ARTICLE

Limpopo provincial health research committee outcomes: Implications for ethics practice and future research

L Muthelo,[1] PhD; **J Ramalivhana,**[2] PhD; **S F Matlala,**[3] PhD; **M Kharivhe,**[4] PhD; **N Muvhango,**[5] MB ChB; **T Tshitangano,**[6] PhD; **T Malatji,**[5] MB ChB, MFAMMED FCPHM; **M Sono,**[5] MB CHB, FCPHM,MMED; **K G Netshisaulu,**[2] PhD; **C Nesamvuni,**[2] PhD; **D T G Goon,**[7] PhD; **M Ngwenya,**[1] Masters, **P Mabotha,**[8] PhD; **O Segura Sardiñas,**[2] MB ChB, **M Masilela,**[3] M Dent (Oral Pathology)

[1]*Department of Nursing Science, University of Limpopo, Mankweng, South Africa*
[2]*Department of Public Health, University of Venda, Thohoyandou, Limpopo, South Africa*
[3]*Department of Public Health, Sefako Makgatho Health Sciences University, Pretoria, South Africa*
[4]*Department of Health, Louis Trichardt Memorial Hospital, Limpopo, South Africa*
[5]*School of Medicine, University of Limpopo, Mankweng, South Africa*
[6]*Department of Public Health, University of Limpopo, Mankweng, South Africa*
[7]*Faculty of Health Science, University of Limpopo, Mankweng, South Africa*
[8]*Department of Public Administration and Management, University of South Africa, Pretoria*

***Corresponding author**: L Muthelo (livhuwani.muthelo@ul.ac.za)*

Background. Various institutional or organisational ethics research bodies are responsible for approving, safeguarding and monitoring strict adherence to the ethical research conduct of researchers seeking approval and conducting research, which is crucial for rational science, particularly in biomedical and allied health research involving humans. Understanding the profiles and outcomes of research submissions and reviews by ethics research bodies informs research direction and better practice.

Objective. The objective of this study was to evaluate the profile, types of studies, and outcomes of research proposals submitted to the Limpopo Provincial Health Research Committee (LPHRC) of the Department of Health, Limpopo Province, South Africa, from January 2014 to July 2024.

Methods. A retrospective, cross-sectional analytical study of all research proposals submitted to the LPHRC was conducted from January 2014 to July 2024. The data were analysed using descriptive statistics.

Results. Of the 2 066 research proposals submitted to the LPHRC within the review period, the majority were in the years 2020 and 2022, accounting for 17.3% and 13.5%, respectively. About 30.8% were not funded, and 21% were self-funded by the researchers. Few research proposals were funded by organisations (9.7%), the government (4.0%) and companies (1.5%). Notably, 28.7% of the research proposals were rejected for various reasons, probably owing to non-compliance with LPHRC principles. About 46% of the proposals did not specify study designs. Intriguingly, infections (9.3%), mental health (8.9%), respiratory conditions including tuberculosis, and injuries and accidents, were among the least studied research areas in Limpopo Province.

Conclusion. The study identified critical areas needing improvement in research practices, particularly concerning incomplete information on submissions to the LPHREC. Research focusing on national health research priorities, and particularly mental health, warrants attention and stakeholder funding to inform evidence-based practice and interventions.

Keywords. Research proposal, profiles, research outcomes, health research ethics committee.

