont dû fonctionner avec des fonctionnaires travaillant à domicile. Par conséquent, le secteur public est ouvert ; ce qui implique que la technologie en sera le principal vecteur.

La gestion des connaissances a été l'un des domaines critiques qui ont suscité des inquiétudes, car les fonctionnaires devaient accéder à l'information depuis leur domicile et prendre des décisions. L'article de Dayal indique que la stratégie et le cadre de gestion des connaissances du gouvernement sud-africain de 2019 définissent la gestion des connaissances comme étant un processus et des activités qui impliquent la collecte, le rassemblement, le partage, la présentation, la diffusion et l'utilisation des connaissances dans la prise de décision et l'amélioration des processus ainsi que de l'efficacité de la prestation de services au sein des ministères et de la fonction publique. La gestion des connaissances évolue rapidement car elle est liée aux développements technologiques. La technologie étant applicable dans les secteurs privé et public, la gestion des connaissances représente un phénomène constant dans les questions de gouvernance, d'administration publique, de partenariats public-privé et d'innovations technologiques.

Ce numéro de la revue est principalement occupé par des articles traitant de la gestion des connaissances, et ce pour deux raisons principales. Tout d'abord, la gestion des connaissances a attiré l'attention pendant la COVID-19, lorsque la valeur des connaissances a été explicitement reconnue. Deuxièmement, les

considérations politiques relatives à la gestion des connaissances en tant que discipline et pratique ne sont pas nouvelles ; par conséquent, il est nécessaire d'institutionnaliser la gestion des connaissances au-delà de la COVID-19 ou de toute autre pandémie ou catastrophe. À cet égard, le volume 6 de la revue scientifique Africa Journal of Public Sector Development and Governance contribue à la production de connaissances sur la gestion des connaissances et ses implications pour le secteur public après une pandémie. Souvent, les gouvernements disposent de stratégies de gestion des catastrophes, mais la COVID-19 semble avoir mis en évidence leur incapacité à mobiliser des ressources et à garantir la participation de toutes les parties prenantes dans les contextes intergouvernementaux.

Allee (2011) affirme que la connaissance est intrinsèquement liée à des questions de définitions, de nature, d'ordres, de rôles, de relations dynamiques et de meilleures pratiques. Les articles figurant dans cette édition ont invariablement abordé certains de ces aspects de la connaissance et la mesure dans laquelle ils sont incubés dans les organisations, les institutions, les processus, les traditions et les cultures.

Les articles publiés se concentrent sur l'ère post COVID-19, signe d'optimisme quant à la fin de la pandémie COVID-19, mais également d'anticipation de perturbateurs similaires. Ainsi, un aperçu de la trajectoire post-COVID-19 devrait permettre de se pencher sur les leçons et la pratique des modèles qui émanent des leçons précédentes, ainsi que sur les mécanismes de prévention. La gestion des connaissances est un domaine essentiel permettant d'intégrer ces connaissances émergentes sous la forme d'événements, de décisions, d'enseignements et de scénarios possibles.

Mutonda et al. étudient la mise en œuvre de la norme ISO 9001:2015 pour mesurer la mise en œuvre de la gestion des connaissances à la Kenya School of Government. Cette étude est applicable à toutes les organisations, car tous les pays et toutes les institutions doivent respecter des normes particulières. L'adhésion à des normes pertinentes en matière de gestion des connaissances permet d'acquérir les compétences nécessaires à la lutte contre des pandémies perturbatrices telles que la COVID-19. Les auteurs ont également souligné l'importance du partage des connaissances. Sur la base des considérations politiques et du partage des connaissances, entre autres, la Kenya School of Government est parvenue à élaborer des manuels de formation pendant la COVID-19 et a poursuivi la formation organisée par vidéoconférence, ce qui témoigne de la technologie et de l'innovation disponibles. Un aspect négatif a été l'impossibilité de mener des entretiens de fin de carrière avec les employés partant à la retraite pendant les périodes de confinement, car les retraités n'avaient pas d'accès technologique, contrairement aux employés en service pour lesquels des plans avaient été élaborés. En outre, la participation aux conférences internationales a été moindre, ce qui indique que les organisateurs ont été lents à se doter de moyens permettant d'organiser des conférences en ligne.

Dayal s'interroge sur le processus et les pratiques qui sous-tendent la gestion des connaissances au sein du gouvernement sud-africain, en se référant à la gestion de la pandémie de COVID-19. L'auteur indique que la gestion des connaissances n'a pas été correctement conceptualisée en Afrique du Sud avant 2019. Ainsi, l'adoption d'une *stratégie et d'un cadre de gestion des connaissances à l'échelle du gouvernement en 2020* (stratégie de gestion des connaissances), sous l'égide du ministère de la fonction publique et de l'administration, a coïncidé avec le début de la pandémie de COVID-19. Toutefois, la stratégie de gestion des connaissances a été élaborée en réponse au plan de développement national: Vision 2030 (2012). Bien que la stratégie de gestion des connaissances semble avoir été adoptée tardivement par rapport à la COVID-19 en 2020, les débats qui ont conduit à son adoption peuvent avoir été utiles pour gérer les questions du travail à distance et de l'accès à l'information, ainsi que les protocoles qui y sont associés. L'article souligne l'institutionnalisation de la gestion des connaissances, mais met en garde contre les

obstacles que sont la culture bureaucratique, la fonction relationnelle négligée des connaissances et la gestion de priorités multiples dans la production de connaissances. À cet égard, la pratique de la gestion des connaissances est pertinente dans le cas de la COVID-19.

L'apprentissage en ligne et la formation organisée par vidéoconférence sont devenus nécessaires pour poursuivre l'éducation, la formation et le développement pendant la pandémie. Un article de Musonda *et al*. s'inquiète de la sous-utilisation de l'apprentissage en ligne en tant que système durable de gestion des connaissances pour l'enseignement supérieur à l'ère de la COVID-19 en Zambie. Les défis à relever dans cette période post-COVID-19 sont de deux ordres : adopter pleinement l'apprentissage en ligne ou revenir au mode de formation en face-à-face. Il est clair que les leçons tirées et la trajectoire du monde après COVID-19 exigent une intégration des deux modes en proposant des modes d'apprentissage et de formation mixtes.

Molala et Matseke ont placé leur enquête dans le secteur de la santé en analysant respectivement la plateforme d'échange d'informations sanitaires et le personnel de santé. Molala a analysé l'efficacité des systèmes d'échange d'informations sur la santé en vue de garantir des informations précises sur les patients et des soins de santé de qualité. Ainsi, le partage d'informations sur les patients entre les praticiens est recommandé pour connaître les antécédents thérapeutiques des patients et les interventions correctes. L'étude de Matseke a été motivée par le rôle central des travailleurs de la santé en tant que services essentiels pendant la pandémie. À ce titre, il était nécessaire de faire le point sur le personnel de santé afin de déterminer s'il était adéquat ou non. L'article confirme que le personnel de santé sud-africain (médecins, infirmières et sages-femmes) était inférieur à la norme internationale requise, telle que définie par l'OMS. À titre d'exemple, en mars 2020, le ratio sud-africain de personnel de santé pour 1 000 habitants était de 2,87, ce qui était inférieur aux 4,45 déterminés par l'OMS. En conséquence, il est nécessaire d'accélérer les différentes méthodes de recrutement conformément à la *stratégie 2030 des ressources humaines pour la santé en Afrique du Sud*. La pandémie nous a appris que la planification des catastrophes doit être faite à l'avance, d'où la nécessité de prévoir une main-d'œuvre appropriée pour les catastrophes et les pandémies et le niveau des perturbations qu'elles entraînent.

D'autres articles abordent les questions de gouvernance et de politique publique. Williams et Poshai s'intéressent à la communauté de la politique du logement urbain à Harare (Zimbabwe). Ils concluent que la communauté de la politique du logement est en proie à des conflits et à des jeux de pouvoir entre les acteurs, à tel point que les citoyens ne bénéficient pas d'un logement adéquat et équitable. Plus important encore, il est difficile de mettre en œuvre les impératifs de la politique du logement tels que le logement abordable. Mdhluli et Jili évaluent la pratique des valeurs et principes constitutionnels fondamentaux de l'administration publique dans le district de Zululand du KwaZulu-Natal en Afrique du Sud. Les collectivités locales constituent une sphère importante du gouvernement, la plus proche des citoyens. Par conséquent, les municipalités doivent activement fournir des services en accord avec les valeurs et principes de base, comme le prévoit l'article 195 de la Constitution sud-africaine. Les auteurs observent que, bien que la municipalité de Zululand soit confrontée à de fréquentes protestations de la part de la communauté concernant les problèmes de prestation de services, elle s'efforce de mettre en œuvre des initiatives d'amélioration de la prestation de services, des activités axées sur le développement et l'encouragement de la participation du public.

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EDITORIAL
A PRÁTICA DA GESTÃO DO CONHECIMENTO PÓS-COVID-19: RETROSPECTIVA PARA A IMPLEMENTAÇÃO FUTURA

Johnny Masego Pietersen

O advento do COVID-19 veio perturbar o mundo em todas as facetas da vida. A Gestão do Conhecimento (KM) não foi excepção, especialmente porque todas as organizações gerem a informação e a utilização do conhecimento. Para reduzir a propagação da nova doença COVID-19, os governos tiveram de aplicar medidas como confinamentos nacionais e restrições a alguns bens e serviços (Mkhize e Thusi 2023). Estas actividades restritivas para controlar a propagação de um coronavírus respiratório agudo grave 2 (COVID-19) seguiram-se à declaração do COVID-19 como pandemia pela Organização Mundial de Saúde (WHO) em 11 de Março de 2020. O sector público também foi afectado de forma diferente em todo o mundo, mas era comum que os governos operassem principalmente com serviços essenciais. No entanto, todas as outras instituições públicas tiveram de operar com funcionários a trabalhar de casa. Assim, o sector público estava aberto, o que implicava que a tecnologia seria o principal canal.

A KM foi um dos domínios críticos que se tornou preocupante, uma vez que os funcionários tinham de aceder à informação a partir de casa e tomar decisões. O artigo de Dayal afirma que a estratégia e o quadro de KM do governo Sul-Africano de 2019 define a KM como um processo e actividades que envolvem a recolha, a compilação, a partilha, o acondicionamento, a divulgação e a utilização de conhecimentos na tomada de decisões e na melhoria dos processos, bem como na eficiência da prestação de serviços nos departamentos e serviços públicos. A KM evolui rapidamente, uma vez que está ligada aos desenvolvimentos tecnológicos. Uma vez que a tecnologia é aplicável tanto no sector privado como no público, a gestão do conhecimento é um fenómeno constante em questões de governação, administração pública, Parcerias Público-Privadas e inovações tecnológicas.

Esta edição da revista é predominantemente ocupada por artigos sobre KM por duas razões principais. Em primeiro lugar, a KM atraiu a atenção durante o COVID-19, quando o valor do conhecimento foi explicitamente reconhecido. Em segundo lugar, as considerações políticas sobre a KM enquanto disciplina e prática não são novas; por conseguinte, é necessário institucionalizá-las para além do COVID-19 ou de qualquer pandemia e catástrofe. A este respeito, o volume 6 da Revista Africana de Desenvolvimento e Governação do Sector Público contribui para a geração de conhecimentos sobre a KM e as suas implicações para o sector público pós-pandemia. Muitas vezes, os governos têm estratégias de gestão de catástrofes, mas o COVID-19 parece ter exposto a sua inadequação para mobilizar recursos e assegurar a participação de todas as partes interessadas nos contextos inter-governamentais.

Allee (2011) afirma que o conhecimento é inerentemente sobre questões de definições, natureza, ordens, papéis, relações dinâmicas e melhores práticas. Os artigos abordados nesta edição discutiram invariavelmente alguns destes aspectos do conhecimento e a medida em que estão incubados em organizações, instituições, processos, tradições e culturas.

Os artigos publicados concentram-se na era pós-COVID-19 como uma indicação de optimismo em relação ao fim da pandemia do COVID-19, mas também uma antecipação de perturbações semelhantes. Como tal, um relance da trajectória pós-COVID-19 deve proporcionar uma reflexão sobre as lições e a prática de modelos que emanam de lições anteriores, bem como sobre os mecanismos de prevenção. A KM é um domínio fundamental para incorporar esse conhecimento emergente sob a forma de ocorrências, decisões, lições e cenários possíveis.

Mutonda et al. exploram a implementação do padrão ISO 9001:2015 para medir a implementação da KM na Escola de Governo do Quénia. Este estudo é aplicável a todas as organizações, uma vez que todos os países e instituições têm de respeitar alguns padrões únicos. A adesão a padrões que são pertinentes para a KM ajuda a obter as competências necessárias para responder a pandemias disruptivas como o COVID-19. Os autores sublinharam também a importância da partilha de conhecimentos. Com base nas considerações políticas e na partilha de conhecimentos, entre outros, a Escola de Governo do Quénia conseguiu desenvolver manuais de formação durante o COVID-19 e continuou com a formação virtual como um atestado da tecnologia e inovação disponíveis. Um aspecto negativo foi a impossibilidade de realizar entrevistas de saída com os trabalhadores que se reformaram durante os períodos de confinamento, uma vez que os reformados não tinham acesso à tecnologia, ao contrário dos trabalhadores no activo para os quais foram feitos planos. Além disso, registou-se uma menor participação em conferências internacionais, o que indica que os organizadores demoraram a adoptar os meios necessários para as conferências online.

Dayal interroga o processo e as práticas subjacentes à KM no governo Sul-Africano, com referência à gestão da pandemia do COVID-19. O autor indica que a KM não foi adequadamente conceptualizada na África do Sul antes de 2019. Assim, a adopção da Estratégia e do Quadro de KM a nível governamental em 2020 (estratégia de KM), liderada pelo Departamento da Função e Administração Públicas, coincidiu com o início do COVID-19. No entanto, a estratégia de KM foi desenvolvida em resposta ao Plano de Desenvolvimento Nacional: Visão 2030 (2012). Embora a estratégia de KM pareça ter sido adoptada tardiamente em relação ao COVID-19 em 2020, os debates que conduziram à sua adopção podem ter sido úteis para gerir as questões do trabalho à distância e do acesso à informação e aos protocolos associados. O artigo sublinha a institucionalização de KMo, mas alerta para os obstáculos, que são a cultura burocrática, a função relacional negligenciada do conhecimento e a governação de múltiplas prioridades na criação de conhecimento. Neste contexto, a prática de KM é relevante para o COVID-19.

A formação virtual e a aprendizagem electrónica tornaram-se necessárias para a continuação da Educação, Formação e Desenvolvimento durante a pandemia. Um artigo de Musonda et al. preocupou-se com a sub-utilização da aprendizagem electrónica como um sistema de gestão sustentável para o ensino superior na era do COVID-19 na Zâmbia. Os desafios neste período pós-COVID-19 são duplos: adoptar plenamente a aprendizagem electrónica ou voltar ao modo de formação presencial. É evidente que as lições aprendidas e a trajectória do mundo após o COVID-19 exigem uma integração de ambos os modos através da oferta de modos de aprendizagem e formação combinados.

Molala e Matseke centraram a sua investigação no sector da saúde, analisando a plataforma de partilha de informações sobre saúde e a força de trabalho no sector da saúde, respectivamente. Molala analisou a eficácia dos sistemas de partilha de saúde para garantir informações exactas sobre os doentes e cuidados de saúde de qualidade. Assim, a partilha de informações sobre os doentes entre os profissionais é recomendada para o conhecimento do historial de tratamento dos doentes e para intervenções correctas. Matseke foi motivado pela centralidade dos profissionais de saúde como serviços essenciais durante a pandemia. Assim, era necessário fazer um balanço da força de trabalho no sector dos cuidados de saúde para determinar a sua adequação ou a sua falta. O artigo confirma que a força de trabalho Sul-Africana no sector da saúde (médicos, enfermeiros e parteiras) era inferior ao padrão internacional exigido pela WHO. A título de exemplo, em Março de 2020, o rácio Sul-Africano de profissionais de saúde por 1000 habitantes era de 2,87, inferior aos 4,45 determinados pela WHO. Por conseguinte, é necessário acelerar vários métodos de recrutamento, em conformidade com a *Estratégia de Recursos Humanos para a Saúde na África do Sul para 2030.* Uma lição importante da pandemia é que o planeamento para catástrofes deve ser feito com antecedência, daí a necessidade de considerar uma força de trabalho adequada para catástrofes e pandemias e o nível das suas perturbações.

Outros artigos abordam as questões da governação e das políticas públicas. Williams e Poshai abordam a comunidade da política de habitação urbana em Harare, no Zimbabué. Concluem que a comunidade da política de habitação está envolta em conflitos e jogos de poder entre os actores, na medida em que não é proporcionada aos cidadãos uma habitação adequada e equitativa. Mais importante ainda, é difícil implementar os imperativos da política de habitação, como a habitação a preços acessíveis. Mdhluli e Jili avaliam a prática dos valores e princípios constitucionais básicos da administração pública no distrito de Zululand, em KwaZulu-Natal, na África do Sul. O governo local é uma importante esfera de governo que está mais próxima dos cidadãos. Consequentemente, os municípios devem prestar activamente serviços de acordo com os bons valores e princípios previstos na secção 195 da Constituição da África do Sul. Os autores observam que, embora o município de Zululand seja alvo de frequentes protestos da comunidade sobre questões relacionadas com a prestação de serviços, o município mostra esforços para implementar iniciativas de melhoria da prestação de serviços, actividades orientadas para o desenvolvimento e incentivo à participação do público.

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IMPLEMENTATION OF THE ISO 9001:2015 STANDARD ON ORGANISATIONAL KNOWLEDGE MANAGEMENT DURING DISRUPTIONS: A CASE OF KENYA SCHOOL OF GOVERNMENT EMBU CAMPUS DURING COVID-19

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INTRODUCTION

Kenya School of Government (KSG) is a State Corporation established under the Kenya School of Government Act No. 9 of 2012. The school's mandate is to deliver learning and development programs that enhance core skills, competencies, and professional ethics in the Public Service. Further, the school is required to establish professional networks and think tanks, provide expert consultancy services, and apply research evidence to inform public policy. The school has five campuses: Embu, Baringo, Matuga, Mombasa and eLearning Institute. KSG is an ISO 9001:2015 certified organisation and is thus obliged to implement the provisions of ISO 9001:2015 Standard. Clause 7.1.6 of the Standard on Organisational Knowledge states that the organisation shall determine the knowledge necessary for the operations of its processes and to achieve conformity of products and services (ISO 2015). This is through the establishment of appropriate policies and procedures.

The KSG Embu campus has committed to implementing the ISO 9001:2015 standard by ensuring that knowledge is maintained and made available through engagement of retired officers in training programs to continuously share their expertise, documenting knowledge through the development of training manuals for various courses offered in the school, participating in international conferences to gain and retain this new knowledge, participating in forums and workshops on Knowledge Management, publication of articles in Peer Reviewed Journals and carrying out Exit Interviews for officers leaving the Public Service among others. During COVID-19, KSG Embu campus operations were disrupted, as was the case in other institutions.

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Paradoxically, the core mandate of the school was to be continued through other innovative ways, such as online programs and working from home. This reduced personal contact among staff; thus, knowledge management processes were also affected.

This study, therefore, investigated the implementation of the ISO 9001:2015 Standard on Knowledge Management at the KSG Embu campus. Specifically, the authors sought to investigate the factors affecting the implementation of the international standard during disruptions such as COVID-19, a recent crisis. The main objective of this study was to investigate factors affecting the implementation of provisions of ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19.

The remainder of this paper is organised in sections that reflect the objectives of the study. The next section conceptualises knowledge and Knowledge Management. A section on theoretical review justifies the conceptual nature of the study. A methodology describes the design of the study with the adopted methods. Another section delineates the findings and discussions. The results obtained from the research and their discussions are presented as conclusions and recommendations.

CONCEPTS OF KNOWLEDGE AND KNOWLEDGE MANAGEMENT

Knowledge is regarded as a new and important asset in an organisation, alongside other assets such as capital and land. Thus, for organisations to deliver quality products and services, it is paramount to use and manage this resource efficiently and effectively (Rezaei 2021). Consequently, organisations, including government institutions, should create an enabling environment for knowledge sharing and provide opportunities for continuous learning of their staff. According to Grant (2013), knowledge is the understanding, awareness, or cognition created through the study, observation, experience, and research of the outside world in the individual and is an intangible resource combined with other organisational resources.

Although Knowledge Management (KM) suggests a rather simple definition, numerous definitions and opinions exist on what it is and how it should be used. Jennex (2005) Defined KM as the practice of selectively applying knowledge from previous experiences of decision-making to current and future decision-making activities with the express purpose of improving the organisation's effectiveness. Therefore, Knowledge Management is the conscious process of defining, structuring, retaining, and sharing the knowledge and experience of employees within an organisation.

As organisations evolve, expand into new areas, and define their approach to business, they develop significant institutional knowledge. This information is invaluable to the company. Imparting it to new or less experienced staff is vital for maintaining successful operations. There are two types of knowledge, which include explicit and implicit knowledge (De Bem Machado *et al*. 2022). Explicit knowledge, also known as expressive knowledge, is any information that can be documented, stored and shared with others. This knowledge can easily be transferred to an organisation's customers and employees. This knowledge can be recorded in various formats, such as databases, manuals, books, publications or videos. This type of knowledge is highly shareable amongst employees because it can be captured in a knowledge base or as part of your Knowledge Management strategy. Implicit knowledge or 'tacit knowledge' is the type of knowledge that is complex to transmit to another individual using verbalising

or written word. It can be well-defined as experiences, culture, ideas, and skills that the public has but are not classified and may not essentially be simply articulated. With tacit knowledge, a team member is not mostly conscious of the knowledge she or he has or how it can benefit others (Zhao *et al.* 2022). Active sharing of tacit knowledge usually needs enormous regular interaction, trust, and personal contact. This form of knowledge management can only be publicised through best practices in a specific framework and transferred through social networks. To some level, it is "captured" when the knowledge holder connects to a community or a network of practice in the organisations.

There are factors for successful Knowledge Management in an organisation, which include well-developed Information and Communications Technology (ICT) infrastructure that supports collaborative work, a culture of pervasive knowledge sharing and appropriate organisational policies and structures that support knowledge sharing and management. For instance, information systems must be accessible and easy to use from multiple locations within the constraints of security (Ali *et al.* 2023). Generally, Knowledge Management should reconsider the pattern of interaction between technologies, people, and the policies that guide, enable and control people to utilise these technologies. To attain the sustainable benefits of Knowledge Management, institutions need to balance their technology systems, social interaction systems and institutional policies. Technologies can be used to increase people's efficiency and improve the flow of information in the organisation. The Knowledge Management process, which includes knowledge acquisition, sharing, and use, positively impacts innovation. Creating, acquiring, sharing, and utilising knowledge equips staff with skills and paves the way for innovation because it helps to present new ideas and to benefit from others' experiences. The underlying concern is employees do not want to share information. Successful organisations empower employees to share and contribute intellectual information by creating an enabling environment. This includes institutionalising international policies and standards such as the ISO 9001:2015 standard. Therefore, government institutions seek to identify enablers such as organisational structure, leadership, culture, and other factors that facilitate knowledge management processes or activities to comply with such standards (Hussain 2019). Consequently, this field has attracted the attention of scholars and researchers in recent years. Reviewing the existing knowledge management literature helps identify some essential gaps that must be addressed (Hsu 2020).

Hsu (2008) and López-Nicolás (2011) claim that Knowledge Management is one of the factors that affect organisational performance, among others. This position has also been supported by (Huang 2009), who argued that Knowledge Management creates a creative environment that enables organisations to achieve advanced performance. However, the role of mediator variables between Knowledge Management and organisational performance processes is still unclear, and there exist some gaps in the literature that need to be further investigated (Wang 2016). Organisations are highly affected by disruptions such as pandemics that distort their operations, including Knowledge Management processes. One such disruption is the COVID-19. The COVID-19 crisis led to an increase in economic uncertainty, creating an unprecedented effect on organisations' survival. On the other hand, most organisations shifted towards a new normal of online work, work from home, or virtual workplace. However, organisational stability relies on Knowledge Management practices and how efficiently and effectively they can support and ensure business continuity during a crisis (Nonaka and Takeuchi 1995). Implementation of international standards in times of crisis is an issue in many institutions due to the interruptions brought by the new normal.

METHODOLOGY

The article employs a descriptive design with theoretical analysis. A self-administered questionnaire was designed and administered to the target respondents. The questionnaire was first subjected to expert review and pilot study to ensure the validity and reliability of the data collected. The targeted respondents were the nineteen (19) faculty members of the KSG Embu campus who are mainly involved in training, research, consultancy and advisory services. The data collected was analysed using descriptive statistics, and the results obtained were presented in tables and charts for easy visualisation and interpretation. Due to the small size of the target population, census was used as the sampling technique where the questionnaire was administered to all members of the population. The response rate was 84 percent (16 out of the 19 faculty members returned the filled questionnaires).

The specific objectives of the study are:

- To determine how knowledge documentation affects the implementation of provisions of the ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19;

- To investigate how knowledge sharing affects the implementation of provisions of the ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19;

- To investigate how technology affects the implementation of provisions of ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19.

The above objectives hinge on the research questions. A research question guides the study. As such, the research questions are:

- How does knowledge documentation affect the implementation of provisions of the ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19?

- To what extent does knowledge sharing affect the implementation of provisions of ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19?

- How does technology affect the implementation of provisions of ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19?

THEORETICAL BACKGROUND

This study on knowledge management was guided by three theories: the Theory of Reasoned Action, the Social Exchange Theory and the Participative Leadership Theory.

Theory of Reasoned Action

The theory of Reasoned Action (TRA) is a social psychology model that explains the reasons for intentional behaviour (Fishbein and Ajzen 1985). This theory is widely used by many scholars to determine the intention of individual behaviour in a multidisciplinary area. In this study, the theory of reasoned action focuses on the intention of knowledge-sharing behaviour among individual preferences. An individual's intention to perform a behaviour influenced by a positive attitude and social norms is the degree to which an individual perceives how others approve of the individual's participation in a specific behaviour (Bock and Lee 2005). This theory represents the attitude and social norms that influence the individual intention of knowledge-sharing behaviour. Attitude is defined as the disposition to respond favourably or unfavourably to the self, others and the environment (Fishbein and Ajzen 1985). While social norms are defined as the way individuals think and the expectations from others towards individual actions.

Some studies have used TRA to explore the different variables in knowledge-sharing behaviour. Bock and Kim (2002) explored the relationship between expected association contributions and expected rewards as variables in determining individual attitudes, social norms, and business climate. The result highlights that attitude toward knowledge-sharing and subjective norms have a positive effect on knowledge-sharing behaviour. A recent study explored the sense of self-worth (Teh and Yong 2011), while other studies such as on role behaviour (Bock and Lee 2005) and business citizenship behaviour (Williams and Anderson 1991). In the study, the scholars used TRA as the model to predict individual knowledge-sharing behaviour. The result shows that those three variables tested had a significant effect in determining knowledge-sharing behaviour.

Social Exchange Theory

Social exchange theory (SET) is defined as an exchange of valuable resources which are expected to benefit two parties. This theory practices to maximise the benefit and reduce the cost that will affect the individual's actions (Blau 1964). According to the antecedent of SET, it is a theory that describes the rational behaviour of individuals to perceive the possibility of rewards they would gain from the social exchange. There must be an actor who has his perception of another and has a belief to create the other's perceptions. In the study, (Cry and Choo 2010) revised the original concepts of SET and found that SET depends on the belief of individual propensity to share and the individual's social value orientation. This refers to the individual's preferences (subjective attitudes or norms) regarding the distribution of outcomes to self and others in the sharing situation. In a certain need of the individual, money might be appropriate and valuable to the individual exchange. However, from other perspectives of social relations, social approval, self-esteem, and compliance are the most influential towards the exchange of social relations. This finding was supported by this study that argues that social exchange theory postulates that people interact with others based on a self-interested appraisal of the costs and benefits. Another scholar also supported the idea that individuals seek to maximise their benefits and minimise costs when exchanging resources with others (Cry and Choo 2010).

Participative Leadership Theory

This theory holds that both subordinates and leaders participate in the decision-making process (Huang, Iun, Liu, and Gong, 2010). The objectives of participative leadership are shared decision-making and influence between managers and subordinates, as well as giving subordinates "greater discretion, extra attention and support, and involvement in solving problems and making decisions" (Lam, Huang, and Chan 2015). Participative leadership is linked with absorptive capacity theory as knowledge sharing is

the process of gathering knowledge and sharing the responsibility of knowledge analysis and utilisation in the technological innovation process.

Empirical Review of Knowledge Sharing During Disruptions

The researchers also did a literature review on recent studies done on employees' attitudes and knowledge sharing during disruptions, organisational policies and knowledge sharing during disruptions and technology, innovation and knowledge sharing during disruptions. When the new knowledge is acquired, it should be transferred to other sectors of the organisation which need the new knowledge or where it could be helpful. Without this step, knowledge will have a very low impact on the organisation. As a result, knowledge transfer at a suitable time and place is the organisation's most important section of knowledge storage (Lee and Lee 2008). Knowledge sharing is a set of behaviours, including information and knowledge exchange and helping others in this regard. It is like organisational citizenship behaviours that are conducted voluntarily and intentionally in organisations. Using knowledge sharing (including explicit and implicit knowledge) is one of the ways to measure knowledge management (Yusefi et al. 2011).

McDermott (1999) defined knowledge sharing as when a person shares their knowledge; it means they direct another person through their knowledge, insight and thoughts to help observe their status better. In addition, a person who shares their knowledge must know the purpose of the shared knowledge, its application, as well as the needs and information gaps of the knowledge receiver. It illustrates that all employees do not need to share their knowledge because their knowledge might not be utilised or used again. Knowledge sharing has often been regarded as a process (Alvay and Lidner 2001).

Encouraging knowledge sharing among employees can be a challenge in some organisations. Some employees believe that knowledge hoarding is more beneficial to them than knowledge sharing. Some employees perceive knowledge sharing as unnatural and consequently are reluctant to engage in knowledge sharing. (Davenport and Prusak 1998) noted that when individuals perceive that power comes from the knowledge they possess, it is likely to lead to knowledge hoarding instead of knowledge sharing. According to Brown and Woodland (1999), individuals use knowledge for both control and defence. Gupta and Govindarajan (2000) also asserted that the perception of knowledge as power discourages employees from sharing knowledge.

Ipe (2003) pointed out that knowledge sharing in organisations is a complex process. It is value-laden and driven by power equations within an organisation. Knowledge is dynamic in nature; the creation and use of knowledge and knowledge sharing depend on social relationships between individuals. Connelly and Kellaway (2003) suggested that employees' perception of managerial support for knowledge sharing and the organisation's social interaction culture have an impact on knowledge sharing. Organisational work cultures also play an important role in promoting pro-sharing cultures in organisations.

It is important to identify employees' perceptions of the knowledge-sharing culture in an organisation, as this shapes their knowledge-sharing behaviour. Chowdhury (2006) believed that a major challenge in encouraging knowledge-sharing behaviour is that trust among employees is necessary to ensure that knowledge-sharing is effective. Individual factors such as age and gender significantly impact employees' perception of the knowledge-sharing culture. Sveiby and Simons (2002) suggested that a

collaborative climate is one of the major factors influencing the effectiveness of knowledge work. They stressed that a collaborative climate tends to improve with age, educational level and managerial role.

There is a need to examine whether the demographic variables of gender, age, education, years of experience, position and organisation sector have significant relationships with employee perception of knowledge-sharing culture.

Global crises affect all aspects of life, including the functioning of the corporate sector, and significantly impact various individual stakeholders and society at large (Jacob 2012; OECD 2020). The COVID-19 crisis proved itself to be one of the worst global crises humans have ever experienced; in addition, fear of the disease, social distancing measures, travel bans, and widespread global unpredictability prompted a new recession and impacted the global economy (Ozili and Arun 2020). The COVID-19 pandemic affected all sectors of the economy at the macro level and all functional areas of businesses at the micro level.

According to Davenport and Prusak (1998), KM includes building an organisation-wide repository of job-related information, including all aspects of KM, such as policies and practices, and establishing an organisation-wide culture of knowledge sharing. KM and crisis management indicates that effective implementation of KM helps during crises. Rosário et al. (2021) opined that during the COVID-19 pandemic, effective implementation of KM facilitated the utilisation of healthcare information and supported management decision-making in organisations. According to Marie and Horváthová (2019), every crisis could be an effective source of knowledge.

Shaw et al. (2007) studied the importance of building a KM strategy during times of crisis in the United Kingdom. They found that managers used knowledge to combat crises and concluded that identifying deficiencies in people's attitudes towards KM processes enabled managers to overcome a crisis's negative effects effectively. Abuzyead and Sherif (2017) indicated that while managers focus more on knowledge acquisition, storage and transfer, implementation would contribute more effectively during a crisis. They emphasised that organisations should create room for the implementation of the knowledge learnt.

During the outbreak of the COVID-19 pandemic, organisations began to imagine how the virus affected consumer behaviour and, in general, business sentiment and outcomes. Uncertainty about the future of an organisation's business requires a radical revision of relational schemes, not only outside the organisation but also within it. Innovation in the time of COVID-19 was critically necessary in all sectors of the economy. While a strict policy response to COVID-19 was necessary, organisations were inevitably impacted by it, sustaining both short-term effects and less expected long-term consequences (Bartik et al., 2020). Due to these circumstances, organisations with fast-changing technologies that invested in RandD activities in response to emerging global risks were in a better position to promote not only their near-term survival but also their future innovative performance to stay competitive (Helfat 1997; Blake and Burrows 2001; Verdu-Jover et al. 2005; Martínez-Sánchez et al. 2011; Aghion et al. 2018; Zhang and Zhou 2019; Marullo et al. 2020).

This gap was in urgent need of attention, as the stressful experiences of employees showed to impair RandD effectiveness (Lee and Sukoco 2011). Indeed, on the one hand, feelings of fear, pressure, and

uncertainty led employees to experience crises and anxiety, which could inhibit their capacities to function effectively (Akgun et al. 2006). Yet, on the other hand, exposure to traumatic experiences unleashed individuals' capacities to enact positive change in response to stressful situations and thereby effectively realise work outcomes (e.g., Runco 1999; Tedeschi and Calhoun 2004).

Knowledge sharing enhanced individual and group performance and innovation in RandD contexts. For example, at the individual level, (Yu and Lee 2017) found that RandD personnel's knowledge sharing was positively related to job performance, while (Chang et al. 2019) showed that knowledge sharing positively mediated the relationship between participative leadership and RandD employee exploratory innovation. At the group level, (Liu et al. 2011) provided evidence for a positive relationship between team knowledge-sharing intention and team performance in RandD project teams, while (Cheung et al. 2016) found that knowledge-sharing positively predicted RandD team innovation and mediated the negative effect of functional diversity on such innovation.

Knowledge sharing was recognised as a type of active coping behaviour that occurs when individuals provide knowledge to others in organisations to help solve problems and improve work outcomes (Cummings 2004; Connelly and Zweig 2015; McCarthy et al. 2019). Accordingly, we contend that knowledge sharing served as an effective coping behaviour from which employees effectively handled stress induced by the pandemic and, in this way, improved their innovative performance.

RESEARCH FINDINGS

Section I: Biological Data of Respondents

Tables 1 and 2 present biological data about the respondents.

Table 1: Gender Distribution of Respondents

	Frequency	Percent (%)
Male	12	75.0
Female	4	25.0
Total	16	100.0

Table 1 illustrates that the majority of the respondents (75 percent) who undertook the survey were male, while 25 percent were female.

Table 2: Experience of Respondents in KSG

	Frequency	Percent (%)
0-4 years	3	18.8
5-10 years	4	25.0
Above 10 years	9	56.3
Total	16	100.0

From Table 2, 18 percent of the respondents have stayed on campus for 0-4 years, 25 percent for 5-10 years, and 56 percent above ten years. This indicates that most respondents had more than ten years of experience in KSG; hence, the data respondents provided is reliable.

Section II: Knowledge Documentation

The study sought to determine how knowledge documentation affects the implementation of provisions of the ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19. The key aspects investigated were on development of training manuals, development of papers for publications, documentation of knowledge of staff who retired during COVID-19 and whether knowledge documents were accessible during COVID-19. The results obtained are presented in Table 3.

Table 3: Knowledge Documentation During COVID-19

Statement:	Strongly Disagree %	Disagree	Agree	Strongly Agree	Not Applicable	Percentage %
a) Many training manuals were developed during COVID-19.	6.3	18.8	43.6	18.8	12.5	100
b) During COVID-19, staff were encouraged to develop papers for publication.	-	6.3	25.0	50.0	18.7	100
c) There was a mechanism to interview staff who retired during COVID-19.	12.5	25.0	31.2	12.5	18.8	100

	Statement:					
d)	The Campus ISO procedures were followed during COVID-19.	6.3	6.3	56.6	18.3	12.5	100
e)	During COVID-19, user guides to guide the staff on how to use different equipment within the school (e.g., machinery operation guides) were accessible off-campus.	12.5	18.8	31.2	25.0	12.5	100

From Table 3, 25.1 percent of the respondents disagree that many training manuals were developed during COVID-19, and 62.4 percent agree that many training manuals were developed. In comparison, 12.5 percent indicated it was not applicable mainly because they were unaware or unsure if training manuals were developed during COVID-19. This, therefore, indicates that knowledge was documented during the COVID-19 disruption. 6.3 percent disagreed that staff were encouraged to develop papers for publication, 75.0 percent agreed while 18.7 percent indicated that it was not applicable. 37.5 percent disagreed that there was a mechanism to interview staff who retired during COVID-19, 43.7 percent agreed, while 18.8 percent indicated that it was not applicable. 12.6 percent disagreed that the Campus ISO procedures were followed during COVID-19, 74.3 percent agreed while 12.5 percent indicated not applicable. 31.3 percent disagreed that user guidelines were accessible off Campus, 56.2 percent agreed, while 12.5 percent indicated it was not applicable.

