


Challenges and opportunities in prostate cancer surgery in South America: Insights into robot-assisted radical prostatectomies—A perspective

Hareesha Rishab Bharadwaj¹ | Andrew Awuah Wireko²  |
Favour Tope Adebuseye²  | Tomas Ferreira³ | Niels Pacheco-Barríos⁴ |
Toufik Abdul-Rahman² | Nikitina Iryna Mykolayivna¹

¹Faculty of Biology, Medicine and Health, The University of Manchester, Manchester, UK

²Faculty of Medicine, Sumy State University, Sumy, Ukraine

³School of Clinical Medicine, University of Cambridge, Cambridge, UK

⁴Faculty of Medicine, Alberto Hurtado Medical School, Cayetano Heredia Peruvian University, Lima, Peru

Correspondence

Favour Tope Adebuseye, Sumy State University, Zamonstankysya 7, 40007 Sumy, Ukraine.

Email: Favouradebusoye@gmail.com

Abstract

Background and Aims: Prostate cancer imposes a significant health burden, particularly in South America with its high incidence and mortality rates. This article explores the emergence of robot-assisted radical prostatectomy (RARP) as a potential solution in the region.

Methods: This study relies on a comprehensive review of relevant literature. The analysis highlights the advantages of RARP, identifies impediments to its implementation, and proposes strategies to overcome these barriers.

Results: RARP demonstrates notable benefits, including improved functional outcomes, reduced complications, and minimized incisions. However, the integration of RARP in South America is hindered by challenges such as regional disparities, financial limitations, and data gaps. Limited healthcare infrastructure and a scarcity of skilled professionals further compound the issues.

Conclusion: Despite its potential, RARP faces obstacles to widespread adoption in South America. Strategic solutions encompassing technology investment, healthcare infrastructure enhancement, and workforce training are imperative. Overcoming these challenges can establish RARP as a crucial tool in managing prostate cancer in the region, ultimately enhancing patient care and treatment outcomes.

KEYWORDS

global surgery, prostate cancer, robot-assisted radical prostatectomy, robotic surgery, South America

The authors would like to recognize Hareesha Rishab Bharadwaj and Wireko Andrew Awuah as co-first authors.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. *Health Science Reports* published by Wiley Periodicals LLC.

1 | BACKGROUND INSIGHTS INTO PROSTATE CANCER IN SOUTH AMERICA AND TREATMENT OPTIONS

Prostate cancer, defined as a malignant neoplasm originating from the prostate gland, has significantly impacted the global disease burden in recent years.¹ In many cases, its precise etiology remains elusive, although factors such as age, genetic polymorphisms and predisposition, hormonal imbalances, dietary factors, and family history can significantly influence disease pathogenesis.² With a generalized age-standardized incidence rate (ASR) of 60.4 per 100,000, South American nations tend to have some of the highest incidences of prostate cancer globally, with French Guyana (147.1), Brazil (91.4), and Uruguay (59.8) exhibiting the highest rates in the region^{3,4} (Figure 1). Notably, prostate cancer ranks among the top

three primary contributors to cancer-related mortality rates across South American nations.³

Therapeutic interventions for prostate cancer have traditionally encompassed a variety of different modalities. Active surveillance is recommended for less aggressive forms (PSA 10 ng/mL, Gleason 3 + 3), whereas aggressive localized disease requires curative treatment through surgery and radiotherapy. Recent years have witnessed the rise of robot-assisted radical prostatectomies (RARPs), which have shown superior outcomes, including less blood loss, lower transfusion rates, and fewer positive surgical margins post-resection compared to open radical prostatectomies.⁵ Other reported benefits of this approach include smaller surgical incisions, reduced analgesic requirements, shorter hospital stays, and improved functional outcomes such as erectile function and urinary continence recovery.^{6,7} A general consensus among urologists suggests that the use of robotic systems