S Afr J Bioethics Law 2025;18(3):3663. https://doi.org/10.7196/SAJBL.2025.v18i3.3663

Conducting ethical research is one of the fundamental elements of good science and practice. It is a requirement that all biomedical research involving human subjects must be reviewed by an independent research ethics committee (REC).[1,2] RECs serve a number of important public functions, including demystification of health research and provision of a public forum for the accountability of researchers.[3]

Until the 1980s, there were no RECs in many countries. In some countries, the main reason that led to REC establishment was the requirement of scientific journals for ethics committee approval from researchers who wanted to publish their findings.[4] In some countries, such as Japan, ethics committees were established specifically to guide ethical issues of *in vitro* fertilisation.[5] Since then, because of growing public concern over the complexities of new biomedical technologies and their social, ethical and legal implications, the idea that ethics committees would discuss, evaluate and approve or disapprove a proposed medical protocol had generated a very positive public image of biomedical scientists, physicians and ethics committees.[5]

The establishment of RECs in many countries has faced several constraints influencing their function and terms of reference. These included uncertainties of which guidelines to follow, who to include

as members, lack of competence, lack of clear job descriptions, varied interpretation and understanding of the international guidelines,[6] and lack of funding, training, independence to practise, and legal backing.[4-6] A report on ethics review studies in the UK documented the immense variation in membership, workloads, and working practices of research ethics committees.[7]

The work of RECs in Africa has been fraught with several challenges. A recent case study on the ethical review processes in a number of African countries identified inadequate training, inconsistent funding, and disproportionate focus on science in the review process, budgetary constraints, multiple responsibilities of REC members, and the tendency of some RECs to 'rubber stamp' approvals in order to secure international funding as the major challenges.[8]

In South Africa, the National Health Research Committee was established as a statutory body under the National Health Act, 2003 (Act No. 61, 2003) to provide a framework for a structured uniform health system within the country, taking into account the obligations imposed by the Constitution and other laws on the national, provincial and local governments concerning health services.[9] Accordingly, the National Health Act 61 of 2003, Section 69 (1), prescribes that the Minister must establish a committee to be known as the National Health Research Committee (NHRC). Section 69 (2) of the National Health Act of 2003 (NHA) states that the NHRC shall consist of not more than 15 persons appointed by the Minister after consultation with the National Health Council (NHC). In addition, Section 69 (4) of the NHA stipulates: 'The Minister must prescribe the manner in which the NHRC must conduct its affairs and procedures to be followed at meetings'. Also, Section 69 (5) of the NHA states: 'A Member of the NHRC not in full-time employment of the State must, in respect of his or her service, be paid such remuneration as the Minister may determine with the concurrence of the Minister of Finance'.[9]

Section 69(3) of the NHA stipulates that the NHRC must determine the health research to be carried out by public health authorities; ensure that health research agendas and research resources focus on priority health problems; develop an integrated national strategy of health research and advise the minister on the application and implementation thereof; and co-ordinate the research activities of public health authorities.[9]

In 2006, the National Health Research Ethics Council (NHREC) was established in terms of section 72 of the National Health Act, 2003 (Act No. 61 of 2003), with its core responsibility of addressing ethical matters relating to health research and to the advancement of health research ethics in South Africa.[9] Its main functions are to determine guidelines for the functioning of health research ethics committees; register and audit health research committees; and set norms and standards for conducting health research. The NHREC has the responsibility to exercise oversight over the functioning of health research ethics committees and other health research on humans in all of South Africa.[9]

The NHREC's mandate further includes determining guidelines for the functioning of health research ethics committees (HRECs); registering and auditing HRECs; setting norms and standards for conducting research on humans and animals, including norms and standards for conducting clinical trials; adjudicating complaints about the functioning of HRECs; and advising the national and provincial departments on any ethical issues concerning research.[9]
A need arose for the NHRC to establish close links with the NHREC as statutory bodies on health research. HRECs established in terms of section 73 of the National Health Act of 2003 require every institution, health agency and health establishment where health research is conducted to establish or have access to an HREC that is registered with the NHREC. HRECs are mandated both to review health research proposals to ensure that research conducted by relevant institutions will promote health, and grant approval for research by relevant institutions, in instances where research protocols and proposals meet the ethical standards of that HREC. Likewise, provincial health research committees (PHRCs) were established in terms of the Health Research Policy in South Africa (2001).[10] The PHRCs co-ordinate health research by liaising with all research stakeholders conducting research in the provinces; manage the process of priority and assist in the development of health research priorities in the province; and review preliminary and final reports to advise on policy implications of completed research projects. Notably, PHRCs' mandates are almost similar to those of the NHRC but operate at the provincial level and thus work closely with the NHRC on research co-ordination, development of health research priorities, and other NDoH strategic research areas requiring NHRC input. The Committee shall operate within the dictates of the National Health Act (Act 61 of 2003), the policy 'Health Research Policy in South Africa (2001)', the document 'Ethics in Health Research: Principles, Processes and Structures (2004)', as well as the amended version thereof, and the document 'Guidelines for Good Clinical Practice (2006/2018)', and 'Guidelines for Provincial Health Research Committees'.[9]

