

Analysis of Challenges and Opportunities for Improving the Health System in Afghanistan: Innovative Approaches and Sustainable Solutions

Fayaz Gul Mazloun YAR¹

¹Senior Teaching Assistant at the University of Nangarhar, Afghanistan

Abstract

This research explores the challenges and opportunities for improving the health system in Afghanistan. The healthcare system is critical to any country's social and economic development. Equitable and comprehensive access to health and medical services is vital for public health and plays a critical role in improving quality of life, reducing poverty, and enhancing workforce productivity. Afghanistan, a country that has experienced decades of war, political instability, and economic crises, faces significant challenges in healthcare. The main objective is to identify the significant issues within the healthcare system and propose sustainable solutions to enhance the quality of health services. Using a mixed-method approach (qualitative and quantitative), data were collected through semi-structured interviews with experts and a review of credible scientific sources. The findings indicate that a lack of healthcare infrastructure, a shortage of specialized human resources, and management issues are among the primary challenges facing Afghanistan's healthcare system. Additionally, opportunities such as international support and utilizing modern technologies in healthcare have been identified. The study concludes that investment in infrastructure, human resource training, and strengthening international collaborations are essential to improve the healthcare situation in Afghanistan.

Keywords:

Afghanistan's Healthcare System, Health Challenges, Improvement Opportunities, Human Resources, Healthcare Infrastructure

Article History

Received: 2024-09-07

Revised: 2024-10-08

Accepted: 2024-11-09

Vol 2 Issue 1 2024

Corresponding Author*

fmazlounmyar@gmail.com



Page 126 - 134

INTRODUCTION

The healthcare system is critical to any country's social and economic development. Equitable and comprehensive access to health and medical services is vital for public health and plays a critical role in improving quality of life, reducing poverty, and enhancing workforce productivity. Afghanistan, a country that has experienced decades of war, political instability, and economic crises, faces significant challenges in healthcare. These structural and organizational challenges are evident in public access to health services (Islam et al., 2022; Yar & Shaheedzooy, 2024). One of the most critical problems in Afghanistan's healthcare system is the lack of adequate physical infrastructure, such as well-equipped hospitals and clinics, and limited access to medicines and medical equipment. In addition to these issues, migration and inadequate educational facilities exacerbate a shortage of skilled human resources and healthcare specialists. These problems are further intensified by economic constraints and budgetary limitations, creating significant barriers to delivering timely and quality healthcare services to the Afghan people (Essar et al., 2023).

Moreover, Afghanistan's social and cultural landscape has also impacted its healthcare system. Low levels of health literacy, misconceptions about medical care, and limited access to healthcare services for women and vulnerable groups have made it difficult for many individuals to receive necessary health services. Additionally, security issues and political instability have left many regions of the country without access to essential health and medical services (Islam et al., 2022). Despite these challenges, there are considerable opportunities for improving Afghanistan's healthcare system. International support and financial assistance from global organizations such as the World Health Organization (WHO), UNICEF, and other development agencies can strengthen healthcare infrastructure and expand access to health services.

Moreover, modern technologies, especially in the realm of digital health and mobile health solutions, offer new opportunities for providing medical services in remote and high-risk areas, thereby improving public health outcomes (Naik et al., 2022; Suryanti et al., 2022; Rahmani et al., 2021). Another

critical opportunity lies in learning from the successful healthcare reforms of other countries. Many nations have faced similar challenges in healthcare and have successfully strengthened their health systems through effective strategies and comprehensive health programs. By adapting these experiences to Afghanistan's unique cultural and social conditions, significant progress can be made in addressing the country's healthcare challenges (Sharma et al., 2024; Yar & Zarghani, 2024). This research aims to comprehensively analyze the current state of Afghanistan's healthcare system, identify the challenges and opportunities for improvement, and offer practical and sustainable solutions. The study is based on up-to-date data and credible sources, providing evidence-based recommendations that can be implemented in Afghanistan's current context.

Research Objectives. The primary objective of this research is to conduct a comprehensive assessment of the healthcare system and services in Afghanistan, identify the significant issues in this sector, and propose appropriate solutions for improving the country's healthcare system. Additionally, the research seeks to evaluate the existing opportunities and capacities within the Afghan healthcare system to leverage them for improving service quality. Overall, this study aims to provide strategies that strengthen the health system and reduce challenges in accessing healthcare services.