Age Standardised Incidence of Prostate Cancer

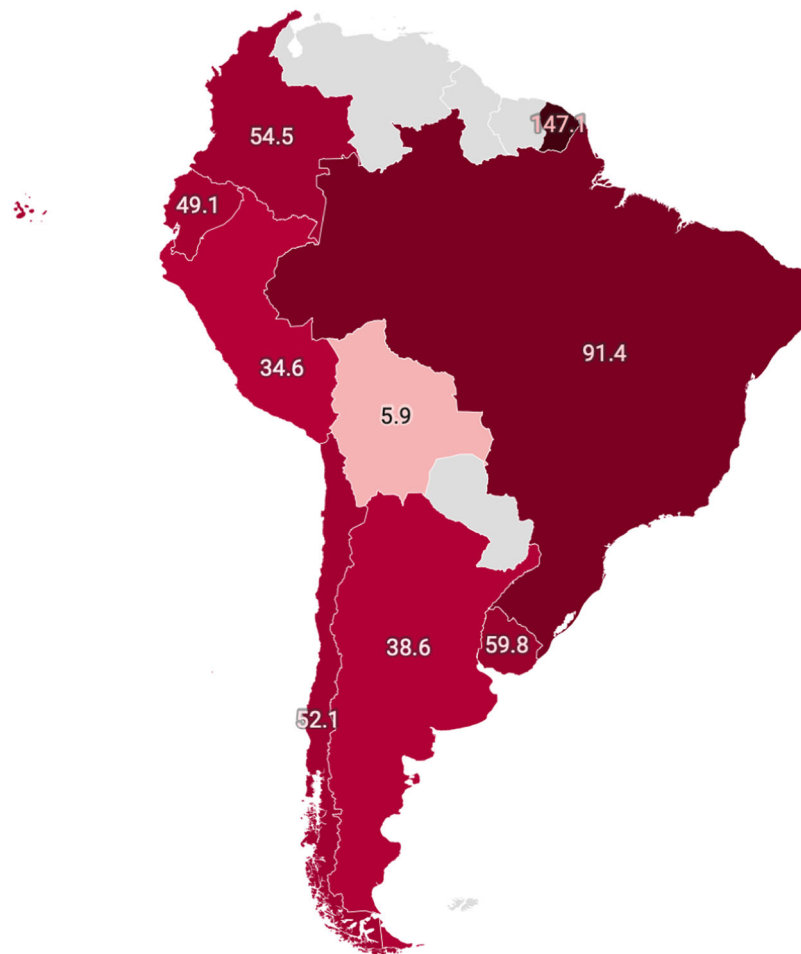
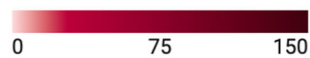


FIGURE 1 Age-standardized incidence rate of prostate cancer in South American countries^{3,4} (created with [Mapchart.net](#)).

permits a significant degree of magnification and provides better ergonomics for the surgeon by eliminating the need for intricate wrist movements (as is required for complicated laparoscopic prostatectomies) and nullifying the effect of tremors.⁶

Although there are several reports on conventional prostatectomies in South America, the current state of RARP remains largely unexplored. To this end, this commentary aims to outline the prevalence and distribution of RARP services across South America, present preliminary outcomes from regional studies, and critically examine the advantages and disadvantages of this service delivery, ultimately suggesting future directions.

2 | ADVANCEMENTS AND PITFALLS IN RARP DELIVERY IN SOUTH AMERICA

RARP has attracted substantial interest among urologists since the approval of the da VinciTM Surgical System (Intuitive Surgical) by the American Food and Drug Administration in 2000. However, the first successful robotic prostatectomy in South America did not occur until 2008 in Brazil.⁷ The availability of this surgical method in the area has steadily improved since then. With over 75 dedicated robotic systems for RARP, Brazil has emerged as a leader in the field, demonstrating a strong commitment to upgrading surgical technology and improving access to cutting-edge therapies.⁸

Noteworthy advances in the provision of RARP services have been observed in Colombia and Chile.^{8,9} The Fundación Santa Fe de Bogotá University Hospital in Bogotá, Colombia, reported over 300 successful robot-assisted prostatectomies performed from 2017 to 2021, showcasing significant progress in the region.⁹ Similarly, the Clínica Alemana de Santiago in Santiago, Chile, conducted 299 RARPs between 2020 and 2021.⁹ The surgical team at Clínica Alemana de Santiago implemented advanced insufflator/aspirator systems (IAS), resulting in improved safety and efficacy of pneumoperitoneum creation and a notable reduction in overall complications. Argentina has also made considerable progress in RARP delivery. The Hospital Italiano de Buenos Aires has specialized in conducting robot-assisted salvage prostatectomies (SRP), a complex procedure targeting recurrent prostate cancers.¹⁰ Promising outcomes have been observed in patients undergoing robotic SRPs, including increased rates of preserved erectile function, decreased incidence of incontinence, and the absence of operative complications.¹⁰ These findings, while preliminary, signify a potential avenue for safe and effective treatment of recurrent prostate cancer in a resource-constrained environment.