Aim of the study

To profile types of studies and outcomes of research proposals submitted to the PHRC to inform health research priorities and strengthen research engagements in Limpopo province. The study also aims to inform research direction and practices aimed at streamlining and strengthening the nature of research engagement among institutions, government and other stakeholders for knowledge production, advancement and societal transformation. Therefore, this present study seeks to characterise the types of research studies and the outcomes of research proposals submitted to the Department of Health, Limpopo Provincial Health Research Committee, South Africa, from January 2014 to July 2024.

Methodology

Study design

This was a retrospective, descriptive, cross-sectional study of the nature and outcomes of research proposal submissions to the LPHRC spanning January 2014 to July 2024.

Study context

The LPHRC was established in 2011 in Limpopo Province. The LPHRC membership includes diverse health specialists and community representatives. To safeguard and monitor the nature of the research conducted in the Limpopo Provincial Department of Health enclave, all health-related research proposals, after receiving the institutional university-based research ethics committees' approval, are by policy required to submit the research proposals to the LPHRC for review and approval before conducting research in all the health facilities under the Department of Health, Limpopo Province. This procedure is applicable in all nine provinces of South Africa, of which Limpopo

Province is one of the largest. It has approximately 471 primary healthcare facilities, 22 health centres and 43 hospitals, and they serve all the communities of Limpopo Province. Research protocol data on year of submission, study type, discipline domain, ethics-seeking purpose, and reviewed outcomes were extracted from all research proposals submitted to the LPHRC via the National Health Research Database (NHRD).

Sampling

We conveniently extracted from the NHRD all research proposals submitted to LPHRC from January 2014 to July 2024.

Data collection

Variables extracted from the NHRD include the number of research proposals submitted per year, types and nature of research studies, outcome of reviews conducted, funding bodies or organisations, institutional review body, and nature of research activity. The study received ethical approval from the University of Limpopo Research Ethics Committee (ULREC/124/2024), which deals with human research ethics.

Data analysis

Data were captured into a Microsoft Excel spreadsheet and then imported to the Statistical Package for Social Sciences (SPSS) software, version 29.0, for statistical analyses. Descriptive statistics (frequencies and percentages) summarised all the research proposals submitted and reviewed by the LPHRC from January 2014 to July 2024.

Results

Profiling of the research proposals

Number of research proposals submitted

Of the 2 066 research proposals submitted to the LPHRC, the majority were from the years 2019 to 2023, representing 10.4% to 11.7%, respectively (Table 1).

Source of funding

Most of the research proposals had no funding source (30.8%), 21% were self-funded and 17.3% were funded by institutions. Concerningly, 15.7% of the research proposals failed to indicate their source of funding (Fig. 1).

Researchers and institutions

Table 2 indicates that mainstream research proposals were from the University of Limpopo (33.3%) and the University of Venda (18.9%).

Study methods and study designs

Of the 1 310 research proposals reflecting study designs, 45% were mixed-methods studies, and 31% and 24% were qualitative and quantitative studies, respectively (Fig. 2). Concerning the types of study method in Table 3, of the 1 310 proposals, mainstream research proposals applied a non-comparative study design inclusive of case series, case study and exploratory research (34.4%), a case study research design (32.7%), and a phenomenological research design (10%). Retrospective studies were the least conducted studies (0.1%).