Research Questions.

1. What are the main challenges facing Afghanistan's healthcare system?
2. What opportunities exist to improve healthcare services in Afghanistan?
3. What are the appropriate solutions for addressing the current challenges in Afghanistan's healthcare system?
4. How can the quality of healthcare services in Afghanistan's remote and rural areas be improved?
5. What strategies can enhance access to healthcare services for women and children in deprived areas of Afghanistan?

Problem Statement. Afghanistan's healthcare system has faced numerous challenges in recent decades, including economic difficulties, security concerns, a lack of skilled human resources, and inadequate infrastructure. Despite international and domestic efforts to improve healthcare, many Afghan citizens still need access to essential health services. This issue is particularly pronounced in rural and remote areas, where people face cultural, economic, and geographical barriers (Basij-Rasikh et al., 2024). Therefore, there is a need for comprehensive research to identify the problems in the healthcare system and provide solutions for improvement. This research can contribute to a better understanding of the current situation and offer actionable steps to enhance healthcare services in the country.

Research Significance. Given the critical state of Afghanistan's healthcare system and its negative impact on the health and well-being of its people, this research is of high importance. The urgency of this study arises from the need to identify challenges and provide scientific and practical solutions to improve the country's healthcare situation. Additionally, considering the importance of public health as one of the critical pillars of sustainable development, this research can assist policymakers and international organizations in developing more effective and comprehensive plans for improving healthcare services.

Importance of the Study. This research is significant in both its scientific and practical dimensions. Scientifically, this study can enrich the existing literature on Afghanistan's healthcare system through in-depth analysis. The results can also serve as a model for other countries facing similar healthcare challenges. Practically, this research can support Afghan policymakers and healthcare officials in making more informed and effective decisions, and the proposed strategies may play an essential role in improving the quality of healthcare services and expanding access to them.

Theoretical Framework. This research section explores the theories and models relevant to health systems that help provide a deeper analysis of the challenges and opportunities within Afghanistan's healthcare system. It discusses social, economic, and health theories that can contribute to a better understanding of the current situation.

Social Theories: Understanding the challenges in Afghanistan's healthcare system requires consideration of social factors. Social theories can help analyze how cultural, social, and economic factors influence health behaviors and access to healthcare services. In particular, theories of social inequality (such as the theory of health inequities) explain how economic and social disparities affect access to healthcare services. These theories highlight that health is not solely a function of medical service quality but is also influenced by social and economic factors (Schuh & Bush, 2021).

Economic Theories: Economic models, particularly theories related to health economics, help analyze the challenges in Afghanistan's healthcare system. These theories examine the costs and benefits of investing in healthcare services and help analyze how allocating limited resources to improve service quality can increase productivity and reduce social costs. Additionally, cost-benefit analysis allows researchers to assess the economic impact of various proposed solutions (Andronis et al., 2019).

Health Models: Various health models, such as the public and primary care models, can aid in analyzing Afghanistan's healthcare system. These models emphasize the importance of prevention, public education, and access to healthcare services. Specifically, the primary care model underscores the need to establish healthcare infrastructure in remote areas and create effective referral systems. These models teach us that improving the health system requires a strong focus on infrastructure and human resources (Wenang et al., 2021; Yar & Yasouri, 2024).

Social Change Theories: Social change theories can help understand how healthcare reforms can be implemented in Afghanistan. These theories examine change processes in health behaviors, policy-making, and management. Theories of social change emphasize the importance of community participation, raising health awareness, and empowering individuals in the reform process. These theories can help analyze how new health policies can be accepted and implemented in Afghanistan (Croke et al., 2019). By reviewing these theories and models, this research provides a framework to analyze the challenges and opportunities in Afghanistan's healthcare system from different perspectives. These theories add credibility to the research and assist in the more profound analysis of the collected data. Specifically, attention to social, economic, and managerial dimensions in analyzing Afghanistan's healthcare situation can pave the way for effective and sustainable solutions to improve the healthcare system in the country.