Section III: Knowledge Sharing

The study sought to investigate how knowledge sharing affects the implementation of provisions of the ISO 9001:2015 Standard on Organisational Knowledge Management in the Kenya School of Government during COVID-19. The results obtained are presented in Table 4.

Table 4: Knowledge Sharing

Statement:	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable	Percentage %
	%					
a) During COVID-19, the Campus engaged retired officers and	18.7	50.0	6.3	6.3	18.7	100

resource persons in training programmed to continually share the experience.						
b) During COVID-19 the staff participated in both national and international conferences to gain and retain knowledge.	12.5	18.7	50.0	6.3	12.5	100
c) The Campus engaged staff in forums and workshops on knowledge management in times of COVID-19.	6.3	18.8	43.8	18.8	12.3	100
d) Faculty members were engaged in peer review for journals during COVID-19.	6.3	18.7	37.5	37.5	-	100
e) Exit interviews were conducted for officers leaving the Public Service during COVID-19.	18.7	25.0	25.0	6.3	25.0	100
f) End-of-event evaluations on participants were conducted during COVID-19 as usual.	12.5	12.5	37.4	31.3	6.3	100
g) Staff were engaged in benchmarking activities both locally and internationally during COVID-19.	18.8	37.4	18.8	-	25.0	100

h) There were tools within the Campus to ensure that knowledge is shared with staff and clients who were physically challenged during COVID-19.	18.8	6.3	43.8	6.3	24.8	100

From Table 4, 68.7 percent of the respondents disagree that the Campus engaged retired officers and resource persons in training programs, 12.6 percent agreed, while 18.7 percent indicated that it is not applicable. 31.2 percent of the respondents disagreed that staff participated in both national and international conferences to gain knowledge during COVID-19, 56.3 percent agreed, while 12.5 percent indicated that it was not applicable. 25.1 percent disagree that the Campus engaged staff in forums and workshops on knowledge management, 62.8 percent agree while 12.3 percent indicated that it was not applicable. 25 percent of the respondents disagreed that faculty members were engaged in peer review of journals during COVID-19 and 75 percent agreed. 43.7 percent disagreed that exit interviews were conducted for officers leaving the Public Service during the COVID-19 pandemic, 31.3 percent agreed, and 25 percent indicated that it was not applicable. 25 percent disagree that end-of-event evaluations on participants were conducted during the COVID-19 pandemic, 68.7 percent agreed, while 6.3 percent indicated that it was not applicable. 56.2 percent disagree that staff were engaged in benchmarking activities both locally and internationally during the COVID-19 pandemic, 18.8 percent agree, while 25.0 percent indicated that it was not applicable. 25.1 percent disagreed that there were tools within the campus to ensure that knowledge was shared with staff and clients with special needs, 50.1 percent agreed, while 24.8 percent indicated that it was not applicable.

Section IV: Technology

The study sought to investigate how technology affected the implementation of provisions of ISO 9001:2015 Standard on Organisational Knowledge Management in Kenya School of Government during COVID-19. The results obtained were presented in Tables 5, 6, and 7 and Figures 1 and 2.

Table 1: Employees were engaged in virtual training during COVID-19.

	Frequency		Percent	
Strongly disagree		1		6.3
Agree		4		25.0
Strongly agree		10		62.5
Not applicable		1		6.3
Total		16		100.0

From Table 5, 31.3 percent of the respondents disagree that staff and clients were engaged in virtual training to make learning consistent during the COVID-19 pandemic, 62.5 percent agree, and 6.3 percent indicated that it was not applicable.

Figure 1: Staff were facilitated with appropriate Technology during COVID-19.

Staff were facilitated with appropriate technology (e.g laptops) to ensure continuity during covid-19

From Figure 1, 43.8 percent of the respondents disagree that staff were facilitated with appropriate technology to ensure continuity during the COVID-19 pandemic, 50.0 percent agree, while 6.3 percent indicated that it was not applicable.

Table 6: Staff had effective internet to enable staff and clients to acquire essential knowledge online during COVID-19.

	Frequency	Percent
Strongly disagree	1	6.3
Disagree	2	12.5
Agree	6	37.5
Strongly agree	6	37.5
Not applicable	1	6.3
Total	16	100.0

From Table 6, 18.8 percent of the respondents disagree that staff had effective internet to enable staff and clients to acquire essential knowledge online during the COVID-19 pandemic, 75 percent agree, while 6.3 percent indicated that it was not applicable.

The Campus used technology to make learning for physically challenged staff and clients easy e.g. provided braille for the blind during COVID-19

Figure 2: The Campus used technology to make learning for physically challenged staff easy.

From Figure 2, 25.1 percent disagree that the Campus used technology to make learning for physically challenged staff and clients easy, 68.8 percent agree, while 6.3 percent indicated that it was not applicable.

Table 2: There were policies institutionalised (e.g., provision of airtime) that enabled staff to use technology during COVID-19.

	Frequency	Percent
Strongly disagree	1	6.3
Disagree	3	18.8
Agree	5	31.3
Strongly agree	6	37.5
Not applicable	1	6.3
Total	16	100.0

From Table 7, 25.1 percent of the respondents disagree that policies were institutionalised to enable staff to use technology during the COVID-19 pandemic, 68.8 percent agree, while 6.3 percent indicated that it was not applicable.
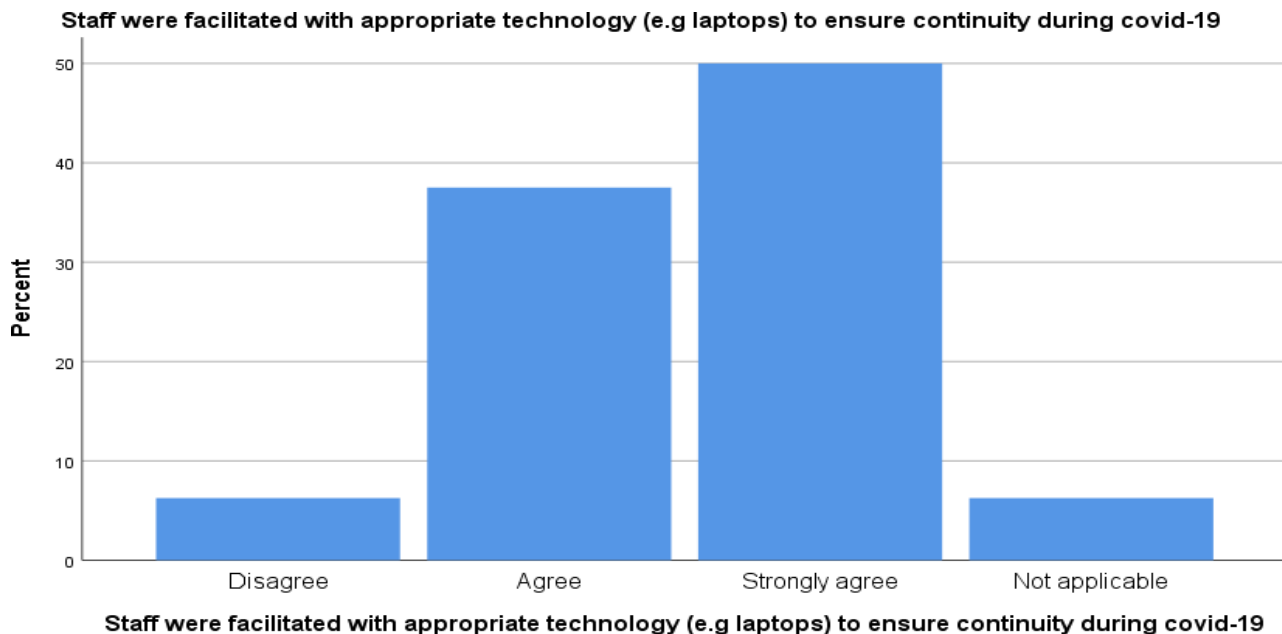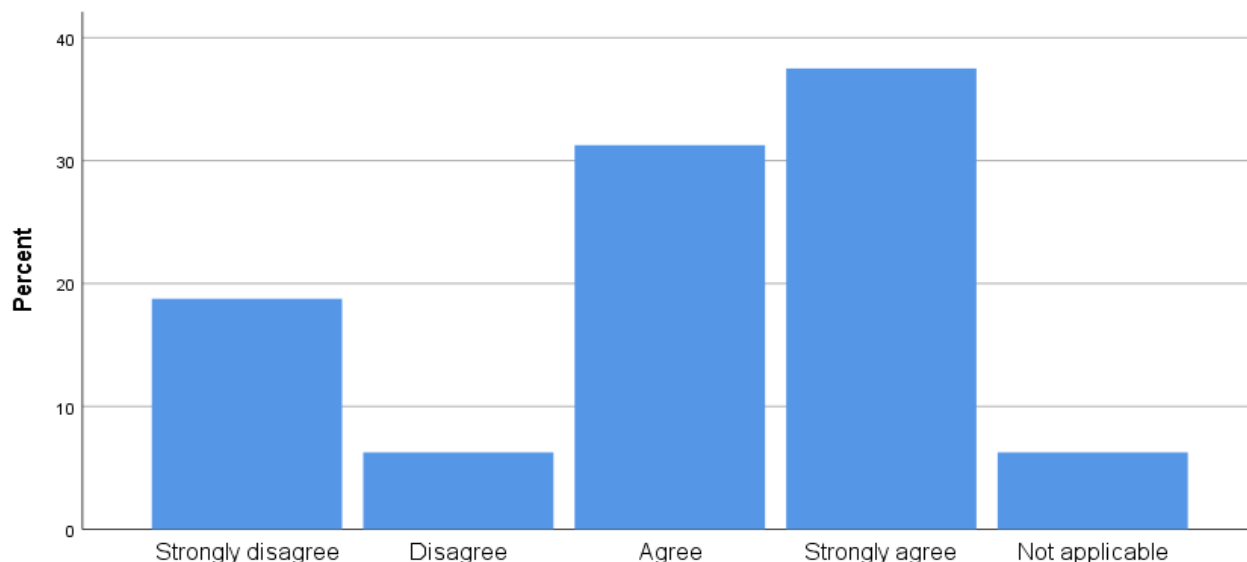
CONCLUSIONS AND RECOMMENDATIONS

This paper presented a study on the investigation of factors affecting the implementation of provisions of the ISO 9001:2015 Standard on Organisational Knowledge Management during disruptions. Implementation of the provisions of ISO 9001:2015 on knowledge management at Kenya School of Government during COVID-19 was taken as a case study. In the study, knowledge documentation, knowledge sharing and technology were considered as variables of the study. Quantitative data was collected from 19 Kenya School of Government Embu Campus faculty members.

The results indicated that many training manuals were developed during COVID-19. This, therefore, suggests that knowledge was documented during the COVID-19 disruption. The majority (75.0 percent) agreed that staff were encouraged to develop papers for publication during COVID-19, a notable 37.5 percent disagreed that there was a mechanism to interview staff who retired during COVID-19, while 43.7 percent agreed. A significant 12.6 percent disagreed that the Campus ISO procedures were followed during COVID-19, while the majority 74.3 percent agreed that the Campus ISO procedures were followed during COVID-19. A significant 31.3 percent disagreed that user guidelines were accessible off-campus, and 56.2 percent agreed.

On knowledge sharing during COVID-19 it was clear that the Campus did not engage retired officers and resource persons in training programs. Also, the research found that staff did not participate in both national and international conferences to gain knowledge during COVID-19. It was also noted that the Campus engaged staff in forums and workshops on knowledge management during COVID-19. The research also found that faculty members were engaged in peer review of journals during COVID-19. The majority, 43.7 percent, disagreed that exit interviews were conducted for officers leaving the Public Service during the COVID-19 pandemic. End-of-event evaluations on participants were conducted during the COVID-19 pandemic. There was benchmarking during COVID-19 since 56.2 percent agreed. On tools within the Campus to ensure that knowledge was shared with staff and clients with special needs, the majority, 50.1 percent agreed, while 24.8 percent indicated that it was not applicable.

On technology, it was found that during COVID-19, there were policies to enable faculty members to access technology, such as the provision of airtime and data bundles. Further learning of physically challenged participants was made easy through technology, such as online courses where participants would study from home without travelling. The faculty also affirmed that they had the appropriate technology and participated in virtual training.

The findings of this study have significant implications for the management of knowledge during disruptions. It is recommended that mechanisms to document the knowledge of retiring officers should be institutionalised. During COVID-19, it was not possible to conduct interviews to document the knowledge of most employees who retired while at home during the lockdown. Institutions should also have alternative service delivery and Knowledge Management alternatives by employing technology and institutionalising enabling policies. Future studies in this area can target tacit knowledge, which was not investigated in this study.

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KNOWLEDGE MANAGEMENT IN THE PUBLIC SECTOR:
LESSONS FROM SOUTH AFRICA POST COVID-19

Harsha Dayal [6]

INTRODUCTION

Knowledge Management (KM) has become an established and professional practice through the development of core concepts, norms and standards by practitioners and experts in the field (Davenport 1998; Huang and Newell 2003; Nonaka *et al.* 2006). In South Africa (SA), Tobin and Snyman (2004) explored the relationship between KM and five other concepts, that is; best practice, benchmarking, maturity models, standards, and quality in the development of a national framework targeted at industries, by which companies could assess their progress in achieving "world-class Knowledge Management" (Tobin and Snyman 2004:3). It has become a dedicated field of academic study, further contributing to its growth and development. In the early years, KM was associated with Information and Technology (IT) systems, when it predominantly focused on the way in which data and information were coded and stored for accessibility (Zack 1998), with little focus and impact on how these knowledge resources were used (Bhatt 2001). There was a shift towards understanding how knowledge is constructed and used, specifically as it relates to organisational learning and effectiveness (Lee and Choi 2003; Newell *et al.* 2009). These developments introduced concepts to guide KM practice in sourcing "tacit" and "explicit" knowledge with its related terminology to mobilise, translate, broker and use knowledge (Shaxson *et al.* 2012). Multilateral agencies also became increasingly interested in KM practice for organisational development (OECD 2001; OECD 2003; Shaxson *et al.* 2012), influencing KM processes to become embedded within organisational structures. Organisational knowledge thus became regarded as an asset for innovation and learning (Best and Holmes 2010; Winters and Gillman 2019; Schmidt 2020).

In parallel developments, the approach and concept of Evidence-Based Policy Making (EBPM) took root in various contexts to ensure that evidence is used in policy and practice (Gaarder and Briceno 2010; Parkhurst 2016; White 2019; Gough *et al.* 2020), including in SA (Stewart *et al.* 2019). Several governments adopted EBPM as an international best practice for policy making (OECD 2018; Stewart *et al.* 2019). EBPM promotes the uptake of evidence into policy by focusing on synthesis methods in supporting 'demand side' evidence needs, i.e., the policy makers (Oliver *et al.* 2018; Cairney and Kwiatkowski 2017) and emphasising the intermediary function of knowledge translation (Ward *et al.* 2009; Grimshaw *et al.* 2012).

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The management of evidence and knowledge is at the core of both KM and EBPM practices. However, these practices are observed to evolve separately, resulting in mixed outcomes, duplication (and wastage) of resources, and uncoordinated efforts for those in the evidence ecosystem.

These phenomena are observed especially in the public sector, where poor data management and information asymmetries are characteristic features of government departments, especially in Low- and Middle-Income Countries (LMICs) (Stewart *et al.* 2019; Pellini 2018; Phipps *et al.* 2017). In the public service, the business of government is to design, plan, implement, monitor and evaluate public policies, strategies, programs and projects.

The management of knowledge resources (both tacit and explicit) must, therefore, be aligned with the business process of government. In a broadened understanding, generic KM processes include discovering, sourcing, storing, organising, curating, packaging, sharing and constantly facilitating the use of all types of knowledge. Evidence forms an inherent component of any knowledge system, where data/information is needed on the diagnostics of a problem, what policies work, for whom, why and under what circumstances. Knowledge Management, in turn, takes into consideration experience or craft knowledge that can test scientific knowledge and theories. Hence, KM and EBPM practices are regarded as complementary but conceptualised and practised separately.

In addition, the COVID-19 pandemic has demonstrated public sector vulnerabilities regarding the generation and availability of real-time data and information to manage the global crisis (Ranchod and Daniels 2020). National governments were required to learn from each other on what interventions to put in place, how to protect citizens and how to manage the pandemic with its related complexities. If learning was to be facilitated, KM-related activities were needed, i.e., documenting the implementation of interventions, (re)assessing its effectiveness, disseminating lessons in a quick turnaround time and creating opportunities for sharing experiences across societies. These were observed to be critical processes outside of routine practices. In addition, processing multiple sources of data and information, multi-level stakeholders and multi-sectoral focus added pressure on ensuring effective management of a body of knowledge for learning. KM was thus a fundamental process and strategy for any organisation (public or private) during the pandemic yet remained neglected at a large scale. There is a need to understand KM practice in the public sector, explore its relevance for improving public policy development and ensure sustainability in public knowledge systems. This study contributes to understanding KM in the public sector, using South Africa as a case study.

Against the foregoing, the aim of this study is to explore how KM is understood and practised in the South African public sector, assess opportunities and challenges post-COVID-19, and identify enabling factors that can help advance KM for the public sector specifically.

METHODOLOGY

The study adopts a case study approach in the quest to understand how KM concepts are applied and experienced in the public sector, using the SA government as a case. Key informants from the sample represented practitioners, managers, and researchers in the public sector. They were primarily targeted to share their experiences and offer solutions to advance KM practice in the public sector. Therefore, a case study design is used that is grounded in qualitative inquiry. Case studies are well documented and

generate thick data because of their distinguishing feature of addressing different parts of a system to provide a holistic picture. It has the potential to explain, illustrate and enlighten in addition to describing the phenomenon under investigation. The understanding is that the case is a 'bounded system' with working parts, and whether "functional or dysfunctional, rational or irrational, the case is a system" (Stake 2000: 436).

The SA government was selected as a country-level case, with an exploration of KM practice at the national, provincial and local levels. This was necessary as the role and focus of national and sub-national governments differed. Furthermore, KM and the broader knowledge system of government are influenced by the way in which government is structured. Within the case, KM practice was explored via practitioners and managers who were identified and sampled for their primary role in KM functions, including program managers and other officials in managing informational resources. Thus, the research questions are:

- How is Knowledge Management conceptualised in the SA public sector, which is aimed at guiding practice?

- What are the opportunities and challenges for KM in the public service post-COVID-19?

- What factors influence KM processes in the public sector?

The case study design provides an in-depth account of the phenomenon, for which three sources of data were generated, analysed and findings derived: (i) *primary data,* through 26 Key Informant Interviews (KII); (ii) *policy and project documentation* which included practice cases and relevant national reports which are publicly available; and (iii) *existing secondary data* on the baseline survey conducted on KM in the SA public sector.

Primary data from KIIs and data extracts from documents were derived from themes identified via thematic content analysis using ATLAS TI software. Data was reduced, and codes were developed and organised for analysis in the context of this study. Thick data generated via the KII produced a rich data source relevant to KM practice in the public sector. Secondary data that was generated through the first comprehensive baseline survey on KM in the SA public sector was used for analysis in the context of this study. Thus, primary and secondary data sources were sourced to answer the three research questions. The three data types described in the data sources ensure rigour through the triangulation of subjective data (KIIs), objective data (documents, reports, guides, plans or strategies) and existing survey data to explore KM experiences in the SA public sector. Thus, combining qualitative and quantitative data sources in the case study design enhances the validity and credibility of findings. This is discussed in the integration of the findings.

LITERATURE REVIEW

Academic literature and understanding of KM's nature, purpose, location, and measurement have gained international and national momentum over the past three decades (Bhatt 2001; OECD 2003; Tobin and Snyman 2004; Winters and Gillman 2019). While much of the literature is spread across information sciences, management practices and organisational studies, core concepts of KM have been operationalised via practitioners in public and private sector organisations. Scholars have expanded on the traditional categories of "explicit" and "tacit" knowledge (Zack 1998; Nonaka *et al.* 2006; Schmidt

2020), introducing more depth in the theoretical underpinnings of KM as well as more ideas and tools to influence practice. The development of KM activities, processes and structures is therefore moving beyond individuals and teams towards a focus on the organisational and institutional contexts. Increasing attention by government departments on KM is observed in striving for organisational effectiveness (OECD 2003; 2018) and addressing complexity (Pellini *et al*. 2018).

The growth and development of KM practice are further reflected in definitional terms and new concepts introduced in its implementation within different contexts. At the core, KM is understood as "the process of capturing, distributing, and effectively using knowledge" (Davenport 1998), a definition that still remains relevant. Insights on KM practice and its challenges emerged as it was applied in different sectors (health, education, environment, agriculture). The International Federation for Agricultural Development (IFAD) stated that "KM, organisational learning and adaptive management are increasingly recognised in the international development community as important routes to more effective development assistance" (Winters and Gillman 2019: iii). Many other development partners are aligning KM strategies with the growth of a global knowledge society.

Where KM and decision-making intersect, learning involves the practice of selectively applying knowledge from previous experiences of decision-making to current and future decision-making activities, with the ultimate purpose of improving organisational effectiveness (Nonaka et al. 2006). A limitation is identified when "KM is individualised according to previous understandings" (Newell *et al*. 2009). Consensus on the notions of knowledge as a social construct advances the conceptualisation of KM, where meaning is derived from relationships and collaborations external to the individual. This moves on from knowledge being regarded as an individual asset or personal property by the individual knower. Advancements and insights through organisational studies introduced concepts like strategic planning, infrastructure, organisational culture, human resources and information technology (Tobin and Snyman 2004; Schmidt 2020), which are regarded as enablers of KM. What is being observed is that behind successful organisations, there is an effective Knowledge Management strategy based on value generation through knowledge resources and brought into the mainstream of organisational performance.

Despite these developments in KM theory, application and practice have remained narrow in focus and have been difficult for the SA public sector where KM remains an incomplete task, ad-hoc, or at best, a project that is time-bound and not budgeted for (Department of Public Service and Administration 2019; 2022). The private sector and industries place value on KM at an organisational level, where businesses find new and innovative ways to transform informational resources (capital) into knowledge assets (Huang 2003). In SA, the challenges behind the experience of the energy sector were aligned with the loss of knowledge capital as one of the causes of the current crisis (Mahlaka 2022). The basis of understanding is that knowledge provides the business with a competitive advantage, which otherwise would not have been possible without the business intelligence derived from a KM strategy.

Performance in government organisations is measured through delivering on mandates and annual plans linked to budgetary allocations. Yet, like any large hierarchical organisation, information flows are better operationalised and managed vertically rather than across units and teams. Detailed measures and analysis of organisational effectiveness are weak, and a major gap in understanding how knowledge is generated and how information flows in public sector organisations (Brynard and Coning 2006; Cairney and Kwiatkowski 2017). Drawing from organisational theory (Bhatt 2001; Lee and Choi 2003), public policy design, monitoring and evaluation activities require policymakers to pay attention to KM

principles and processes. However, policymakers also need a critical analysis of who is generating the knowledge and what evidence has informed the policy proposals (Shaxson *et al.* 2015; Nutley *et al.* 2019). Thus, the type of knowledge relevant to the public sector is an important consideration for KM practitioners and possibly different from other sectors in what is prioritised as knowledge sources. In a recent comprehensive systematic review of the literature on the institutionalisation of Knowledge Management strategies, authors Akuku *et al.* (2020) found that although "KM is an interdisciplinary and established field, researchers have not sufficiently focused on the institutionalisation of KM strategies (Akuku *et al.* 2020: 75)", drawing out implications on the agricultural sector in East Africa. The authors argue further, derived from the review, that KM theory can help explain the interrelationship between practices, processes and outcomes, pointing to the contributions that KM practice makes to theory development.

In this context, experience or "craft knowledge" plays an equally important role as scientific knowledge and has relevance for KM in the public sector. Experience from years of practice is recognised as a source of information and evidence, thereby broadening what constitutes evidence in the SA experience (Stewart *et al.* 2019). EBPM practices created awareness of the inclusion of policy champions and government experts in defining what constitutes evidence as the starting point in the decision-making process. This ensures relevance and legitimacy. Fleming and Rhodes (2018) took the debate further by identifying four related and overlapping notions of experience and tacit knowledge, which contribute to relevant processes of knowledge sourcing in the public sector. Firstly, *organisational culture* - plays a hidden role in how knowledge is valued and pursued, especially based on long-term assumptions that get worked into formal processes and passed on to new employees. Secondly, *craft* – referred to as a skill, profession, or occupation. To refer to a "craft" rather than a science is to accept the importance of experiential knowledge and formal knowledge – and more often acquired on the job. In applying to the public sector, the authors note that public servants must become masters of their craft and must build a sense of identity that serves the public professionally (Fleming and Rhodes 2018). Thirdly, *institutional memory* is the organised but selective recall of the past to make sense of the present. Institutional memory, corporate memory, organisational memory and departmental philosophy are ways of locating an organisation's knowledge base. It is a combination of tacit and explicit information and knowledge found in employees' views, agency records, routines, customs, traditions and stories – essential to the organisation's identity and, most importantly, is the basis for learning and identifying what works. Finally, *local knowledge* – this is referred to as "contextual knowledge" derived from interactions with others and closely linked to judgement and discretion. It points to the "own reading" of a situation, which oftentimes forms the basis of a position taken by the leadership. These concepts are significant in how KM is practised and applied in the public sector. However, a dearth of literature connects these concepts to current KM practice. No empirical evidence for the SA public sector was available other than normative guides and frameworks.

FINDINGS

Conceptualisation of Knowledge Management in the SA Public Sector

KM had not been adequately conceptualised in the South African public sector prior to 2019. The central government developed a government-wide KM strategy and framework, launched in 2020 in response to the country's National Development Plan (NDP). This guides the whole SA government and effectively institutionalises KM practice in the public service. National-level conferences, forums, capacity-building activities and communities of practice were established to instil a new culture of valuing knowledge resources in government. For the first time, KM was defined by the central

government as a process and activities that involve collecting, collating, sharing, packaging, disseminating, using knowledge in decision-making and enhancing the processes as well as efficiency of service delivery within departments and public service (Department of Public Service and Administration 2019:11). It was acknowledged that government departments are major generators of data and information. Hence, KM is viewed as strategically managing the collection, storage and usage of data and information to the benefit of government as well as citizens. The framework was welcomed by national, provincial and local government officials, as it essentially activated KM processes and documented the first government-wide KM strategy to influence public sector practice. What data and information is acquired, collated and shared is, however, not clear or specified. In addition, a separate guiding document and strategy was developed for local government because of the way in which the three spheres of government are structured (South African Local Government Association 2018), presenting the challenge of disruption in the flow of knowledge between local, provincial and national government.

While documents and frameworks provide a guide and establish a normative entry point into the public sector, it is only through direct practice and embedding activities in organisational processes that difficulties in its operationalisation become evident. Without an adequate baseline for KM practice in the SA public sector, it was difficult to monitor and assess what interventions were working prior to 2019. For this reason, available secondary data was analysed to establish current starting points for KM concepts to become operationalised across departments. The central government administered the survey in 2020-21 via a self-assessment tool and provides the only comprehensive baseline for current KM practice at national and provincial levels (as discussed under data sources). The sample size for this survey was one hundred and eleven (111) provincial departments and forty-seven (47) national departments, but the response rate was 46 percent for provincial and 36 percent for national levels.

A measure of readiness by public sector institutions to implement KM is designed by the Department of Public Service and Administration (Department of Public Service and Administration 2022). There are five levels included in the self-assessment: 1= mature (KM is conventional in the institution); 2= refinement (KM implementation is continuously evaluated and improved); 3= expansion (KM activities are integrated with everyday work process); 4= initiation (awareness and recognition of the need for KM); 5= reaction (KM is unplanned and random). Most national departments in the sample (68.4 percent) were at the initiation level 1, meaning that the majority of national departments from the sample are only just beginning to recognise the need to manage their knowledge resources. The rest (31,6 percent) reported being at the reaction level, where KM remains ad hoc, unplanned, and not systematic in its processes. No public sector national department from among the responses was found to be at the expansion, refinement, or mature stage level. The provincial departments were found to be in a better position than the national sphere of government, with 45 percent at the reaction level, 41 percent at the initiation level, 13 percent at expansion and 2 percent at the refinement level (Department of Public Service and Administration 2022). Furthermore, the lack of alignment between the IT units of the various departments and the KM units led to poor responses to the business needs of the departments in relation to knowledge. Translating strategy into practice was reported to be weak in many departments, and this was reported by a senior manager in government in a succinct manner, as illustrated in the quotation below:

> *"So, it is about this thing of AGILITY, you know, that's why I keep on going back to strategy - all organisations, private, public, civil society and so on. Where if we get things wrong at strategy level, you will get the structure wrong, you will get the operation wrong, you will get the resource allocation wrong. So my view is that we must go back to where the basic decisions are made at the strategic level"* (Senior Manager 3 - National Government).

Thus, KM is currently being institutionalised in the SA government through relevant legislation and regulated via departments reporting to the central government in required templates, with stipulated norms and standards to be achieved. These are collectively intended to influence a positive culture and awareness of KM principles across public sector organisations. However, practice in the mainstream is not motivated by need, as demonstrated in the results of departments that responded to the baseline survey. Neither is the motivation driven by embedding KM into internally driven processes since generic KM concepts are not applied to existing information management processes in many line function departments. KM practitioners and managers sympathetic to the KM cause find that they must influence executive leadership to value KM at the organisational level. Therefore, KM practice in the SA public sector is at risk of becoming a compliance-driven exercise. These challenges are further explored in the next section. Even though the survey results were reported in 2022, responses were based on existing KM processes and practices of the past.

Opportunities and challenges for KM practice in the public service post-COVID-19 pandemic

The recent implementation of KM in the SA public service, through the documentation of principles and introduction of concepts to guide practice in government, presents an opportunity to strengthen governments' overall performance using KM approaches. Several informants reported that the government's internal processes and information systems can be improved and elevated from a routine activity to a strategic function via KM within departments. This is captured by a senior communications officer in central government below:

> *"There is very little argument on that Knowledge Management needs to be a strategic support function. And so, you know, when Knowledge Management is then reduced to an operational level, it really becomes ineffective, in the sense that Knowledge Management is meant to provide an insight, it's not meant to provide a set of daily file worthy documents"*
> (Senior Communications Officer 1)

Since central government is involved in providing the new direction for KM via the framework (discussed in the previous section), a coordinated and integrated approach across government can influence several sectors to open channels for unobstructed knowledge flows, thereby breaking down silos. It was reported by a senior academic that silos were not there before, and that they are created by the way in which the government is structured. Knowledge has the potential to become diffused across levels and sectors if managed well. Several informants shared how the public sector can become more efficient and agile if knowledge is better managed. Where research processes are useful to generate new knowledge external to government, KM processes within the public sector present the opportunity to strengthen organisational effectiveness through the tacit knowledge of public officials. These experiences by the informants align with the literature, where experience and craft knowledge have the potential to generate relevant knowledge for use by the government.

However, given the state of KM in the public service prior to the pandemic, as demonstrated in the earlier section, the way in which knowledge was produced, mobilised, and used in managing the COVID-19 pandemic demonstrates the complex challenges behind KM practice in the SA public sector. One of the fault lines exposed by the pandemic is that institutionalised planning struggled to break out of sector-based silos. This was reported by the majority of informants who experience the separate mandates that public officials comply with. The business of government in providing quality service delivery and achieving developmental objectives was compromised during COVID-19 (Ajam 2020). Due to weak information management and processes that generate poor quality and incomplete and duplicated

administrative data, the leadership behind COVID-19 opted for the establishment of a completely new centralised structure to manage and cope with the pandemic (Presidency of SA 2021). This had direct implications on information and knowledge flows where separate structures were not helpful in overcoming the silos that were so characteristic of government prior to the pandemic. KM processes and systems are more effective if built over time per department so that they can become a knowledge resource through routine work in preparation for urgencies.

The focus of the new structure under COVID-19 was on a single line of communication and information flows on operations that would be adhered to at all levels of government and across all sectors, but also considering local realities and a differentiated approach in its implementation. This provided a temporary solution to overcome high levels of information asymmetries. The Ministerial Advisory Committee, as the expert advisory structure for COVID-19, was able to gather experts who had the knowledge, craft and experience to steer the technical centres where implementation was taking place. From the onset, no explicit KM was made available or evident. Yet, government communications and officials were at the forefront of managing information and knowledge flows between and within departments - as well as with citizens.

It was observed that components of KM processes were being developed or strengthened at the institutional level at a remarkable pace and effectiveness. South Africa was hailed as a success story in reducing the impact of the virus on its citizens (Presidency of SA 2021). A more explicit KM approach was reported in developing an 'evidence catalogue' by a national government official since no prior knowledge existed of the virus. In this task, integrated knowledge across the sectors, multiple sources of information, data and evidence were captured and categorised to make it easily accessible and discoverable. This was the first widespread and official attempt at using KM principles and approaches during the COVID-19 disaster. Many local-level examples also exist when monitoring citizen involvement in support initiatives (Ajam 2020; Ranchod and Daniels 2020; Presidency of SA 2021). The challenge remained in transferring newly established structures and processes into routine KM activities and continues to be a challenge currently.

Several longer-standing challenges (unrelated to the COVID-19 pandemic) were reported by informants who represent the government at all levels and are integral to the business of government. These are related to KM being focused on records management and regulated by corporate standards as the predominant activity of KM currently in government (Senior Program Manager – 5). The KM function is located in different organisational designs and dispersed across various units, ranging from monitoring and evaluation, research, libraries, or IT units, resulting in KM as a technical function and ineffective at the organisational level (Senior Communications Officer - 3). The location of the function for KM and discovering sources of knowledge derived from internal sources in departments – were reported to be the most problematic currently in government. This is captured in the quote below by a development partner working with the government in providing critical social development services:

> "Government's not very good at that (administration). It's kind of like one day you there, one day you're gone. I mean, a nice example is one of the chief directors I've worked with constantly on this program. We were supposed to do a presentation tomorrow together. And I knew she's retiring by the end of this year. And she retired on the 30th and is nowhere in sight she's just gone and none of her staff know what I'm talking about." (Program Manager - 7)

Factors influencing KM in the South African public sector

The thematic content analysis led to three factors influencing KM in the SA public sector. These factors influence KM at the organisational and institutional levels, influencing KM practice across several government departments. These are further contextualised by drawing from document analysis.

Organisational and bureaucratic culture in the SA government negatively impacts KM

Traditional approaches to acquiring and using knowledge resources in public organisations and top-down bureaucratic culture in decision-making were predominant themes in the primary data generated. Traditional approaches in the SA public sector are reported to depend on content experts, consultants, and externally generated knowledge through outsourced financial processes. The dependency on consultants for routine work of government by public officials was reported widely in the media and annually by the Auditor-General in SA. The social logic guiding day-to-day decision-making in public organisations is an important part of sense-making. Where credible and quality data, information, and knowledge are not readily available for officials to use in their reporting, organisational effectiveness is weakened. When embedded in the broader organisational processes, KM processes and practices have the potential to equalise power dynamics inherent in who decides, who prioritises and who influences the decision space. Several informants reported the bureaucratic culture as one of compliance on the one hand and highly politicised on the other hand. In particular, the performance measuring and reporting culture of government was reported by several informants as the main overtly inhibitory factor across government, and "unfortunately, government makes peace with it. And that is the mindset change we need" (Program Manager and Consultant to government). Authority, rank, titles, and a highly politicised public service, supported by hierarchical reporting structures, result in less engagement between individuals and add to the cultural dynamic of disengaged officials and no trust in internal processes of knowledge use (or learning) within government.

Lack of attention to the relational nature of knowledge

A second dominant theme from the primary data was the relational function of knowledge, which is especially pertinent to the public sector, where multiple stakeholders, multiple sources of knowledge and multiple types of data, information and evidence are engaged with by officials regularly. In this regard, informants reported that government plays the role of a 'knowledge broker' in bridging between various interfaces (science-policy-practice, policy-action, theory-praxis). Informants distinguished between formal relationships that exist and are necessary to fulfil the public purpose (e.g., between state and citizens or between different government entities) with that of informal relationships between individuals and teams who share a common purpose and mutual interests. Relationships were also reported to exist between business and technology functions in the private sector. Formal relationships are recognised through short-term contractual agreements between parties. They are legislated in the case of long-term institutional arrangements between line function (sector-specific) departments and science councils in the production and translation of knowledge. However, informants concluded that government officials in the mainstream have neglected the relational function of knowledge, which negatively influences KM practice.

Governance of multiple priorities and voices in the generation of knowledge

Arising out of the understanding that knowledge is relational, attention to effective governance is another factor that influences KM practice at the institutional level in the public sector. While the KM framework by central government acknowledges the different stakeholders, partners and networks upon which

effective KM processes are dependent, the neglect of relational functions, combined with the top-down bureaucratic culture reported by informants, governance in the knowledge space has been the most neglected. Governance refers to those rules that guide collective decision-making, and therefore, in the public sector, it goes beyond individuals rather than systems that support collective decision-making and processes that need to be continuously updated within a dynamic context at the level of the institutional context. The quotation provided below by a Senior Program Manager illustrates the point:

> *"I think the institutionalisation is dependent on relationships. So, as people change, you know, as people pass and move on and out of this environment, will it continue to exist? I'm not sure. And that's where some sort of, not formalised, but some, more long-term institutional arrangement (is) needed"* (Senior Program Manager - 14).