Study fields

Table 4 indicates that about 46% of the researchers during the application process on the NHRD did not indicate the study fields of their prospective studies. However, of those who indicated their study fields, the majority were interested in public health (9.4%), health systems strengthening (6.2%), child health (4.4%), women's health (3.8%), reproductive health and mental health (2.9%), quality of care (4.4%) and child health (4.4%). Geriatric and dental health were least studied

Health categories

Fig. 3 indicates that the mainstream of the submitted research proposals focused on health categories such as generic health relevance (18.4%), disputed aetiology and other (13.2%), infections such as HIV/AIDS (10.6%), and reproductive health and childbirth (10.6%). Other health categories that include contagious diseases such as TB (2.1%), non-communicable diseases (2.8%) and disorders such as metabolic, endocrine, skin, congenital and musculoskeletal were the least investigated health categories by the researchers.

Research activities

Table 5 indicates that only 1 308 of the proposals indicated the research activities for their study during submission. It seems the majority of the studies focused on health and social care services research (38.5%), prevention of diseases and conditions, promotion of well-being (18.3%), and underpinning research (10.2%). However, less than 10% focused on the aetiology (9.8%), management of diseases (8.6%), evaluation of treatment and therapeutic interventions (6.6%), detection, screening and diagnosis (5.0%), and development of treatments and therapeutic interventions (3.1%).

Research proposals: application outcomes

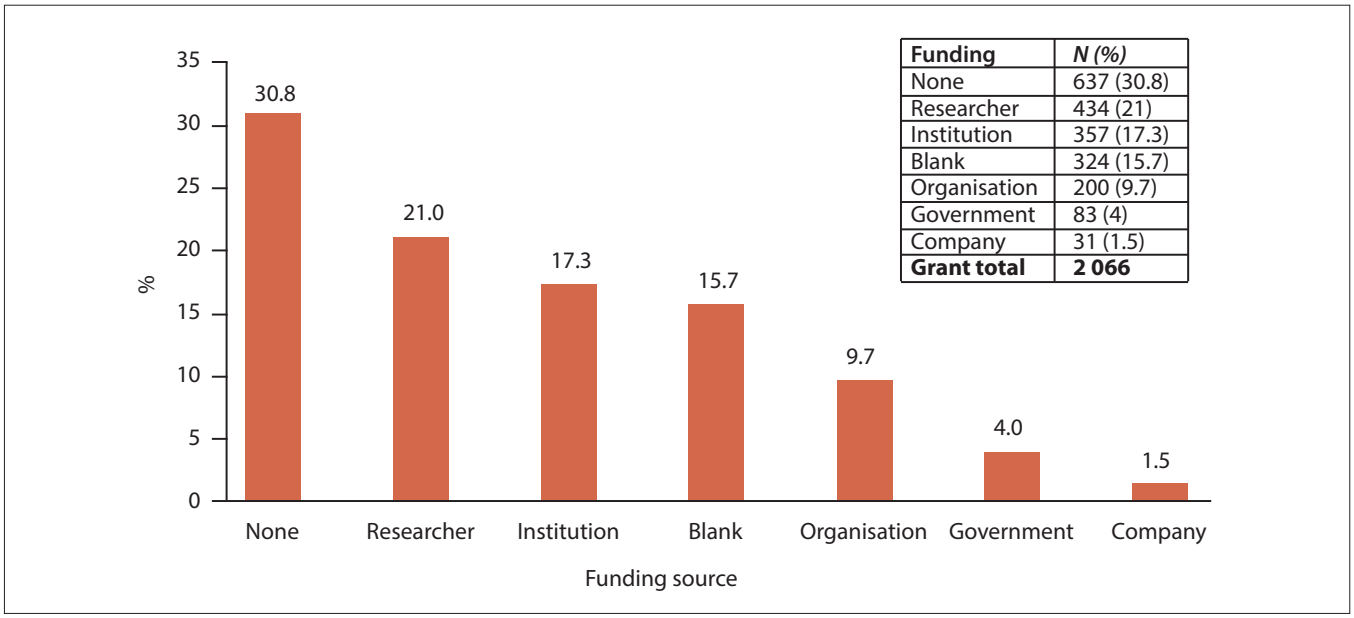
The research proposal application status is shown in Table 6. Only 1 379 (66.7%) research proposals were approved, and 28.7% declined, while 0.8% were referred to applicants for revision, and 1.6% were pending amendments.