Preliminary studies have consistently demonstrated advantages associated with RARP, such as reduced blood transfusions, fewer intraoperative complications (transfusion, difficult airway, low-potency vasopressor, bleeding, anesthetic complications, and conversion to laparotomy), and postoperative complications (nausea and vomiting, urinary incontinence), along with decreased perioperative deaths.^{8,9,11-15} Additionally, patients undergoing RARP have reported superior outcomes in terms of urinary continence and

preservation of erectile function.¹¹⁻¹⁴ These benefits not only enhance patients' quality of life and sexual satisfaction but also reduce the need for postoperative sexual health consultations, thereby contributing to resource preservation.

Another noteworthy finding is the potential for a shorter learning curve and less demanding training programs for surgeons adopting RARP in Brazil.¹³ This suggests that urologists in South America may require fewer rigorous training requirements to develop proficiency in RARP.

Despite these advantages, several challenges prevent the widespread adoption of RARP in South America. This is particularly evident in Argentina, where access to RARP services poses a significant barrier. A 2019 survey revealed that Argentina had only three robots available for a population of 44 million residents, resulting in a poor ratio of approximately one robot for every 14.6 million residents.¹⁶ Moreover, these robots are disproportionately concentrated in the capital city of Buenos Aires.¹⁶

The lack of advanced surgical experience among South American surgeons is another challenge. A recent survey conducted by the Brazilian Society of Urology highlights that only 12.8% of the 417 surveyed urologists were competent in performing RARP, suggesting limitations in service delivery that primarily benefit select individuals and institutions.¹⁷ Additionally, reported rates of positive surgical margins in South America vary significantly among studies, ranging from 16% to 31%.¹⁸

Furthermore, RARP services are not equitably distributed across South America, as the majority of nations, excluding Brazil, Argentina, Chile, and Colombia, face limited access to this advanced surgical intervention. This discrepancy is primarily attributed to the scarcity of research and the limited dissemination of RARP techniques within the region.¹¹⁻¹⁴

3 | CHALLENGES IN EXPANDING ACCESS TO RARPs IN SOUTH AMERICA

Although the advantages of RARPs in South America are clear, there are several challenges preventing their widespread adoption. The lack of adequate medical infrastructure, including access to advanced robotic systems and the requisite operating theater modifications, presents a significant barrier.⁷ Similarly, the shortage of healthcare professionals trained in robotic surgical techniques, coupled with a lack of dedicated surgical units for training and operation, poses further impediments to the widespread adoption of RARPs across the continent.¹⁷

The financial implications of RARPs also pose a significant challenge. The purchase of robotic surgical systems, in conjunction with maintenance and consumable costs, can render these interventions economically burdensome.⁷ When considering the financial constraints faced by South American healthcare systems, the cost of implementing and performing RARPs may be prohibitive, potentially impeding access for both patients unable to shoulder the cost of the procedure and institutions struggling with substantial initial

expenditures.⁷ Additionally, the reliance on intricate robotic systems and instruments during the RARP implementation underscores the risk of mechanical failure. An increase in the likelihood of technical malfunctions could negatively impact surgical outcomes and patient safety.⁹

South America's geographical landscape contributes to the complexity of RARP adoption. In some regions, healthcare infrastructure is robust, with well-equipped facilities and highly trained personnel, where other regions face an underdeveloped healthcare landscape, struggling to deliver even basic services.¹⁰ This disparity poses a vital question about resource allocation. Considering these geographical disparities, it becomes essential to contemplate whether government resources might be more efficiently channeled into improving basic healthcare facilities in underserved regions rather than investing in robotic surgical systems.