In addition, the experience of COVID-19 at the level of the state was reported to strengthen multi-level governance in SA and demonstrated what was possible (Presidency of SA 2021). The three spheres of government worked together proactively, with engaged leadership from the centralised structure to respond to the crisis. Decision-making was based on available knowledge and new forms of social partnerships that previously took years to consolidate. Information flows were better and faster through these newly established structures. The critical balance between the need for a rapid and authoritative response nationally had to be constantly balanced with local realities. The observance of rapidly responding during the COVID-19 pandemic was, however, not the experience of the majority of informants in the ordinary business of government post-COVID-19.

These three factors were found to influence KM practice in the SA public sector in its routine work, while the COVID-19 pandemic demonstrated the need for government to pay attention to what knowledge is produced, who is producing this knowledge and how multiple sources of knowledge must be managed for integrated analysis and interpretation. These experiences expand the scope and practice of KM in the public sector and compel practitioners to consider how knowledge is governed.

DISCUSSION AND RECOMMENDATIONS

There is a body of evidence on interventions involving KM policies, strategies, processes and activities implemented in different contexts (Best and Holmes 2010; Schmidt 2020). Documentation of KM within the international development sector further contributes to this body, where multilateral organisations emphasise KM strategies to strengthen organisational effectiveness and efficiencies (OECD 2018; Winters and Gillman 2019). However, it has been established that very little empirical evidence is available for KM processes, systems and outcomes in the public sector, and no empirical evidence for the public sector in SA. What is abundantly available and widely distributed in social media and other accessible learning platforms are normative guides, definitions, concepts, digitalisation, visualisation and other advances in IT systems impacting KM practice.

The findings in this study have demonstrated that KM practice in the public sector is not only relevant post-COVID-19, but it requires attention to specific challenges of bureaucratic culture, relational functions and knowledge governance. If KM theory is developed from practice, it matters that these practices are studied in an inclusive manner with public and private organisations. Furthermore, the location of KM in the structure of government and organisational designs was found to be a critical

enabler in the functioning of the knowledge centre responsible for KM in the organisation. The process for effective KM practice starts with collecting (acquisition), structuring (organising and collating), the management of knowledge resources, and dissemination (translation) of information. More advanced practices contribute by identifying important information sources, cataloguing, codifying and indexing materials for providing a one-stop shop to address multiple knowledge needs. This is important as the conceptualisation of KM in the public sector demonstrates that a balance is needed between formal externally driven knowledge-producing processes and informal internally generated knowledge.

When the business of government is to deliver quality services using planning tools (annual performance plans; medium-term strategic frameworks) that encompass the whole of government processes, it becomes a major concern when KM processes run parallel or outside the departments' business processes. Where budgetary allocations are made based on these processes, it makes the case even more desperate for KM to be a strategic function in the public sector. Three lessons are thus derived from the findings of this study that advance KM practice and ensure its relevance and sustainability for the public sector in SA as well as other similar contexts.

Recommendation 1 – Revisiting the conceptualisation of KM for relevance in the public sector

The conceptualisation of KM must move beyond a single focus on individuals and organisations towards the inclusivity of multiple stakeholders, types of knowledge and sources. This has a direct implication for the development of pluralistic assessment methods and applications to remain relevant. The experience of complexities in government has the potential to inform KM theory from public sector practice. KM definitions must expand to include scientific, experiential (craft), monitoring and tracking evidence, and evaluative evidence, thereby acknowledging different types of knowledge.

Recommendation 2 – Strengthen technical and strategic KM processes for sustainability in the public sector

Explicit knowledge using codified or taxonomy approaches alone limits KM at the technical level. It must be expanded into managing bodies of knowledge that capture multiple narratives in an integrated and synthesised manner to facilitate knowledge use. KM strategies which aim for organisational effectiveness in the public service must include the management of multiple stakeholders, consensus building, facilitation skills and strategic planning processes.

Recommendation 3 - Institutional outcomes contribute to KM theory development

Since the public sector and spheres of government must access, make sense of and use multiple sources of knowledge and deal with various stakeholders, knowledge governance needs to become an integral part of KM practice at the institutional level. Knowledge governance requires KM to include the way in which knowledge is produced, integrated and translated to benefit the broader public good.

CONCLUSION

This study used a case study design to focus on KM practice in the South African government, also referred to as the public sector. Primary and secondary data sources were used to explore the conceptualisation of KM in the public sector, understand the opportunities and challenges in its

application in a post-COVID-19 context and identify factors that influence KM processes in the public sector. Different sources of data enabled the triangulation of findings. Conceptual clarity to guide KM practice in the public sector came as late as 2019, after more than 15 years of efforts to institute KM in the SA government. The centralisation of KM standards provides an opportunity to value public knowledge resources and address critical information asymmetries, including silo structures that impede knowledge flows. Current practice, however, remains characteristic of ad hoc and random practices, with some emerging awareness and recognition for KM at national and provincial levels of government.

Local government has normative guides but no adequate baselines to date to monitor KM practice. Overall challenges identified are that KM is not embedded in the routine work of government and is not aligned with the business strategy of government in the main. Exploring the way in which COVID-19 was managed using a KM lens demonstrates that the SA government has the capacity to lead the implementation of an effective government-wide KM strategy. It has the potential to be responsive to urgencies while continuing with routine service delivery. Findings in this study have demonstrated the value of KM in the public sector and that specific challenges of bureaucratic culture, relational functions and knowledge governance must be addressed. If KM theory is developed from practice, it matters that these practices are studied in an inclusive manner within public and private organisations. For KM to be better understood and embedded in the public sector, more in-depth documentation of public sector business processes is needed and aligned to KM processes. KM theory and practice must expand to accommodate for multiplicity and complexity at all levels if it is to succeed, remain relevant and be sustained in the public sector.

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ANALYSING THE IMPLEMENTATION OF MOMCONNECT AND STOCK VISIBILITY SYSTEM (SVS) HEALTH INFORMATION EXCHANGE IN SOUTH AFRICA: IMPLICATION FOR SHARING INFORMATION AND KNOWLEDGE MANAGEMENT (IKM)

Mmakwena Molala[7]

INTRODUCTION

The Constitution of the Republic of South Africa (1996), Section 27 assured the South African citizens of the right to health care, food, water and social security. It further indicated in Section 27 (2) that the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights. The Department of Health responds to Section 27, and among the tools developed includes the National Health Act and, in recent times, the National Health Insurance Bill. The health sector further ensured compliance and played its role in ensuring that the National Development Plan (NDP) Chapter 10 was catered for. It further ensured that Goal 3 of the Sustainable Development Goals in ensuring that it reduces the global maternal mortality ratio and preventable deaths of newborns, ends the epidemics of AIDS, reduces premature mortality, and prevents and treats sustainable abuse. It further puts in line various responses through the years in line with eHealth strategies that catered for innovative responses in the improvement of health access and services. The review of the National Digital Health Strategy for South Africa (2019 - 2024) will fully embrace potential health technologies in line with the National Health Insurance (NHI) transformation imperatives towards Universal Health Coverage (UHC). South Africa has not only developed the policy and frameworks but went further to develop and implement various health information exchange interventions, the earliest interventions being MomConnect and SVS.

Xiong, Kamunyori and Sebidi (2018) indicates, "South Africa`s MomConnect mobile messaging programme which aims to promote safe motherhood and improve pregnancy outcomes for South Africa woman, includes a helpdesk feature which allows woman registered on the system to ask maternal and child health related questions and to provide feedback on health services received at public health clinics". MomConnect was launched in 2014 by the then Minister of Health Dr Aaron Motswaledi, for the benefits of the pregnant woman to share information. Seebregts *et al.* (2017:2) noted that the "key features of MomConnect programme included using the mobile phone infrastructure in South Africa,

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using open-source systems for the technical platform for MomConnect and using local capacity to build and maintain the system and to keep system cost as low as possible."

They noted further that "the benefits of digital interventions to address health service delivery in low-resource environments are usually limited by a lack of interoperability, data integration and data availability." MomConnect technically had a successful advantage in terms of technical architecture and compliance to National Department of Health (NDoH) policies. But it is worth noting the fact that "MomConnect shows the potential and limitations of using mHealth to support maternal health promotion messaging in resource-constrained environments." Seebregts *et al.* (2017:6) note that "the full benefits of MomConnect`s scalable and extensible architecture will depend on the ability of front-end systems to generate appropriate information to populate a demographic repository and longitudinal health records". MomConnect was designed to promote universal coverage, including women in the lowest socioeconomic bracket (Barron *et al*. 2017). It was noted that more than 2.5 million mothers were registered with MomConnect as of 31 March 2019 (National Digital Health Strategy 2019 -2024).

In a bid to reduce the rate of stockouts of medicines, the South African Department of Health launched the SVS to contain this problem. (USAID, 2020) noted that "the SVS is a web-based management tool with a mobile application that is used at public Primary Health Care (PHC) clinics to capture and monitor medicine availability" and "in South Africa, where outdated and fragmented paper-based systems have made it difficult for supply chain managers to accurately forecast and avoid stockouts of life-saving medicines, SVS supports improved access to medicines and contributes to reducing the cost of health care delivery by ensuring that the supply of medicines in public health facilities meets demand". The SVS process can be brought to all the role players within the workflow process to play their roles; this can be done through the integrated navigation dashboard. The SVS integrated navigation dashboard gives all role players a chance to manage their components within the value chain. It becomes crucial to integrate stock data into the distribution and supply process to increase usage (Ottih, Cussen and Mustafa 2018) further note that "enhanced visibility has promoted a culture of accountability and data-driven decision making". Real time information is important to save lives. The information shared through MomConnect and the management of stock through SVS should be in real time. The SVS dashboard not only gives a role player a chance to perfect their role but also to have real time information on stocks available to make provision for timely orders to avoid any shortages. The roll–out of the dashboard, which collects stock data, will create visibility within the health facility and other stakeholders' evidence for decision-making.

Problem Statement

Access to patients' health information by healthcare providers is necessary in delivering improved quality of healthcare, thus saving more lives. Patients' access to their own health and medical information is equally important as this will ensure that patients get efficient care where and when they need it. However, limited access to patient health and medical information by healthcare providers is a concern globally and in South Africa. Patients' access to their health/medical information electronically is also limited, with healthcare providers being their primary source of this information. Evidence suggests that up to 18 percent of patient safety errors and as many as 70 percent of adverse drug events could be eliminated if the right information about the right patient is available at the right time (Kaelber and Bates 2007:40).

Patient safety is defined by the WHO as "the prevention of errors and adverse effects to patients associated with health care" (WHO 2012). Lack of appropriate knowledge, as well as its transfer, have been cited as one of the factors contributing to adverse events in developing countries. On the other hand, as noted by Torress, Swietek, Ubri and Singer (2014), "patient`s consent for providers to share their health information with other providers may occur on either an opt-in or opt-out basis". An HIE system for clinical health must be managed properly with an opt-out to an opt-in policy, in which patients are given the power to sign consent forms specifying who is or was permitted to view their data in the system.

The importance of the creatable information is emphasised based on the need to ensure that information saves lives. Shapiro *et al.* (2011:616) noted that in addressing the health challenges, "health information organisations (HIOs) have been established to secure the integrated sharing of clinical information among numerous stakeholders". What drives health is not only based on health care but the availability of information and understanding of such information to encourage knowledge innovation to prevent the spread of diseases. Shapiro *et al.* (2011:616) note that "the Centre for Disease Control and Prevention (CDC) implemented a large program to examine the extent to which HIOs can be used to support biosurveillance activities", concurring with the idea that information access is important to the health system. Noting the terrain of the South African micro intervention health sector, which mostly fails to reach the rural areas, the question remains: does the HIE in MomConnect and SVS interventions developed and implemented in South Africa reach all intended health practitioners and health institutions? How useful are the two methods in ensuring that the information is readily accessible and managed accordingly to avoid a lack of knowledge and prevent any form of infection in terms of MomConnect amongst its database users (both practitioners and patients alike? How much power does the SVS give to the frontline staff (practitioners) to assist the supply chain process in time to procure necessary medications and avoid any form of shortage? The central points remain the collection, codification, use and reuse of patients' information and knowledge to prevent any reoccurrence of any disease or shortage of medication within the health facilities.

RESEARCH METHODOLOGY

The study is based purely on desktop research wherein existing sources of information relating to MomConnect and SVS were analysed. Efforts were made to extract information from sources, including articles, conference papers, books, and any other sources of information on MomConnect and SVS. Academic search engines accessed during this endeavour include Google Scholar, Ebsco, and ProQuest databases.

The study analyses the two HIE strategies in terms of timely communication and information exchange, collaborative approach, streamlined processes, flexible care delivery and patient-centred care and support. These elements were crucial within the two HIE strategies in improving health continuity amongst their intended clients and practitioners. The two strategies are accessed based on information and knowledge exchange between its practitioners, whether they served their purpose in ensuring the information reached the intended practitioners in time, and whether knowledge created by practitioners was also shared amongst themselves and systems developers to improve the process. This included an analysis of the WHO reports on health and South African National Health Strategies.

Literature Review and Theoretical Framework

The elements that underpin the sharing of knowledge in the health sector revolve around the systems and proper sharing of information with relevant stakeholders. Adams (2022), the manager of Intersystem, said when he was interviewed that "CareConnent Health Information Exchange (HIE) is designed to help make a meaningful difference in healthcare outcomes". He further noted that the sharing of health information is "underpinned by the Intersystem Healthcare advanced interoperability platform used by healthcare sector organisations globally to assist with the effective, safe and reliable sharing of patient information". Patient information remains at the centre of ensuring that the information shared is relevant, adequate, effective and efficient to be used by another health practitioner.

Data ownership becomes another contested terrain within the space. Patient rights versus access to information or health care service is felt when lives are lost. During COVID-19, we have seen some elements of patient rights being relaxed to ensure that medication reached patients. Further than that, we have seen the sharing of information and knowledge amongst health practitioners become a norm in a quest to share ideas and research outputs and find a solution to the pandemic. This, in nature, promoted coworking spaces. Bousen and Aslam (2019) noted that "coworking spaces use the idea of spatial co–location that improves communication and knowledge sharing among independent knowledge professionals". They further noted that the "fundamentals to those positive outcomes are the knowledge-sharing processes between users of coworking spaces". Data sharing and analysis have become the core pillars of coworking spaces in health environments.

Profit versus availability of information is a challenge as information and knowledge supersede profit, specifically in the health care profession where lives are at stake and prevention is better than cure. In a country like South Africa, where health equality is a myth, it becomes important to address the issue of profit within health when looking at the rural areas. HealthConnect is supposed to advance easy access to information and knowledge and incubate the idea of communities of practice within the sector. This will facilitate well-qualified specialists assisting general practitioners who are mostly servicing rural areas. Adam (2022) notes that "the ability to see, real–time, a patient`s history and care regime regardless of the service provider used might therefore sound like science fiction" and further notes that "HIE will result in improved decisions and reduce costs while enhancing patient care".

Networking becomes a strategic pillar to advance the HIE parameters within the public and private sectors. Country policies must advance the networking, interlinking and sharing of research outputs for public and private sector health practitioners. The network`s goal is to increase the availability, quality, value and use of timely and accurate health information by catalysing the joint funding and development of core country health information systems (World Health Organisation 2006), and further notes that " health information goes beyond the responsibility of a single government entity; it is both produced and used by various institutions, such as health ministries, national statistics offices, ministries for labour, social welfare, planning and finance, the private sector, civil society, donors and development assistance agencies".

The usage of social mobile applications such as tablets and smartphones plays a pivotal role in building the communities of practice (CoP). A simple application such as a WhatsApp group can ensure that a CoP is built to share ideas. Mbunge *et al.* (2022) indicated that "although not everyone owns a smartphone, they are becoming more popular and pervasive, and South Africa is taking advantage of the proliferation of smartphones to improve healthcare". MomConnect is a mobile application used to

provide maternal and childcare by connecting pregnant women to health services. The issues of concern and protection of personal information may be agreed upon among patients and health practitioners. The issues of rural versus urban areas in South Africa still pose a challenge linked to network connection and the availability of data.

CONCEPTUALISATION

Access to health services in nature is a basic right and need within various countries. These are emphasised by their legislative environment. The South African Constitution regards health as the basic right advocated by the Bill of Rights. World Health Organisation (WHO) Framework on Integrated People-Centred Health Services is adopted for the study. The framework is adopted based on its compelling vision in which "all people have equal access to quality health services that are co-produced in a way that meets their life course needs". The framework further advocates for reforms in member states to "incorporate a human rights approach, enshrining access to health care as a basic right, without distinction of ethnicity, religious, gender, age, disability, potential belief, and economic or social condition". Conditions are driven amongst communities based on availability of information and knowledge. Bouncken and Aslam (2007) states that the "co-location of individuals in coworking spaces is first about physical proximity and second about socialisation and collaboration opportunities, which the social disembodiment of ideas, synthesise domain-related knowledge sharing and promote inter-domain learning". WHO, on its Health Information Management and Dissemination (IMD) notes that "information builds knowledge and reliable information is the cornerstone of effective health policies". South Africa like any other African country has challenges in healthcare workers finding the balance between spiralling costs with delivering consistent, high quality patient outcomes". Adams (2022) noted that "technology solutions within the sector have seen the development of health information exchange". The exchange theoretical model will be embraced to ensure a proper understanding emerges from the HIO model and the participants. Huang and Knight (2017:80) indicate that "an exchange theory perspective sheds light on the emergence of different patterns of relationship development over time and how different kinds of resources exchange places at a given stage of development". Care coordination can be viewed as the central pillar in HIE as part of the exchange theory model among health practitioners.

FINDINGS AND RECOMMENDATIONS

The HIE platform generates what is called the knowledge-sharing process, which will ensure that health practitioners share their experiences on a variety of health challenges, this being diagnostics assessment, patient history, physical exams, patient evaluation, symptoms, alternate diagnoses, and ordering of diagnostic tests. Bouncken and Aslam (2019) noted that the creation of coworking spaces is important as they "use the idea of special co-location that improves communication and knowledge sharing among independent knowledge professionals".

The National Digital Health Strategy for South Africa (2019 – 2024) noted in its current digital health governance assessment important elements, including:

- The fact that digital health governance provides for tracking, accountability and the steering of strategy to ensure the health sector meets the expected outcomes.

- The NDoH is required, in terms of Section 74 of the National Health Act, to coordinate the establishment, implementation and maintenance by departments, district health councils, municipalities and the private health sector of the health information systems of the national, provincial and local levels in order to create a comprehensive national health information system.

In response to the three questions noted within the outlined problem statement, the Department of Health in South Africa has implemented various policies and frameworks for advancing the HIE. This, amongst many, included the District Health Management Information Systems (DHMIS) Policy that aimed at ensuring uniformity in the implementation of the DHMIS across the country. In noting the HIE towards knowledge sharing, the below elements provide clear insight in terms of information and knowledge processing:

Information and Knowledge Processing:

There are various definitions of knowledge, but for the purpose of the study, Yun (2002) is relevant. "Knowledge is information that comes laden with experience, judgement, intention and values. In short, knowledge is information that is digested and internalised by human beings" (Yun (2002:26). The importance of data transferred to knowledge through use is important in health professions. With all the jargon and terms used in health professions, it is important to note that simply collecting information is not knowledge. Knowledge, therefore, involves processing definitions, workflow management systems and integration techniques. Yun (2002:32) indicates that "process modelling languages are distinct from each other because they have different meta-model elements". Sibbald *et al.* (2013) note that "information sharing in interdisciplinary teams is a complex and multifaceted process" and that "specific interventions need to be improved such as formalising models of communication, better organisation of knowledge-sharing activities, and improving the active use of allied health professionals".

In their study of HIE and patient safety, Kaelber and Bates (2007) attributed issues of information and knowledge processing to improved patient safety opportunities through HIE. Tomasi, Facchini and Maia (2004:867) indicated that "in health care, especially in developed countries, the use of different types of information technology (IT) has progressed considerably since the beginning of electronic patient registration". They further indicated that it "leads to improvements in the interface and fusion capabilities of a large variety of computers and technologies". MomConnent and SVS are driven by guideline processes, the conceptualisation embedded within the process to connect and share information to save lives. Wang, Norris and Bero (2016) noted that "the implementation of evidence-based guidelines can improve clinical public health outcomes by helping health professionals practice in the most effective and efficient manner and policymakers design optional programmes". MomConnect is based on information pregnant women upload in an accessible way and shared with health practitioners to generate valuable knowledge amongst its recipients. The fact that in 2019, 2.5 million pregnant women were connected to MomConnect gives an indication of the volume of shared information with professional practitioners. It does not, though, indicate the sharing of information amongst these pregnant women in terms of their experiences and challenges. In nature, MomConnect is a two-way stream between the Department of Health and pregnant women, offering support based on the logged calls.

Information and knowledge processing, in terms of the SVS, is more linked to ensure accurate supply chain visibility (SCV). It is worth noting that SCV processes, if well mapped, can encourage the sharing

of information that is accurate, trusted, timely, and in a usable format. Bvuchete, Grobbelaar and Van Eeden (2022) put it into perspective that "the focus of healthcare supply chain management is on planning, management, coordination and controlling flows such as medicine, information, services and finance from supplies to health facilities" and noted that "gaining such visibility requires tools to agilely capture, manage and share the supply chain information across all relevant supply chains partners". Information availability are the key words because any system implemented will be useless if the information is not understood and managed accurately to manage medicine stores. Iwu (2019), in her PhD thesis on vaccine stock management in the Eastern Cape Province, indicated that "a total of 49 (77 percent) health facilities had at least one stockout of at least one vaccine on the day of the visit", indicating the lack of proper management of SVS. The stocks can better be controlled when data is analysed to be information that can be read by the users (health practitioners), and their knowledge of analysing intake per their clients is used to remind the stock controllers in time to initiate the procurement processes. This means the SVS life cycle is not only the supply chain process but the workflow process involving the users, who at the end, know the intake of their clients (patients).

Patient registration and availability of information to the practitioners:

Patient registration plays a significant role in the HIE process. The introduction of technologies has allowed this process to be seamless and interact within the organisational process, that being a hospital, health centre or clinic. The electronic patient registration (EPR) is linked to good quality electronic records, noting the importance of having good metadata. Cox *et al.* (2003:1439) noted that "good quality electronic records can be used to prompt better care, improve coordination of care between primary and secondary care, monitor the health of populations and undertake primary care-based research". MomConnect is more of an electronic patient registration in terms of the management of pregnant women registered on the system. The fact that women register on MomConnect does not guarantee the flow of information amongst the patients themselves in terms of sharing their experience, but a two-way communication between the doctor and patients. The system addresses the practitioner and patient connection but neglects the fact that information will be better shared amongst the community of practice, in this case, pregnant women. The SVS is a stock registration system which is more controlled by the supply chain process and not interactive with its users, including the sisters or unit managers within the health facilities as practitioners, making it difficult for them to assist and advise stock controllers and place their orders on time to avoid any stock shortages.

Improved public health information processing.

Kaelber and Bates (2007:43) made an important accession that improving health processing will require "opportunities for improved patient safety in the areas of post-marketing drug surveillance, infections disease surveillance, biohazard surveillance, and environmental exposure surveillance". Wherelse, Bvuchete, Grobbelaar and Van Eeden (2022) emphasised collaborative decisions in terms of supply chain management, in particular the decision-making process for procurement decisions, supplier decisions, productive decisions, capacity allocation, distribution decisions and transportation issues. Zipperer (2016) noted that "in public health, a decision is mainly based on data and a shift is needed towards evidence–based decision making". The two-way communication in MomConnect provides professionals not only with problems but also with an investigative method to seek and resolve problems in relation to pregnant and postpartum women. Knowledge generated between the two parties in this synopsis, if shared, should be used to assist any new pregnant women facing similar situations in a proactive manner.

Interoperability between private and public health sector

There is a disjuncture between the private and public health systems in South Africa. Private is more profit-driven but perceived to be more efficient than public health services. Yun, L. (2002) noted that "business process models representing process knowledge about doing business are necessary for designing information systems (IS) solutions in enterprises". Yun further indicated that "interoperability of business process knowledge in legacy systems is crucial for enterprise systems interoperation and integration due to increased enterprise cooperation and business exchange". It is further noted that the healthcare of developing countries has suffered greatly due to an increase in diseases, population growth, limited resources and performance issues, and many organisations now look towards the adoption of KM to manage their knowledge and improve their performance (Belay, Desta, Smithson and Meshesha 2020). MomConnect`s success has been enabled by governance and oversight by the South African NDOH, the technical expertise, agility and flexibility of the NSO sector and generous donor funding (Barron *et al.* 2017). Interoperable systems and HIE can be used to effectively support data and information sharing to support continuity of care (Cummins, Crouch and Gesteland 2012)

Improved communication among stakeholders

HIE would become effective when it is communicated and understood by communities. The strategic framework, therefore, must be oriented towards communication amongst stakeholders from the Ministry, hospitals, clinics and available health centres. Morr and Subercare (2010) note that "KM is of paramount importance for the collaboration and sharing of knowledge so that optimal outcomes of the healthcare service are improved". Storm and Fagermoen (2014) share the same sentiment and further note that "the inclusion of experiential knowledge and use involvement can challenge professional authority, roles, and working methods because knowledge sharing is different from persuasion, professional explanation, and consent" and indicated that "dialogue and collaboration between professionals and users is essential to effective user involvement". Medical knowledge, like any other body of knowledge, revolves around time, research is motivated by problems, and KM is encouraged by the collection and sharing of processed information and leads to innovation. In essence, KM plays a greater role in ensuring that health practitioners share the tacit knowledge (problems or solutions) to stimulate research innovation.

CONCLUSION

Despite the growing evidence that mHealth programmes are effective in improving health, literature also points out that the contribution of mHealth programmes is comprehensively misunderstood. Current evidence of the impact of mHealth programmes in terms of information and knowledge sharing is not brought forth by literature. MomConnect and SVS prove to be processes that ensure compliance, with MomConnect linked to a helpdesk that focuses on the impact of complaints, and SVS as a process to ensure that stock is available; information and knowledge sharing remain important within the workflow process. Belay, Desta, Smithson and Meshesha (2020) indicate that "the success of an organisation ultimately depends on the KM process, which creates long-term benefits, learns new techniques, solves problems, creates core competencies and adapts to new situations". Processes of information and knowledge sharing are seamless, advocating for the free flow of knowledge to enhance the process and encourage innovation. Health processes are protected by various legislation; the patient-doctor clause becomes a stumbling block in sharing case studies that could save lives. The balance between health processes, information, and KM remains key in redesigning HIE strategies such as MomConnect and SVS. The future, though, remains optimistic, and as it was proven during the COVID-19 pandemic, sharing specific case study information and knowledge proves key to saving lives.

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TAKING STOCK OF THE HEALTHCARE WORKFORCE IN THE PUBLIC HEALTH SECTOR OF SOUTH AFRICA DURING COVID-19: IMPLICATIONS FOR FUTURE PANDEMICS

Motlagabo Gladys Matseke[8]

INTRODUCTION

According to the World Health Organisation (WHO), health workers are people primarily engaged in actions with the primary intent of enhancing health (WHO 2006). This includes physicians, nurses and midwives, but also laboratory technicians, public health professionals, community health workers, pharmacists, and all other support workers whose main function relates to delivering preventive, promotive or curative health services. The shortage of health workers in Africa is projected to reach 6.1 million by 2030 (WHO 2023). These shortages are threatening African countries' chances of achieving universal healthcare by 2030 (WHO 2023). As with other African countries, South Africa's public health sector has seen shortages in healthcare worker numbers for many years, and this problem was exacerbated by the COVID-19 crisis. The shortage of skilled health professionals in South Africa is projected to be 97 000 health workers by 2025 to address inequities across provinces, with Community Health Workers comprising around one-third of this number (RSA 2020c). It has also been estimated that 88 000 Primary Health Care (PHC) health workers will be needed by 2025 to expand public sector PHC utilisation to the benefits package defined in national policy. These health workers comprise of medical specialists, medical officers, professional nurses, nursing assistants, pharmacists and pharmacy assistants, psychologists, and dental personnel. The Human Resources for Health (HRH) Strategy also stated that due to population growth alone, the shortfall in essential health workers will worsen by 2025 if health workforce expenditure only increases in line with inflation.

The long-standing health worker shortage stems from several factors, including inadequate training capacity, rapid population growth, international migration, weak governance of the health workforce, career changes as well as poor retention of health personnel (WHO 2022). The 2030 HRH Strategy in South Africa makes a case for investing in the health workforce and also states that "the right health workforce enables an efficient and effective health system, which is critical for attaining the goals of improved population health, responsiveness to patient and community expectations, and ensuring financial risk protection" (RSA 2020c).

As such, ensuring an appropriate, trained, and sustainable workforce is a priority for the South African health sector. This is in line with the human capital theory, which stresses the importance of human

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resources for the economic gain of every organisation or country. This theory makes a case for how investment in education and training as a form of capital is required for the development of individuals, organisations, and communities (Nafukho *et al.* 2004).

Emphasis has been put on the fact that HRH is central to health and healthcare, with ample evidence showing that healthcare worker numbers and quality are positively associated with improved health outcomes such as improved immunisation coverage, successful outreach in PHC, infant, child, and maternal survival, impact on communicable diseases and enhancing quality and length of life (RSA 2011). It is, therefore, critical to plan for the required health workforce. This planning is influenced by various factors, including the demographic changes towards an ageing population, the burden of disease, and the epidemiological shift from communicable to non-communicable diseases (RSA 2020c). HRH planning also needs to consider training capacity, the package of services to be provided, the most effective and efficient mix of skills required, and appropriate workloads to ensure quality care.

The outbreak of COVID-19 in December 2019 and its devastating impact led to global concerns about the state of health systems. The health systems in both developed and developing countries were overwhelmed by the COVID-19 pandemic. In the early stages of the pandemic, the number of cases and hospitalisations was on a rapid rise and, as a result, overwhelmed the healthcare systems in several countries. "In Italy, the number of cases and hospitalisations was rising exceptionally fast during the first wave, leading to a strict nationwide lockdown. The number of cases increased from 3 to 59 138 between 20 February and 22 March 2020, and there were more than 4 000 patients admitted to intensive care units on 1 April, which is the highest value during the entire pandemic." (Alavinejad *et al.* 2022).

In South Africa, the cumulative number of confirmed COVID-19 cases by 1 July 2020 was already at 159 333, with 8 124 new cases identified and 2 749 deaths with a mortality rate of 1,7 percent (NICD 2020). The impact of this pandemic on the already existing healthcare worker shortages was ravaging. Three months after the declaration of the state of nation disaster in South Africa due to the COVID-19 pandemic, President Cyril Ramaphosa highlighted a serious shortage of more than 12 000 healthcare workers to assist in the fight against COVID-19 in the country (RSA 2020b). The most needed healthcare workers were nurses, doctors, and physiotherapists.

This paper was aimed at conducting a rapid analysis of the available healthcare workforce when COVID-19 hit South Africa in March 2020, considering that COVID-19 had the potential to overwhelm public health systems. Its objectives were to provide an estimation of the healthcare workforce numbers in the South African public health sector as of March 2020, including the demographic profile of this workforce as well as information on whether this workforce was at their early-, mid-, or late-career stage. The implications of the then stock of the healthcare workforce for future pandemics are also discussed in this paper.

METHODS

A secondary research approach was adopted in this study as it was the most feasible method due to its time-effectiveness and cost-effectiveness. Firstly, desktop research was conducted to obtain the most recent registration statistics from relevant professional bodies. In particular, the number of registered healthcare professionals such as nurses and midwives, medical practitioners, dental practitioners, as well

as medical technologists has been sourced from the South African Nursing Council (SANC), Health Professions Council of South Africa (HPCSA), and South African Pharmacy Council (SAPC).

Secondly, the employment data used to determine the healthcare workforce numbers was sourced from the Vulindlela Human Resources (HR) Application hosted by the Department of National Treasury (2020). As such, HR Oversight data from this system from April 2019 to March 2020 has been instrumental in this endeavour. The HR data were based on data received from the Personal and Salary System (PERSAL) from April 2019 to March 2020. Data were captured on Microsoft Excel, and descriptive analyses were done using the same software.

The method of collecting data from various sources and collating the data in order to estimate the number of healthcare professionals working in South Africa was guided by previous work on a similar subject (Econex 2009; Mahlathi and Dlamini 2015). In the work done by Econex, PERSAL data and data from HPCSA as well as SANC were collated in an attempt to provide an estimation of the numbers of nurses, doctors, specialists, including the breakdown by age, gender, and province (Econex 2009). In Mahlathi and Dlamini's 'Rapid analysis of stock and migration' for the HRH and the surgical workforce in South Africa, PERSAL information for the nine provincial departments of health was utilised for the analysis of stock and migration as they are the largest employer of public sector health professionals (Mahlathi and Dlamini 2015). Also, the statutory health councils were included on the basis that they carry a legislative mandate to maintain the registers of all health professionals in the country.

LITERATURE REVIEW

Legislation and policies

Section 27 of South Africa's Constitution specifies the right of access to healthcare services, and the State's obligation to achieve the progressive realisation of health rights (RSA 1996). The majority of the legislative frameworks impacting HRH were created in the first five years of democracy, between 1994 and 1999, and are based on the Constitution, which provides the broad framework for the development of sectoral legislation. The 1997 White Paper for the Transformation of the Health System in South Africa recognised that a suitable health workforce is central to meeting the population health needs of a democratic South Africa and the implementation of health and social development programmes (Department of Health 1997).

The National Health Act (NHA) was promulgated in 2004 and makes provision for the development of policy and guidelines for the provision, distribution, training, management and utilisation of HRH within the national health system (RSA 2004). These policies and guidelines must, amongst other things, facilitate the adequate distribution of HRH; the provision of appropriately trained staff at all levels of the national health system to meet the population's healthcare needs; and the effective and efficient utilisation, functioning, management and support of HRH (RSA 2004). The NHA makes provision for the establishment of a Forum of Statutory Health Professional Councils to enable coordination between the different professions, complemented by the 2005 Nursing and 2007 Health Professions Amendment Acts (RSA 2004; RSA 2008).

On a global scale, WHO Member States, including South Africa, are required to establish a national public health emergency response plan, including multidisciplinary teams, under the International Health Regulations, 2005 (WHO 2021). The WHO Guidance on Preparing for National Response to Health Emergencies and Disasters suggests a whole-of-society and whole-of-government approach. South Africa's Disaster Management Act 57 of 2002 aims for integrated disaster management policies that focus on emergency preparedness, rapid and effective response to disasters and post-disaster among others.
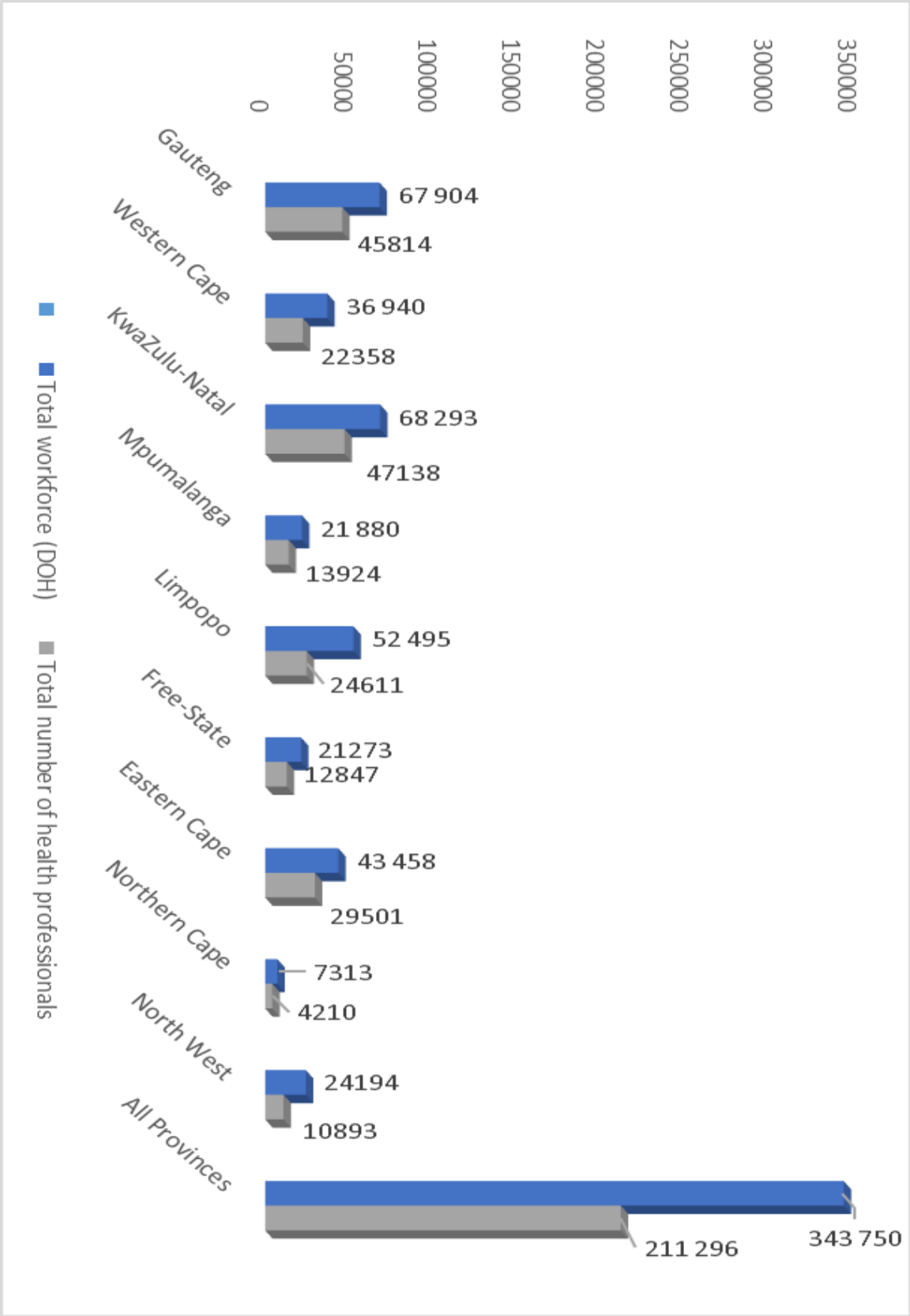
Human Resources for Health

The human capital theory stresses the importance of human resources for the economic gain of every organisation or country and makes a case for how investment in education and training as a form of capital is required for the development of individuals, organisations and communities (Nafukho *et al.* 2004). The Global Strategy on Human Resources for Health: Workforce 2030 (WHO 2016) addresses all aspects of the health workforce, ranging from planning, education, management, retention, incentives, and linkages with the social service workforce. The 2030 HRH Strategy for South Africa sets out the overall vision, goals and actions required to advance South Africa's progress in addressing persistent issues of inequity and inefficiencies in the health workforce. The South African 2030 HRH Strategy argues in favour of health workforce investment and adds that the right health workforce enables an efficient and effective health system, which is critical for attaining the goals of improved population health, responsiveness to patient and community expectations, and ensuring financial risk protection (RSA 2020c). As a result, the South African health sector places a high focus on having the right workforce that is suitable, trained, sustainable, and available. A balanced distribution of health workers in every country is of the utmost importance in the rapid response to infectious diseases and disasters. Given the threat of pandemics, governments need to invest now in their human resources before they strike.