Discussion

In the realm of human research in South Africa, it is stipulated by the regulations relating to research to human participants, R719 of September 2014, that for researchers to conduct research with human participants, it is mandatory to conduct an ethical review of all research proposals by a health research ethics committee to determine if it aligns with the National Department of Health's ethical

Table 1. Number of research proposal submitted (*N*=2 066)

Year of research submission	*N* (%)
2014	13 (0.6)
2015	83 (4.0)
2016	177 (8.6)
2017	137 (6.6)
2018	170 (8.2)
2019	215 (10.4)
2020	357 (17.3)
2021	240 (11.6)
2022	278 (13.5)
2023	241 (11.7)
2024	155 (7.5)



Funding	N (%)
None	637 (30.8)
Researcher	434 (21)
Institution	357 (17.3)
Blank	324 (15.7)
Organisation	200 (9.7)
Government	83 (4)
Company	31 (1.5)
Grant total	**2 066**

Fig. 1. Source of research proposal funding.

Table 2. Researchers and institutions

Institution	*n* (%)
University of Limpopo	688 (33.3)
University of Venda	390 (18.9)
University of Pretoria	160 (7.7)
Sefako Makgatho Health Sciences University	147 (7.1)
University of the Witwatersrand	117 (5.7)
Tshwane University of Technology	71 (3.4)
Anova Health Institute	70 (3.4)
University of South Africa	116 (5.6)
University of Johannesburg	56 (2.7)
University of KwaZulu-Natal	50 (2.4)
Ndlovu Care Group	47 (2.3)
University of Stellenbosch	47 (2.3)
National Institute for Communicable Diseases	42 (2.0)
Others	65 (3.1)

Table 3. Study designs

Study design	*n* (%)
Non-comparative (case series, case study, exploratory research, focus groups, etc.)	450 (34.4)
Case study	428 (32.7)
Phenomenological	131 (10.0)
Grounded theory	56 (4.3)
Before and after study or interrupted time series	47 (3.6)
Ethnographic	22 (1.7)
Content analysis	13 (1.0)
Cluster randomised control trial	13 (1.0)
Correlation	12 (0.9)
Individual randomised control trial	12 (0.9)
Cross-sectional	8 (0.6)
Case control	8 (0.6)
Non-randomised control trial	5 (0.4)
Prospective cohort	2 (0.2)
Retrospective cohort	1 (0.1)
Others	102 (7.8)

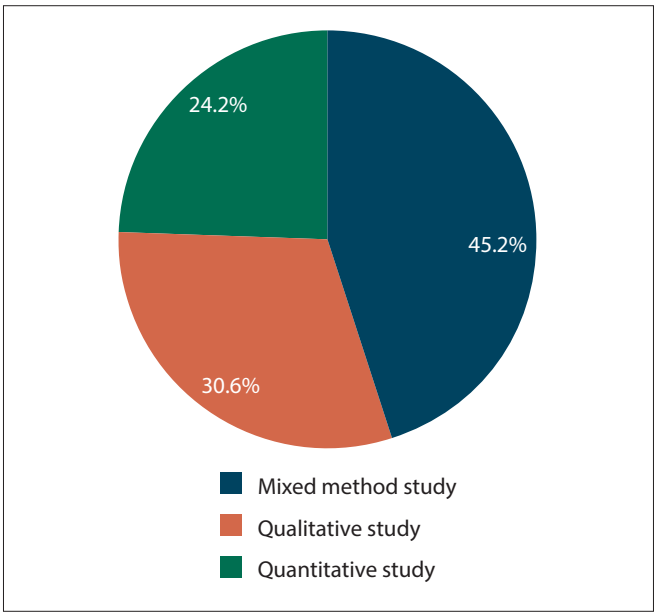


Fig. 2. Type of studies.

guidelines.[11] Accordingly, the present article aimed to evaluate and examine the outcomes of research proposals submitted to the LPHRC between 2014 and 2024.