In addition, the availability and reliability of data in the region raise significant concerns. The limited scope of data, derived from a restricted number of countries, underscores the substantial research gaps that persist across South America. Neumaier et al. conducted a study highlighting the potential incompleteness of data collected from medical and hospital records regarding the outcomes of robot-assisted prostatectomies, which may result in an underestimation of complications and an inadvertent overestimation of positive results.¹⁹ Considering the economic disparities and divergent public policies within South American countries, access to robot-assisted surgeries remains constrained, limiting the number of citizens who can benefit from these procedures.⁶ Given the existing economic disparities and the limited potential for significant improvements in either the economic status of individuals or a more equitable distribution of resources, it is improbable that a substantial proportion of the population will have the financial means to afford these costly healthcare procedures. Moreover, the lack of substantial scientific evidence supporting the widespread establishment of robotic centers currently does not justify significant public investments in this domain.⁶ Consequently, expanding

access to robot-assisted prostatectomies in South America poses an additional challenge. An overview of the challenges impeding the expansion of RARPs in South America can be found in Figure 2.

4 | STRATEGIES FOR EXPANSION AND IMPROVING EQUITABLE ACCESS OF RARPs IN SOUTH AMERICA

Increasing access to robotic prostatectomy services in South America is a critical area for future focus. To address the needs of underserved regions, robust governmental policies should be developed to facilitate the establishment and equipping of robotic surgical systems in these areas. A great example of this is the Kingdom of Saudi Arabia, which has invested in the establishment of robotic surgical systems for prostatectomies in governmental hospitals across different regions of the country as part of its health policy to invest in surgical technology.²⁰ Governments can also improve providing access to urology care for citizens in rural regions to tertiary locations by utilizing telehealth to provide for an efficient system of referrals, and further invest in telehealth systems such that most preoperative and postoperative follow ups can be completed remotely. For instance, the UK's National Health Service has invested heavily in its telehealth service "Babylon Flow" to improve preoperative diagnostics in urology, thereby effectively increasing its efficiency, combating the increasing burden of workload on urologists and streamlining care to patients in medically underserved areas in the country.^{21,22}

Telehealth is emerging as a valuable tool in the monitoring and evaluation of postoperative recovery and patient outcomes following RARPs. An increasing number of mobile applications are demonstrating potential for facilitating postoperative patient management and care. These applications offer real-time recovery monitoring, treatment guidance, complication identification, and satisfaction assessment.²³⁻²⁶

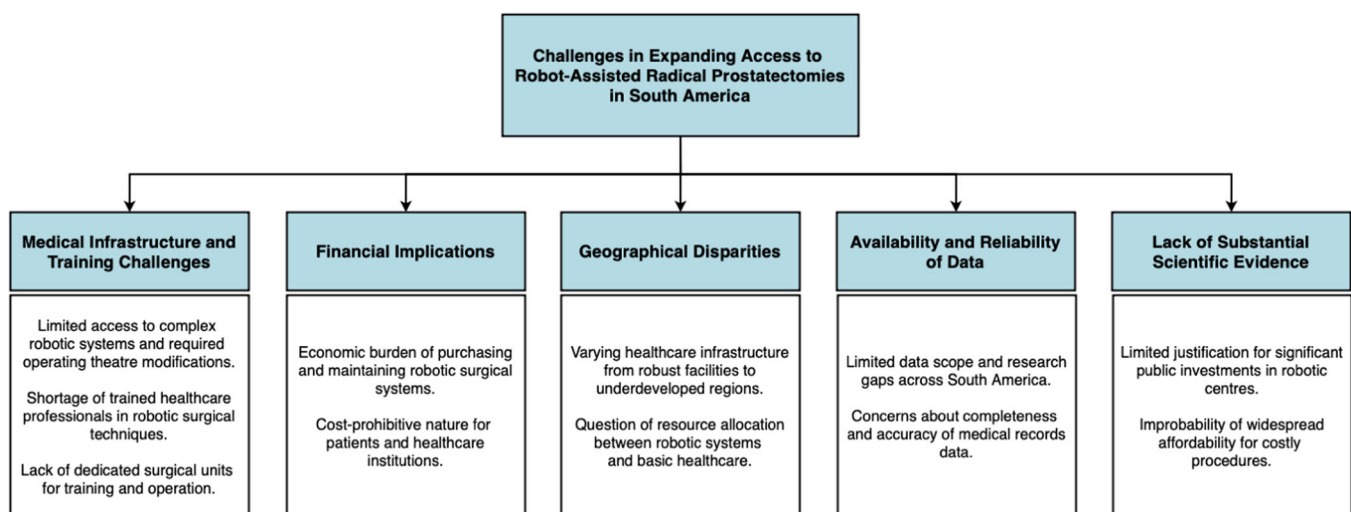


FIGURE 2 Challenges in expanding access to robot-assisted radical prostatectomies in South America.