FINDINGS

The total public health sector workforce of approximately 343 750 were employed across the nine provincial departments of health in March 2020 (see Figure 1). This included employees who were not healthcare workers. About 61.5 percent (211 296) of this workforce were healthcare workers, including clinical (medical, dental, and medical technology) and nursing professionals.
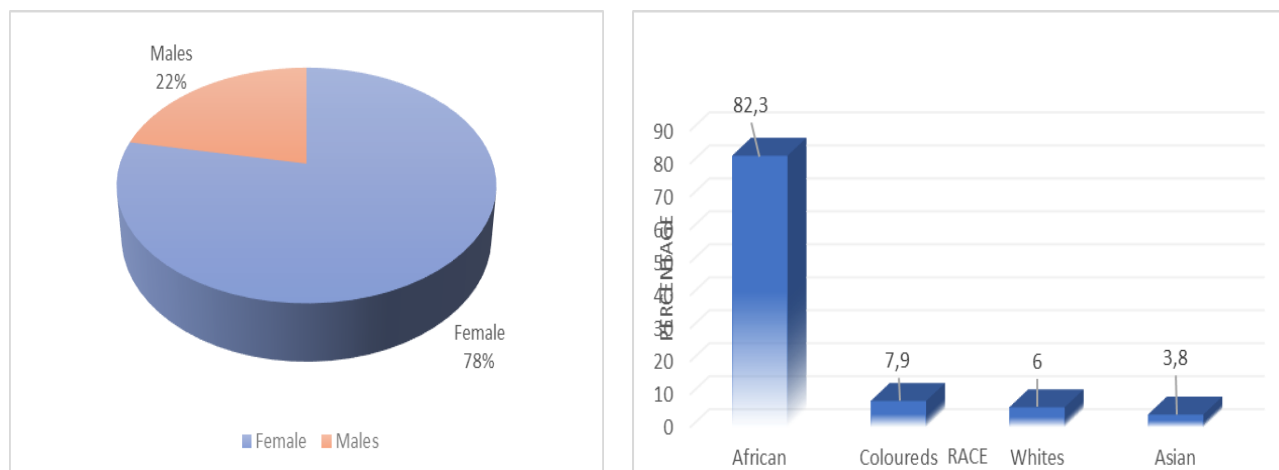
Figure 1: Healthcare Workforce in the Public Health Sector, March 2020

Demographic Profile of the Healthcare Workforce in the Public Health Sector
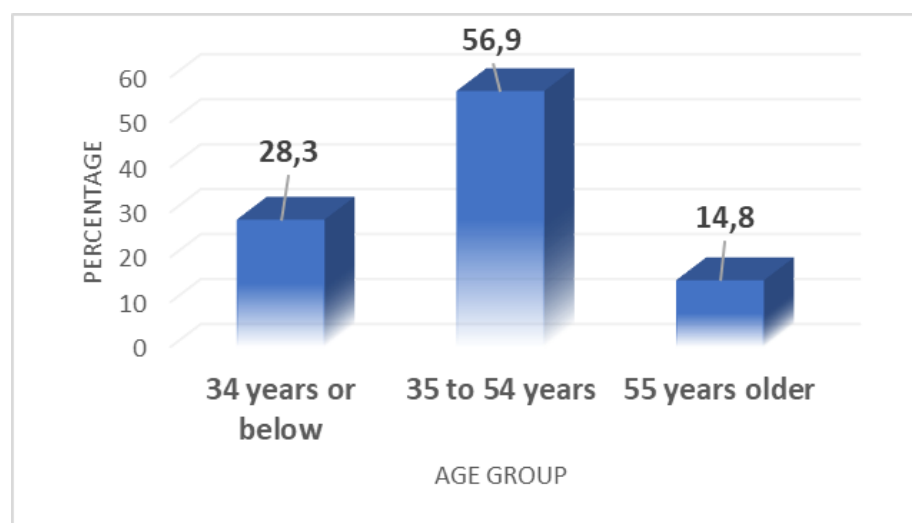
Gender Profile

Figure 2: Gender and Racial Profiles of the Healthcare Workforce in the Public Health Sector of South Africa, March 2020

Most of the healthcare workforce was female (78.1 percent) and African (82.3 percent) in March 2020 (see Figure 2 above).

Age Profile

Figure 3: Age Profile of the Healthcare Workforce in the Public Health Sector of South Africa, March 2020

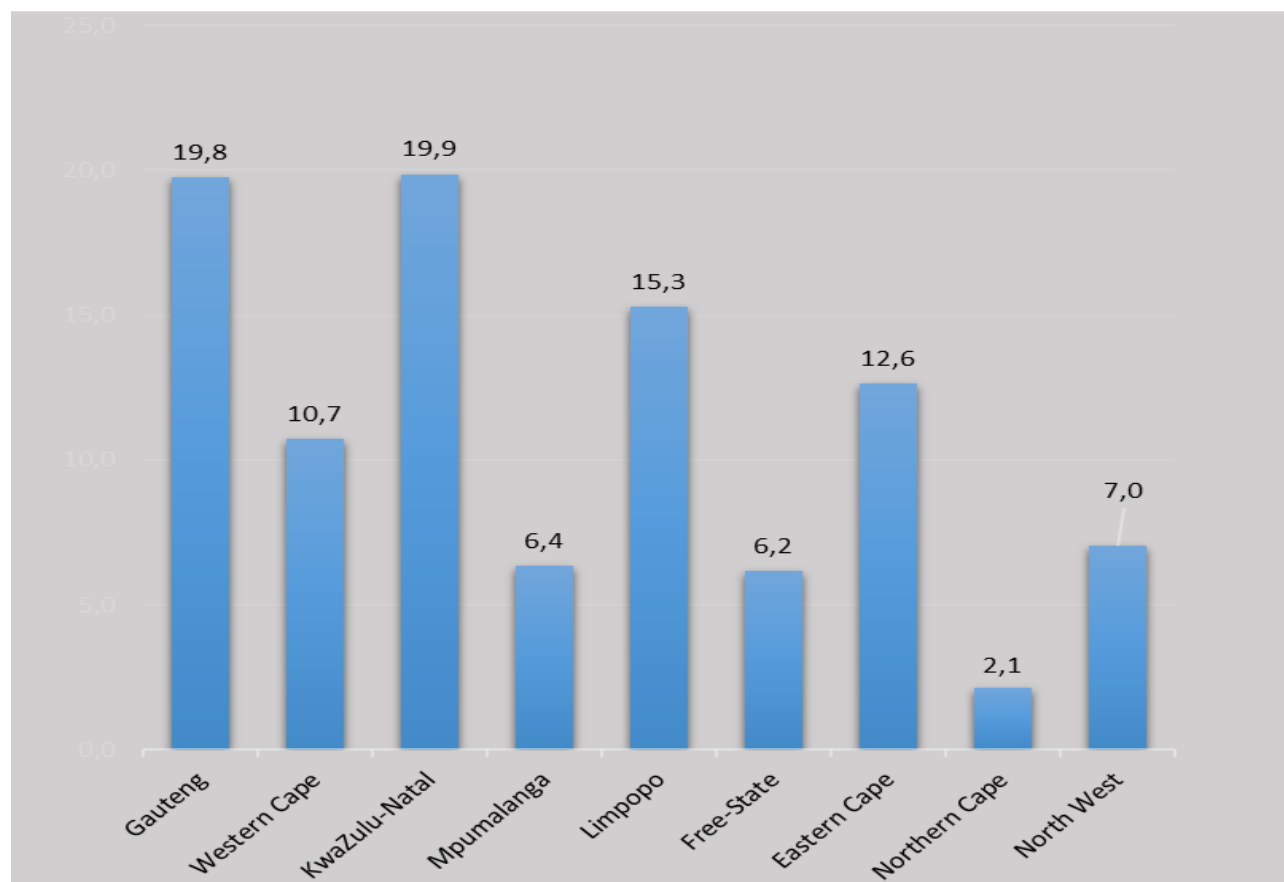When considering the data per age category, it is important to distinguish what percentage of employees are in the early career stage (34 years of age and below), mid-career stage (35 - 54 years) and those in their late career stage (55 years of age and older). The findings in Figure 3 above suggest that 28.3 percent of the public health sector healthcare workforce were in their early career stage (i.e., 34 years of

age and below) and 56.9 percent in their mid-career stage (i.e., 35 - 54 years). Lastly, approximately 14.8 percent were in their late career stage, that is, 55 years and older, and thus also nearing retirement.

Provincial Distribution

Figure 4: Provincial Distribution of the Healthcare Workforce in the Public Health Sector of South Africa, March 2020
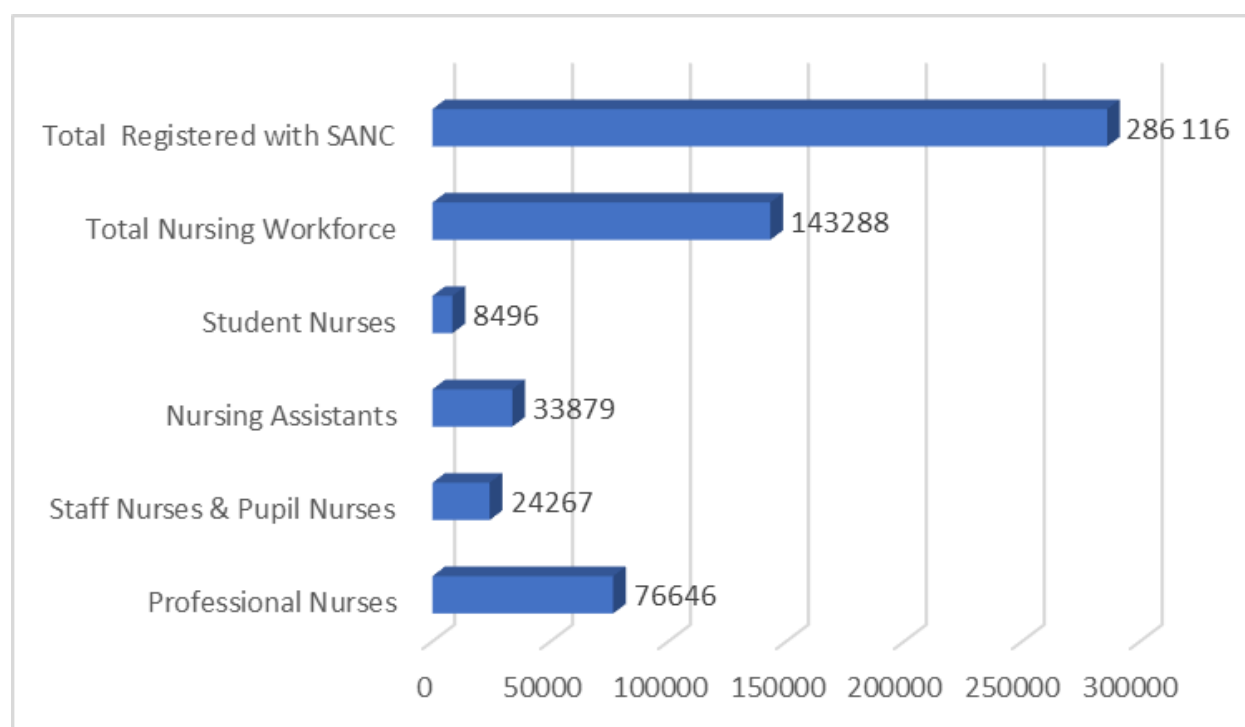

Most of this healthcare workforce was employed in KwaZulu-Natal (19.9 percent) and Gauteng (19.8 percent), more than elsewhere (see Figure 4).

Estimating the Healthcare Workforce numbers in the Public Health Sector

Nursing and Midwifery personnel

Information obtained from SANC indicated that a total of 286 116 nursing personnel were registered with SANC as of 31 December 2019 (see Figure 5 below). An overwhelming majority (90.1 percent) of the registered nursing personnel were female (257 899), while only 9.9 percent were male (28 217). Figure 5 also shows that approximately 143 288 nursing personnel existed in the public health sector in South Africa as of March 2020, of which 53.5 percent (76 646) were professional nurses, 16.9 percent (24 267) were staff nurses and pupil nurses, 23.6 percent (33 879) were nursing assistants, and 5.9 percent (8 496) were student nurses.

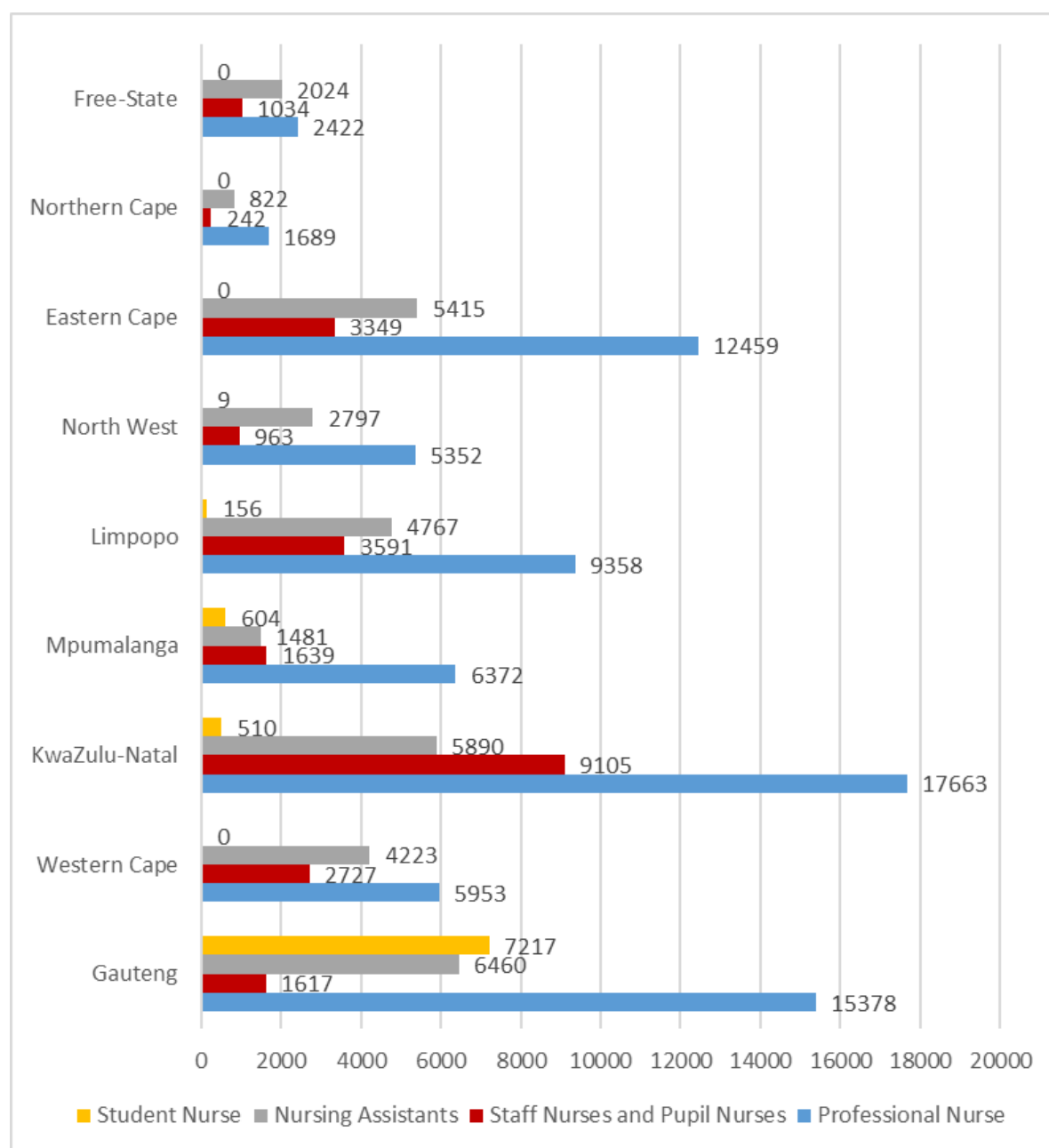**Figure 5: Nursing Workforce in the Public Health Sector, March 2020**

The difference (142 828) between the numbers of registered nursing personnel and those employed in the public health sector is assumed to be those employed in the private health sector and those who have migrated.

Figure 6 below shows that Kwa-Zulu Natal had 17 663 professional nurses employed, followed by Gauteng with 15 378 and Eastern Cape with 12 479. The least number of professional nurses were employed in the Northern Cape (1 689) and Free State (2 422). With regards to staff nurses and pupil nurses, the majority worked in Kwa-Zulu Natal (9 105), followed by Limpopo (3 591), and Eastern Cape (3 349). The least number of staff nurses and pupil nurses worked in the Northern Cape (242), followed by North West (963) and Free State (1 034).

Most of the nursing assistants worked in Gauteng (6 460), followed by Kwa-Zulu Natal (5 890), Eastern Cape (5 415), Limpopo (4 767), and Western Cape (4 223). The least number of nursing assistants worked in the Northern Cape (822), followed by Mpumalanga (1 481), Free State (2 024) and North West (2 797). Regarding student nurses, the majority (7 217) were employed in Gauteng Health Department. The least number of student nurses worked in Mpumalanga (604), Kwa-Zulu Natal (510), and Limpopo (156). There was no indication of student nurses employed by the health departments in the Western Cape, Eastern Cape, Northern Cape, and Free State.

Figure 6: Provincial Distribution of Nurses in the Public Sector

Other Healthcare Personnel

The registration statistics of other healthcare personnel and numbers employed in the public health sector are presented in Table 1 below. A total of 43 901 medical practitioners were registered in the HPCSA by 1 April 2020, of whom 20 926 were employed in the public health sector. These personnel include the workforce in the ambulance and emergency services, with 49 157 registered with HPCSA and 14 432 employed in the public health sector. While a total of 43 901 medical practitioners were registered with HPCSA, almost half (20 926) were employed in the public health sector. A total of 4 860 medical specialists were registered while 4 860 were employed in the public health sector. Only 1 779 physiotherapists were employed in the public health sector, while 8 060 were registered with HPCSA.

Table 1: Registration Statistics vs Workforce in the public health sector, March 2020

Health Profession Category	Number Registered	Number in Public Sector
Nursing practitioners (Professional Nurse, Staff Nurses and Pupil Nurses, Nursing Assistants, and Student Nurses)	285245	143 288
Medical Practitioners	43 901	20 926
Medical Specialists	---	4 860
Medical Technicians/Technologists	3973	568
Medical Biologocal Scientist	694	0
Medical Physicists	150	41
Physiotherapy	8 060	1 779
Dental Practitioners (and Specialists)	6 059	1 596
Dental Technicians	0	51
Dental Therapy	740	361
Oral Hygiene	1 257	251
Dieticians and Nutritionists	3 723	1 640
Ambulance and Emergency Services Related	49157	14 432
Environmental Health	3 565	697
Occupational Therapy	5146	1 614
Optometrists And Opticians	4 021	5
Radiographers	7 309	3 448
Supplementary Diagnostic Radiographers	100	288
Speech Therapy And Audiology	4 351	993
Psychologists And Vocational Counsellors	10 589	802
Pharmacists	5 888	7 074
Pharmaceutical Assistants	7 161	1 937

The provincial distribution of other healthcare personnel, besides nurses, employed in the public health sector is presented in Table 2 below.

Table 2: Provincial Distribution of Other Healthcare personnel in the public health sector, March 2020

Health Profession Category	Gauteng	Western Cape	KwaZulu-Natal	Mpumalanga	Limpopo	North West	Eastern Cape	Northern Cape	Free-State	Total
Ambulance and Emergency Services Related	1959	1692	2800	897	1827	908	2505	74	1770	14 432
Medical Practitioners	5 372	2 907	4 889	1 211	1 708	1 064	2 555	549	721	20 926
Medical Specialists	1 858	1 263	837	72	79	147	227	46	331	4 860
Medical Technicians/Technologists	142	137	154	11	19	29	36	6	34	568
Physicists	17	2	3	2	2	1	6	...	8	41
Dental Practitioners	272	204	195	120	199	112	187	52	104	1 445
Dental Specialists	113	33	...	1	1	...	1	1	1	151
Dental Technicians	25	12	2	0	3	2	5	1	1	51
Dental Therapy	42	2	100	28	132	14	18	24	1	361
Oral Hygiene	56	56	32	7	60	10	20	2	8	251
Dieticians and Nutritionists	313	109	235	168	337	156	153	78	91	1 640
Environmental Health	181	...	90	79	120	98	26	15	88	697
Occupational Therapy	335	180	257	115	235	73	187	74	158	1 614
Optometrists And Opticians	57	2	60	7	111	5	8	2	5	257
Radiographers	852	532	763	187	206	185	437	101	185	3 448
Supplementary Diagnostic Radiographers	5	...	7	5	229	6	15	1	20	288
Speech Therapy And Audiology	254	83	230	112	93	67	84	37	33	993
Psychologists And Vocational Counsellors	337	110	91	32	31	55	84	18	44	802
Physiotherapy	391	189	390	158	174	127	223	79	48	1779
Pharmacists	1 506	1 086	1 216	420	745	448	1 058	185	410	7 074
Pharmaceutical Assistants	4	...	1 064	171	415	203	10	65	5	1937
Chiropodists and other related workers	6	1	1	...	2	1	...	...	...	11
Medical Research and Related Professionals	15	8	116	1	11	...	5	1	2	159
Pharmacologists Pathologists & Related Profess	1	...	389	6	22	...	1	41	3	463
Health Sciences Related	1029	847	99	18	195	15	427	5	1342	2101

Ambulance and emergency-related professionals made up a total of 14 432, the majority of whom were in KwaZulu-Natal (2 800), followed by Eastern Cape (2 505), Gauteng (1 999), Limpopo (1 827), Western Cape (1 692), and Free State (1 770). Approximately 908 ambulance and emergency-related professionals were employed in Northwest and 897 in Mpumalanga. The least number of ambulance and emergency-related professionals were in the Northern Cape (74). Approximately 20 926 of the healthcare workforces in the public health sector were shown to be medical practitioners, the majority of whom were in Gauteng (5 372) and KwaZulu-Natal (4 839). This is followed by the Western Cape with 2 907 and the Eastern Cape with 2 555 medical practitioners. The least number of medical practitioners were in the Northern Cape with 549, and in the Free State with 721 medical practitioners. Limpopo has 1 706 medical practitioners, while Northwest has 1 064, and Mpumalanga has 1 211 medical practitioners. Similarly, with regards to medical specialists, most were in Gauteng (1 858) and Western Cape (1 253), while the least were in Northern Cape (46), Mpumalanga (72), and Limpopo (79). Of the 4 850 medical specialists, the rest were in KwaZulu-Natal (837), Free State (331), Eastern Cape (227), and Northwest (147).

Approximately 568 medical technicians/technologists work in the public sector, most of whom work in Gauteng (142), KwaZulu-Natal (154), and Western Cape (137). The least number of medical technicians/technologists work in Northern Cape (6), Mpumalanga (11), and Limpopo (19). Twenty-nine (29) medical technicians/technologists work in Northwest, 34 in Free State, and 36 in Eastern Cape. Regarding dental practitioners, the majority were in Gauteng (272), followed by Western Cape (204), Limpopo (199), KwaZulu-Natal (195), and Eastern Cape (187) with the least in Northern Cape (52). A similar pattern is observed with dental specialists, dental technicians, oral hygienists, environmental health practitioners, occupational therapists, radiographers, speech therapists and audiologists, psychologists and vocational counsellors, physiotherapists, and pharmacists, the majority of whom were in Gauteng. The rest of the professions follow different distributions across the provinces.

LIMITATIONS

The information provided in this paper is important as it gives a picture of the healthcare workforce in the public health sector at the time when COVID-19 hit South Africa in March 2020. However, some limitations in the use of some of the data sources are noted. Firstly, there is a possibility that the data supplied by the Vulindlela data system contains errors due to some level of acknowledged inaccuracy. Secondly, the registration statistics across the different healthcare professions cannot be translated into numbers of the active healthcare workforce and may include personnel who were only employed in the private health sector as well as those who have emigrated and retired. According to Smith *et al.* (2018), regulatory bodies such as the HPCSA and the SANC should have the full list of registered health professionals by type. However, the information provided by these professional bodies does not provide details of the location of work for health professionals. Smith *et al.* (2018) further stated that registration data from professional bodies should be the foundation for the total HRH count. It is also important to note that the registration statistics from SANC reported at the end of December 2019 were used in this study as these were the latest available data at the time of data collection. Similarly, only the 2018 pharmacy profession registration statistics were available at the time of data collection.

DISCUSSION AND RECOMMENDATIONS

COVID-19 has challenged health systems worldwide, especially the health workforce, a pillar crucial for health systems resilience (Chemali *et al.* 2022). This paper provides an estimation of the healthcare workforce numbers in the South African public health sector as of March 2020, when COVID-19 hit the country. Study findings estimated that a total of 211 296 healthcare workers were employed across the public health sector by March 2020, including medical practitioners (20 926), medical specialists (4 860), and nursing practitioners (143 288). This overall number translated to 2.87 healthcare workers per 1 000 population in March 2020, which was much lower compared to the recommended ratio of at least 4.45 healthcare workers (doctors, nurses, and midwives) per 1 000 population to deliver essential health services and achieve universal health coverage. This confirms the shortage of healthcare workers in South Africa up to March 2020 as was evident from the overburdened health system during the COVID-19 crisis. In 2019, a total of 136 567 nurses, 16 046 medical practitioners, and 4 827 medical specialists were reported to be employed in the public sector (RSA 2020c). Notably, these numbers are not markedly different from the numbers reported in this paper and confirm the shortage of healthcare workforce prior to March 2020.

The WHO ratio of at least 4.45 healthcare workers per 1000 population translates to 445 healthcare workers per 100 000 population. The recent 2030 HRH Strategy (RSA 2020c) reported staffing ratios for the different categories of healthcare workers in South Africa in 2019. For example, the HRH Strategy reported the national average for medical practitioners to be 33.11 per 100 000 population, 9.96 for medical specialists, 147.95 for professional nurses, 64.04 for enrolled nurses, and 69.78 for nursing assistants (RSA 2020c). This equates to a ratio of 324.84 doctors, nurses, and midwives per South Africa's 100 000 population in 2019. The ratio of healthcare workers (doctors, nurses, and midwives) in this study is 2.87 per 1000 population. It is useful to know the proportion of the population who use public health facilities for healthcare services, as this will serve as the correct denominator for calculating a ratio of this kind.

On the contrary, a ratio calculated from registered healthcare workers (physicians, nurses and midwives) reported in this study sums up to 559.35 per 100 000 population in March 2020. This ratio is higher compared to the WHO's recommended ratio of 444 per 100 000 population and refutes the fact that there is a shortage of healthcare workers from previous reports. However, it is not clear what proportion of the registered healthcare workers are not working in South Africa. Hence, the registration statistics cannot be translated into numbers of the active healthcare workforce as they may include personnel who have emigrated and retired. However, the number of registered healthcare workers provides proof that South Africa does have an adequate healthcare workforce and should work harder to recruit and retain these professionals as an active healthcare workforce. To support this, findings from a recent WHO regional survey of African countries indicate that SA no longer has healthcare worker shortages as the total number (456 042; ratio = 6.5) has surpassed the WHO's recommended ratio of 4.45 (WHO 2021). The survey report shows that South Africa has one of the highest total stocks of health workers (456 042) after Nigeria (940 193).

Retention of healthcare professionals in the public health sector is vital as it seeks to address shortages of healthcare staff in the country, especially in rural areas. Provincial departments of health have applied several strategies to retain and attract healthcare personnel, especially medical doctors and medical specialists, into the public health sector. The restoration of nurses into the nursing register by SANC has

been implemented for some time. As such, the recall of healthcare personnel into public service and the facilitation of the return of retired health professionals are some of the important strategies to address shortages as the country faces a burden of diseases. These strategies became more important during the COVID-19 crisis as more nurses, medical practitioners and specialists were needed to assist in the fight against this pandemic, mostly in the public health sector. The public health sector serves the most vulnerable and largest part of society, and without adequate and available healthcare in this sector, this vulnerable part of our society will have no other options for healthcare. More healthcare workers have been affected by COVID-19 as they became cases themselves and needed to be out of work for some time as they needed to isolate. In his speech on the progress made in the national effort to contain the COVID-19 pandemic, President Cyril Ramaphosa highlighted a serious shortage of more than 12 000 healthcare workers to assist in the fight against COVID-19 in South Africa (RSA 2020b). To be specific, the President mentioned the need for mostly nurses, doctors, and physiotherapists.

The findings also showed an ageing healthcare workforce, with over a quarter (26.6 percent) of healthcare workers over the age of 50 years. Approximately 14.8 percent of the healthcare workforce are aged 55 years and older and, therefore, nearing retirement. This finding highlights the need to plan for future human resources, such as training more graduates and attracting qualified professionals back to the healthcare profession. Furthermore, it has been noted that some health professions have more staff who are in their late career stage. These are health sciences-related professions, chiropodists and other related workers, supplementary diagnostic radiographers, dental specialists as well as professional nurses. This issue is of more concern in the case of professional nurses as this is a critical occupation and the backbone of the healthcare service and should be highlighted as a key issue when we consider the skills available to support improved healthcare and response to COVID-19. The human resource plans for the health sector should consider the age profile of staff in each profession to ensure that the human resources demand can continuously be met by institutionalising sound career management practices.

IMPLICATIONS FOR FUTURE PANDEMICS

The severe shortage of health workers in Africa has daunting implications. Without the right healthcare workforce that is suitable, trained, and sustainable, it will be a challenge to achieve better health outcomes such as improved immunisation coverage, successful outreach in primary healthcare, infant, child, and maternal survival, not to mention overcoming future pandemics. Hence, increasing HRH capacity should be prioritised if South Africa is to overcome future pandemics. This paper highlights the need to plan for future human resources, such as training more graduates and attracting qualified professionals back to the healthcare profession.

International health worker recruitment has accelerated as a consequence of the COVID-19 pandemic and widespread disruptions to health services. There is a need to strengthen the healthcare worker recruitment and retention measures and strategies that proved worthy of boosting the workforce numbers during the pandemic. For instance, the facilitation of the return of health professionals who have retired or even migrated and allowing dual practice by healthcare workers across both the private and public health sectors are some of the important strategies to address shortages in the public health sector as the country faces a burden of diseases. The use of financial and non-financial incentives needs to be revisited and revised to ensure that they serve the purpose of retaining and attracting more healthcare workers in the public health sector.

The already existing plans for HRH in South Africa should be implemented. The 2030 HRH Strategy in South Africa already made a case for investing in the health workforce and emphasises the need for additional investments in HRH to improve health service quality, equity and access. Also, this strategy highlights the need to improve the performance of the health workforce as well as the criticality of looking after our health workers through positive practice environments and gender-transformative practices. Furthermore, the recommendations from the 2018 Presidential Health Summit report highlighted the need for evidence and needs-based HRH planning and financing a strategy that ensures adequate numbers of equitably distributed human resources with the right skills mix to meet the needs of the health system (RSA 2019). The need to review the Remuneration of Work Outside Public Sector (RWOPS) policy to ensure the effective use of the existing workforce was stated in the summit. Recommendations also included the need to map the skills and competencies of various categories of healthcare workers to ensure that these human resources are appropriately deployed, and skills leveraged optimally for the benefit of patients.

CONCLUSION

The chronic shortage of healthcare workers in Africa has far-reaching consequences. Without an adequate, trained, sustainable, and proper healthcare workforce, it will be impossible to attain better health outcomes as well as effectively respond to future pandemics. Therefore, if South Africa is to survive upcoming pandemics, expanding HRH capacity needs to be a top priority. The already established plans for investing in South Africa's health workforce, as indicated in the 2030 HRH Strategy, should be implemented. Strategies for retaining and attracting healthcare workers in the public health sector were critical in managing healthcare worker shortages in the country, particularly during a pandemic like COVID-19. This paper underlines the importance of planning for future human resources, such as getting qualified professionals back into the public health sector and training more graduates. Thus, as part of ensuring readiness to deal with future pandemics, the existing short and long-term strategies need to be reviewed and improved to ensure that they permanently address the persisting healthcare worker shortages in the public health sector of South Africa.

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AN EVALUATION OF THE PRACTICE OF CONSTITUTIONAL BASIC VALUES AND PRINCIPLES OF PUBLIC ADMINISTRATION IN THE ZULULAND DISTRICT, KWAZULU-NATAL, SOUTH AFRICA

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INTRODUCTION

Public administration as a set of the activities performed by public officials focuses on the management and implementation of the complete set of government activities on law implementation, regulations, government decisions and management providing public services, finance, health, education, sanitation, housing, and social security. Public administration delivers services using the principal legislation (Ijeoma, Nzewi and Sibanda 2013). Coetzee (2012) indicates that public administration is a wide-ranging and distinctive area of activity, comprising several public officials operating in public institutions, providing goods and services in the community's interests. These activities or functions can be classified into three groups:

The generic administrative activities or tasks of policymaking, financing, organising, staffing, determining work procedures and creating control means;

- Functional activities peculiar to precise services, including education, nursing, public works, or defence; and

- The auxiliary functions, such as decision-making, data processing, planning, programming, and communication, are obligatory to simplify or accelerate executing the generic administrative functions and the functional activities (Coetzee 2012).

According to Uwizeyamana and Maphunye (2014), public administration concerns itself with the executive branch, where the government's work is conducted. Public administration involves enabling the government's goals and objectives to be achieved. Uwizeyamana and Maphunye (2014) Further add that public administration is concerned with the "what?" and "how?" of the government. The "what?" is the subject—the technical knowledge of a field allowing the administrator to accomplish their responsibilities. The "how?" is the management method—the values according to which cooperative programmes are supported through to triumph (Uwizeyamana and Maphunye 2014).

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In South Africa, public administration is based on its government system with three spheres: the national, provincial, and local spheres. Similar to other states, South Africa has a fundamental body of principles and laws governing the country, the Constitution of the Republic of South Africa (RSA) (Brynard 2015).

Section 195 of the Constitution of the Republic of South Africa (RSA 1996) states that public administration must be governed by the following democratic values and principles;

a) *A high standard of professional ethics must be promoted and maintained.*

b) *Efficient, economic and effective use of resources must be promoted.*

c) *Public administration must be development oriented.*

d) *Services must be provided impartially, fairly, equitably and without bias.*

e) *People's needs must be responded to, and the public must be encouraged to participate in policy-making.*

f) *Public administration must be accountable.*

g) *Transparency must be fostered by providing the public with timely, accessible and accurate information.*

h) *Good human-resource management and career-development practices, to maximise human potential, must be cultivated.*

i) *Public administration must be broadly representative of the South African people, with employment and personnel management practices based on ability, objectivity, fairness, and the need to redress the imbalances of the past to achieve broad representation.* (Constitution of the Republic of South Africa 1996).

Section 195 of the Constitution of the Republic of South Africa (RSA 1996) asserts that public administration must be governed by a set of democratic values and principles applied to administration in all spheres of government, organs of state, and public enterprises. National legislation must promote these values and principles (RSA Constitution 1996). Public administration is highly action-oriented as it brings administrative and political participants to the forefront and tests constitutional values for implementation (Sebola 2018). This paper evaluates whether Zululand District and its local municipalities practise the democratic values and principles of public administration as stipulated in the Constitution and how they implement them to improve governance and service delivery.