The retrospective analysis noted a steady flow of proposals submitted since 2016. This indicates progress in health research over time. In the field of health research, the continuous trend demonstrates a positive impact, as research is regarded as pivotal; it assists in creating knowledge and clinical interventions that inform clinical practice. It is held that research is one of the strategic ways to generate new information and develop more innovative interventions to improve and promote health, thus reducing the burden of diseases.[12,13] As a result, there are more postgraduates registered for master's and doctoral qualifications than in earlier decades. This was substantiated by the South African Department of Higher Education, which recorded a steady increase in higher levels

Table 4. Study fields

Study field or domains	*n* (%)
Incomplete information	1 310 (46.0)
Public health	267 (9.4)
Health systems strengthening	178 (6.2)
Social and clinical aspects of HIV/AIDS	142 (5.0)
Quality of healthcare	126 (4.4)
Child health	124 (4.4)
Clinical	118 (4.1)
Women's health	109 (3.8)
Mental health	83 (2.9)
Non-communicable diseases	79 (2.8)
Nutrition	61 (2.1)
Tuberculosis	59 (2.1)
Injury/trauma	37 (1.3)
Sexually transmitted diseases (other than HIV/AIDS)	34 (1.2)
Dental health	25 (0.9)
Geriatrics	23 (0.8)

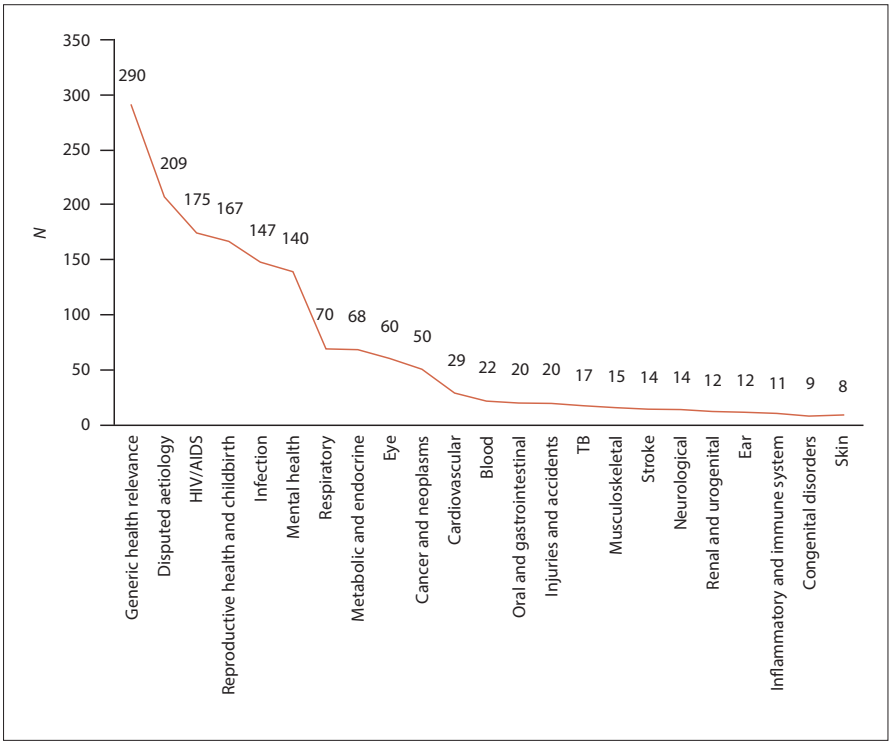


Fig. 3. Health categories.