Furthermore, such technology can be used to provide psychosocial support following complex surgeries.²⁷ This growing reliance on application-based healthcare holds promise for improving patient outcomes and streamlining healthcare delivery. Increased investment in telehealth could significantly benefit South American nations by reducing doctors' workloads in resource-limited settings and granting patients in remote areas access to quality care.

Social media, in tandem with telehealth, offers promising potential. Its burgeoning use within the field of urology can facilitate patient education, stimulate research interest through the sharing of contemporary RARP experiences, disseminate scientific articles, and distribute surgical videos for knowledge dissemination. Platforms such as Twitter encourage healthy discussion on the subject,^{28,29} thereby suggesting the need to foster this culture within South America to improve the uptake of RARPs.

Effective promotion of accurate information through comprehensive training programs is also critical. These programs should reflect the hands-on training offered to urologists, education for nurses in postoperative care, and the provision of patient testimonials and case studies to inform potential patients of the procedure's benefits and outcomes.^{21,22} As exemplified by Rocha et al.'s study in Brazil, enlisting proficient urologists specializing in RARPs to lead training initiatives, forming affiliations with international institutions to aid South American practitioners' education, and optimizing online educational opportunities such as Da Vinci STM certification could

markedly improve the implementation of RARPs.¹² Moreover, fostering a multidisciplinary approach to RARPs within urology is key, ensuring that other clinical staff, including nurses and healthcare assistants, can actively participate in the continuous discourse. Greater investigation into patient outcomes following RARPs, the use of validated questionnaires to assess patient satisfaction, and leveraging this feedback to refine training methodologies are indispensable strategies for future progress.

As previously highlighted, mechanical failures are a potential risk within complex robotic surgical systems. This risk is increased in scenarios such as those in South America, where a limited number of robots are deployed to conduct several surgeries. As a result, establishing an on-site dedicated technical support team is critical. This proactive approach not only addresses operational contingencies but also offers a new pathway for integrating a varied range of professionals, including technical support, into the healthcare environment.³⁰

Governments can also expedite the process of granting licenses for robotic surgical equipment to be sold in the country, thereby increasing availability. Furthermore, the implementation of cloud-based systems, subsidies for purchasing costs in hospitals located in rural settings, and collaborations with coveted institutions in developed nations can help bridge skills gaps and improve accessibility. To advance the delivery of prostatectomies in the country, the State of Kuwait has fostered active governmental and institutional