Problem statement

Constitutional principles are broken without reasonable justification in administrative and political terms. The lack of ethics and principles by public authorities has undermined not only political and administrative issues but also legal and ethical concerns (Sebola 2018). Zululand District has experienced ethical concerns amongst community members since the area had frequent community protests regarding service delivery, governance, and alleged corruption. Rural municipalities, such as Zululand, still encounter several challenges regarding public administration and service delivery. According to The Citizen (2020), over ten violent service delivery protests were held in Zululand in five years. These protests occur in various areas within the district, with some directly by the district municipality. These protests occur in multiple locations and at different times but have similar traits. Citizens complain about insufficient service provision, inadequate financial administration and management, alleged corruption, and inadequate governance.

According to The Citizen (2020), ZDMs encounter challenges, such as maladministration, corruption, and service delivery backlogs, leading to service delivery protests, mostly violent, encompassing illegal acts of vandalism. Residents accuse the local ZDMs of not following their constitutional obligations regarding governance and service delivery. Reports from news publications, such as The Citizen (2020), Excelsior (2020), and Zululand Observer (2019), remark that Zululand encountered more service delivery protests than any district in the KwaZulu-Natal (KZN) in the past five years. Citizens claim municipal officials are not following their constitutional obligation by promoting and enforcing the fundamental values and principles of public administration. The 2016 Auditor-General (AG) report also highlights challenges faced by rural-based municipalities, such as Zululand, which include inadequate skills and insufficient accountability.

Furthermore, local government is often seen as a means for self-enrichment. This research aimed to evaluate the promotion and enforcement of the fundamental values and principles of Public Administration by ZDMs in their daily operations. It also examined how these values and principles are utilised to enhance governance and service delivery. The paper also explored measures to enable the South African public service to improve ethical compliance among government officials and government agencies, as well as in the management of public properties, policies, and resources at an institutional level.

LITERATURE REVIEW

Values and principles are essential in a democratic state

The Constitution of the Republic of South Africa (RSA 1996) remarks that the Republic is a single, sovereign, democratic state with distinct national, provincial, and local government domains interdependent and interrelated. The Constitution of the Republic of South Africa (RSA 1996) further specifies that the norms and principles regulate public administration in Section 195(1) of the Constitution and government administration in all spheres of government. The Constitution mandates that the Republic's government be effective, transparent, responsible, and coherent to ensure the people's well-being and gradual realisation of their fundamental rights (the Constitution of the Republic of South Africa 1996).

In exploring the significance of values and principles in a democratic state, Muller and Cassim (2014) observe them as related ideas. Values and principles of public administration are about the real-world application of ethical standards in governance. Zikhali (2005) emphasises that values reflect universal beliefs that a specific norm of action or state of life is superior to an opposing mode of action or state existence, personally or socially. Those values and principles involve an aspect of judgement because they hold a person's opinions on what is true and desirable. The human is the only living being capable of distinguishing between noble and evil or correct and incorrect. The term value, therefore, means the definition of what is appropriate for the human (African Union 2011).

According to Masango and Mfene (2017), values have substance and sound qualities. The content attribute indicates it is essential to have a code of conduct or end-state life. The attribute of strength determines just how critical it is. Values are a customary practice for organisations in the public and private sectors. Of paramount importance is that institutions follow a set of values and principles in their conduct (Masango and Mfene 2017). Zikhali (2005) indicates that the public authorities must understand

the values' presence and importance under varying conditions. Principles are essential and solid, derived from values and norms (Kooiman and Jentoft 2009). They are simple human behavioural guidelines shown to have long-standing validity. According to Levin (2018), values and principles support choices and empower persons to consider and make informed decisions about diverse situations. Fox (2010) believes that values need to be part of the product of experience, which often has a historical background. A significant portion of the value relates to an individual's experiences.

According to the Public Service Commission (PSC) (2020), the democratic values enshrined in the South African Constitution relate to South African history. They were implemented because of the injustices during the Apartheid era and the struggle against Apartheid. Section 195 of the country's Constitution outlines South Africa's democratic values and the principles for public administration. The preamble remarks that the Constitution is adopted as the supreme law of the land, designed to ensure that South Africa is a country where its entire people are equal before the law, with equal access to service (Constitution of the Republic of South Africa 1996). Masango and Mfene (2017) further add that the values of the Constitution intend to promote and enhance social cohesion among the individuals and population groups within the society. According to Theletsane (2014), the creation and successful implementation of democratic political structures require the formation of fair public administrators, discouraging political partisanship while respecting the complex beliefs and desires of their societies. Molina and McKeown (2012) agree that to advance democracy in South Africa, the government and public officials need to uphold the principles of the Constitution in their daily tasks and handle people in a dignified, non-racial, and non-sexist manner, demonstrating respect for human rights. South Africa is a constitutional democracy requiring the rule of law and accountability, responsiveness, and transparency by the government (PSC 2020).

In conducting its constitutional mandate according to the principles outlined in Chapter 10 of the Constitution (1996), Public Administration should advance democracy by promoting and respecting the values of the Constitution. In the rendering of public services and the administration of the public sector, these democratic values should always prevail. How the services are provided should not be affected by the political affiliation of the service provider or the recipient of the service. Political affiliations should be irrelevant (Theletsane 2014).

The practice of fundamental values and principles of public administration in South Africa

According to Matsiliza (2013), an independent, normative (value) structure to which all South Africans must adhere and where all South Africans must live is provided by the principles expressed in Section 195 of the Constitution of the Republic of South Africa (RSA 1996). Beyond meritocracy, it describes the essence of a South African civil servant who respects ideals and beliefs, executing their daily obligations. Regarding the values and principles of public administration, the Constitution of the Republic of South Africa (RSA 1996) set the basis for fairness, equity, and social justice. The South African public service focuses on creating an effective environment and policy structure to strengthen and discuss inequities and divergences in providing services, especially in historically deprived South African communities (Muller and Cassim 2014).

A public service that would provide efficient public governance with equal and valued equity, facilitating performance, was universally inclusive, neutral and independently prepared by the Constitution of the Republic of South Africa (RSA 1996). The Government of National Unity had an idea "to continually improve the lives of the people of South Africa through a transformed Public Service which is

representative, coherent, transparent, efficient, effective, accountable and responsive to the needs of all"
(Danver 2013).

According to section 196 of the Constitution of the Republic of South Africa (RSA 1996), the PSC exists
to;

> *to promote the values and principles set out in section 195, throughout the public service; to
> investigate, monitor and evaluate the organisation and administration, and the personnel
> practices, of the public service; to propose measures to ensure effective and efficient
> performance within the public service; to give directions aimed at ensuring that personnel
> procedures relating to recruitment, transfers, promotions and dismissals comply with the
> values and principles set out in section 195; to report in respect of its activities and the
> performance of its functions, including any finding it may make and directions and advice it
> may give, and to provide an evaluation of the extent to which the values and principles set
> out in section 195 are complied with; and either of its own accord or on receipt of any
> complaint- (i) to investigate and evaluate the application of personnel and public
> administration practices, and to report to the relevant executive authority and legislature;
> (ii) to investigate grievances of employees in the public service concerning official acts or
> omissions, and recommend appropriate remedies; (iii) to monitor and investigate adherence
> to applicable procedures in the public service; and (iv) to advise national and provincial
> organs of state regarding personnel practices in the public service, including those relating
> to the recruitment, appointment, transfer, discharge and other aspects of the careers of
> employees in the public service and to exercise or perform the additional powers or functions
> prescribed by an Act of Parliament.*

The Constitution of the Republic of South Africa (RSA 1996) presents a vision of service focus and
dedication to providing all South Africans with high-quality services concerning the values and
principles of public administration. Service provision in South Africa should, therefore, be unbiased.
Service provision should be described as a response to the needs of the people and be compassionate
and respectful to the public. The Constitution of the Republic of South Africa (RSA 1996) specifies that
all government workers, regardless of colour, gender, or status, need equal labour standards. Public
service is necessary to enhance the service delivery to the South African community in a sustainable
(efficient, economical, and fair) way.

According to Danver (2013), this is a major departure from the practices and principles followed by the
civil sector in South Africa before 1994. Thebe (2017) believed that practising fundamental values and
principles of public administration in South Africa is vague. The political placement without suitable
political education and training is the cause of incompetent human resources, mismanagement of
financial administration, and poor management within the government. The fundamental values and
principles of public administration lay a solid foundation for equality, equity, and social justice in the
South African public service (Addison 2011). The values and principles of the Constitution of South
Africa (1996) provide a vision of service orientation and commitment to providing high-quality services
to all South Africans. According to this document, service delivery in South Africa ought to be affected
in an unbiased and impartial manner. Gordon (2010) emphasises that service delivery is to be
characterised by responsiveness to the needs of the public—one of the nine values and principles of
public administration.

The Constitution of the Republic of South Africa (RSA 1996) also remarks on the need for fair labour practices for all public servants, despite race, gender, or class. Moth (2014) commends the stunning work of the South African government and its Constitution in ensuring this by establishing support institutions. These support institutions ensure that institutions—especially public institutions, comply with all the constitutional compulsions. These support institutions include the Commission for Conciliation, Mediation and Arbitration (CCMA), the Human Rights Commission, the Commission for gender equality, and the Public Protector. Mokhethi (2017) adds that these institutions have a constitutional obligation to protect the people of South Africa from any form of discrimination or unfair practices. With the notion of accountability, public sector institutions have guidelines detailing how important it is for South African public service servants to be honest and accountable. Public sector institutions and their employees are informed about the obligation to expose, explain, and justify actions (Muswede and Thipa 2017). The South African government contends that public servants in South Africa ought to be guided by an ethos of service delivery. Public servants ought to be committed to promoting service delivery in an unbiased and impartial manner. This is important considering the exclusion policy under the previous government in South Africa (Cox III 2017).

Nekati (2015) believes that in all three spheres of government and municipalities, the ideals of administrative justice should be associated with the structure of democratic governance in South Africa regarding community participation. Christopher (2015) continues, "Community participation is an essential component or principle as far as relevant and basic service delivery is concerned". A responsive, transparent, and accountable municipality avoids service delivery protests. Service quality protests arise when the population of a region expresses its frustration with the mode and measure where public services are delivered, remaining in South Africa for an extensive period (The Citizen 2020)

The practice of fundamental values and principles of public administration in local government

Binza (2012) remarks that with the ratification of the 1996 Constitution, local government in South Africa began a new era. The Constitution established a wall-to-wall local government system for the first time in history, requiring municipalities to be constituted over the entire territory of the Republic (Binza 2012). Section 152 of the Constitution of the Republic of South Africa (RSA 1996) indicates that the South African local government has these objectives:

- Provide democratic and accountable government for local communities;

- Ensure service delivery to people in a sustainable manner;

- Encourage social and economic growth;

- Encourage a safe and healthy environment; and

- Promote the participation of the public and their organisations in matters of local government.

According to SALGA (2021), South Africa's local government is divided into eight metropolitan municipalities, representing the country's eight most populated and industrialised areas. Outside urban regions, the local government mandate is conducted through a two-tier system, with 228 local municipalities divided into 44 district municipalities, sharing the functional competencies outlined in the Constitution's Schedules 4B and 5B. The Municipal Structures Act of 1998 establishes a division of responsibility between the district and the local municipality (SALGA 2021). SALGA (2021) further adds that the Constitution allows municipalities to regulate the local government affairs of their community on their own initiative. This paper focused on fundamental values and principles of public administration in one district municipality, Zululand. Zululand comprises five local municipalities. Since

local government is autonomous, how do we know that, as a public sector institution, they maintain public ethics within their operations?

Brynard (2015) believes that municipalities need to attempt—within their financial and administrative dimensions, to accomplish these objectives. For local governments to be effective, they must meet all these objectives. To meet the above aims, local government, its entities, and employees must adhere to Section 195 of the South African Constitution. Motubatse, Ngwakwe and Sebola (2017) insist that a municipality must aim to attain these goals within its financial and administrative potential. A municipality needs to accomplish all these goals to succeed. Local government, its organisations, and workers must adhere to Section 195 of the South African Constitution to accomplish the above goals (Motubatse, Ngwakwe, and Sebola 2017).

Molina and McKeown (2012) conclude that the values and principles of public administration serve as a guide for municipalities. These values and principles promote efficient, effective, and cost-effective resource management while assisting municipalities in determining if service provision is conducted within its scope and the constraints of resources. Services must be provided in a legal and ethically acceptable manner (Molina and McKeown 2012).

RESEARCH METHODOLOGY

This paper employed a qualitative research method in the collection and interpretation of data. The qualitative research method was employed to gain a thorough awareness of applying the values and principles of public administration in Zululand. This paper and its findings are descriptive, comprising the participants' verbal expressions about practising democratic values and principles of public administration in Zululand. The data was qualitatively analysed by narrating the respondents' observations, opinions, and perceptions. This paper pursued to evaluate whether Zululand practices the democratic values and principles of public administration while examining these values and principles to improve governance and service delivery in Zululand. The factors could be identified, affecting practising the democratic values and principles of public administration in the district while recognising ways of fostering these procedures. The paper observed the diverse thoughts, perceptions, observations, emotions, and perspectives of the participants. The targeted participants hold a significant function in Zululand and, therefore, are important in the study and its findings. Mayors, municipal managers and heads of departments from the Zululand District were interviewed. Well-articulated arguments were presented during the interviews. No interpretation was favoured, but all perspectives were given equal weight, acknowledging that diversity would benefit the paper. The purpose was not to expose a single acceptable truth but to understand the perspectives through which individuals regarded reality.

The targeted location for this paper was the Zululand District in KwaZulu Natal, South Africa. Zululand comprises five local municipalities, including eDumbe, Bhekuzulu, Ulundi, Nongoma, and uPhongolo. This study targeted mayors, municipal managers of each of the five local municipalities within Zululand and heads of departments from the Zululand District municipality. The targeted participants hold significant functions in Zululand; therefore, their participation was significant in the paper and its findings. Primary data was collected through physical, telephone and Zoom interviews that were conducted with the participants. The motivation behind targeting mayors and municipal managers as study participants in a municipality is that the mayor oversees the municipal council's work and

supervises the municipal managers and department heads. The municipal manager and other officials lead the municipal administration as they are in charge of the municipality's work. A purposive, non-probability sampling was used to select participants. Purposive sampling is applied when a sample is chosen for a specific reason to provide insight into a field of interest determined by the research topic (Jensen and Laurie 2016). In this study, the participants with information on how the values and principles of public administration are upheld in the district were identified through municipal websites involving the municipality's primary office bearers/management. This includes the mayors, the municipal managers, and heads of departments (HODs) in ZDM.

PRESENTATION AND DISCUSSION OF FINDINGS FROM MUNICIPAL OFFICIALS

After conducting interviews with municipal officials, the following findings were made:

Understanding of public administration.

To the municipal officials from the Zululand District, public administration is the management of state resources for the benefit of society. It is about ensuring that service delivery is in the public's best interest through the proper utilisation of public funds. This is supported by Coetzee (2012), who defined public administration as a wide-ranging and distinctive area of activity consisting of several public officials operating in public institutions and providing goods and services in the interests of the community. For municipal officials in the Zululand District, public administration is a platform for them to serve their communities the best way they know how. It requires them to be aware of society and look after it, prioritising individuals and their communities' progress and well-being, integrity, sensitivity, empathy and foresight. Participants demonstrated a good understanding of public administration.

Understanding of the South African constitution.

When asked about their understanding of the RSA Constitution, a majority of municipal officials from the Zululand District view the Constitution as a system of laws and regulations that establish government powers and obligations and ensure certain rights for the people. It contains significant rules and laws of the political system; it protects the rights of all citizens regardless of their gender, race, age or political affiliation. It stipulates that in South Africa, nobody is above the law; everyone is equal before the law. Every citizen is required to respect the rules of the constitution. The South African constitution is the supreme law that every citizen should respect regardless of their position in society. Participants demonstrated a good understanding of the Constitution and the rule of law.

Understanding of section 195 of the South African constitution.

Section 195 of the RSA constitution provides values and principles underpinning public administration in South Africa. According to Levin (2018), values and principles underpin choices and empower individuals to consider and make informed decisions about diverse situations and act in a manner which advances democracy. In the rendering of public services and the administration of the public sector, these democratic values should always prevail. Most municipal officials from the Zululand District who view section 195 of the RSA constitution as a set of guidelines share the same sentiments. These guidelines are intended for public officials and regulate their conduct in public institutions. All public servants, whether in local, provincial or national government, should follow these guidelines. According to Matsiliza (2013), an independent, normative (value) structure to which all South Africans need to adhere

and by which all South Africans must live is given by the principles expressed in section 195 of the constitution. In addition, beyond meritocracy, it starts to describe the essence of a South African civil servant who not only respects ideals and beliefs but also executes their everyday obligations consequently. The values and principles of public administration of the Constitution of the Republic of South Africa (RSA 1996) set a basis for fairness, equity and social justice.

The promotion and enforcement of the democratic values and principles of public administration by the municipality.

Section 195, subsection 2 of the Constitution of the Republic of South Africa (RSA 1996) states that the values and principles embodied in section 195, subsection 1 apply to a. administration in every sphere of government; b. organs of state; and c. public enterprises. As a local government administration, the Zululand District municipality and its local municipalities follow their constitutional obligation of promoting and enforcing the democratic values and principles of public administration. The Zululand District promotes and maintains a high standard of professional ethics and promotes the efficient, economical and effective use of resources. Municipal services, both at the local (all five local municipalities within the district) and at the district level, are provided impartially, fairly, equitably and without bias. The study established that within the Zululand District, the needs of the residents are responded to, and public participation is highly encouraged to improve service delivery. Municipal officials from the Zululand District guaranteed and asserted they have a mechanism for ensuring transparency and accountability and that they are indeed guided by Section 195 of the RSA constitution in their conduct. One municipal executive who was interviewed mentioned that they are guided by the constitution in their municipal duties. This participant further explained that as public servants, they adhere to the values and principles given in section 195 of the constitution and continuously strive to improve the practices of these values. This was a clear argument that this particular municipality does promote and enforce the democratic values and principles of public administration, and this, according to municipal officials, is done daily in a variety of ways. Ijeoma *et al.* (2013) also state how South Africa has made huge progress by implementing the values and principles of public administration in developing the country and providing for its people.

The use of the values and principles of public administration to improve governance and service delivery.

In order to improve governance and service delivery, the Zululand District municipality and its local municipalities use or implement the values and principles of public administration in conjunction with relevant legislations such as the Municipal Finance Management Act, Municipal Structures Act and, in particular, the Local Government Municipal Systems Act. The Local Government Municipal Systems Act intends:

- To establish the basic concepts, procedures and processes necessary to allow municipalities to develop towards local community social and economic elevation and to provide universal access to affordable vital services.

- To provide for the exercise and performance of municipal authorities and functions.

- To provide for public participation.

- Providing a foundation for local public administration and development of human resources.

- Develop the support, monitoring and standard-setting framework for other government spheres so that local governments progressively establish themselves as an efficient, forward-load

development agency able to integrate all levels of government's activities to enhance social and economic over all communities in harmony with its natural local environment.

Municipal officials asserted that these are their daily guidelines towards ensuring service delivery in the district.

Development-oriented activities by the municipality.

The Zululand District comprises local municipalities such as UPhongolo, Nongoma, uLundi, Abaqulusi and Dumbe (KZN Online 2019). The participants stated that these local municipalities are supported financially by the district. According to the study participants, Zululand ensures the redistribution of resources to all its local municipalities timeously and assists local municipalities in providing service to the people and sustaining the provision of service in their areas. Findings gathered through interviews also indicated that the Zululand District has LED offices across its five local municipalities to ensure that municipal activities are development-orientated. Furthermore, to ensure that municipal activities are development-orientated, the Zululand District constantly updates citizens about the services available within the municipality. The Zululand District also supports local municipalities through cooperation with local municipalities and also assists those municipalities to promote social and economic development. The researcher learnt from the participants that in ensuring that their activities are development-oriented, the Zululand District is guided by the Integrated Development Planning (IDP). The IDP is a five-year strategic plan for the municipality's future social and economic development. The participants further explained the IDP as a mechanism that involves both the municipality and the citizens in finding a solution in achieving the long-term objectives. Since IDP looks at social and economic development, ZDM uses IDP to create jobs for local citizens and provide infrastructure and service delivery.

The enforcement and encouragement of public participation by the municipality.

Findings gathered through interviews indicated that ward committees are used to facilitate and encourage public participation in the Zululand. The researcher discovered that this is regarded as the most effective way to ensure public participation in the district. The Public Service Commission (2008) report mentioned that ward committees support this and Community Development Workers (CDWs) are facilitators of public participation in ward operations in every municipality. CDWs carefully work with the ward committees to provide vital information that community and governmental organisations should gain (The Public Service Commission, 2008). Furthermore, municipal officials organise meetings and Imbizos for the people to voice their opinions in matters of public interest. One of the participants remarked that using modern communication methods such as social media and internet surveys is another way of promoting public participation in the district.

Impartial, fair and equitable provision of services within the district.

When it comes to impartial, fair and equitable provision of services, the study found that municipal officials from the Zululand conduct proper research surveys and feasibility studies of the area as well as the type of services that are needed and then draft an appropriate allocation of budget. Municipal officials constantly engage with community members and ward councillors to identify services needed in the community and then work towards providing those services. The participants asserted that when it comes to the provision of services, people are treated equally and with respect, regardless of their gender, race, age or political affiliation.

Transparency and accountability within the municipality.

Findings gathered through interviews indicated that the Zululand District has various ways in which to ensure transparency and accountability. This includes regular communication with stakeholders and the community and publicising memos, cases, minutes of meetings and outcomes. To ensure transparency and accountability, the Zululand District has a multitude of ways (both online and offline) for community members to obtain information. These include municipal websites and information boards. Holding an annual general meeting (AGM), which allows different stakeholders to assemble, learn about the previous year's municipal operations and finances, and raise questions, is another method used in the Zululand to ensure transparency and accountability.

During interviews, the participants mentioned various ways in which transparency and accountability are ensured in the Zululand, including:

> *"Regularly train employees on the importance of transparency and accountability".*

> *"Making public what their overall budget is and how their financial resources are being spent and reporting on the regularity and effectiveness of the use, including own activities and actions, of public monies".*

> *"Publicly publishing any audit findings and recommendations, unless specific laws and regulations render them private. As a municipality, we always report on the follow-up actions taken with respect to audit recommendations".*

Good human resource management and career development practices within the municipality.

Regarding good human resource management and career development practices, the Zululand District, like any other public institution, is guided by relevant legislation such as the Basic Conditions of Employment Act and the Labour Relations Act. The researcher discovered that the Zululand District municipality regularly organises Career workshops for its employees. The purpose of these workshops is to enable officials to identify and analyse problems in public administration, develop solutions to those and act professionally. Furthermore, these workshops help employees to be able to interpret and apply the principles underlying administrative justice, for example, fairness, real estate, and so on, and to provide information about norms and values that promote democratic public administrative management.

The Zululand District does cultivate good human resource management and career development practices to maximise human capital, to the extent that one of the participants remarked that;

> *"Ensuring that the selection process is fair, transparent and relevant to what is required, providing subsidy to employees who want to further their studies and providing rewards and performance management bonuses".*

Another participant added:

> *"Provide learnerships and internships for youth, give youth an opportunity to do computer studies, provide students with academic fees for registration in a higher institution after completing their matric".*

The Zululand District municipality and its local municipalities always encourage their staff to register for online courses at the National School of Government to expand their knowledge of public service.

RECOMMENDATIONS

The study aimed at evaluating the practising of fundamental values and principles of public administration in Zululand District, and the following was recommended:

Municipal officials should always know the constitutional values in their daily service to society. They should ensure that human rights are respected and promoted, prioritising the community's interests. Officials should maintain constitutional authority, uphold the rule of law and ensure that everyone is held accountable and that everything is transparent. Public servants (municipal officials in this context) must uphold the Constitution and its values and principles in all their actions. For service delivery, they should follow the Batho Pele principles, which emphasise putting people first.

Establish the public administration Ethics, Integrity and Disciplinary unit within municipalities. In ethics and integrity management, the unit should provide technical support. The unit would also develop the municipality's integrity, ethics, behaviour, and discipline norms and standards. The unit will strengthen local government oversight of ethics, integrity, and discipline and intervene where necessary if systemic flaws are discovered. Within the municipality, the unit should promote and enhance excellent ethics and integrity.

The district municipality must organise workshops or facilitate training where all municipal officials will be taught about the importance of fundamental values and principles of Public Administration. Such training and workshops should also focus on educating officials on incorporating or using these values in their daily tasks.

Transparency, accountability, and public participation, which most community members complain about, should be strengthened.

Establish and communicate the guidelines regarding the processes when applying or enquiring for a service to community members. These guidelines should be clear. Such guidelines should be provided to all habitants within Zululand, regardless of their local municipality.

CONCLUSION

The participants asserted and demonstrated that there is clear promotion and enforcement of the values and principles of public administration within the Zululand District. This is braced by service delivery improvements, development-oriented activities by the municipality, the enforcement and encouragement of public participation by the municipality, impartial, fair and equitable provision of services within the district, the visibility of transparency and accountability within the municipality, as well as good human resource management and career development practices within the municipality. The municipal officials also emphasised their usage of Batho Pele principles in their official duties. They asserted that their

activities are guided by relevant legislation as well as the municipal IDP. The municipal officials avowed that they play a huge role in the governance and development of the municipality. They further added that every official decision they take is always in the community's best interest. Finally, the support provided by the provincial and national governments makes it easier for local municipalities to successfully implement and practice the democratic values and principles of public administration.

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POLICY ACTORS ENGAGED IN URBAN HOUSING POLICY PROVISION IN ZIMBABWE: EXPERIENCES FROM HARARE

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INTRODUCTION

This article is divided into seven cohering sections, namely, this introductory section, research methodology, research analytical framework, state actors engaged in urban housing policymaking in Zimbabwe, non-state and community actors engaged in urban housing provision in Zimbabwe, discussion and analysis of research results and conclusions and recommendations.

Governments normally use the planning and administration instrument called "public policy" to address identifiable problems existing in the political, economic and social environmental realm (Birkland 2011). A public policy is a purposive course of action followed by an actor or a set of actors to deal with a problem or a matter of concern (Anderson 2014). Policy actors are the individuals or groups who directly or indirectly, formally or informally, influence public policy (Ansell, Sørensen and Torfing 2017). Policy actors coordinate the policy-making process by making decisions at the various stages of the policy cycle, such as agenda setting, problem definition, policy formulation, policy adoption, policy implementation and policy evaluation (Dunn 2018). Different public policies are coordinated by a set of policy actors who constitute a policy community for that public policy (Birkland 2016). Each policy field has its own set of actors who define the policy problem, articulate the policy goals and suggest the means for achieving those goals (Knoepfel, Larrue, Varone and Hill 2007). This article examines the roles of actors engaged in urban housing policy formulation and its implementation in Zimbabwe with reference to the City of Harare Housing policy adopted in 2015.

The provision of urban housing in Zimbabwe involves the interaction of multiple actors from both the state and non-state sectors. Regarding the City of Harare housing policy (2015), hereafter referred to as Housing Policy (2015), these actors include but are not limited to housing ministers, mayors, town clerks, housing officers, city housing directors, chamber secretaries, ward councillors, policy advisors, urban planners as well as residents, among others. This research observes that housing policies are found at the central government level, provincial level, and local government level as well as within the civil society and private sectors. These actors in Zimbabwe often collaborate and contest to influence the content and implementation trajectory of the housing policy.

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These housing policy actors complement each other in ensuring that the policy is successful. For example, their collaboration can result in clear articulation of housing policy goals and the design of effective policy instruments to achieve the defined goals.

Competing interests often cause discord amongst the actors. Factors such as different political affiliations, political manipulation and polarisation often lead to disputations and disharmony amongst urban housing policy actors, thereby negatively affecting the process and efforts towards addressing the urban housing challenges in the country. Given this background, this article examines the contributions of the actors who participate in the design and implementation of urban housing policy in Zimbabwe. The article analyses the motivations, interests and limitations that shape the activities and conduct of these actors in formulating and implementing the 2015 urban housing policy for the City of Harare. The analytical focus is on how actors influence the content of the policy and its implementation trajectory.

Research Methodology

The research methodology of this article has been influenced by its central aim, namely an examination of the roles of policy actors involved in formulating and implementing the City of Harare's 2015 housing policy. Thus, this article employs a qualitative methodological approach, which enabled the researchers to use the interview method to critically examine the contribution of the actors engaged in the formulation and implementation of the housing policy adopted by the Housing policy (2015). Data was collected from both primary and secondary sources. First, we reviewed pertinent secondary sources such as the Housing policy (2015) and the Urban Council Act (Chapter 29:15), research articles and newspaper articles. Second, ten (10) key informant interviews were conducted with participants whose profiles are summarised in Appendix A, and the questions to which they had responded are contained in Appendix B. Throughout these interviews, ethical measures such as respect for privacy, informed consent and avoiding any form of harm were upheld. The participants were purposefully selected using specific criteria, namely their institutional positions and their role in urban housing policy formulation and housing policy implementation. The Coronavirus (COVID-19) pandemic constraints limited rigorous engagement with community participants and some targeted key informants. As a result, virtual platforms such as WhatsApp calls, Skype, Zoom and Google Meetings were used to collect data from some participants. The data collected from secondary sources was analysed through qualitative content analysis, while primary data was analysed using thematic analysis.

Research analytical framework

This article uses The Policy Community Model as the guiding framework for data analysis. A policy community refers to a group of actors actively involved in policymaking within a defined policy field (Birkland 2016). The policy community framework shows the interconnections and informal relations between actors in a policy cluster (Anderson 2014). Actors within a policy community usually share a common interest in designing and implementing alternatives for addressing a particular problem (Dunn 2018). Each policy field has its policy community, that is, the set of actors who influence policymaking phases in that policy field. Each actor in the policy community has a specific role in the policymaking processes, and there are boundaries for exercising institutional powers and authority (Pal 2014). Based on the policy community framework, this article argues that while actors in Zimbabwe's urban housing policy community are expected to collaborate towards addressing housing challenges in the country, they often demonstrate contestations or conflicts over the interpretation of housing policy issues because of their diverse backgrounds, interests and motivations. Thus, actors in the urban housing policy

community in Zimbabwe often struggle fiercely to influence and shape urban housing public policy contents and outcomes.

In terms of the major housing policy contents and outcomes, the next section of this article focuses on the main urban housing policy actors in Zimbabwe, which are categorised as government or state actors, non-state actors and community actors. The roles of specific actors within these categories in formulating and implementing urban housing policies in Zimbabwe are discussed in the next section.

STATE ACTORS ENGAGED IN URBAN HOUSING POLICYMAKING IN ZIMBABWE

The following sections provide an overview of the roles of selected state actors who are engaged in formulating and implementing urban housing policies in Zimbabwe.

Minister of Housing and Social Amenities

The Minister of Housing and Social Amenities (hereafter the Minister of Housing) ensures that the primary housing aim of the government – to facilitate sustainable housing delivery – is met and even exceeded. The Minister of Housing provides policy leadership to all urban local authorities towards the achievement of progressive and organised human settlements across the country. This was emphasised in an interview with the Housing Director of the Ministry of National Housing and Social Amenities, who stated that "the Minister of Housing and Social Amenities is a government actor who stands as the chief superintendent of all housing policy developments across the country, which makes him/her responsible for the effective administration of urban housing policies in urban local authorities in Zimbabwe." In the Cabinet, the Minister of Housing represents all local authorities in matters of housing by negotiating with the Treasury on the budget for effective housing development. The Minister of Housing even goes further to negotiate the source funds from private institutions and cooperates to cater for local housing development initiatives under the auspices of government. This was revealed in an interview with a public housing finance expert who stated:

> Local authorities are agents of the central government for housing provision, which gives the Minister of Housing the mandate to set up institutional funding frameworks for housing development to ensure that local authorities are adequately funded to implement their local housing policy functions. In this regard, the Minister of Housing develops and approves proposals for ensuring sustainable housing finance streams to support local housing delivery endeavours.

In an interview with the Housing Director in the Ministry of National Housing and Social Amenities, it was revealed that the Minister of Housing gives regular ministerial directives to evaluate the progress and impact of urban housing policies. The interview disclosed that:

> The Minister of Housing instructs and directs urban councils to conduct regular evaluations of their local urban housing policies to assess their ability to contribute towards meeting established national housing provision targets. This is done as a requirement to assess the performance of the local authorities, identify the challenges they are facing in meeting housing delivery targets and proffer corrective measures for improvement. In this process, urban councils provide progress reports to the Minister of Housing, as these are important in his/her evaluation of their progress in meeting their housing delivery mandate.

Minister of Local Government and Public Works

The Minister of Local Government and Public Works (henceforth Minister of Local Government) is another government actor with a direct role in urban housing policy formulation and implementation. He/she is empowered to supervise all local government processes under the provisions of both the Urban Councils Act (henceforth UCA) (Chapter 29:15). For example, section 313 of the UCA also empowers the Local Government Minister to give directions on matters of policy – and this includes the urban housing policy formulation and implementation. The Minister of Local Government has the power to issue policy directives to the local government and rescind or suspend council resolutions and decisions that he/she considers as defeating housing delivery objectives. While this must be done to ensure accountability with such oversight being critical in establishing an effective urban housing delivery system, scholars argue that the Minister of Local Government in Zimbabwe possesses unfettered supervisory powers in council affairs (Chigwata and De Visser 2017).

There are 36 sections in the Urban Councils Act (UCA) where the phrase "the Minister shall" appear. Amongst other implications, this means the Minister of Local Government has a major influence on the content of the urban housing policy and the manner of its successful implementation. The UCA also empowers the Minister of Local Government to supervise the administration of land in different local authorities. Section 150 (3) of the UCA states that urban local authorities in Zimbabwe may not acquire land without the Minister of Local Government's approval. This was emphasised in an interview with the Housing Director in the Ministry of National Housing and Social Amenities, who stated that:

> *In terms of the expropriation of council land, over and above the resolution of the Committee of the council, the Minister of Local Government's approval is necessary for the process to be completed. This is in line with Section 151 (3) (a) of the UCA, which states that when the council has passed a resolution to appropriate land, it submits this resolution to the Minister of Local Government as an application, and then the minister on receipt of such an application may either refuse to approve the proposed expropriation; or approve it if he/she is satisfied.*

Importantly, the Minister of Local Government only approves the proposed expropriation of land if he/she is *satisfied* that such expropriation is reasonable, as stated under section 151 (4) of the UCA. In addition, section 151 (4) (b) of the UCA also states that this vetting of proposed land expropriations by the Minister of Local Government is necessary to ensure that the land is acquired for the purposes specified by the council. This means that an urban council can only expropriate land for its intended purpose, and it cannot sell, exchange, donate or lease it without the explicit consent of the Local Government Minister as stipulated under Section 151 (8) (b) of the UCA.

Provincial Housing Director

The obligation to promote effective urban housing policy development in Zimbabwe is shared by the central government, provincial housing structure, and local authorities. The Minister of Housing and the Minister of Local Government, respectively, give housing policy directives to the central government and local government. The Provincial Housing Director is a government actor responsible for overseeing the processes of formulating and implementing urban housing policies in their province (Chigwata, Marumahoko and Madhekeni 2019). Provincial Housing Directors are part of the structure of Provincial Councils (hereafter PCs) in Zimbabwe. There are ten PCs in Zimbabwe, and these are established under the Provincial Councils and Administration Act of 1985 [Chapter 29:11]. Section 151 (8) (b) of the UCA states that in their capacity as the provincial administrative units of the central government, PCs evaluate

and approve proposed provincial development plans, including urban housing policy plans – prepared by non-elected committees made up of district administrators, provincial housing directors, Chief Executive Officers (hereafter CEOs) of Rural District Councils (hereafter RDCs) and town clerks.

The role of the Provincial Housing Director is essentially to consolidate plans from Urban Councils (hereafter UCs) and RDCs into the provincial development plan, as revealed by an interviewed officer in the Harare provincial housing director's office. Generally, Provincial Housing Directors facilitate housing in their province in line with the national housing policy framework. In an interview with a housing officer in the office of the Provincial Housing Director in Harare, it was revealed that "the office of the Provincial Housing Director in Zimbabwe works in consultation with provincial organisations representing urban municipalities, that is, to coordinate housing policy and development processes to promote effective housing delivery." The central government instructs this Provincial Housing Director through the Minster of Housing to strengthen the capacity of urban local authorities to effectively provide housing for residents in their areas of jurisdiction (De Visser 2003).

City or Town Mayor

In terms of Section 64 (1) (a and b) of the UCA, the mayor is a government actor who supervises and coordinates development processes in an urban area and controls the activities of the employees of the council concerned. In an interview with the former mayor of Harare, it was revealed that this role encompasses overseeing the activities involved in the formulation and implementation of urban housing policy. The office of the mayor in Zimbabwe – especially the Harare mayor – is not a permanent or stable position. There are many clashes between the mayor and the Minister of Local Government, which often derail the activities and processes of formulating and implementing urban housing policies. Section 54 of the UCA empowers the Minister of Local Government to dismiss the mayor for several reasons, such as being incompetent, guilty of misconduct and acting without consulting the Minister. In an interview, a former mayor of Harare stated:

In terms of municipal protocols, the mayor must report to the town clerk, with whom he/she must take an oath of loyalty and consult with the Minister of Local Government before making any decision. The mayor plays a coordinating role to ensure progressive housing for residents. For example, this is done together with the provision of other social services or facilities, including sustainable housing, water, sewer reticulation, roads, storm-water drains and transport facilities.