of education attainment from 2015 to 2023 at degree level, inclusive of master's degrees and doctoral degrees; oddly enough, this was noted among the youth.[14]

Although a hike in higher levels of education attainment is noticeable, the problem of funding remains, as most research projects were not funded, but were self-funded by the researchers. Saidi indicated that, although South Africa has funding sources such as National Research Foundation (NRF) and the National Institute for Humanities and Social Sciences (NHISS), there are insufficient funds to cover all qualifying researchers.[15] Therefore, there is a high dropout rate among postgraduate studies for those who cannot fund themselves. This calls for making more funds available for postgraduate studies, particularly for professionals in the clinical fields.[15]

Our findings show that most of the research studies failed to indicate their study fields. The few that were mentioned include public health, HIV/AIDS and health systems. However, nutrition, TB and mental health were negligible areas of research focus. Seemingly, research studies in Limpopo Province do not align with the South African national health research priorities of alleviating the burden of diseases related to mental health and infectious diseases, such as TB. Findings further indicated that least of the studies were on mental illnesses and TB, which lends credence to the fact that some of the sub-priorities of the burden of diseases receive little attention.[16] Mental health is a growing public health phenomenon among youths and adults in South Africa; therefore, research on mental health is needed to inform health policy and interventions to address its aetiology and management. Mental health is a new silent killer, particularly in men, and emerging mental health problems warrant national attention, as more people die from suicide related to mental health issues such as depression.[17]

Concerningly, regarding national health research priorities in South Africa, none of the studies delved into digital health; instead, the focus was on the burden of diseases and health systems.[16] However, digital health innovative interventions have the potential to reduce the burden of diseases and revolutionise how care is provided to patients.[18] It was indicated by the World Health Organization that digital health interventions enable the promotion of care and improve patient health outcomes.[19]

Despite the lack of research in other national research priorities, our findings revealed that most studies focused mostly on prevention of diseases and promotion of well-being, aetiology and management of diseases, which is in tandem with national health priorities to generate an understanding of diseases to enhance health promotion and prevention.[16] The study findings indicate that Limpopo Province needs to also pay attention to health categories and study fields that are least researched.

Study limitations

The study only focused on LPHRC outcomes; thus, limitations cannot be generalised of the results to other provinces in South Africa. Moreover, the study only looked at the phenomenon of inquiry. Therefore, narrative studies exploring the phenomenon of inquiry should be conducted to understand the rationale behind less investigation in the identified field of study.

Table 5. Research activities

Research activities	*n* (%)
Health and social care services	504 (38.5)
Prevention of diseases and conditions and promotion of well-being	239 (18.3)
Underpinning research	133 (10.2)
Aetiology	128 (9.8)
Management of diseases and conditions	112 (8.6)
Evaluation of treatment and therapeutic interventions	86 (6.6)
Detection, screening and diagnosis	65 (5.0)
Development of treatments and therapeutic interventions	41 (3.1)

Table 6. Research proposal application status (*N*=2 066)

Status of application	*n* (%)
Approved	1 379 (66.7)
Declined	592 (28.7)
Pending (amendment)	34 (1.6)
Pending (new application)	43 (2.1)
Provisional approval	17 (0.8)
Withdrawn	1 (0)

Conclusion

This study identified a critical need for funding in areas needing improvement in research practices, particularly in mental health, which is a growing health issue in South Africa. The study recommends that relevant stakeholders and companies make funding available and invest in research to target these under-explored areas. This might enhance patient care across all health categories, with a particular emphasis on mental health. Our findings underscore the need for researchers to conduct research relevant to the South African National Health Research priorities to meet the varying health needs of the community.