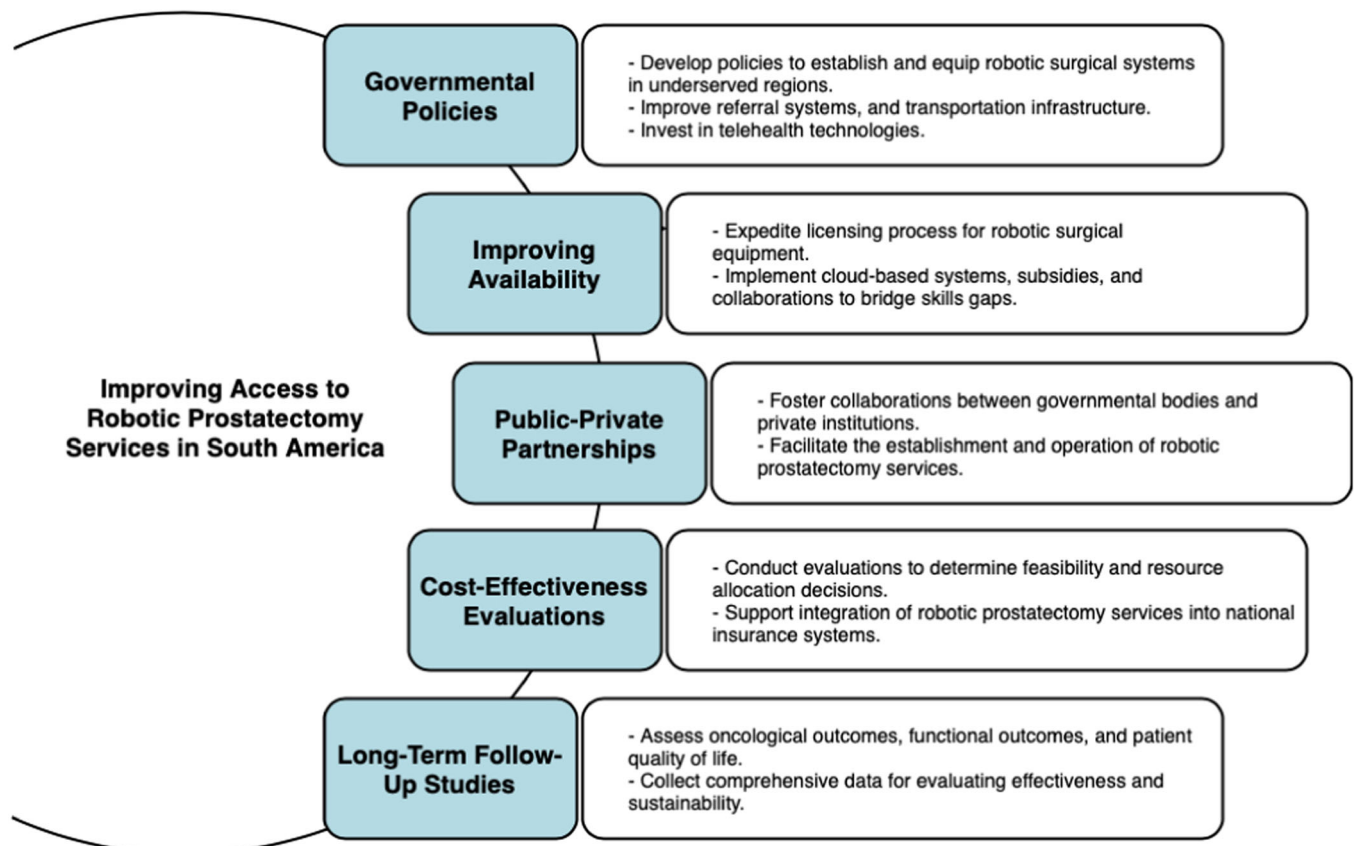


FIGURE 3 Strategies to improve access to robot-assisted radical prostatectomy services in South America.

collaborations so that Kuwaiti urologists can complete niche fellowships in institutions across North America and return to implement their skills back home. Thus, this denotes an excellent example of how institutional agreements and collaborations can improve access to RARPs and other such innovative surgical procedures.²⁰

Public-private partnerships offer a promising avenue for progress. By fostering collaborations between governmental bodies and private institutions, South American nations can facilitate the establishment and operation of robotic prostatectomy services. For instance, India, another low-middle-income country, has been fostering extensive collaborations with private institutions to establish a number of robotic surgical centers, such as the da Vinci Surgical Skills Training Centre in Gurgaon.²³

Furthermore, conducting comprehensive cost-effectiveness evaluations is vital to determine the feasibility of expanding robotic prostatectomy services. These evaluations will provide valuable insights into resource allocation decisions within health budgets, supporting the further integration of this transformative surgical technique. Exploring the integration of robotic prostatectomy services into national insurance systems, such as Brazil's Sistema Único de Saúde, warrants further investigation to improve affordability and access for a broader patient population.⁷ A great example of this is India's "Ayushman Bharat" Scheme, whereby through research and evaluation, urological robotic surgery programs have been incorporated and access has been expanded to millions of low income citizens.²³

Overall, long-term follow-up studies are essential to assess oncological outcomes, functional outcomes (including erectile function and urinary continence), and patient quality of life associated with robotic prostatectomy. Rigorous data collection and analysis will provide a robust evidence base to evaluate the effectiveness and sustainability of this surgical approach within the South American context. An overview of the strategies to improve access to RARP services in South America can be found in Figure 3.

5 | CONCLUSION

Prostate cancer poses a significant health burden in South America, with high incidence and mortality rates. RARP presents advantages as a surgical approach, yet its widespread adoption in the region is impeded by various challenges, including regional disparities, limited surgical expertise, financial considerations, geographic obstacles, and data limitations. Addressing these challenges requires the implementation of strategic measures such as establishing robotic systems in underserved regions, instituting comprehensive training programs, fostering public-private partnerships, conducting cost-effectiveness evaluations, and prioritizing research and data collection to assess the procedure's effectiveness and long-term sustainability in the region. These measures have the potential to improve access to RARPs and optimize prostate cancer management in South America.