In addition to the above-stated functions, the mayor also sets housing development goals and supervises the designation of housing land in their areas of jurisdiction. In an interview with a former mayor of Harare, it was revealed that as part of the urban housing policy administration, the mayor also plans and manages land use and development patterns for the city, which is important in the creation and maintenance of a suitable environment for urban housing development. While mayors play a leading role in initiating, planning, and coordinating housing development initiatives in the cities they manage, their operational freedom is limited by constant ministerial involvement in local government affairs. This was emphasised in an interview with a former mayor of Harare, who stated:

There is serious centralisation of local jurisdictions, as the devolution of power has not been put in place. The mayor has ceremonial powers, and he/she does not have executive powers, as these reside with the minister of local government. To do anything, the approval from the minister of local government is

needed. Likewise, to employ senior staff, there is a need to ask for permission from the minister of local government. The same applies to a budget. The minister is from the ZANU-PF party, and party politics has always been at work as the minister has on several occasions disapproved the proposed council budget, thereby undermining the mayor's office to function effectively.

The spate of politically motivated suspensions and dismissals of democratically elected councillors/mayors based on unverifiable accusations of corruption has not only been in Harare but in other cities as well (Marumahoko, Afolab, Sadie and Nhede 2020). In Harare, after the tug of war between the mayor's office and the Minister of Local Government, mayors have been dismissed by the latter on more occasions than in other cities and towns in Zimbabwe.

Town Clerk

The town clerk is the chief government administrator in a local government, providing administrative guidance to all council staff, including the mayor. This was revealed in an interview with a housing officer in Harare who stated:

In the formulation and implementation of the 2015 urban housing policy for the City of Harare, town clerks carry out several duties, such as determining the policy designs that enable councils to achieve high-quality housing development standards. The mandate of the town clerk in housing policy formulation and implementation is to assess the recommendations made by housing officers and affect them so that they obtain the final authorisation of the council.

In addition to the above, town clerks in Zimbabwe are also involved in setting performance standards and milestones to evaluate, guide, and measure success in the implementation of urban housing policies. In this way, they engage in performance monitoring in which they regularly track and evaluate the extent to which the housing sector is achieving the housing delivery milestones set up by the Ministry of National Housing and Social Amenities. Moreover, the office of the town clerk also provides technical support to their councils to enable them to have the capacity to exercise their powers in executing their urban housing development responsibilities. In explaining this function, an interviewed housing officer in Harare stated:

When the 2015 housing policy for the City of Harare was formulated, the town clerk set the framework for consultative forums to be followed by councillors and housing officers when collecting urban housing policy formulation data from stakeholders. The town clerk also facilitated stakeholder engagement programmes, ensuring that there was cooperation between the council and representatives of the central government, civil society representatives, private sector representatives, and financial sector representatives on matters of urban housing policy development.

In the implementation of urban housing policies, the town clerk provides official communication to stakeholders on the progress and milestones in the implementation process.

Chamber Secretary

The chamber secretary is an essential administrative position in the urban local government structure in Zimbabwe. The chamber secretary heads the department that provides supporting clerical and administrative services to the council as provided under Section 133 (1) of the UCA. The specific roles of the chamber secretary include "preparing and distributing minutes of the proceedings of a council and its committees" (Section 133, 1a of the UCA); and "preparing and distributing agendas and notices of any mayoral, council or committee meetings" (Section, 133 1b of the UCA). In an interview with the City of Harare's Director of Housing, it was revealed that:

During the drafting stage of the formulation of the 2015 housing policy for the City of Harare, the chamber secretary was responsible for compiling and recording all resolutions of the council as stipulated in the UCA. Whenever there is a need for a reference point concerning a contested urban housing policy issue, the chamber secretary must provide clarity as the record keeper.

The chamber secretary can also stand in for the town clerk under Section 133 (2) of the UCA, which states that "whenever the office of the town clerk is vacant, or the town clerk is absent or incapacitated or fails to act, the chamber secretary shall perform the functions conferred or imposed upon the town clerk…" Below is a discussion of the role of the city housing director in urban housing policy formulation and implementation in Zimbabwe.

City Housing Director

Urban local governments in Zimbabwe have housing departments headed by the city or town housing director (hereafter, the director of housing). The City of Harare, for example, has a Housing and Community Services Department based at Remembrance Drive in Mbare and this Department, which is headed by the City Housing Director, is the department responsible for housing matters in this city. The City of Harare housing policy document of 2015 states that the Director of Housing has a coordinating role over all council departments involved in land development during the implementation of any housing development project in the City of Harare. The same policy also provides that all allocation of stands/properties be developed by or in partnership with the private sector on municipal land and that it shall be done by the director of housing in terms of the application procedure. In an interview, the Director of Housing in the City of Harare revealed the following as some of his mandates:

From time to time, the director of housing receives policy formulation proposals from housing officers and committees of the council and suggestions from different urban housing stakeholders. The director of housing then examines these proposals against the vision and mission of the city, which is to achieve sustainable housing provision. The director also checks the feasibility of the proposals received against available council resources, and from these proposals, the director of housing develops policy recommendations for housing delivery in the city. In the case of the 2015 housing policy for the City of Harare, for example, when the drafting of the policy was complete, the director assessed if the proposed policy was enforceable.

The other obligation of the Director of Housing is to ensure that the local authority's distinct housing provision responsibility is fulfilled. Thus, the director plays a pivotal role in the efforts to realise the right to affordable and accessible housing for citizens by ensuring that all logistics are made to make residential housing land available together with the supporting essential services such as water, sewer, roads, electricity and drainage systems. The City of Harare housing policy adopted in 2015 states that the Housing Director is actively involved in the allocation and administration of leased accommodation,

whereupon he/she keeps a list of applicants for leased accommodation who must also be on the city's housing waiting list. It is also the mandate of the Director of Housing to ensure priority in the allocation of rented accommodation is given to council employees. The Director of Housing, therefore, plays a prominent, coordinating role in the implementation of projects and programmes towards the realisation of the right to shelter. The Director of Housing works in collaboration with the town clerk, mayor, councillors, town planners, town engineers, and housing officers in the city. The ensuing section is a discussion of the role of councillors in formulating and implementing urban housing policies in Zimbabwe.

Ward Councillors

Ward councillors are elected officials, that is, politicians representing political parties and wards within constituencies. Some may be independent in terms of political party affiliation. They are elected during the harmonised/congruent general elections in Zimbabwe and hold a five-year term. Councillors play a pivotal role when consultative forums are conducted as they coordinate the collection of data to facilitate the review and formulation of urban housing policies. This was confirmed in an interview with a spatial planning officer in the Harare City Council who stated that:

Councillors are our immediate face when reviewing policies in communities and when conducting consultations with stakeholders such as residents in different wards and constituencies. Since they are known in the different wards due to their political presence, councillors communicate with the residents on what the council is doing in terms of housing development. In crafting the 2015 housing policy for the City of Harare, for example, councillors were the mode of communication used by both the council and residents to share policy-relevant information.

When executing their responsibilities, councillors do not work individually, but in teams known as standing committees of the council. This committee, which oversees housing issues, has eight councillors or members. In terms of section 96 (3) of the UCA, "every council shall appoint a health and housing committee which shall be responsible for health and housing matters relating to the council". In an interview with one of the councillors in this committee, the following roles emerged concerning the role of councillors in the processes of housing policy formulation and implementation:

Councillors in the health and housing committee make up the housing strategy task force for the Harare City Council. During the formulation of the 2015 housing policy for the City of Harare, for example, councillors gave recommendations to the council for the development of actionable strategies for improved housing provision as well as on measures to ensure sustainable and affordable housing provision in the city of Harare.

In addition, through research, ward councillors develop, assess and plan to achieve decent, affordable housing in their wards to improve the housing conditions of communities in Harare. In this regard, the objective of the Education, Health, Housing and Community Services and Licencing Committee is to ensure that there is organised housing delivery in the city. In light of these observations, an interviewed Harare councillor revealed that:

Part of the functions of the councillors in this committee is to set up rent regulation and tenant protection in council apartments and enforcement of housing development projects approved by the council. In the implementation of the 2015 housing policy for the City of Harare, these councillors also play an important role in surveying housing vacancies or deficits to ensure adequate housing provision to urbanites. Councillors also advise on the construction of new housing facilities and rehabilitation of council housing properties to modernise and meet the growing housing needs of the residents.

The Interviewed ward councillor in Harare further stated that while the city of Harare is a duly elected council with decentralised powers, it is difficult for councillors to exercise their powers because of the continuous interference by the Minister of Local Government in the administration of council business. Councillors also participate in ordinary and special council meetings where urban housing policy proposals and recommendations are deliberated upon. These meetings are usually called upon by the mayor whenever there is a request for a meeting by the town clerk. In deciding on policy issues, section 84 (2) (a) stipulates that "all the councillors present at that meeting shall vote on every matter which is put to the vote". Practical experiences in Harare have shown that the term of office of councillors is not stable. They can vacate office through suspension or dismissal by the Minister of Local Government. In the years 2020 and 2021, over 20 councillors in Harare were removed from office for various reasons and this greatly affected the capacity of the council to execute their functions such as housing policy formulation and its implementation.

Housing Officers

Housing officers are permanent council employees whose roles include the evaluation of the different needs of housing applicants, locating vacant council accommodation and placing new tenants and regularly inspecting council properties to ensure that they are in a good state. This role involves working closely with different community stakeholders and is important in providing policy-relevant information when urban housing policies in Zimbabwe are formulated and implemented. In an interview, a housing officer for the Harare City Council summarised their role in the urban housing policy-making process as follows:

We manage tenants' agreements and leases, administer payments and arrears, prepare reports, collect statistical data on housing in the city, and process legal action when there is a need to do so. We also ensure that all computerised and manual recording systems of housing data are updated and maintained on an accurate and timely basis and that all service requests are responded to within the prescribed timescales. We regularly work with committees of councillors, architects, engineers, tenants' groups, and private housing associations to ensure that there is coordination in the city's housing delivery system. Generally, our role involves the management of the day-to-day operations of rented council properties, which is also an important part of urban housing policy administration. We also regularly inspect council housing facilities to make sure that they are in a good condition for tenants.

In an interview, the City of Harare Housing Director seemingly overstated the role of housing officers in urban housing policy-making, as he averred that housing officers provide vital information when urban housing policies in Zimbabwe are formulated and implemented, mentioning that:

Housing officers conduct research and statistical compilation of housing information, waiting list management, planning and coordination, housing development, feasibility studies and financial

mobilisation. These officers also process tenants' applications and give them feedback. They also process and resolve issues of breaches of tenants' lease agreements and develop strategies to manage arrears by the tenants.

In contradistinction to the preceding, seemingly prominent/eminent role of housing officers, interviews with Harare City Council personnel indicated that housing officers are supposed to ascertain, in conjunction with urban planners, residents' shelter needs and facilitate the revitalisation of housing projects within a city. This means that housing officers work with urban planners, and not alone, in ensuring the provision of utility services like water and sewer, as well as with engineers in the maintenance and construction of housing facilities. These officers also interview applicants on the housing waiting list to assess their ability to pay for residential stands on a short- and long-term basis. In this regard, the role of city planners in urban housing policymaking is vital, as discussed in the ensuing section.

Urban Planners

Urban planners in Zimbabwe help urban housing policymakers with professional advice on proper land management, such as the development of land use plans for the local authority, for example, land use zoning, surveying, and establishing plans that are important for the implementation of different city projects, including housing. These may be spatial, site, layout, and master plans. Elaborating on these functions, the city planning officer in the Harare City Council stated that:

Urban planners develop layout plans and patterns to make the city look more attractive and design plans on how to accommodate the growing urban population sustainably. These planners also design the regulations for the sustainable use of urban space to create an ideal city. Planners also review site plans submitted by land developers to make sure that they comply with zoning and environmental regulations. Urban planners use their planning expertise to create organised urban morphology. Urban planners also conduct regular field investigations to collect information on related factors that affect urban land use patterns, and this information is important to actors who formulate and implement urban housing policies.

Drawing on the preceding interview insights shared by the city planning officer in the Harare City Council, it can be argued that when urban housing policy projects are implemented, there is also a need to develop the "related factors" mentioned in the preceding quotation. In this regard, the following section briefly discusses the important role of policy consultants or advisors in urban housing policymaking in Zimbabwe.

Non-state and community actors engaged in urban housing provision in Zimbabwe

Non-state and community actors also participate in urban housing policy formulation and implementation in Zimbabwe, and the active ones are as follows:

Policy Consultants or Advisors

The policy consultant is a non-state actor who advises government actors on matters of policy. Most often, policy decision-makers require expert advice to formulate effective and substantive policies

because of the complexity of the problems they confront (Elaigwu *et al.* 2008). This applies to urban housing policy formulation in Zimbabwe, where a council can hire a consultant to provide technical insight into the issues that shape the policy being designed. In an interview with the City of Harare Housing Director, it was revealed that "Consultancies are the think-tanks, academics and commissions, among other specialists who provide policy-relevant information to the decision-makers. The expectation is that they give informed, objective and justifiable recommendations on whether or not a proposed course of action should be pursued."

Scholars have argued that when giving advice, consultants consider the context of the issue they are giving advice on and consider the interests of all actors and stakeholders affected by the advice they will give (Fossas 2008). For example, in the context of urban housing planning and development in Zimbabwe, consultants may be called to advise in a contested area or on a contested issue, such as the demolition of irregular settlements. The expectation is that they must examine such an issue from an unbiased and non-political standpoint to provide objective advice even if the client does not like it. In Zimbabwe's urban housing policymaking arena, expert advice is sought from a professional consultant, but this is only done on a restricted basis because of limited financial resources to pay the hired consultants. The next section is a brief discussion of the contribution of residents in the processes of formulating and implementing urban housing policies in Zimbabwe.

Residents or Citizens

Residents and the community are the primary targets of urban housing policy and its first beneficiaries. Thus, it is encouraged that residents and the community at large actively participate in the formulation and implementation of public policies (Weible and Ingold 2018). The demands and expectations expressed by residents during community participation exercises make up part of the content of the final policy document. The success of urban housing policy depends largely on active community participation in creating sustainable housing solutions. Community participation in planning, governance and development at the grassroots level is integral to democratic governance (Williams 2006). Globally, there is some recognition of the need to engage residents to co-produce solutions to housing challenges (Marks and Erwin 2018). Engaging residents enables local authorities to gain local buy-in in housing policy-making (Czischke 2018). When consulted, residents can become active participants in creating the change they want through urban housing policies and not just be passive recipients of predetermined housing products. However, in some cases, community participation is never done, and policy positions will be imposed on them.

DISCUSSION AND ANALYSIS

The urban housing policy community in Zimbabwe consists of actors who have discrete roles, distinct interests, diverse motivations, mixed backgrounds and different degrees of influence in the processes of formulating and implementing urban housing policies. However, it would seem that the main motivation for the majority of actors is political survival and supremacy in urban governance processes. These actors are categorised as either state actors or non-state actors. There are more state actors than non-state actors that are engaged in urban housing policy-making. State actors are the individuals who represent government at different levels of governance. Non-state actors are participants drawn from the consultancy sector and the community. In terms of decision-making power, state actors wield more authority than non-state actors. Pertinent points that can be drawn in this regard are:

First, both state and non-state urban housing policy actors in Zimbabwe seek to influence the design, content and implementation trajectory of urban housing policies. These policy actors in Zimbabwe's urban housing policy community operate in a highly contested political environment (Muchadenyika 2015). These actors seem determined to ensure that the housing challenges in the country are addressed, but through policy strategies that resonate with their political interests. Thus, "political gladiators" force urban housing policy actors to make certain decisions and pursue certain actions that advance political interests instead of addressing the persistent urban housing challenges.

Second, urban housing policy actors in Zimbabwe have varying degrees of decision-making power, as some actors exercise direct control and supervision of the activities of other actors (McGregor 2013). For example, the Minister of Local Government and Public Works directly influences the activities of the other actors, such as provincial housing directors, mayors and town clerks, under the framework of ministerial supervision, which is provided under the UCA. Scholars argue that the UCA gives the Minister of Local Government excessive powers to interfere in local government affairs like housing policy administration (Chigwata, Muchapondwa and De Visser 2017).

Third, the UCA presents several problematic clauses concerning the role of the Minister of Local Government in urban council affairs – including urban housing policy administration. For example, section 7 (4) (b) of the UCA states that in the urban housing policy implementation process, the Minister of Local Government has the power to control the allocation of residential stands for homeownership purposes *as* he/she may think fit. Moreover, section 313 (3) of the UCA states that upon receiving the policy direction from the Minister of Local Government, councils are expected to "with all due expedition, comply" with these policy directions. Thus, the decisions and resolutions made by urban local authorities when formulating and implementing urban housing policies are not final until the Minister of Local Government approves them. The UCA states that by doing this, the Minister of Local Government will be correcting possible errors or omissions in the administration of the council. These are some of the instances where the Minister of Local Government directly influences the conduct of other actors.

Fourth, the operational autonomy of some urban housing policy actors is clipped by ministerial intervention in local government administration. This is mainly because the majority of mayors are from the opposition political parties such as the Citizen Coalition for Change (CCC) and the Movement for Democratic Change-Tsvangirai (MDC-T), whilst the minister is from the ruling party Zimbabwe African National Union-Patriotic Front (ZANU-PF). Over ten (10) mayors in Zimbabwe have been dismissed, harassed and/or suspended by the Minister of Local Government from the year 2000 to 2020 in Zimbabwe (Muchadenyika and Williams 2020). The tug of war between mayors and the minister of local government in Zimbabwe has resulted in conflicts that mar the formulation and implementation of urban housing policy. This partly explains why urban housing challenges in Harare have persisted as persistent confrontations often stall urban housing policy implementation progress.

Fifth, some actors have had their terms of office cut short through ministerial suspensions. This results in a staff shortage to administer urban housing policies and coordinate some related local government functionaries. Legally, the Minister of Local Government can dismiss councillors if they are suspected or found to have contravened any provisions of the Prevention of Corruption Act [Chapter 9:16] through acts of corruption, dishonesty, negligence and gross mismanagement of council funds (section 114 of the UCA). This provision has been used to dismiss or suspend suspected corrupt councillors in Harare,

often without concrete evidence, creating a turbulent relationship between councillors and the Minister of Local Government. Such stormy relationships, characterised by the battle of political supremacy, are making it difficult for councillors to focus on their mandate of designing effective urban housing policies. This has contributed to the persistence of urban housing challenges in Harare (as much time is lost to political battles while neglecting the need to prioritise the design of effective housing delivery strategies). Unlike ward councillors and mayors, town clerks in Zimbabwe seem to enjoy an amicable relationship with the Minister of Local Government due to the 'political' nature of their appointment. As a result, their tenure is more stable than that of the ward councillors and mayors, whose positions are often shrouded in confrontations with the Minister of Local Government.

Sixth, this research observes that the non-participation of one actor negatively affects the policy outcome. This is because each actor has a unique contribution to the process, a contribution that other actors may not be able to execute effectively. Thus, while it may be difficult for actors to always agree or come to a common agreement on urban housing policy matters, the collaboration between and amongst these actors is considered an important way to ensure that a particular urban housing policy reflects the input/perspectives of most if not all actors. The research established that the non-participation of some actors, such as residents, stems from the failure of local governments to incorporate their input into the decision-making process. Based on such a perspective/conclusion, it appears that community consultations are a formality because the final policy will reflect the interests of decision-makers, which are often misaligned with the housing expectations and demands expressed by the residents during consultations.

CONCLUSIONS AND RECOMMENDATIONS

The urban housing policy community in Zimbabwe is highly contested. This article has argued that while they largely differ in terms of political orientations, urban housing policy actors in Zimbabwe constitute the principal architects of policy formulation and implementation, and they essentially determine the content, path and result of public policies in the housing field. The article has also demonstrated how the urban housing policy community in Zimbabwe has a wide range of policy actors performing diverse responsibilities and holding different powers and levels of authority, and this often creates distracting tendencies and conflicts amongst some actors, constraining, thereby, the implementation of adequate, equitable urban housing policies. Our research demonstrated that there are conflicts and disagreements amongst policy actors. Thus, it is often difficult to implement housing policy imperatives such as the provision of affordable housing in Zimbabwe. The article notes that while conflicts amongst actors are often inevitable, good urban housing public policies should, as far as possible, be designed and implemented collaboratively by different housing and infrastructural actors. It is, therefore, recommended that grassroots-driven mechanisms such as street committees via community networks be established as a necessary policy nexus with government policy actors in the urban housing sector in Zimbabwe. Our research also demonstrated that policy actors influence the outcome of public policy directly or indirectly, hence the need to encourage a shared understanding of different policy issues and infrastructural needs amongst specific actors, which could facilitate the provision of accessible and adequate urban housing in Zimbabwe.

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STRENGTHENING E-LEARNING AS A SUSTAINABLE KNOWLEDGE MANAGEMENT SYSTEM FOR HIGHER EDUCATION IN THE COVID-19 ERA

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INTRODUCTION

The disruptive outbreak of the COVID-19 pandemic spread rapidly globally, causing havoc to all sectors of society. It was traced in China around December 2019 and was declared a pandemic in January 2020 by the World Health Organisation (WHO) (Keni R, Alexander A, Nayak PG, Mudgal J and Nandakumar K (2020). COVID-19 left a trail of destruction in social, political and economic sectors. As a result, countries, organisations and institutions responded in many ways needed to ensure their survival. Like all other sectors, the education sector was heavily affected by the pandemic. The education sector operates with multitudes of people like retail, tourism, public transport and service sectors. Measures adopted to combat the spread of COVID-19 were geared towards controlling the gathering of many people in one place, hence the isolation technique applied by WHO.

Zambia, like any other country worldwide, under the provision of Statutory Instrument No. 22 of 2020, developed measures that helped to curb the effects of the pandemic, such as locking down, social distancing and working from home (Government of Republic of Zambia Statutory Instrument 2020). The COVID-19 measures did not spare institutions of higher learning (herein also referred to as Higher Education Institutions), which were using traditional delivery models to adopt alternative teaching methods to exterminate physical contact. In Zambia, like many other countries, all physical learning in all schools, including those under Higher Education Institutions (HEIs), was prohibited as a preventive measure to reduce the spread of COVID-19. HEIs responded by investing more in platforms, thus shifting from traditional forms to technology-based e-learning delivery systems. HEIs worldwide recognised and accepted e-learning as an effective mode of education service delivery as far as quality education is concerned (Sarker, Mahmud, Islam and Islam 2019). Investing in transitioning from the traditional methods to e-learning had other HEIs redesigning their strategic plans, adopting the latter for continuous use to explore future benefits.

The e-learning experience during COVID-19 informed HEIs of the need for sustaining KM. The learners' experiences during COVID-19 through e-learning were better for most educators as it aided in creating a society of knowledge equal to the world. However, HEIs faced the challenges of

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underutilisation of the e-learning systems despite their high potential to reach a large number of learners in both urban and rural Zambia. This was interesting as it drew attention to further research in order to gain a deeper understanding of why e-learning was under-utilized by lecturers and students in HEIs.

METHODOLOGY

The study adopted an exploratory case study design, which focused particularly on the academic members of staff, ICT staff and students from selected HEIs within the City of Lusaka. The study explored the experiences of participants on the utilisation of e-learning as a sustainable Knowledge Management Systems tool in HEIs post-COVID-19.   The study design helped address its objectives in understanding the implications of HEIs for utilising e-learning as a sustainable Knowledge Management System in the post-COVID-19 period (Dudovskly 2022). The adopted design implied that understanding selected participants from various HEIs' contextual experiences would be required to achieve most study objectives. The selected participants from identified HEIs in this study were interviewed and asked questions about the understanding of the study phenomenon, hence giving an in-depth knowledge of the matter. The study was conducted in Lusaka City because of two reasons. First, Lusaka is the capital city of Zambia. Second, Lusaka is host to a number of HEIs compared to other cities within Zambia.

Lusaka was the area where the researchers obtained the study sample. Therefore, a target population was relevant for this study in particular. The participants were academic members of staff, Information and Communication Technology (ICT) staff and students from four (4) HEIs within the targeted population. The four HEIs were targeted as they formed part of a number within the HEIs. The population was, therefore, sufficient for the study within the four HEIs.

A sample size is a representative number of respondents chosen to participate in the study. The Researchers considered an exploratory study design which relied on collecting in-depth information from participants. Levels of information saturation guide the determination of sample size in qualitative studies. Therefore, the study in each specific HEI identified one to two participants, giving a total of (5) five. A sample of 5 participants drawn from four HEIs was large enough to generate valuable insights into the effectiveness of strategies for utilising e-learning in HEIs post-COVID-19. According to Creswell (2014), the key feature of qualitative research is small samples chosen from a range of one to 30 individuals.

Furthermore, Ritchie and Lewis (2003) urge that the saturation level of information is conclusive as it is meant to manage the analysis of the complexity of qualitative data collected. Therefore, qualitative studies' concerns are not based on data accumulated by a limited number but rely on data being collected due to information saturation. The choice of the sample size in this study was guided by saturation levels of information (Aguboshim 2021).

The study's targeted sample of participants was within the Lusaka District. Purposive sampling was used for selecting five key participants from Four HEIs. These represented the University of Lusaka, the National Institute of Public Administration, ZCAS University and Texilla University. Purposive sampling was applied to this study to identify participants using good judgment in selecting key informants. Purposive sampling is a non-probability form of sampling used in qualitative studies. Since qualitative studies require in-depth information on a particular matter, in this case, it was about

sustainable knowledge management systems, and the choice of sampling methods helped the study to obtain information from participants who had knowledge and experience within the study scope (Palinkas, Horwitz, Green, Wisdom, Duan and Hoagwood 2015).

A questionnaire and an interview guide were used to obtain information from five participants in four selected HEIs. The questionnaire was structured with open-ended questions. The open-ended questions were framed in order to address study objectives or research questions (Di Petta 2010). The questionnaire was self-administered. Though a questionnaire has its weaknesses, it was appropriate for this study to obtain enough information by using a variety of questions at a specific time.

An interview guide contained questions which would be a follow-up to the questionnaire. To obtain expert information with regards to having an understanding of Caretakers inhabiting uncompleted houses within a policy and institutional framework capacity, four (4) key informants of representatives of UN-Habitat for Humanity, Landlords, Ministry of Housing and Infrastructure and National Housing Authority of different organisations were interviewed as part of diverse stakeholders on how they perceive e-learning in HEIs.

Since part of the data collected was primary, filled-in questionnaires and recorded in-depth interviews were obtained. These were analysed through the generation of themes and analysis of the contents thereafter. Dudovskly (2022) alludes that qualitative research has no universal guidelines in data analysis, as in the case of quantitative research. In qualitative studies, data analysis entirely depends on the researcher's analytical and proficiency capabilities to analyse the data collected. Therefore, the data analysis skills in qualitative studies are never repeated to have the same results. This is because the application of skills in analysing qualitative data by researchers is quite dynamic.

Thus, thematic analysis is another method that was used to analyse data collected from face-to-face interviews. Creswell (2014) asserts that thematic analysis is a method of data analysis in its own right. Whatever form of qualitative data analysis is undertaken, it must be understood that the data collected is unstructured and more in-depth than quantitative; therefore, a level of skill to process data is always needed. Thematic analysis is used by deducing meaning from words people use. This is associated with the discovery of repeated themes in text or voice. Those discovered themes will reveal insights to quantify data. The themes were codified or formed into categories. The process of theme-creating in thematic analysis is understood as "coding".

LITERATURE REVIEW

The literature review is crucial to this study as it engenders an understanding of the perspectives of different scholars and gives insights into the reasons for the underutilisation of e-learning. Conducting a thorough literature review before undertaking the actual investigation is essential for discussing our findings. Equally essential is comprehending the underlying factors why e-learning was underutilised. Furthermore, the process has helped us identify a significant gap in existing knowledge, which will contribute to advancing our understanding in the e-learning field.

Causes of Underutilisation of e-learning Facilities

Higher Education Authorities in Malawi report that nearly 65 public and private universities adopted some e-learning systems during the epidemic (Gama, Chipeta and Chawinga 2022). In addition, it is revealed that the average use of e-learning systems in HEIs in that country stands at 61 percent, compared to an estimated 73 percent in the region. One of the reasons researchers cite is the lack of acceptance of e-learning portals as an alternative to the usual educational service delivery at university institutions in Zambia. Thus, not all university authorities that invest in these systems are well equipped to migrate to e-learning, and decisions are made quickly to avoid losing business. Educational experts have long held that traditional forms of learning are the best learning model because there are physical interactions between learning facilitators and learners (Serbessa 2006). COVID-19's experience through electronic learning informed our society of a need for a sustaining KM within HEIs. The experiences of COVID-19 learners through e-learning were better for most educators because it contributed to creating a knowledge-sharing society equivalent to the world.

E-learning is considered to be an alternative, inferior or less efficient approach to be implemented by many lecturers (Khan and Setiawan 2019). This view has affected the level of adoption and utilisation by both learners and lecturers. Adedoyin and Soykan (2020) state that the most notable disadvantage of e-learning is its lack of social interaction between learners and facilitators of learning. Learners enjoy interacting with the facilitator of learning or the lecturer. Clearly, most students need social interaction to perform academically and thus tend to find e-learning difficult to adopt.

Serbessa (2006) maintains that experts in education management argue that a student studying in isolation will require a great deal of self-motivation, time management, self-discipline and a focused approach to get the most out of e-learning. Unfortunately, most students lack the drive needed to get the most out of e-learning and, therefore, find self-study challenging.

Herawati, Siregar, Yusrizal, Rahma, Sari and Irwandi (2021) investigated learners' perception of online learning amid the COVID-19 pandemic. The study heightened some challenges in its findings faced during online learning, such as small phone screens possessed by learners making resolutions difficult, poor internet access, system unreliability, lack of sufficient data by learners, cost of data, financial issues and poor lecturers' attitude. However, Sarker *et al.* (2019) postulate that external factors such as poor internet infrastructure support, cost structures, government regulations, culture issues and literacy levels all contribute to low utilisation of learning systems in higher learning institutions. Further, Herawati *et al.* (2021) posit that students and lecturers face inadequate internet data and poor internet network reliability, and some lecturers and students do not have smartphones, tablets or computers to use for e-learning. The standpoint resulted in the underutilisation of e-learning facilities because about 60 percent of students enrolled in some higher learning and 30 percent of lecturers did not have the gadgets to help them access the internet facilities. The Herawati *et al.* (2021) study further reveals that most lecturers did not have sufficient ICT skills and could not adopt a particular media consistently to deliver lectures. Lecturers keep switching from Zoom to Google Meet, WhatsApp, Microsoft Teams and so forth. Some lecturers lack the readiness to use various e-learning media in the learning process.

Another challenge is that there are types of training that simply cannot be taught via e-learning. They are known as soft skills. Ray (2020) identified these soft skills, and they take the form of interpersonal skills, verbal, communication, leadership and initiative. There are general fears that online education courses while offering many advantages over traditional brick-and-mortar courses, fall short of teaching

those soft skills. These soft skills are often essential life skills that contribute towards employability; this problem raises the classic dilemma of the student who is academically excellent but unable to assimilate his knowledge to others because of poor accommodation. Mwakwai, Khaled and Bwaaneh (2020) propound how a virtual environment can help improve student interest and motivation but lack the mechanism that increase student interest through immediate feedback.

Besides other comments, systems do not help reduce the challenges facing both students and lecturers, such as integrated learner management systems and providing synchronous components. Further, virtual classes' text-based chat functionality would motivate learners to participate. However, integrating learner management systems in higher educational settings can often enhance the teaching and learning experience (Al-Nuaimi, Al-Sawafi, Malik Al-Emran and Selim 2022).

In addition, another cause of the underutilisation of e-learning facilities in HEIs is attributed to the attitudes of both the students and lecturers. Asamoah (2021) states that the attitudes of learners and facilitators affected the usage of online learning portals. This entails that students and lecturers were still so used to the traditional learning delivery system that they did not regard the e-learning system as a useful tool for the timely delivery of learning content. Furthermore, many students and lecturers interested in the traditional form of learning system found it difficult to change to and adapt to e-learning systems provided by school authorities in most HEIs.

Effects of COVID-19 on the Higher Education Sector

When COVID-19 emerged, and closure restrictions became compulsory, HEIs such as universities had no choice but to switch from traditional education to emergency remote learning. Remote learning is usually a form of learning that is performed online or through e-learning. Remote learning is not a new phenomenon, as it dates back to the 1850s when students used learning methods by letter, television, e-mail, and radio. Since then, they have been changing with the growing demand for digital technologies, and eventually, terms such as e-learning and online learning have emerged. During the COVID-19 restrictions and social distancing, requiring the compulsory use of e-learning impacted HEIs (García-Morales, Garrido-Moreno and Martín-Rojas 2021).

It can, however, be said that in most HEIs, some form of electronic learning initiative is practised, but that the epidemic of COVID-19 increased to unprecedented levels, leading to fundamental changes in the institutions adopting it. Investment in its infrastructure immediately became a mandate for students' access and the acquisition of quality education (Murphy 2020:449).

Subsequently, e-learning was not a new event that was identified as new during the COVID-19 pandemic. The adoption and management of ICT technologies in the transformation of e-learning was key during COVID-19. After COVID-19, the transformation created a platform that could be seen positively or negatively. Positive means that most HEI stakeholders have experienced e-learning and, that opportunities are created, and that they should be considered as spaces for innovation. Most universities have taken advantage of the opportunity to open doors to invite students from all over the world to reach higher academic achievement.

COVID-19 Learning opportunities

Gracie *et al.* (2020:2) raise a sense of hope in the manner in which COVID-19 disrupted the traditional form of learning. In as much as HEIs were going to transition to e-learning as an emergency remote learning approach, it granted an opportunity for adopting e-learning as it brought talented innovations on board. Both learners and educators had to learn ICT programmes and processes to fit within the demands of e-learning, which took place during the COVID-19 pandemic. Talent that was acquired during transformation meant many HEI learners discovered alternative styles or methods of learning and teaching. These styles could then be adopted for continuity to save as forms of KM that would exist to benefit society at any point when another disaster looms.

Meanwhile, the innovation that was adopted through e-learning could be that there was an introduction of an open curriculum where both the learner and educator needed to continue learning and teaching as long as it was sustaining the learning process through e-learning (Kim, Rosenblith, Chang and Pollack (2020:303). Changing to such modes of learning needed both the learner and educator to adopt sustainable approaches where the transformation was to accept change by involving processes that would ensure all involved participated.

Furthermore, a participatory culture was necessary where it was not just a belief to see that every member contributes, but for all to be free to contribute at any time during the designing of initiatives, and their contribution would be valued suitably (Green, Edwards, Wolodko, Stewart, Brooks and Littledyke 2010). Since the transition to e-learning was urgent, feedback on decisions was vital so that all involved were not left without knowledge and knowing how the whole process would be managed to lead to its sustainability and achieving goals.

However, Gracie *et al.* (2020:2) further raise a sense of hope by breaking traditional learning modes in the way of COVID-19. Although HEIs intended to transition to e-learning as an emergency remote learning approach, they had the opportunity to adopt e-learning because it brought talent innovation. Both learners and educators had to learn ICT programs and processes to meet the demands of e-learning that occurred during the COVID-19 pandemic. The talent acquired during the transformation allowed many HEI teachers to discover alternative styles and methods of learning and teaching. These styles could then be adopted for the purpose of continuity as KM forms that exist to benefit society at any time when another disaster is imminent. The innovations adopted by e-learning may be the introduction of an open curriculum in which learners and educators must continue to learn and teach as long as the learning process is maintained through e-learning (Kim *et al.* 2020:302). Change to such learning modes required both learners and educators to adopt a sustainable approach, where the transformation was to accept change through processes that would ensure that all parties participated.

As a result, a participatory culture is needed to recognise that all members can participate freely in the initiative's design and be appreciated appropriately (Malete 2020). This is because the transition to e-learning is urgent. Feedback and decisions are said to be essential for ensuring that all participants did not leave out knowledge and knew how the whole process would be managed to achieve its sustainability and achievement goals.

Hybrid Learning and Knowledge Management

A hybrid learning system in some cases of other HEIs has been one possible approach adopted when face-to-face learning resumed to ensure sustainability and readiness for any such global pandemics. E-learning could ensure that challenges or barriers are minimised while maintaining a hybrid system. The hybrid system forms part of the KM systems, which have been in existence in the field of education even before COVID-19 (Gracie e*t al.* 2020).

Owing to this, the e-learning experience during COVID-19 got the attention of KM for society. The learners' improved experiences during COVID-19 through e-learning are better for most educators as it aided in creating a society of knowledge which will be equal to the world. Improving and enhancing e-learning challenges experienced during COVID-19 is aimed at averting a new pandemic.

Enhancing Information, Communication and Technology Capacity

Enhancing e-learning becomes necessary to continue improving information, communication and technology (ICT) capacities, such as improved internet speed for connectivity, which may have been limited and challenging to most users during the pandemic. Training is needed to be available to educators to ensure online learning is delivered to students. E-learning could also be sustained by enhancing certain components of learning online. Korkmaz and Toraman (2020) postulate that a revised curriculum would incorporate forms of learning that students need for self-care, which has to be more related to topics that they may learn to manage on their own at any location or time. Education frameworks need to be revised to align with the realities of real situations of adopting e-learning to fit within theories of learning and educational philosophies. E-learning may bring such aspects in the curriculum to understand that it does have educational connotations as a learning experience form of social learning, exploration, shared knowledge, cognitive and teacher presence.