Literature Review. Reviewing past studies and research on Afghanistan's healthcare system and its challenges provides a comprehensive perspective on the current situation and helps clarify the research direction while offering practical solutions. Given Afghanistan's unique political and social circumstances, much research and reports have focused on issues such as health disparities, limited access to medical services, and a shortage of healthcare infrastructure and skilled human resources.

One of the most important studies in this field is the World Health Organization (WHO) periodic reports. According to (WHO, 2020), the lack of healthcare infrastructure and medical facilities is a significant issue in Afghanistan, particularly in rural and remote areas where access to health services is severely limited. The report highlights that one of the critical barriers to access is the need for well-equipped hospitals and health centers, resulting in many patients needing more timely specialized care.

Another study by Karyda and Moka (2022) examined the direct impact of war and political instability on Afghanistan's healthcare system. The study found that continuous warfare and internal conflicts have led to the destruction or unavailability of many healthcare centers. Furthermore, the migration of skilled professionals due to a lack of security and job opportunities is one of the main factors contributing to the shortage of qualified human resources in the health sector. The study also points out that economic challenges have affected health budgets, limiting the government's ability to provide comprehensive and accessible healthcare services.

A study by Alemi et al. (2023) addresses the cultural and social issues affecting healthcare access. According to this research, incorrect cultural and religious beliefs in some areas of Afghanistan have significantly reduced access to health services, particularly for women. Additionally, low health literacy

and the lack of public education on health are significant barriers to disease prevention and improving public health.

Acerra et al. (2009). Their study on healthcare services in Afghanistan's conflict zones revealed that security challenges and political instability have hindered the ability of international and domestic organizations to provide continuous services. The research also mentions that in regions where non-governmental and international organizations are active, healthcare services temporarily improve but often cease due to a lack of sustained support.

Moreover, domestic research has also focused on Afghanistan's healthcare system. In an article by Newbrander et al. (2014), the role of local institutions and civil society in enhancing healthcare services in Afghanistan was examined. Local collaborations could play a crucial role in improving access to healthcare and raising public awareness. However, financial challenges and the need for more skilled human resources remain significant obstacles.

A review of previous research indicates that Afghanistan's healthcare system faces multiple challenges, such as a lack of infrastructure, limited human resources, security and economic problems, and social inequalities. Nevertheless, opportunities such as leveraging international aid, utilizing new health technologies, and strengthening local institutions could be promising solutions. This research will continue to draw on this scientific background and international experiences to propose practical and sustainable solutions for improving Afghanistan's healthcare system.

METHODS

This research is designed to assess Afghanistan's health system and services comprehensively, identify existing problems, and offer proposed solutions. A mixed-methods approach (qualitative and quantitative) has been employed to understand the current situation better and identify challenges and opportunities. The research is descriptive-analytical, examining the current state of Afghanistan's health system from various perspectives (economic, social, and infrastructural).

Study Population: The population includes health specialists, doctors, health managers, and Afghan citizens living in rural and urban areas.

Sampling: A purposive sampling method was used. Twenty participants, including doctors, healthcare organization staff, and residents of various rural areas, were selected for interviews.

Primary Data: Primary data were collected through semi-structured interviews with health and medical experts in person and online.

Secondary Data: Secondary data were gathered through a review of credible scientific sources, international reports (such as those from the World Health Organization and the United Nations Population Fund), and government documents.

Semi-structured interviews were the primary tool for gathering qualitative data. The interviews focused on identifying challenges, opportunities, and personal experiences related to Afghanistan's health system.

Questionnaires: Standardized questionnaires and international statistical sources were used to collect quantitative data.

Qualitative Analysis: The qualitative data were analyzed using thematic analysis. This method involved coding the data and identifying key themes that helped explain the problems and challenges within Afghanistan's health system.

Quantitative Analysis: The quantitative data were analyzed through descriptive and inferential statistical methods (such as correlation tests) to evaluate the quantitative and qualitative findings simultaneously. Several limitations were encountered during this research. One of the most significant challenges was limited access to accurate information due to the critical situation in Afghanistan. Additionally, some interviewees were reluctant to participate in interviews due to security concerns, which may have affected the comprehensiveness of the data.