Declaration. This research forms part of a PhD study.
Acknowledgements. We acknowledge the guidance of the University of Limpopo Research Ethics Committee.
Author contributions. LM and MS conceptualised the study. MWN and DTG drafted the methodology. DTG, TT, MM, MS, SFM, PM, JR, MN, MR, MK, KN and TM validated the manuscript. Formal analysis was conducted by OSS. MWN and LM drafted the original draft of the manuscript. DTG, MWN and LM reviewed and edited the manuscript. All the authors contributed to the work.

Funding. None.
Conflict of interest. None.

1. World Health Organization. Ensuring ethical standards and procedures for research with human beings. Geneva: World Health Organization; 2021. https://www.who.int/activities/ensuring-ethical-standards-and-procedures-for-research-with-human-beings
2. Ethical principles for medical research involving human participants: Declaration of Helsinki World Medical Association (WMA), 2024. https://www.wma.net/policies-post/wma-declaration-of-helsinki/
3. Ashcroft R, Pfeffer N. Ethics behind closed doors: Do research ethics committees need secrecy? BMJ 2001;322(7297):1294-1296.
4. Aksoy N, Aksoy S. Research ethics committees in Turkey. In: Song SY, Koo YM, Macer DRJ, editors. Bioethics in Asia in the 21st century. Christchurch: Eubios Ethics Institute; 2003.
5. Kimura R. Ethics committees for 'High Tech' innovations in Japan. J Med Philosophy 1989;14(4):457-464.
6. Committee on Bioethics. Institutional ethics committees. Pediatrics 2001;107(1):205-209.
7. Tod AM, Nicolson P, Allmark P. Ethical review of health service research in the UK: implications for nursing. J Adv Nurs 2002;40(4):379-386.
8. Kass NE, Hyder AA, Ajuwon A, et al. The structure and function of research ethics committees in Africa: A case study. PLoS Med 2007;4(1):e3.
9. South African Government. National Health Act 61 of 2003 https://www.gov.za/documents/acts/national-health-act-61-2003-23-jul-2004
10. Makgoba NW, Mametja M, et al. Health research policy in South Africa 2001. https://www.gov.za/sites/default/files/gcis_document/201409/healthresearch0.pdf
11. South African ethics in health research guidelines: Principles, processes and structures. 3rd ed. 2024. https://www.health.gov.za/wp-content/uploads/2024/05/NDoH-2024-Health-Research-Guidelines-3rdEdition-v0.1.pdf
12. IJsselmuiden C, Matlin S. Why health research? Research for health: Policy briefings. Council on Health Research for Development and Global Forum for Health Research. 2006.
13. Department of Higher and Education Training. Highest level of educational attainment in South Africa. www.dhet.gov.za. https://www.dhet.gov.za/Planning%20Monitoring%20and%20Evaluation%20Coordination/Fact%20Sheet%20-High%20Level%20Education%20Attainment%20in%20South%20Africa-%20April%20%202024.pdf
14. Bradbury J. Promises, pyramids and prisms: Reimagining postgraduate funding. S Afr J Higher Educ 2023;37(6):153-174.
15. National Department of Health. National Health Research Strategy: Research priorities for South Africa 2021-2024. www.gov.za. Pretoria: Department of Health; 2024 (cited 14 February 2025). https://www.health.gov.za/wp-content/uploads/2021/04/NATIONAL-HEALTH-RESEARCH-STRATEGY-2021-2024.pdf
16. Ngwenya MW, Sumbane GO. The urgency of access to men-centered mental healthcare services to address men's sensitive issues in the communities of South Africa. Healthcare access - new threats, new approaches. 16 December 2022. IntechOpen.
17. Mitchell M, Kan L. Digital technology and the future of health systems. Health Systems & Reform 2019;5(2):113-120.
18. World Health Organization. Global strategy on digital health 2020-2025. 2021.https://www.who.int/docs/default-source/documents/gs4dhdaa2a9f352b0445bafbc79ca799dce4d.pdf

Received 21 May 2025. Accepted 22 September 2025.