Challenging Experiences at COVID-19

A limitation to transforming to e-learning was in one experience of students with limited access to electronic gadgets used for accessing learning resources as they missed out on the educational success and objectives of KM efforts employed in the e-learning processes. The limitation to accessing e-learning on electronic gadgets contributed to increases in educational inequalities, threatening part of the benefits of KM and the achievement of goals. The demand to create e-learning in HEIs after and during COVID-19 has been increasing despite the challenges of not fulfilling the goals of inclusive education.

Ordinarily, Green *et al*. (2010) agree that students developed a level of expectation or anxiety when using e-learning as the system's end users. The anxiety created negative attitudes towards e-learning by learners, which has needed a tool to help create a positive attitude towards e-learning.

In the meantime, students' diverse needs in using e-learning came on board during the study as other students successfully explored their ICT skills and others did not. Those who did explore felt competent, whereas those who did not felt frustrated and incompetent. The understanding was that e-learning pre and post-COVID-19 considers students' diverse needs to draw learners' attention to the transition to e-learning with ease.

Table 3: Features for Adopting and Enhancing Sustainable e-learning Approach

Adapted features	Enhancing features
Information and communication and media technologies.	• Deeper learning. • Multiple learning choices. • Tailored to individual needs. • Learner to operate electronic systems.
Higher levels of anxiety.	• Improved learning environments.
Failure of feedback from service providers.	• Improving student attitude towards e-learning.
Accessibility by all students.	• Culture change. • Mandatory requirement. • Reducing inequalities in communities by the government to grant access to students.

Source: Designed by Authors - *Adapted and enhanced features for sustainable e-learning*

Taking into consideration the learning modes and theories of online education was a form of crisis that affected HEIs, making most convert to remote teaching and to accommodate the crisis and not necessarily a well-planned online education for most, which led other institutions to rewind or revert to traditional education as soon as COVID-19 lockdown restriction ended.

Therefore, adequate planning is a needed tool for online education, which would take into the planning processes of education models and theories. Digital platforms are to be designed for use in digital skills and would be equipped with such tools. The process of designing digital platforms would lead to incorporating these tools into the learning and teaching tools designed or adopted in the curriculum. The need to adopt assessment tools has been emphasised, especially in developing countries, to assist in reducing cheating and plagiarism by students. The age of online learning can also be addressed by corporate entities supporting the waiving of data costs for students as a way to contribute their Corporate Social Responsibility (CSR) to the education sector.

Reversing the Underutilisation of E-learning in Higher Educational Institutions

There are various approaches related to reversing the underutilisation of e-learning in HEIs. Van Wyk and Geldenhuys (2018) identify the integration of learning management systems such as Moodle with existing library services as one of the most effective strategies for reversing the underutilisation of e-learning in HEIs. An approach to sensitise lecturers and students through seminars and workshops is identified as key to enhancing the utilisation of available e-learning technologies in HEIs. Although Dube and Scott (2017) establish that students value the integration of technology into their learning process to enhance the use of e-learning technologies, the majority of the students that were surveyed were frustrated due to the disconnection between the common teaching methods and the available technologies for effective teaching and learning in HEIs.

Equally, Maphalala and Adigun (2021) further establish that to have sustained use of e-learning, there was a need to provide periodic updates and training on the changes made to HEIs' e-learning platforms

and provide technical support to academic members of staff. This would enhance the effectiveness of utilising and sustaining the user experience of e-learning. Hong *et al.* (2017) maintains that if an e-learning user perceives utility value, they will continue using it. The development of compulsory technology, media and design pedagogy courses for teacher education was found to be crucial in reversing the underutilisation of e-learning in HEIs (Sibanda and Moyo 2018). Ghasia et al. (2020) confirm the criticality of continuous user support and going beyond uploading and downloading materials to increase the utilisation of e-learning technologies to both lecturers and students as far as teaching and learning are concerned.

Substantially, Abou El-Seoud *et al.* (2014) maintain the need for interactive features in a learning management system, which increases students' motivation for the learning process in HEIs. Khan and Setiawan (2019) suggest that e-learning improves students' perception, communication, critical thinking and self-learning. Integrating learning management systems with library services could address the underutilisation of e-learning and enhance the student experience. Van Wyk and Geldenhuys (2018) identify academic staff members from departments and across HEIs as key stakeholders in the Integration of learning management process. Further, Grewal, Kidney and Kenny (2022) acknowledge strong partnerships and collaborations among governments, HEIs and e-learning businesses as key to better e-learning platforms and business execution to enhance the use of e-learning in HEIs.

FINDINGS

Participants were drawn from four (4) Higher Education Institutions (HEIs) based in the city of Lusaka. A rigorous process was undertaken to organise transcribed data from various participants to generate themes. Three themes were generated and are indicated below:

Theme 1: Institutional and Learner Capacity

Participants from selected HEIs expressed experiences of underutilisation of e-learning during the post-COVID-19 era.

In my view, the first cause is the lack of capacity to train academic members on how these e-learning platforms (e.g. Moodle) work from a pedagogical and student perspective. The majority of members have little or no knowledge of how the features of these e-learning systems can help both academic members and students to fully benefit from these systems (P1).

Less adoption of e-learning had external challenges, as was indicated:

- Technology depends also on other things to be available such as a constant supply of electricity so if they are extended hours of load shedding in a country, then HEIs, may fail to use e-learning effectively (P3).

Participant 4 indicated that KM on e-learning in HEIs was a matter of managing a changing culture.

- Culture deals with habits or attitudes. If habits die hard, then educators or learners found it easy to get back to physical learning when COVID-19 restrictions were, and this is our story here. There was no measure in place to help those involved in the process to adhere to e-learning during the COVID-19 era (P4).

The process of KM is enhanced by the transfer of skills which was referred to as something critical.

- Computer skills become part of knowledge transfer in the process of adopting e-learning

and   require an institution to understand this as they convert to new forms of doing things (P2).

Theme 2: Managing e-learning Sustainably

Participants revealed matters surrounding effective KM in HEIs through e-learning systems:

- We live in a computer era, and we can't run away from it. Infrastructure on ICT is cardinal in HEI to facilitate the process of adopting the e-learning model. E-learning, according to Participant 1, was to be part of planning in decision-making, especially on students' needs.

- Budget rollout for training will be necessary (P5)

Inappropriate approaches to adopting e-learning were identified as an obstacle to the process of adopting e-learning models for educators and learners.

- In my view, the first is the training of academic members and students, though currently, this strategy is not effective as training conducted so far for both academic members and students is hastily organised without careful planning and thought through by the facilitators from the IT Department and Academic Office.

- Management should fully engage with all the relevant stakeholders and explain the benefits of e-learning as opposed to using the "carrot and stick" to increase the utilisation of Moodle (P1).

Models in e-learning systems are critical to HEI as participants revealed other benefits that come with it.

- Learning online does have good incentives for students and educators about time, even technology-wise. Therefore, improvements in delivering methods of e-learning are a must and can be invested into (P2).
- The strategies for e-learning are important as technology does not only benefit just one purpose but creates an interface with other technologies (P3).

Theme 3: The E-learning Policy

Most participants referred to a need for a regulatory policy initiated by those in the higher authority of education to ensure compliance.

- I very much want to believe in this case of HEIs, the higher authority HEA must have been at the forefront to direct policy in enabling all to sustain e-learning rather than leaving it as an option. The reason we see most HEI have options is either to maintain e-learning or revert to physical, and it has been likely that going back to traditional learning has been the best option for others who are looking at the benefits e-learning comes with (P3).

It was understood from participants that an e-learning policy was inevitable for HEI;

- Accrediting institutions must demand platforms that support e-learning in vital programs such as IT (P5). Several stakeholders, such as IT Departments, Academic Members, Administrative Staff that handle student affairs, Management, Students and ZAMREN (P1). Motherboards or higher authority in this will have a right drive to direct

policy in this (P2).

DISCUSSION

The study aimed to review the underutilisation of e-learning in five selected HEIs in Lusaka. Three themes were identified: (1) Institutional and learner's capacity, (2) managing e-learning sustainably and (3) the e-learning policy.

Participants confirmed the capacity of underutilisation of e-learning as having a bearing on institutions and learners.

As part of stakeholder engagement, the Higher Education Authority (HEA) confirmed several public and private universities are adopting e-learning systems. The underutilisation of e-learning by participants can be testified by factors of experiences of institutions and learners in the failure to fully utilise e-learning beyond the post COVID-19 era. Aguboshim (2021) alludes to e-learning as not being a new practice but existing since the 1850s, which was under a different mode referred to as distance learning. The underutilisation of e-learning was aligned with resistance to adopting change, as identified by participants that "old habits die hard". When COVID-19 restrictions were lifted, the educators did, without difficulties, revert to the traditional form of delivery of physical lessons as it has always been the practice. Murphy (2020) recounts that educational experts prefer the traditional form of physical delivery of lessons to the virtual form of e-learning.

However, institutional capacity to sustain e-learning offered opportunities to save time for learners in long-distance locations and educators reducing travel time. However, participants indicated that this was not realised as the shift to e-learning during COVID-19 restrictions was done hastily, and most educators and learners were forced to adapt to the system.

Most importantly, the need to put strategies in place is vital to avert any future pandemic paralysing the education sector for sustaining the effective management of e-learning as it was during COVID-19. Maphalala and Adigun (2021) allude to periodic training as much more needed than only learners or educators knowing how to download or upload materials on Moodle. Sibanda and Moyo (2018) postulate that the development of compulsory pedagogy courses in teacher education for technology, media and design was crucial to reverse the underutilisation of e-learning in HEIs.

Nonetheless, participants described experiences with the process of e-learning with HEIs from the COVID-19 to the post-COVID-19 era. Much of the effort to create an effective model to sustain e-learning as one of the KM preserves for HEIs was recommended by most participants. The experiences from participants show that most HEIs, either public or private, have struggled to sustain e-learning for most of their programmes and resolve to revert to traditional education to deliver lessons physically. Most participants allude to higher authorities becoming part of the process. When accrediting training programmes, HEA (2022) concerns the need to incorporate e-learning in certain courses.

Consequently, Gama, Chipeta and Chawinga (2022) argue that a participatory culture in creating sustainable e-learning in HEIs is vital for all would-be beneficiaries, which is currently missing. An e-learning policy has to be initiated with the mother body of higher education, such as HEA, to directly influence this, especially since it has been in other components that influence education standards. Participants allude that e-learning is a contemporary culture compelling all HEIs to transform as the computer age requires. Policy options would be available for education mother bodies to adopt. Gracie *et al.* (2020:2) suppose that hybrid systems of learning have since been adopted in education sectors. One participant asserts that their institution did not completely abandon e-learning but sustained it as a hybrid system. This meant that certain programmes operate part-time, and distance sessions have continued with the e-learning platforms. This has helped learners to cut costs on travel during physical classroom learning. Maphalala and Adigun (2020) suppose that some sectors of HEA have maintained e-learning as key strategies were identified to continue sensitising learners and lecturers in training through seminars and workshops. However, overcoming resistance is a concern when such policies are to be initiated and implemented. Most participants alluded to having mindsets changed in the process of transforming to e-learning.

CONCLUSION AND RECOMMENDATIONS

The study gained an understanding of underlying factors leading to the underutilisation of e-learning among selected HEIs in Zambia. From its findings, the study obtained a general perspective of participants' experiences with their HEIs, revealing several aspects owing to the low utilisation of e-learning in the post-COVID-19 era. Generally, through exploring the subject under study, findings indicated that most HEIs were caught in between during the heightened period of COVID-19 and the post-COVID-19 era. They have been left to decide on two options. The two options have been to fully adopt e-learning or revert to physical in-person learning. Most HEIs already took a side of the two options, and implications have been identified for either of those. It is duly recommended that both options are vital for an undertaking as it is a way to effectively integrate KM in society, particularly e-learning.

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ABSTRACTS OF ARTICLES IN THIS EDITION

RÉSUMÉS DES ARTICLES DE CETTE ÉDITION

SUMÁRIO DOS ARTIGOS NESTA EDIÇÃO

IMPLEMENTATION OF THE ISO 9001:2015 STANDARD ON ORGANISATIONAL KNOWLEDGE MANAGEMENT DURING DISRUPTIONS: A CASE OF KENYA SCHOOL OF GOVERNMENT EMBU CAMPUS DURING COVID-19

James Mutinda, Ann Wanjiru Kang'ethe, Purity Makena and Doreen Onchangwa

This study investigates the implementation of the relevant provisions for the ISO 9001:2015 standard on organisational knowledge management during disruptions such as COVID-19. Knowledge management is comprised of the systematic processes and approaches that organisations use to create, structure, store, and share knowledge among employees. This gives organisations a competitive advantage since creativity, innovation and teamwork are nurtured through knowledge management. The international standard (ISO 9001:2015) has stipulated that organisations should determine and maintain the knowledge necessary for the operations of its processes and to achieve conformity of products and services. However, due to a crisis such as COVID-19 that disrupts organisational operations, the implementation of such standards is highly affected. The study specifically investigated how knowledge documentation, sharing and technology affected the implementation of the requirements of the ISO 9001:2015 standard during COVID-19 in the Kenya School of Government (KSG) Embu Campus. The study used descriptive design to collect and analyse responses from 19 faculty members of the KSG Embu campus. The results indicated that technology was adopted and appropriate policies were implemented to support staff in knowledge management during COVID-19. It was also found that knowledge sharing was done during COVID-19 due to the availability of technology, virtual training and conferences. However, the documentation of knowledge from retiring officers was not conducted as stipulated in the ISO 9001:2015 standard.

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MISE EN ŒUVRE DE LA NORME ISO 9001:2015 SUR LA GESTION DES CONNAISSANCES ORGANISATIONNELLES PENDANT LES PERTURBATIONS: CAS DE L'ECOLE DE LA GOUVERNANCE DU KENYA CAMPUS D'EMBU PENDANT LA COVID-19

James Mutinda, Ann Wanjiru Kang'ethe, Purity Makena and Doreen Onchangwa

Cette étude examine la mise en œuvre des dispositions pertinentes de la norme ISO 9001:2015 sur la gestion des connaissances organisationnelles lors de perturbations telles que la COVID-19. La gestion des connaissances comprend les processus et approches systématiques que les organisations utilisent pour créer, structurer, stocker et partager les connaissances entre les employés. Cette gestion donne aux organisations un avantage concurrentiel, car la créativité, l'innovation et le travail d'équipe sont favorisés par la gestion des connaissances. La norme internationale (ISO 9001:2015) stipule que les organisations doivent déterminer et maintenir les connaissances nécessaires au fonctionnement de leurs processus et à la conformité de leurs produits et services. Toutefois, une crise telle que celle de la COVID-19, qui perturbe les opérations organisationnelles, affecte fortement la mise en œuvre de ces normes. L'étude a spécifiquement examiné comment la documentation, le partage des connaissances et la technologie ont affecté la mise en œuvre des exigences de la norme ISO 9001:2015 pendant la COVID-19 sur le campus d'Embu de l'Ecole de la Gouvernance du Kenya (KSG). L'étude a utilisé un modèle descriptif pour collecter et analyser les réponses de 19 membres du corps enseignant du campus d'Embu de la KSG. Les résultats indiquent que la technologie a été adoptée et que des politiques appropriées ont été mises en place pour soutenir le personnel dans la gestion des connaissances pendant la COVID-19. Il a également été constaté que le partage des connaissances a eu lieu pendant la COVID-19 en raison de la disponibilité de la technologie et des formations et conférences virtuelles. Toutefois, la documentation des connaissances des agents qui partent à la retraite n'a pas été effectuée comme le stipule la norme ISO 9001:2015.

Mots-clés:

James Mutinda, Kenya School of Government, Ann Wanjiru Kang'ethe, Kenya School of Government, Purity Makena, Kenya School of Government and Doreen Onchangwa

IMPLEMENTAÇÃO DO PADRÃO ISO 9001 :2015 SOBRE GESTÃO DO CONHECIMENTO ORGANIZACIONAL DURANTE INTERRUPÇÕES: UM CASO DO CAMPUS DE EMBU DA ESCOLA DE GOVERNO DO QUÉNIA DURANTE O COVID-19

James Mutinda, Ann Wanjiru Kang'ethe, Purity Makena, Doreen Onchangwa

Este estudo investiga a aplicação das disposições relevantes do padrão ISO 9001:2015 sobre gestão do conhecimento organizacional durante interrupções como o COVID-19. A gestão do conhecimento é composta pelos processos e abordagens sistemáticos que as organizações utilizam para criar, estruturar,

armazenar e partilhar conhecimentos entre os empregados. Isto confere às organizações uma vantagem competitiva, uma vez que a criatividade, a inovação e o trabalho em equipa são fomentados pela gestão do conhecimento. O padrão internacional (ISO 9001:2015) estipulou que as organizações devem determinar e manter o conhecimento necessário para as operações dos seus processos e para alcançar a conformidade dos produtos e serviços. No entanto, devido a uma crise como a do COVID-19, que perturba as operações organizacionais, a aplicação desses padrões é altamente afectada. O estudo investigou especificamente o modo como a documentação, a partilha e a tecnologia do conhecimento afectaram a implementação dos requisitos do padrão ISO 9001:2015 durante o COVID-19 no Campus de Embu da Escola de Governo do Quénia (KSG). O estudo utilizou um modelo descritivo para recolher e analisar as respostas de 19 membros do corpo docente do campus de Embu da KSG. Os resultados indicaram que a tecnologia foi adoptada e que foram implementadas políticas adequadas para apoiar o pessoal na gestão do conhecimento durante o COVID-19. Verificou-se também que a partilha de conhecimentos foi feita durante o COVID-19 devido à disponibilidade de tecnologia e de formações e conferências virtuais. No entanto, a documentação dos conhecimentos dos funcionários reformados não foi efectuada como estipulado no âmbito do padrão ISO 9001:2015.

Palavras-chave:

James Mutinda, Escola de Governo do Quénia, Ann Wanjiru Kang'ethe, Escola de Governo do Quénia, Purity Makena, Escola de Governo do Quénia and Doreen Onchangwa,

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KNOWLEDGE MANAGEMENT IN THE PUBLIC SECTOR: LESSONS FROM SOUTH AFRICA POST COVID19

Harsha Dayal

Increasing attention on the nature, purpose, principles and practice of Knowledge Management (KM) has made it an established field across disciplines. While more research in the field comes from the private and international development sectors, there is a dearth of research to inform the public sector. This study aimed to understand the processes and practices behind Knowledge Management in the South African government. It specifically focuses on how it is conceptualised, identifies opportunities and challenges for KM in a post-COVID-19 context and explores what factors influence Knowledge Management processes in the public sector. A case study research design was used with the South African government as the case and unit of analysis. Three data sources were generated. Primary data from 26 key informants who represent practitioners, senior managers and policymakers within the government and those working with the government. Document analysis of relevant policies, strategies and project information. Secondary analysis of survey data generated via a self-assessment tool on the status of KM practice at national and provincial government departments. Findings show that the conceptualisation and approach to KM practice in the South African government was delayed, leading to practice remaining ad hoc, random and not embedded in the routine work of government. An analysis of how the COVID-19 pandemic was managed using a KM lens shows that the South African government has the capacity and political will to lead the implementation of a government-wide KM strategy. Factors influencing Knowledge Management processes in the public sector are bureaucratic culture, lack of attention to the relational function of knowledge and weak knowledge governance. The conceptualisation of KM must be more inclusive of multiple priorities and narratives, implying pluralistic methods of assessment and application. Finally, institutional outcomes have the potential to contribute to KM theory development.

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GESTION DES CONNAISSANCES DANS LE SECTEUR PUBLIC: LEÇONS DE L'AFRIQUE DU SUD APRÈS LA COVID-19

Harsha Dayal

L'attention croissante portée à la nature, à l'objectif, aux principes et à la pratique de la gestion des connaissances (GC) en a fait un domaine établi dans toutes les disciplines. Alors que la plupart des recherches dans ce domaine proviennent du secteur privé et du secteur du développement international, le secteur public manque d'informations à ce sujet. Cette étude vise à comprendre les processus et les pratiques qui sous-tendent la gestion des connaissances au sein du gouvernement sud-africain. Elle se concentre en particulier sur la manière dont elle est conceptualisée, identifie les opportunités et les défis liés à la gestion des connaissances dans un contexte post-COVID-19 et explore les facteurs qui influencent les processus de gestion des connaissances dans le secteur public. Une étude de cas a été

utilisée, le gouvernement sud-africain étant le cas et l'unité d'analyse. Trois sources de données ont été produites. Des données primaires provenant de 26 informateurs clés représentant des praticiens, des cadres supérieurs et des décideurs au sein du gouvernement et des personnes travaillant avec le gouvernement. Analyse documentaire des politiques, stratégies et informations de projet pertinentes. L'analyse secondaire des données d'enquête produites au moyen d'un outil d'auto-évaluation sur l'état de la pratique de la gestion des connaissances dans les ministères nationaux et provinciaux. Les résultats montrent que la conceptualisation et l'approche de la pratique de la gestion des connaissances au sein du gouvernement sud-africain ont été retardées ; une situation qui a conduit à ce que la pratique reste ad hoc, aléatoire et non intégrée dans le travail de routine du gouvernement. L'analyse de la gestion de la pandémie de COVID-19 sous l'angle de la gestion des connaissances révèle que le gouvernement sud-africain a la capacité et la volonté politique de diriger la mise en œuvre d'une stratégie de gestion des connaissances couvrant l'ensemble de l'administration. Les facteurs qui influencent les processus de gestion des connaissances dans le secteur public sont la culture bureaucratique, le manque d'attention à la fonction relationnelle des connaissances et la faiblesse de la gouvernance des connaissances. La conceptualisation de la gestion des connaissances doit davantage tenir compte de priorités et de récits multiples, ce qui implique des méthodes d'évaluation et d'application pluralistes. Enfin, les résultats institutionnels peuvent contribuer au développement de la théorie de la gestion des connaissances.

Mots-clés :

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GESTÃO DE CONHECIMENTO NO SECTOR PÚBLICO: LIÇÕES DA ÁFRICA DO SUL PÓS- COVID-19

Harsha Dayal

A atenção crescente sobre a natureza, o objectivo, os princípios e a prática da Gestão do Conhecimento (KM) tornou-a uma área estabelecida em todas as disciplinas. Embora a maior parte da investigação nesta área provenha dos sectores privado e internacional do desenvolvimento, existe uma escassez de investigação para informar o sector público. Este estudo teve como objectivo compreender os processos e práticas subjacentes à Gestão do Conhecimento no governo Sul-Africano. Concentra-se especificamente na forma como é conceptualizada, identifica oportunidades e desafios para a KM num contexto pós-COVID-19 e explora os factores que influenciam os processos de gestão do conhecimento no sector público. Foi utilizado um modelo de investigação de estudo de caso com o governo Sul-Africano como caso e unidade de análise. Foram criadas três fontes de dados. Dados primários de 26 informadores-chave que representam profissionais, gestores séniores e decisores políticos dentro do governo e aqueles que trabalham com o governo. Documenta a análise das políticas, estratégias e informações sobre projectos relevantes. Análise secundária de dados de inquéritos gerados através de uma ferramenta de auto-avaliação sobre o estado das práticas de KM nos departamentos governamentais nacionais e provinciais. As conclusões mostram que a conceptualização e a abordagem da prática da KM no governo Sul-Africano sofreram atrasos, o que levou a que a prática permanecesse ad hoc, aleatória e não integrada no trabalho de rotina do governo. Uma análise da forma como a pandemia do COVID-19 foi gerida, utilizando uma lente de KM, mostra que o governo Sul-Africano tem a capacidade e a vontade política para liderar a implementação de uma estratégia de KM a nível governamental. Os factores que

influenciam os processos de KM no sector público são a cultura burocrática, a falta de atenção à função relacional do conhecimento e a fraca governação do conhecimento. A conceptualização da KM deve incluir mais prioridades e narrativas múltiplas, o que implica métodos pluralistas de avaliação e aplicação. Por último, os resultados institucionais têm potencial para contribuir para o desenvolvimento da teoria da KM.

Palavras-chave:

Gestão de Conhecimento; sector público; pandemia do COVID-19; estratégia de desenvolvimento.

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ANALYSING THE IMPLEMENTATION OF MOMCONNECT AND STOCK VISIBILITY SYSTEM (SVS) HEALTH INFORMATION EXCHANGE IN SOUTH AFRICA: IMPLICATION FOR SHARING INFORMATION AND KNOWLEDGE MANAGEMENT (IKM)

Mmakwena Molala

This article aims to analyse the journey undertaken by the South African Government through its Health Department in the implementation of the Health Information Exchanges (HIE) and the eHealth strategies in South Africa, particularly the MomConnect and the Stock Visibility System (SVS). The study is based purely on desktop research wherein existing documents relating to MomConnect and SVS were analysed. Efforts were made to extract information from sources, including articles, conference papers, books, and any other sources of information on MomConnect and SVS. Academic search engines accessed during this endeavour include Google Scholar, Ebsco, and ProQuest databases. The study analyses the two strategies in terms of timely communication and information exchange, collaborative approach, streamlined processes, flexible care delivery and patient-centred care and support. These elements were crucial within the two HIE strategies in improving health continuity amongst their intended clients and practitioners. The two strategies are assessed based on information and knowledge exchange between its practitioners, whether they served their purpose in ensuring the information reached the intended practitioners in time, and whether knowledge created by practitioners was also shared amongst themselves and systems developers to improve the process. This included an analysis of the World Health Organisation (WHO) reports on health and South African National Health Strategies.

Keywords:

MomConnect, Stock Visibility System (SVS), Information and Knowledge Management

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ANALYSE DE LA MISE EN ŒUVRE DE MOMCONNECT ET DU SYSTEME DE VISIBILITE DES STOCKS (SVS) POUR L'ECHANGE D'INFORMATIONS SUR LA SANTE EN AFRIQUE DU SUD: IMPLICATION POUR LE PARTAGE DE L'INFORMATION ET LA GESTION DES CONNAISSANCES (IKM)

Mmakwena Molala

Cet article vise à analyser le parcours entrepris par le gouvernement sud-africain, par l'intermédiaire de son ministère de la santé, dans la mise en œuvre des échanges d'informations sur la santé (HIE) et des stratégies de santé en ligne en Afrique du Sud, en particulier MomConnect et le système de visibilité des stocks (SVS). L'étude est basée uniquement sur une recherche documentaire dans laquelle les documents existants relatifs à MomConnect et au SVS ont été analysés. Des efforts ont été déployés pour extraire des informations des sources, y compris des articles, des documents de conférence, des livres et toute autre source d'information sur MomConnect et SVS. Les moteurs de recherche académiques consultés dans le cadre de cette étude comprennent les bases de données Google Scholar, Ebsco et ProQuest. L'étude analyse les deux stratégies en termes de communication et d'échange d'informations en temps opportun, d'approche collaborative, de processus rationalisés, de prestation de soins flexible et de soins et de soutien axés sur le patient. Ces éléments ont joué un rôle crucial dans les deux stratégies HIE en améliorant la continuité de la santé parmi les clients et les praticiens visés. Les deux stratégies sont évaluées sur la base de l'échange d'informations et de connaissances entre leurs praticiens, de leur capacité à garantir que les informations parviennent à temps aux praticiens concernés et du partage des connaissances créées par les praticiens entre eux et avec les développeurs de systèmes afin d'améliorer le processus. Pour ce faire, une analyse des rapports de l'Organisation mondiale de la santé (OMS) sur la santé et des stratégies nationales de santé sud-africaines a été réalisée.

Mots-clés :

MomConnect, Système de visibilité des stocks (SVS), Gestion de l'information et des connaissances

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ANÁLISE DA IMPLEMENTAÇÃO DE MOMCONNECT E PARTILHA DE INFORMAÇÕES SOBRE SAÚDE NO SISTEMA DE VISIBILIDADE DE ESTOQUES (SVS) NA ÁFRICA DO SUL: IMPLICAÇÕES PARA A PARTILHA DE INFORMAÇÕES E GESTÃO DO CONHECIMENTO (IKM)

Mmakwena Molala

Este artigo tem por objectivo analisar o percurso empreendido pelo Governo Sul-Africano, através do seu Departamento da Saúde, na implementação dos Intercâmbios de Informação sobre Saúde (HIE) e das Estratégias de Saúde Electrónica (e-Health) na África do Sul, em particular o MomConnect e o Sistema de Visibilidade de Estoques (SVS). O estudo baseia-se exclusivamente numa investigação documental em que foram analisados os documentos existentes relativos ao MomConnect e ao SVS.

Foram feitos esforços para extrair informações de fontes, incluindo artigos, documentos de conferências, livros e quaisquer outras fontes de informação sobre o MomConnect e o SVS. Os motores de busca académicos consultados durante este esforço incluem as bases de dados Google Scholar, Ebsco e ProQuest. O estudo analisa as duas estratégias em termos de comunicação atempada e partilha de informações, abordagem colaborativa, processos simplificados, prestação de cuidados flexíveis e cuidados e apoio centrados no doente. Estes elementos foram cruciais no âmbito das duas estratégias de HIE para melhorar a continuidade da saúde entre os seus clientes e profissionais pretendidos. As duas estratégias são avaliadas com base na partilha de informações e conhecimentos entre os seus profissionais, se serviram o seu objectivo de garantir que as informações chegavam atempadamente aos profissionais pretendidos e se os conhecimentos criados pelos profissionais foram também partilhados entre eles e os criadores de sistemas para melhorar o processo. Isto incluiu uma análise dos relatórios da Organização Mundial de Saúde (WHO) sobre saúde e das Estratégias Nacionais de Saúde da África do Sul.

Palavras-chave:

MomConnect, Sistema de Visibilidade de Estoque (SVS), Informação e Gestão de Conhecimento

Mmakwena Molala, Director: Gestão de Conhecimento. Escola Nacional do Governo

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TAKING STOCK OF THE HEALTHCARE WORKFORCE IN THE PUBLIC HEALTH SECTOR OF SOUTH AFRICA DURING COVID-19: IMPLICATIONS FOR FUTURE PANDEMICS

Motlagabo Gladys Matseke

The South African public health sector has seen shortages in the number of healthcare workers over many years, and this problem was exacerbated by the COVID-19 crisis. This paper provides an estimation of the healthcare workforce numbers in the South African public health sector in March 2020, when COVID-19 hit the country, as well as the numbers of those registered with the relevant professional bodies. The demographic profile of this workforce is provided, as well as information indicating the workers' career stages. Desktop research was conducted to obtain employment data and registration statistics pertaining to healthcare workers. This data was sourced from the Vulindlela Human Resources Application hosted by the National Treasury and relevant professional bodies. Study findings estimated that a total of 211 296 healthcare workers were employed across the public health sector in March 2020, including medical practitioners (20 926), medical specialists (4 860), and nursing practitioners (143 288). This overall number translated to 2.87 healthcare workers per 1 000 population in March 2020, which was much lower compared to the recommended ratio of at least 4.45 healthcare workers (doctors, nurses, and midwives) per 1 000 population to deliver essential health services and achieve universal health coverage. This confirms the shortage of healthcare workers in South Africa up to March 2020, as was evident from the overburdened health system during the COVID-19 crisis. The short-term strategies implemented during the COVID-19 crisis have been very useful in addressing the dire shortages of healthcare workers. Therefore, as part of ensuring readiness to deal with future pandemics, the existing

short and long-term strategies need to be reviewed and improved to ensure that they permanently address the persisting healthcare worker shortages in the public health sector of South Africa.

Keywords:

Motlagabo Gladys Matseke, Deputy Director: Research, The National School of Government, South Africa

BILAN DU PERSONNEL DE SANTÉ DANS LE SECTEUR DE LA SANTÉ PUBLIQUE EN AFRIQUE DU SUD PENDANT LA COVID-19: IMPLICATIONS POUR LES PANDÉMIES À VENIR

Motlagabo Gladys Matseke

Le secteur de la santé publique sud-africain connaît depuis de nombreuses années une pénurie de personnel de santé, problème qui a été exacerbé par la crise du COVID-19. Ce document fournit une estimation des effectifs du personnel de santé dans le secteur de la santé publique sud-africain en mars 2020, lorsque la crise de la COVID-19 frappera le pays, ainsi que le nombre de personnes inscrites auprès des organismes professionnels compétents. Le profil démographique de cette main-d'œuvre est fourni, ainsi que des informations indiquant les étapes de la carrière des travailleurs. Une recherche documentaire a été menée pour obtenir des données sur l'emploi et des statistiques d'enregistrement concernant les travailleurs de la santé. Ces données proviennent de l'application Vulindlela Human Resources, hébergée par le Trésor national, et des organismes professionnels concernés. Les résultats de l'étude ont permis d'estimer à 211 296 le nombre total de travailleurs de la santé employés dans le secteur de la santé publique en mars 2020, dont 20 926 médecins praticiens, 4 860 médecins spécialistes et 143 288 infirmières praticiennes. Ce chiffre global correspondait à 2,87 travailleurs de la santé pour 1 000 habitants en mars 2020, ce qui était bien inférieur au ratio recommandé d'au moins 4,45 travailleurs de la santé (médecins, infirmiers et sages-femmes) pour 1 000 habitants afin de fournir des services de santé essentiels et de parvenir à une couverture sanitaire universelle. Cette situation confirme la pénurie de personnel de santé en Afrique du Sud jusqu'en mars 2020, comme l'a montré la surcharge du système de santé pendant la crise de la COVID-19. Les stratégies à court terme mises en œuvre pendant la crise COVID-19 ont été très utiles pour remédier à la grave pénurie de personnel de santé. Par conséquent, dans le cadre de la préparation aux futures pandémies, les stratégies existantes à court et à long terme doivent être revues et améliorées afin de s'assurer qu'elles répondent de manière permanente aux pénuries persistantes de personnel de santé dans le secteur de la santé publique en Afrique du Sud.

MOTS-CLÉS

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BALANÇO DA FORÇA DE TRABALHO NO SECTOR DA SAÚDE PÚBLICA DA ÁFRICA DO SUL DURANTE O COVID-19: IMPLICAÇÕES PARA FUTURAS PANDEMIAS

Motlagabo Gladys Matseke

O sector da saúde pública Sul-Africano tem registado uma escassez de profissionais de saúde ao longo de muitos anos, tendo este problema sido agravado pela crise do COVID-19. Este documento apresenta uma estimativa do número de trabalhadores do sector da saúde pública na África do Sul em Março de 2020, quando o COVID-19 atingiu o país, bem como o número de pessoas registadas nos orgãos profissionais relevantes. É apresentado o perfil demográfico desta força de trabalho, bem como informações que indicam as etapas da carreira dos trabalhadores. Foi efectuada uma pesquisa documental para obter dados sobre o emprego e estatísticas de registo relativas aos profissionais de saúde. Estes dados foram obtidos a partir da Aplicação de Recursos Humanos Vulindlela, organizada pelo Tesouro Nacional e pelos organismos profissionais relevantes. Os resultados do estudo estimaram que, em Março de 2020, o sector da saúde pública empregava um total de 211 296 profissionais de saúde, incluindo médicos (20 926), médicos especialistas (4 860) e enfermeiros (143 288). Este número total traduzia-se em 2,87 profissionais de saúde por 1 000 habitantes em Março de 2020, o que era muito inferior ao rácio recomendado de, pelo menos, 4,45 profissionais de saúde (médicos, enfermeiros e parteiras) por 1 000 habitantes para prestar serviços de saúde essenciais e alcançar a cobertura universal de saúde. Este facto confirma a escassez de profissionais de saúde na África do Sul até Março de 2020, como ficou patente no sistema de saúde sobrecarregado durante a crise do COVID-19. As estratégias de curto prazo implementadas durante a crise do COVID-19 têm sido muito úteis para fazer face à grave escassez de profissionais de saúde. Por conseguinte, para garantir a preparação para enfrentar futuras pandemias, as estratégias existentes a curto e a longo prazo devem ser revistas e melhoradas, a fim de garantir que abordam de forma permanente a escassez persistente de profissionais de saúde no sector da saúde pública da África do Sul.

Palavras-chave

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AN EVALUATION OF THE PRACTICE OF CONSTITUTIONAL BASIC VALUES AND PRINCIPLES OF PUBLIC ADMINISTRATION IN THE ZULULAND DISTRICT, KWAZULU-NATAL, SOUTH AFRICA

Sifundo K. Mdhluli and Nokukhanya N. Jili

The fundamental values and principles of public administration embodied in the Republic of South Africa Constitution (1996) stipulate a set of rules governing public administration in all spheres of government. This paper evaluated whether local municipalities in the Zululand District practice the democratic values and principles of public administration as constitutionally mandated. The paper also examined how practising democratic values and principles of public administration can improve governance and service delivery in Zululand. A qualitative research method was adopted with a specific focus on purposive sampling. Data was collected through virtual and physical interviews with 35 municipal officials from the Zululand District. The findings of this paper revealed how Zululand incorporates the values and principles of public administration with local government objectives. The Zululand Municipality emphasises the importance of these values and principles to all its employees, encouraging them to continue using them in executing their daily tasks. The paper revealed how fundamental values and principles of public administration produce good governance in Zululand. Notably, municipal officials revealed that there is a clear practice of the fundamental values and principles of public administration within the district.