AUTHOR CONTRIBUTIONS

Hareesha Rishab Bharadwaj: Conceptualization; data curation; formal analysis; funding acquisition; investigation; methodology; writing—original draft; writing—review and editing. **Andrew Awuah Wireko:** Supervision; validation; visualization; writing—original draft; writing—review and editing. **Favour Tope Adebuseye:** Formal analysis; supervision; writing—original draft; writing—review and editing. **Tomas Ferreira:** Supervision; validation; writing—original draft; writing—review and editing. **Niels Pacheco-Barrios:** Writing—original draft; writing—review and editing. **Toufik Abdul-Rahman:** Writing—original draft; writing—review and editing. **Nikitina Iryna Mykolayivna:** Conceptualization; data curation; supervision; writing—original draft; writing—review and editing.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data Availability Statement is not available.

TRANSPARENCY STATEMENT

The lead author Favour Tope Adebuseye affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

ORCID

Andrew Awuah Wireko  <https://orcid.org/0000-0003-2380-2949>

Favour Tope Adebuseye  <https://orcid.org/0000-0001-5362-3920>

REFERENCES

1. Wang L, Lu B, He M, Wang Y, Wang Z, Du L. Prostate cancer incidence and mortality: global status and temporal trends in 89 countries from 2000 to 2019. *Front Public Health*. 2022;10:811044.
2. Chan JM, Stampfer MJ, Giovannucci EL. What causes prostate cancer? A brief summary of the epidemiology. *Sem Cancer Biol*. 1998;8(4):263-273.
3. Sierra MS, Soerjomataram I, Forman D. Prostate cancer burden in Central and South America. *Cancer Epidemiol*. 2016;44:S131-S140.
4. Rawla P. Epidemiology of prostate cancer. *World J Oncol*. 2019;10(2):63-89. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6497009/>
5. Du Y, Long Q, Guan B, et al. Robot-assisted radical prostatectomy is more beneficial for prostate cancer patients: a system review and meta-analysis. *Med Sci Monit*. 2018;24:272-287. <https://www.medscimonit.com/abstract/index/idArt/907092>
6. Julio AD, Ahlering TE, Korke F, et al. Robotic assisted radical prostatectomy: a different treatment for prostate cancer? *Einstein*. 2010;8(3):381-382. <https://www.scielo.br/j/eins/a/dGNhtPpkHdHtZYDnPKJNBdW/?lang=pt>
7. Faria EF, Rosim RP, de Matos Nogueira E, Tobias-Machado M. Cost-effectiveness analysis of robotic-assisted radical prostatectomy for localized prostate cancer from the Brazilian public system perspective. *Value Health Reg Issues*. 2022;29:60-65.
8. Madrid G, Arango E, Ferrer L, et al. Characteristics of patients undergoing robotic-assisted prostatectomy. Observational study. *Colomb J Anesthesiol*. 2021;49(4):e201.