ÉVALUATION DE LA PRATIQUE DES VALEURS ET PRINCIPES CONSTITUTIONNELS FONDAMENTAUX DE L'ADMINISTRATION PUBLIQUE DANS LE DISTRICT DE ZULULAND, KWAZULU-NATAL, AFRIQUE DU SUD

Sifundo K. Mdhluli et Nokukhanya N. Jili

Les valeurs et principes fondamentaux de l'administration publique inscrits dans la Constitution de la République d'Afrique du Sud (1996) stipulent un ensemble de règles régissant l'administration publique dans toutes les sphères du gouvernement. Cet article évalue si les municipalités locales du district de Zululand pratiquent les valeurs et les principes démocratiques de l'administration publique tels qu'ils sont prescrits par la Constitution. Il examine également la manière dont la pratique des valeurs démocratiques et des principes de l'administration publique peut améliorer la gouvernance et la prestation de services au Zululand. Une méthode de recherche qualitative a été adoptée, avec une attention particulière portée à l'échantillonnage raisonné. Les données ont été collectées par le biais d'entretiens organisés par vidéoconférence et en présentiel avec 35 fonctionnaires municipaux du district de Zululand. Les conclusions de ce document ont révélé la façon dont le Zululand intègre les valeurs et les principes de l'administration publique dans les objectifs des collectivités locales. La municipalité de Zululand insiste sur l'importance de ces valeurs et principes auprès de tous ses employés, les encourageant à continuer à les utiliser dans l'exécution de leurs tâches quotidiennes. Le document a

révélé la manière dont les valeurs et les principes fondamentaux de l'administration publique produisent une bonne gouvernance au Zululand. Les fonctionnaires municipaux ont notamment révélé que les valeurs et principes fondamentaux de l'administration publique étaient clairement mis en pratique dans le district.

Mots-clés:

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UMA AVALIAÇÃO DA PRÁTICA DOS VALORES E PRINCÍPIOS CONSTITUCIONAIS BÁSICOS DA ADMINISTRAÇÃO PÚBLICA NO DISTRITO DE ZULULAND, KWAZULU-NATAL, ÁFRICA DO SUL

Sifundo K. Mdhluli e Nokukhanya N. Jili

Os valores e princípios fundamentais da administração pública consagrados na Constituição da República da África do Sul (1996) estipulam um conjunto de regras que regem a administração pública em todas as esferas do governo. Este artigo avaliou se as autarquias locais do distrito de Zululand praticam os valores e princípios democráticos da administração pública, tal como constitucionalmente previsto. O artigo examinou igualmente a forma como a prática dos valores e princípios democráticos da administração pública pode melhorar a governação e a prestação de serviços em Zululand. Foi adoptado um método de investigação qualitativa com uma ênfase específica na amostragem intencional. Os dados foram recolhidos através de entrevistas virtuais e presenciais com 35 funcionários municipais do distrito de Zululand. Os resultados deste artigo revelaram como a Zululand incorpora os valores e princípios da administração pública nos objectivos do governo local. O Município de Zululand sublinha a importância destes valores e princípios a todos os seus funcionários, encorajando-os a continuar a utilizá-los na execução das suas tarefas diárias. O artigo revelou como os valores e princípios fundamentais da administração pública produzem a boa governação na Zululand. Nomeadamente, os funcionários municipais revelaram que existe uma prática clara dos valores e princípios fundamentais da administração pública no distrito.

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POLICY ACTORS ENGAGED IN URBAN HOUSING POLICY PROVISION IN ZIMBABWE: EXPERIENCES FROM HARARE

Williams, John, J. and Poshai, L.

This article examines the institutional roles of actors engaged in the provision of housing in Zimbabwe, with reference to the formulation and implementation of the 2015 Housing policy for the City of Harare (2015). The article interrogates the activities, motivations and interests of selected political-administrative actors and social actors that are engaged in housing policymaking – demonstrating how their activities either promote or detract from housing provision policies and programmes in the country. A qualitative methodology was used in the research. Purposive sampling was used to select participants such as housing officers, council officials, housing directors in relevant government ministries, former mayors and residents in different parts of Harare. Data was collected using key informant interviews and documentary analysis. The research found persistent contestations between actors in the housing policy sector in Zimbabwe, as some actors seem to usurp the powers and jurisdictions of other actors without any sense of civic accountability. This article concludes that institutional conflicts and operational contradictions affect the provision of housing negatively in Zimbabwe. The authors recommend constructive conflict mediation and resolution to ensure that there is recognition, respect, professionalism and mutual collaboration among the different policy actors involved in housing provision in Zimbabwe.

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ACTEURS POLITIQUES IMPLIQUÉS DANS LA MISE EN PLACE D'UNE POLITIQUE DE LOGEMENT URBAIN AU ZIMBABWE: EXPÉRIENCES DE HARARE

Williams, John, J. et Poshai, L.

Cet article examine les rôles institutionnels des acteurs engagés dans la fourniture de logements au Zimbabwe, en se référant à la formulation et à la mise en œuvre de la politique de logement de 2015 pour la ville de Harare (2015). L'article interroge les activités, les motivations et les intérêts d'une sélection d'acteurs politico-administratifs et d'acteurs sociaux engagés dans l'élaboration de la politique du logement, en montrant la manière dont leurs activités favorisent ou entravent les politiques et les programmes de fourniture de logements dans le pays. Une méthodologie qualitative a été utilisée pour la recherche. U échantillonnage raisonné a été utilisé afin de sélectionner les participants, tels que les responsables du logement, les fonctionnaires des conseils municipaux, les administrateurs chargés du logement au sein des ministères concernés, les anciens maires et les habitants de différents quartiers de Harare. Les données ont été collectées à l'aide d'entretiens auprès d'informateurs clés et d'analyses

documentaires. La recherche a révélé des contestations persistantes entre les acteurs du secteur de la politique du logement au Zimbabwe, certains acteurs semblant usurper les pouvoirs et les compétences d'autres acteurs sans aucun sens de la responsabilité civique. Cet article conclut que les conflits institutionnels et les contradictions opérationnelles affectent négativement la fourniture de logements au Zimbabwe. Les auteurs recommandent une médiation et une résolution constructives des conflits afin de garantir la reconnaissance, le respect, le professionnalisme et la collaboration mutuelle entre les différents acteurs politiques impliqués dans la fourniture de logements au Zimbabwe.

Mots-clés :

Acteurs politiques, communauté politique, politique de logement urbain, fourniture de logements, défis en matière de logement.

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ACTORES POLÍTICOS ENVOLVIDOS NA POLÍTICA DE HABITAÇÃO URBANA NO ZIMBABUÉ: EXPERIÊNCIAS DE HARARE

Williams, John, J. e Poshai, L.

Este artigo examina os papéis institucionais dos actores envolvidos na provisão de habitação no Zimbabué, com referência à formulação e implementação da política de habitação de 2015 para a cidade de Harare (2015). O artigo interroga as actividades, motivações e interesses de actores político-administrativos e sociais seleccionados que estão envolvidos na elaboração de políticas de habitação - demonstrando como as suas actividades promovem ou prejudicam as políticas e programas de provisão de habitação no país. Uma metodologia qualitativa foi utilizada na investigação. Foi utilizada uma amostragem selectiva para escolher os participantes, tais como funcionários do sector da habitação, funcionários municipais, directores do sector da habitação em ministérios governamentais relevantes, antigos presidentes de câmara e residentes em diferentes partes de Harare. Os dados foram recolhidos através de entrevistas a informadores-chave e de análise documental. A investigação encontrou contestações persistentes entre os actores no sector da política de habitação no Zimbabué, uma vez que alguns actores parecem usurpar os poderes e jurisdições de outros actores sem qualquer sentido de responsabilidade cívica. Este artigo conclui que os conflitos institucionais e as contradições operacionais afectam negativamente a provisão de habitação no Zimbabué. Os autores recomendam a mediação e resolução construtiva de conflitos para garantir o reconhecimento, o respeito, o profissionalismo e a colaboração mútua entre os diferentes actores políticos envolvidos na provisão de habitação no Zimbabué.

Palavras-chave:

Actores políticos, comunidade política, política de habitação urbana, provisão de habitação, desafios em matéria de habitação.

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STRENGTHENING E-LEARNING AS A SUSTAINABLE KNOWLEDGE MANAGEMENT SYSTEM FOR HIGHER EDUCATION IN THE COVID-19 ERA

Lucky Musonda, Michael Sinkala, Elliot Mumba and Edward Nondo

The article explores the underutilisation of the e-learning systems in the post-COVID-19 era despite having invested in the system by several Higher Educational Institutions (HEIs) across Zambia. Further, it investigates the causes of underutilisation of the e-learning systems, most HEIs and measures put in place for a sustainable system in the COVID-19 era. The e-learning experience during COVID-19 got the attention of knowledge management (KM) in society. The learners' experiences during COVID-19 through e-learning were better for most educators as it aided in creating a society of knowledge equal to the needs of the world for accelerating development in all sectors.

A case study design was adopted to explore e-learning in the post-COVID-19 era within HEIs. A purposive sampling technique in selecting study participants was found appropriate for specifically choosing from the four HEIs among many to draw lived experiences. The experiences were to understand how e-learning has been sustained as a system in the post-COVID-19 era. In-depth interviews were administered by telephone and face-to-face interactions with six participants identified from the target HEIs. The study's main findings indicated that COVID-19 management in most HEIs has been complex in adopting the process of transforming from traditional learning to remote learning. Consequentially, post-COVID-19 has seen certain HEIs reducing programmes on e-learning owing to society reverting to almost zero COVID-19 existence.

However, the opportunity that came with it could not be overlooked; hence, most HEIs continue to struggle to sustain KM practices of e-learning and lessen the complexity of future disasters. Further studies will explore the education on e-learning policy to identify possible areas of improvement.

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RENFORCER L'APPRENTISSAGE EN LIGNE EN TANT QUE SYSTÈME DURABLE DE GESTION DES CONNAISSANCES DANS L'ENSEIGNEMENT SUPÉRIEUR À L'ÈRE COVID-19

Lucky Musonda, Michael Sinkala, Elliot Mumba and Edward Nondo

L'article explore la sous-utilisation des systèmes d'apprentissage en ligne dans l'ère post-COVID-19, malgré les investissements réalisés par plusieurs établissements d'enseignement supérieur (EES) en Zambie. Il étudie également les causes de la sous-utilisation des systèmes de formation en ligne, la plupart des établissements d'enseignement supérieur et les mesures mises en place en faveur d'un système durable à l'ère de la COVID-19. L'expérience de l'apprentissage en ligne au cours de la COVID-19 a attiré l'attention de la société sur la gestion des connaissances. L'expérience des apprenants pendant la COVID-19 grâce à l'apprentissage en ligne a été meilleure pour la plupart des éducateurs, car elle a contribué à créer une société de la connaissance à la hauteur des besoins du monde afin d'accélérer le développement dans tous les secteurs.

Un modèle d'étude de cas a été adopté pour explorer l'apprentissage en ligne dans l'ère post-COVID-19 au sein des établissements d'enseignement supérieur. Une technique d'échantillonnage raisonné pour sélectionner les participants à l'étude a été jugée appropriée pour choisir spécifiquement les quatre EES parmi de nombreux autres afin d'en tirer des expériences vécues. Ces expériences visaient à comprendre la manière dont la formation en ligne a été maintenue en tant que système dans l'ère post-COVID-19. Des entretiens approfondis ont été menés par téléphone et en face à face avec six participants issus des établissements d'enseignement supérieur ciblés. Les principales conclusions de l'étude indiquent que la gestion de COVID-19 dans la plupart des EES a été complexe dans l'adoption du processus de transformation de l'apprentissage traditionnel à l'apprentissage à distance. Par conséquent, après la COVID-19, certains établissements d'enseignement supérieur ont réduit leurs programmes d'apprentissage en ligne en raison de la quasi-absence de COVID-19 dans la société.

Cependant, l'opportunité qui en découle ne peut être négligée ; c'est pourquoi la plupart des EES continuent de lutter pour soutenir les pratiques de GC en matière d'apprentissage en ligne et pour réduire la complexité des catastrophes futures. D'autres études exploreront l'éducation sur la politique d'apprentissage en ligne afin d'identifier les domaines d'amélioration possibles.

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REFORÇO DA APRENDIZAGEM ELECTRÓNICA COMO SISTEMA SUSTENTÁVEL DE GESTÃO DO CONHECIMENTO PARA O ENSINO SUPERIOR NA ERA DO COVID-19

Lucky Musonda, Michael Sinkala, Elliot Mumba e Edward Nondo

O artigo explora a sub-utilização dos sistemas de aprendizagem electrónica na era pós-COVID-19, apesar de várias Instituições de Ensino Superior (HEIs) da Zâmbia terem investido no sistema. Além disso, investiga as causas da sub-utilização dos sistemas de aprendizagem electrónica, a maioria das HEIs e as medidas postas em prática para um sistema sustentável na era do COVID-19. A experiência de aprendizagem electrónica durante o COVID-19 chamou a atenção da gestão do conhecimento (KM) na sociedade. As experiências dos estudantes durante o COVID-19 através da aprendizagem electrónica foram melhores para a maioria dos educadores, uma vez que ajudaram a criar uma sociedade do conhecimento à altura das necessidades do mundo para acelerar o desenvolvimento em todos os sectores.

Um projecto de estudo de caso foi adoptado para explorar a aprendizagem electrónica na era pós-COVID-19 nas HEIs. Uma técnica de amostragem intencional na selecção dos participantes no estudo foi considerada adequada para escolher especificamente entre as quatro HEIs, de entre muitas, para extrair experiências vividas. As experiências visavam compreender como é que a e-learning tem sido sustentada como um sistema na era pós-COVID-19. Foram realizadas entrevistas aprofundadas por telefone e interacções presenciais com seis participantes identificados nas HEIs-alvo. As principais conclusões do estudo indicam que a gestão do COVID-19 na maioria das HEIs tem sido complexa na adopção do processo de transformação do ensino tradicional para o ensino à distância. Consequentemente, após o COVID-19, algumas HEIs reduziram os programas de e-learning devido ao facto de a sociedade ter passado a ter uma existência quase nula de COVID-19.

No entanto, a oportunidade que surgiu não pode ser negligenciada; por isso, a maioria das HEIs continua a lutar para manter as práticas de gestão do conhecimento da aprendizagem electrónica e diminuir a complexidade de futuro desastres. Outros estudos irão explorar a política de educação em aprendizagem electrónica para identificar possíveis áreas de melhoria.

Palavras-chave:

Lucky Musonda, Instituto Nacional de Administração Pública, Zâmbia.

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BOOK REVIEW

TEN CITIES THAT LED THE WORLD: FROM ANCIENT METROPOLIS TO MODERN MEGACITY BY PAUL STRATHERN

Johnny Masego Pietersen and Thean Potgieter[17]

"Cities come and go", Strathern states in the first words of his book. The reader may well ask, why are they so significant and how did they come to lead the world? The first hint at the importance of cities is etymological. As the word "civilisation" originates from the Latin word "civitas", meaning "city", we could see civilisation as a society consisting of cities. This implies that the rise of cities is a central characteristic of civilisation and that it is urban, not nomadic.

Cities became and remained important to civilisations. They developed into centres for economy, religion, philosophy and learning, culture, art, science, and technology. As the example of the Persian Babylonians showed, government systems developed to reflect culture while also managing those living in cities and organising the economy and society. Governments took care of state finances, created legal systems, and undertook public infrastructure projects to improve the functioning of cities as well as the quality of life of their inhabitants. But they also had to create armed forces to defend themselves against rivals – or wipe them from the "face of the earth." This was poignantly demonstrated in the history of the Punic Wars as "Roman revenge" after Hannibal's invasion of Italy was brutal, and the Roman insistence on "*Carthago delenda est*" (Carthage must be destroyed) became a reality.

City-states date back to antiquity, existed before nation-states, and at times evolved into sprawling empires. France has a long history of statehood and arguably became the first nation-state in the 18th century. The domestic and international influence cities had was mirrored by the later phenomenon of imperialism. By linking cities with defining historical epochs, Strathern indicates that they led the world. Ancient Babylon defined the building blocks of city-states, but Athens became the template. Rome's expansion beyond its original boundaries became the epitome of imperialism. At its height, Rome controlled a vast empire stretching from Britain to North Africa and the Middle East, including areas that would later become part of the Byzantine and Ottoman Empires. After more than a thousand years, the Eastern Roman Empire (Byzantine Empire) came to an end when the Ottoman Turks conquered Constantinople in 1453 (renaming it Istanbul). Strathern further associates Paris with the Enlightenment, London with the British Empire, while Moscow typified the working-class revolution and New York a city of dreams. Mumbai is a vision of the world's future, and Beijing of an alternative future.

The reader is taken through an exciting journey blending human excellence and discoveries with tragedies and showing human nature at its best and worst. Through religion, knowledge creation, trade

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[17] Prof Thean Potgieter, Chief Director: Research and Marketing Intelligence, The National School of Government

and political developments, among others, city-states influenced world history. Although some of these prominent cities are within nation-states today, they have retained a unique character and remained important centres of economy and diplomacy. With the benefit of hindsight, Strathern identifies the defining aspects in the history of each city. Babylon bequeathed Babylonian Mathematics and an original understanding of the eclipse to the world. Athens conceptualised democracy, literary heritage, pan-athletic competitions, as well as the origin and pursuit of philosophy through the likes of Socrates, Plato and Aristotle. While the Greeks posed abstract questions, the Romans wanted real answers and focussed on solutions and technology. In architecture, "the Athenians built the timeless proportions of the Parthenon, the Romans built engineering miracles such as the Colosseum and the Pantheon."

Paris led the world in literature, political thought and military pursuits (through influential figures such as Descartes and Napoleon), and Montesquieu bequeathed the notion of separation of powers (through a legislature, an executive, and a judiciary). The chronologic positioning of London replacing Paris after the fall of Napoleon is a debatable issue, as earlier records show London as a sprawling metropolitan concoction of villages and towns with a global footprint. However, the rising British Empire in this period greatly influenced the world and Africa in particular. The Bolshevik takeover and the Revolution in Russia (driven by key figures such as Lenin and Trotsky) brought Karl Marx's ideas to the fore and influenced twentieth-century history.

The final three cities, New York, Mumbai and Beijing, are the world leaders of our time. Despite the unimaginable wealth and contrasts between rich and poor, both New York and Mumbai chaotically embrace capitalism and democratic freedoms, compared to the alternative vision of prosperity provided by an orderly and authoritarian Beijing. According to the author, the authoritarian tendencies of China are evidenced by the conservative power of the older generation and the government's control of the internet. New York is a bustling symbol of promises; Mumbai, with its vast technological capacity, must manage abject poverty within the context of democracy, while Beijing contests global leadership through innovation and industrialisation but within a defining context of state control.

As around 60% of the global population resides in urban areas (Aragão *et al.* 2023), urbanisation and industrialisation are enduring legacies of the past. The ten cities Strathern identified pioneered many spheres of human development. In our time, cities lead global digital innovation, and they must facilitate human development and political aspirations, from local needs to global networks (Marchetti 2021). As urban failures are common – such as the corruption and inequality that made Kolkata a failed city during the 1960s – proper city governance is crucial as good renewal projects could turn failures into successes.

Strathen warns that although the cities of the future are "stuffed with humanity, bursting at the seams", the future may also hold "emptiness" – as this is not a phenomenon only associated with the sprawling ruins of ancient cities. Modern emptiness could be found in the pristine buildings of Panama City created with "laundered cash... of offshore shell companies", and in mushrooming megacities "built to drive the new economic powerhouse" as "China's relentless drive to keep up its GDP has involved such ploys as the building of ghost cities." As rows of high-rise blocks in such cases are "devoid of inhabitants", Strathern referred to them as contemporary "monuments" of "financial manipulation."

The warfighting capacity of city-states was transferred to nation-states, but with it also the diplomatic skills to avoid conflicts. Despite the impacts of wars and conflicts, the ten cities Strathern selected also

prospered through cooperation and diplomacy. Hence, avoiding conflict and facilitating diplomacy within the current global context of major power contestation, climate change, pandemics and innovation provide the space for cities to lead change.

Strathern is a pleasure to read. He recounts fascinating and remarkable histories in a lucid and fluent writing style but also adds philosophical wisdom to the book – understanding the rise, decline and disappearance of cities against the broad brushstrokes of civilisation or as an ultimate blossoming of it.

The book could be critiqued for not being a wealth of new historical knowledge compiled after an exhaustive search through primary sources, as it is, in essence, a regurgitation of existing research. Another point to make is that Strathern might have cast a wider net by including more cities of historical and cultural significance from across the world. However, the relevant and evocative description of the cities selected must be appreciated. The author acknowledged the unique attributes of ten major cultural and political entities as well as their crucial contributions in specific epochs to the cultural, socio-economic, and political development of human society. As a result, this book makes a relevant contribution to our learning journey and our understanding of why and how we reached our current juncture in history.

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CRITIQUE DE LIVRE

DIX VILLES QUI ONT DOMINÉ LE MONDE: DE L'ANCIENNE MÉTROPOLE À LA MÉGAPOLE MODERNE PAR PAUL STRATHERN

Johnny Masego Pietersen et Thean Potgieter

"Les villes vont et viennent", déclare Strathern dans les premiers mots de son livre. Le lecteur peut se demander pourquoi ils sont si importants et comment en sont-ils venus à diriger le monde? Le premier indice de l'importance des villes est étymologique. Comme le mot "civilisation"provient du mot latin "civitas", qui signifie "ville", nous pourrions voir la civilisation comme une société composée de villes. Cela implique que l'essor des villes est une caractéristique centrale de la civilisation et qu'elle est urbaine et non nomade.

Les villes sont devenues et sont restées importantes pour les civilisations. Ils sont devenus des centres d'économie, de religion, de philosophie et d'apprentissage, de culture, d'art, de science et de technologie. Comme l'exemple des Babyloniens perses l'a montré, les systèmes gouvernementaux se sont développés pour refléter la culture tout en gérant ceux qui vivaient dans les villes et en organisant l'économie et la société. Les gouvernements se sont occupés des finances de l'État, ont créé des systèmes juridiques et ont entrepris des projets d'infrastructure publique pour améliorer le fonctionnement des villes ainsi que la qualité de vie de leurs habitants. Mais ils ont également dû créer des forces armées pour se défendre contre leurs rivaux – ou les effacer de la "surface de la terre". Cela a été démontré de manière poignante dans l'histoire des guerres puniques lorsque la "vengeance romaine" après l'invasion de l'Italie par Hannibal a été brutale, et que l'insistance romaine sur "Carthago delenda est" (Carthage doit être détruite) est devenue une réalité.

Les cités-États remontent à l'Antiquité, existaient avant les États-nations et ont parfois évolué en empires tentaculaires. La France a une longue histoire d'État et est sans doute devenue le premier État-nation au XVIIIe siècle. L'influence nationale et internationale des villes s'est reflétée dans le phénomène ultérieur de l'impérialisme. En reliant les villes à des époques historiques déterminantes, Strathern indique qu'elles ont dirigé le monde. L'ancienne Babylone définissait les éléments constitutifs des cités-États, mais Athènes est devenue le modèle. L'expansion de Rome au-delà de ses frontières d'origine est devenue la quintessence de l'impérialisme. À son apogée, Rome contrôlait un vaste empire s'étendant de la Grande-Bretagne à l'Afrique du Nord et au Moyen-Orient, y compris des régions qui feraient plus tard partie des empires byzantin et ottoman. Après plus de mille ans, l'Empire romain d'Orient (Empire byzantin) a pris fin lorsque les Turcs ottomans ont conquis Constantinople en 1453 (la renommant Istanbul). Strathern associe en outre Paris aux Lumières, Londres à l'Empire britannique, tandis que Moscou symbolise la révolution ouvrière et New York une ville de rêve. Mumbai est une vision de l'avenir du monde, et Pékin d'un avenir alternatif.

Le lecteur est emmené à travers un voyage passionnant mêlant l'excellence humaine et les découvertes avec des tragédies et montrant la nature humaine dans ce qu'elle a de meilleur et de pire. Par le biais de la religion, de la création de connaissances, du commerce et des développements politiques, entre autres, les cités-États ont influencé l'histoire du monde. Bien que certaines de ces villes importantes se trouvent aujourd'hui dans des États-nations, elles ont conservé un caractère unique et sont restées d'importants centres d'économie et de diplomatie. Avec le recul, Strathern identifie les aspects déterminants de l'histoire de chaque ville. Babylone a légué au monde les mathématiques babyloniennes et une compréhension originale de l'éclipse. Athènes a conceptualisé la démocratie, le patrimoine littéraire, les compétitions pan-athlétiques, ainsi que l'origine et la poursuite de la philosophie à travers des gens comme Socrate, Platon et Aristote. Alors que les Grecs posaient des questions abstraites, les Romains voulaient de vraies réponses et se concentraient sur les solutions et la technologie. En architecture, « les Athéniens ont construit les proportions intemporelles du Parthénon, les Romains ont construit des miracles d'ingénierie tels que le Colisée et le Panthéon ».

Paris a dominé le monde dans les domaines de la littérature, de la pensée politique et des activités militaires (par le biais de personnalités influentes telles que Descartes et Napoléon), et Montesquieu a légué la notion de séparation des pouvoirs (par le biais d'un pouvoir législatif, d'un exécutif et d'un judiciaire). Le positionnement chronologique de Londres remplaçant Paris après la chute de Napoléon est une question discutable, car les archives antérieures montrent Londres comme une concoction métropolitaine tentaculaire de villages et de villes avec une empreinte mondiale. Cependant, l'Empire britannique naissant à cette époque a grandement influencé le monde et l'Afrique en particulier. La prise du pouvoir par les bolcheviks et la révolution en Russie (sous l'impulsion de personnalités clés telles que Lénine et Trotsky) ont mis en avant les idées de Karl Marx et ont influencé l'histoire du XXe siècle.

Les trois dernières villes, New York, Mumbai et Pékin, sont les leaders mondiaux de notre époque. Malgré la richesse inimaginable et les contrastes entre riches et pauvres, New York et Mumbai embrassent de manière chaotique le capitalisme et les libertés démocratiques, par rapport à la vision alternative de la prospérité fournie par un Pékin ordonné et autoritaire. Selon l'auteur, les tendances autoritaires de la Chine sont mises en évidence par le pouvoir conservateur de l'ancienne génération et le contrôle du gouvernement sur Internet. New York est un symbole animé de promesses ; Mumbai, avec sa vaste capacité technologique, doit gérer la pauvreté abjecte dans le contexte de la démocratie, tandis que Pékin conteste le leadership mondial par l'innovation et l'industrialisation, mais dans un contexte déterminant de contrôle de l'État.

Étant donné qu'environ 60 % de la population mondiale réside dans les zones urbaines (Aragão et al. 2023), l'urbanisation et l'industrialisation sont des héritages durables du passé. Les dix villes identifiées par Strathern ont été pionnières dans de nombreux domaines du développement humain. À notre époque, les villes sont à la pointe de l'innovation numérique mondiale, et elles doivent faciliter le développement humain et les aspirations politiques, des besoins locaux aux réseaux mondiaux (Marchetti 2021). Comme les échecs urbains sont fréquents – comme la corruption et les inégalités qui ont fait de Calcutta une ville en faillite dans les années 1960 – une bonne gouvernance municipale est cruciale, car de bons projets de rénovation pourraient transformer les échecs en succès.

Strathen avertit que bien que les villes du futur soient "remplies d'humanité, pleines à craquer", l'avenir peut aussi contenir du "vide" – car ce n'est pas un phénomène uniquement associé aux ruines tentaculaires des villes anciennes. Le vide moderne se trouve dans les bâtiments immaculés de Panama

City créés avec "de l'argent blanchi... des sociétés écrans offshore", et dans les mégapoles en pleine croissance "construites pour faire fonctionner la nouvelle puissance économique" car "la volonté implacable de la Chine de maintenir son PIB a impliqué des stratagèmes tels que la construction de villes fantômes". Comme les rangées d'immeubles de grande hauteur sont dans de tels cas "vides d'habitants", Strathern les a qualifiées de "monuments" contemporains de "manipulation financière".

La capacité de combat des cités-États a été transférée aux États-nations, mais aussi les compétences diplomatiques pour éviter les conflits. Malgré les impacts des guerres et des conflits, les dix villes choisies par Strathern ont également prospéré grâce à la coopération et à la diplomatie. Par conséquent, éviter les conflits et faciliter la diplomatie dans le contexte mondial actuel de contestation des grandes puissances, de changement climatique, de pandémies et d'innovation fournit aux villes l'espace nécessaire pour mener le changement.

Strathern est un plaisir à lire. Il raconte des histoires fascinantes et remarquables dans un style d'écriture lucide et fluide, mais ajoute également une sagesse philosophique au livre – comprenant l'ascension, le déclin et la disparition des villes à travers les grands coups de pinceau de la civilisation ou comme un épanouissement ultime de celle-ci.

On pourrait reprocher au livre de ne pas être une mine de nouvelles connaissances historiques compilées après une recherche exhaustive dans les sources primaires, car il s'agit, par essence, d'une régurgitation de recherches existantes. Un autre point à souligner est que Strathern aurait pu ratisser plus large en incluant plus de villes d'importance historique et culturelle du monde entier. Cependant, la description pertinente et évocatrice des villes sélectionnées doit être appréciée. L'auteur a reconnu les attributs uniques de dix grandes entités culturelles et politiques ainsi que leurs contributions cruciales à des époques spécifiques au développement culturel, socio-économique et politique de la société humaine. Par conséquent, ce livre apporte une contribution pertinente à notre parcours d'apprentissage et à notre compréhension des raisons pour lesquelles nous en sommes arrivés à ce moment de l'histoire.

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RECENSÃO BIBLIOGRÁFICA

DEZ CIDADES QUE LIDERARAM O MUNDO: DA METRÓPOLE ANTIGA À MEGACIDADE MODERNA POR PAUL STRATHERN

Johnny Masego Pietersen e Thean Potgieter

"As cidades vêm e vão", afirma Strathern nas primeiras palavras de seu livro. O leitor pode muito bem perguntar: por que eles são tão significativos e como eles vieram para liderar o mundo? O primeiro indício da importância das cidades é etimológico. Como a palavra "civilização" tem origem na palavra latina "civitas", que significa "cidade", poderíamos ver a civilização como uma sociedade constituída por cidades. Isto implica que a ascensão das cidades é uma característica central da civilização e que é urbana, não nómada.

As cidades tornaram-se e permaneceram importantes para as civilizações. Transformaram-se em centros de economia, religião, filosofia e aprendizagem, cultura, arte, ciência e tecnologia. Como o exemplo dos babilônios persas mostrou, os sistemas de governo se desenvolveram para refletir a cultura e, ao mesmo tempo, gerenciar aqueles que vivem nas cidades e organizar a economia e a sociedade. Os governos cuidaram das finanças do Estado, criaram sistemas jurídicos e empreenderam projetos de infraestrutura pública para melhorar o funcionamento das cidades, bem como a qualidade de vida de seus habitantes. Mas também tiveram de criar forças armadas para se defenderem dos rivais – ou eliminá-los da "face da terra". Isto foi pungentemente demonstrado na história das Guerras Púnicas como "vingança romana" após a invasão da Itália por Aníbal foi brutal, e a insistência romana em "Carthago delenda est" (Cartago deve ser destruído) tornou-se uma realidade.

As cidades-estado remontam à antiguidade, existiram antes dos Estados-nação e, por vezes, evoluíram para impérios extensos. A França tem uma longa história de Estado e indiscutivelmente se tornou o primeiro Estado-nação no século 18. A influência nacional e internacional que as cidades tiveram foi espelhada pelo fenómeno posterior do imperialismo. Ao ligar as cidades com épocas históricas definidoras, Strathern indica que elas lideraram o mundo. A antiga Babilônia definiu os blocos de construção das cidades-estado, mas Atenas tornou-se o modelo. A expansão de Roma para além das suas fronteiras originais tornou-se o epítome do imperialismo. No seu auge, Roma controlava um vasto império que se estendia da Grã-Bretanha ao Norte de África e ao Médio Oriente, incluindo áreas que mais tarde se tornariam parte dos Impérios Bizantino e Otomano. Depois de mais de mil anos, o Império Romano do Oriente (Império Bizantino) chegou ao fim quando os turcos otomanos conquistaram Constantinopla em 1453 (rebatizando-a de Istambul). Strathern associa ainda Paris ao Iluminismo, Londres ao Império Britânico, enquanto Moscovo tipificou a revolução operária e Nova Iorque uma cidade de sonhos. Mumbai é uma visão do futuro do mundo, e Pequim de um futuro alternativo.

O leitor é levado através de uma viagem emocionante que mistura excelência humana e descobertas com tragédias e mostra a natureza humana no seu melhor e pior. Através da religião, da criação de conhecimento, do comércio e dos desenvolvimentos políticos, entre outros, as cidades-estado influenciaram a história mundial. Embora algumas dessas cidades proeminentes estejam dentro dos Estados-nação hoje, elas mantiveram um caráter único e permaneceram importantes centros de economia e diplomacia. Com o benefício da retrospetiva, Strathern identifica os aspetos definidores na história de cada cidade. Babilônia legou a Matemática Babilônica e uma compreensão original do eclipse para o mundo. Atenas conceptualizou a democracia, a herança literária, as competições pan-atléticas, bem como a origem e a busca da filosofia através de nomes como Sócrates, Platão e Aristóteles. Enquanto os gregos colocavam questões abstratas, os romanos queriam respostas reais e se concentravam em soluções e tecnologia. Na arquitetura, "os atenienses construíram as proporções intemporais do Partenon, os romanos construíram milagres de engenharia como o Coliseu e o Panteão".

Paris liderou o mundo na literatura, no pensamento político e nas atividades militares (através de figuras influentes como Descartes e Napoleão), e Montesquieu legou a noção de separação de poderes (através de um legislativo, um executivo e um judiciário). O posicionamento cronológico de Londres substituindo Paris após a queda de Napoleão é uma questão discutível, já que registros anteriores mostram Londres como uma extensa mistura metropolitana de vilas e cidades com uma pegada global. No entanto, o Império Britânico em ascensão neste período influenciou grandemente o mundo e a África em particular. A tomada do poder pelos bolcheviques e a Revolução na Rússia (impulsionada por figuras-chave como Lenine e Trotsky) trouxeram as ideias de Karl Marx à tona e influenciaram a história do século XX.

As três últimas cidades, Nova Iorque, Mumbai e Pequim, são os líderes mundiais do nosso tempo. Apesar da riqueza inimaginável e dos contrastes entre ricos e pobres, tanto Nova Iorque como Mumbai abraçam caoticamente o capitalismo e as liberdades democráticas, em comparação com a visão alternativa de prosperidade proporcionada por uma Pequim ordeira e autoritária. Segundo o autor, as tendências autoritárias da China são evidenciadas pelo poder conservador da geração mais velha e pelo controle da internet pelo governo. Nova Iorque é um símbolo fervilhante de promessas; Mumbai, com a sua vasta capacidade tecnológica, tem de gerir a pobreza abjeta no contexto da democracia, enquanto Pequim contesta a liderança global através da inovação e da industrialização, mas dentro de um contexto definidor de controlo estatal.

Como cerca de 60% da população mundial reside em áreas urbanas (Aragão et al. 2023), a urbanização e a industrialização são heranças duradouras do passado. As dez cidades identificadas por Strathern foram pioneiras em muitas esferas do desenvolvimento humano. No nosso tempo, as cidades lideram a inovação digital global e devem facilitar o desenvolvimento humano e as aspirações políticas, desde as necessidades locais até as redes globais (Marchetti 2021). Como os fracassos urbanos são comuns – como a corrupção e a desigualdade que fizeram de Calcutá uma cidade fracassada durante a década de 1960 – uma governança urbana adequada é crucial, pois bons projetos de renovação podem transformar fracassos em sucessos.

Strathen adverte que, embora as cidades do futuro estejam "recheadas de humanidade, rebentando pelas costuras", o futuro também pode conter "vazio" – já que este não é um fenómeno apenas associado às extensas ruínas de cidades antigas. O vazio moderno podia ser encontrado nos edifícios imaculados da Cidade do Panamá criados com "dinheiro lavado ... de empresas de fachada offshore", e em megacidades em expansão "construídas para impulsionar a nova potência económica", como "o esforço implacável

da China para manter o seu PIB envolveu estratagemas como a construção de cidades fantasma". Como as fileiras de arranha-céus nesses casos são "desprovidas de habitantes", Strathern referiu-se a eles como "monumentos" contemporâneos de "manipulação financeira".

A capacidade bélica das cidades-estado foi transferida para os Estados-nação, mas com ela também as habilidades diplomáticas para evitar conflitos. Apesar dos impactos das guerras e conflitos, as dez cidades selecionadas por Strathern também prosperaram através da cooperação e diplomacia. Assim, evitar conflitos e facilitar a diplomacia no atual contexto global de contestação das grandes potências, alterações climáticas, pandemias e inovação proporcionam o espaço para as cidades liderarem a mudança.

Strathern é um prazer de ler. Ele relata histórias fascinantes e notáveis em um estilo de escrita lúcido e fluente, mas também acrescenta sabedoria filosófica ao livro – entendendo a ascensão, declínio e desaparecimento das cidades contra as grandes pinceladas da civilização ou como um florescimento final dela.

O livro poderia ser criticado por não ser uma riqueza de novos conhecimentos históricos compilados após uma pesquisa exaustiva através de fontes primárias, pois é, em essência, uma regurgitação da pesquisa existente. Outro ponto a destacar é que Strathern poderia ter lançado uma rede mais ampla ao incluir mais cidades de importância histórica e cultural de todo o mundo. No entanto, a descrição relevante e sugestiva das cidades selecionadas deve ser apreciada. O autor reconheceu os atributos únicos de dez grandes entidades culturais e políticas, bem como suas contribuições cruciais em épocas específicas para o desenvolvimento cultural, socioeconômico e político da sociedade humana. Como resultado, este livro faz uma contribuição relevante para nossa jornada de aprendizado e nossa compreensão do porquê e como chegamos à nossa atual conjuntura na história.

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