9. Otaola-Arca H, Mejías O, Bravo JC, et al. Impact of insufflator/aspirator versus exclusive insufflator during robotic radical prostatectomy: a comparative prospective cohort study. *Ann Med Surg.* 2023;85(5):1480-1485.
10. Martinez PF, Romeo A, Tobia I, Isola M, Giudice CR, Villamil WA. Comparing open and robotic salvage radical prostatectomy after radiotherapy: predictors and outcomes. *Prostate Int.* 2021;9(1):42-47.
11. Colombo Junior JR, Andreoni C, Lemos GC, et al. Robot-assisted radical prostatectomy in Brazil: preliminary results. *Einstein.* 2009;7(4):488-493.
12. Rocha MFH, Picanço Neto JM, Filgueira PHO, Coelho RF, Moschovas MC, Patel V. Robotic-assisted radical prostatectomy with preceptor's assistance: the training experience and outcomes in South America. *J Robot Surg.* 2021;16(1):207-213.
13. Lott FM, Favorito LA. Is previous experience in laparoscopic necessary to perform robotic radical prostatectomy? A comparative study with robotic and the classic open procedure in patients with prostate cancer. *Acta Cir Bras.* 2015;30(3):229-234.
14. Tobias-Machado M, Mitre AI, Rubinstein M, Costa EF, Hidaka AK. Robotic-assisted radical prostatectomy learning curve for experienced laparoscopic surgeons: does it really exist? *Int Braz J Urol.* 2016;42(1):83-89.
15. Raykar NP, Makin J, Khajanchi M, et al. Assessing the global burden of hemorrhage: the global blood supply, deficits, and potential solutions. *SAGE Open Med.* 2021;9:205031212110549.
16. Moldes JM, de Badiola FI, Vagni RL, et al. Pediatric robotic surgery in South America: advantages and difficulties in program implementation. *Front Pediatr.* 2019;7:94.
17. Rocha MFH, Coelho RF, Branco AW, Filgueira PHO, Guida Júnior R. A census of laparoscopic and robotic urological practice: a survey of minimally invasive surgery department of the Brazilian Society of Urology. *Int Braz J Urol.* 2019;45(4):732-738.
18. Yossepowitch O, Briganti A, Eastham JA, et al. Positive surgical margins after radical prostatectomy: a systematic review and contemporary update. *Eur Urol.* 2014;65(2):303-313.
19. Neumaier MF, Segall Júnior CH, Hisano M, Rocha FET, Arap S, Arap MA. Factors affecting urinary continence and sexual potency recovery after robotic-assisted radical prostatectomy. *Int Braz J Urol.* 2019;45(4):703-712.
20. Azhar RA, Elkoushy MA, Aldousari S. Robot-assisted urological surgery in the Middle East: where are we and how far can we go? *Arab J Urol.* 2019;17(2):106-113.
21. Symeonidis EN, Veneziano D, Borgmann H, et al. Telemedicine in urology: where have we been and where are we heading? *Eur Urol Open Sci.* 2023;50:106-112.
22. Iacobucci G. Babylon Health holds talks with "significant" number of NHS trusts. *BMJ.* 2020;368:m266.
23. Bora G, Narain T, Sharma A, et al. Robot-assisted surgery in India: A SWOT analysis. *Indian J Urol.* 2020;36(1):1-3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6961426>
24. Belarmino A, Walsh R, Alshak M, Patel N, Wu R, Hu JC. Feasibility of a mobile health application to monitor recovery and patient-reported outcomes after robot-assisted radical prostatectomy. *Eur Urol Oncol.* 2019;2(4):425-428. doi:10.1016/j.euo.2018.08.016
25. Goode PS, Johnson TM, Newman DK, et al. Perioperative mobile telehealth program for post-prostatectomy incontinence: a randomized clinical trial. *J Urol.* 2022;208(2):379-387. doi:10.1097/JU.0000000000002697
26. Viers BR, Lightner DJ, Rivera ME, et al. Efficiency, satisfaction, and costs for remote video visits following radical prostatectomy: a randomized controlled trial. *Eur Urol.* 2015;68(4):729-735. doi:10.1016/j.eururo.2015.04.002
27. Lange L, Fink J, Bleich C, Graefen M, Schulz H. Effectiveness, acceptance and satisfaction of guided chat groups in psychosocial aftercare for outpatients with prostate cancer after prostatectomy. *Internet Interv.* 2017;9:57-64. doi:10.1016/j.invent.2017.06.001
28. Matta R, Doiron C, Leveridge MJ. The dramatic increase in social media in urology. *J Urol.* 2014;192(2):494-498. doi:10.1016/j.juro.2014.02.043
29. Rivas JG, Socarrás MR, Blanco LT. Social Media in Urology: opportunities, applications, appropriate use and new horizons. *Cent Eur J Urol.* 2016;69(3):293-298. doi:10.5173/ceju.2016.848
30. Kaushik D, High R, Clark CJ, LaGrange CA. Malfunction of the da Vinci Robotic System during robot-assisted laparoscopic prostatectomy: an international survey. *J Endourol.* 2010;24(4):571-575.

How to cite this article: Bharadwaj HR, Wireko AA, Adebusoey FT, et al. Challenges and opportunities in prostate cancer surgery in South America: insights into robot-assisted radical prostatectomies—A perspective. *Health Sci Rep.* 2023;6:e1519. doi:10.1002/hsr2.1519