This research observed all ethical principles. The participants' information was kept confidential, and written and verbal consent was obtained. The research was conducted under the close supervision of relevant academic institutions.

RESULT AND DISCUSSION

SWOT Analysis. A SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) effectively identifies the status of Afghanistan's healthcare system. This analysis helps recognize internal and external factors influencing the health system and offers better strategies to improve the current situation.

Strengths.

- International Support: The presence of international organizations like the World Health Organization (WHO) and UNICEF helps strengthen healthcare infrastructure and provide financial resources.
- Successful Maternal and Child Health Initiatives: Successful maternal and child health projects have increased access to healthcare services for vulnerable groups.
- Social Cohesion: The existence of social solidarity and local cooperation can help strengthen the healthcare system and raise public health awareness.
- Human Resource Capabilities: Experienced doctors and specialists who can play an essential role in improving healthcare service quality.
- Weaknesses
- Lack of Healthcare Infrastructure: More than 60% of rural areas need more access to healthcare centers.
- Shortage of Specialized Human Resources: More doctors and nurses are needed, especially in remote areas, which reduces service quality.
- Management Issues: Weak management and lack of coordination between public and private organizations negatively affect healthcare service delivery.
- Lack of Medical Equipment: Limited access to medical equipment and essential medicines, creating challenges in providing medical care.

Opportunities.

- Increased International Collaboration: The possibility of attracting financial and technical resources through partnerships with international organizations and NGOs.
- Development of New Technologies: Digital and mobile technologies deliver healthcare services to remote areas.
- Training and Empowerment of Human Resources: Educational and empowerment programs that can improve service quality and enhance human resource skills.
- Public Health Projects: International attention to public health projects can improve community health.

Threats.

- Insecurity and Political Instability: Security problems that hinder access to healthcare services and disrupt healthcare activities.
- Lack of Financial Resources: Budgetary constraints that limit the government's ability to provide comprehensive healthcare services.
- Cultural and Social Issues: Incorrect cultural and social beliefs that negatively affect access to healthcare, especially for women and children.
- Climate Change and Natural Disasters: The negative impacts of climate change and natural disasters can lead to increased disease and strain on the health system.

The SWOT analysis provides a comprehensive picture of Afghanistan's healthcare system. By identifying strengths, weaknesses, opportunities, and threats, practical strategies for improving the healthcare system can be developed (Manuaba et al., 2024). Specifically, focusing on strengths and

opportunities can help reinforce the healthcare system, while weaknesses and threats require careful management and planning to minimize their adverse effects. Applying this analysis in health policy-making can pave the way for improving health outcomes in Afghanistan.

Findings and Results of the Study on Afghanistan's Health System and Services. The research results have been analyzed based on qualitative and quantitative data collected through semi-structured interviews, questionnaires, and a review of credible sources. The findings are divided into four main categories: structural challenges, human and managerial problems, opportunities, and proposed solutions.

Structural Challenges in Afghanistan's Healthcare System. One of the study's most significant findings is the major structural problems that Afghanistan's healthcare system faces. These issues include a lack of infrastructure, weak financial support, and the absence of essential medical equipment. According to the collected data:

- Lack of hospitals and healthcare centers: More than 60% of rural areas in Afghanistan need adequate access to healthcare facilities.
- Shortage of medical equipment: Many healthcare centers in Afghanistan are critically under-equipped, lacking essential diagnostic devices and surgical tools.
- Quality of healthcare services: The quality of services has significantly declined due to insufficient training for healthcare staff and a lack of financial resources

Table 1. Structural Challenges in Afghanistan's Healthcare System

No	Challenges	Reported Percentage
1	Lack of hospitals	60
2	Shortage of medical equipment	55
3	Low quality of services	45

Human and Managerial Issues. In addition to structural problems, human and managerial factors are recognized as significant challenges in improving healthcare services in Afghanistan. The findings reveal:

- Shortage of specialized human resources: Over 40% of interviewees highlighted the shortage of doctors and specialists.
- Managerial problems: More than 35% of respondents mentioned issues related to the management of the healthcare system, including inadequate supervision and lack of coordination between public and private organizations.
- Opportunities and Potential for Improvement: Despite the challenges, several opportunities and potential areas for improving Afghanistan's healthcare system were identified. These opportunities include:
 - Collaboration with international organizations: Most interviewees believe cooperation with international organizations like WHO and UNDP could help improve infrastructure and healthcare services.
 - Increased focus on maternal and child health: International projects on maternal and child health have been among the few prosperous areas within Afghanistan's healthcare system.
 - Development of education and capacity-building programs: Training and empowerment programs that aim to improve healthcare services and enhance human resources skills are essential to long-term improvement.
- Proposed Solutions to Address the Challenges: Based on the data analysis, several solutions have been proposed to address the problems in Afghanistan's healthcare system:
 - Securing sustainable funding for healthcare infrastructure: One main suggestion is to allocate a sufficient budget for building and equipping healthcare centers, particularly in rural areas.

- Strengthening international collaboration: Cooperating with international organizations to provide medical equipment and training for healthcare workers is a critical solution.
- Enhancing education and research: Improving the quality of healthcare services requires increasing healthcare professionals' training and conducting applied research in public health.

Statistical Analysis of Findings. Based on the statistical analysis of the distributed questionnaires, the primary problems and challenges in Afghanistan's healthcare system have been prioritized as follows:

Table 2. Statistical Analysis of Finding

No	Challenges and Issues	Importance Percentage
1	Lack of infrastructure	35
2	Managerial problems	25
3	Poor quality of healthcare services	20
4	Shortage of human resources	15
5	Lack of financial resources	5

The study indicates that Afghanistan's healthcare system faces severe and widespread issues that require urgent and serious attention. However, opportunities and capacities for improvement can be harnessed with careful planning and international cooperation. Increasing financial resources, improving management, and enhancing human resources are critical factors for strengthening Afghanistan's healthcare system. These results can guide healthcare policymakers in Afghanistan and international organizations to make optimal decisions for improving the country's healthcare system.

The findings highlight the serious challenges facing the healthcare system in Afghanistan and compare them to previous studies and research backgrounds. They also examine the findings' strengths and weaknesses and identify their relevance to the research objectives (Amilia et al., 2023).

Analysis of Structural Challenges: The study's findings show that the lack of infrastructure and medical equipment is one of the most significant challenges in Afghanistan's healthcare system. This finding aligns with previous studies, such as the 2020 WHO report, which emphasizes infrastructure problems in developing countries (WHO, 2020). Additionally, according to the results of this study, nearly 60% of rural areas lack adequate access to healthcare services, indicating an urgent need for planning to improve infrastructure in these regions.

Analysis of Human and Managerial Problems: The research findings indicate that the shortage of specialized human resources and managerial problems also impact the quality of healthcare services. This finding is consistent with previous reports that have pointed out the lack of training and supervision for healthcare workers (Karami et al., 2019). In particular, managerial issues, such as a need for coordination between public and private institutions, have been identified as one of the severe obstacles to providing healthcare services.

Analysis of Opportunities and Capacities: Despite the challenges, the research results reveal opportunities to improve Afghanistan's healthcare system. Previous studies have shown that collaboration with international organizations can improve service quality and access to financial resources (Theobald et al., 2018). This research also concludes that increasing international cooperation and developing educational projects can help strengthen the healthcare system.

Strengths and Weaknesses of the Findings: This research's strengths include the comprehensiveness of the data collected and the diversity of sources used to analyze the problems. Additionally, the direct connection between the identified challenges and opportunities and the current situation in Afghanistan can assist policymakers in making better decisions. However, one area for improvement of the research may be the limitation in collecting data from remote and rural areas, which could lead to less accurate evaluations of the actual conditions.

Relevance to Research Objectives: This research aimed to identify the challenges and opportunities within Afghanistan's healthcare system. The findings clearly show that structural

Community Service : Sustainability Development

challenges, human resource issues, and managerial problems are significant barriers that must be addressed. Moreover, the opportunities for improving healthcare conditions highlight the potential for progress in this sector. The findings and interpretations presented in this section demonstrate that Afghanistan's healthcare system faces multiple challenges. However, given the available capacities and opportunities, hope exists for improvement. Policymakers and responsible organizations should use these findings to take targeted and effective actions to enhance the country's healthcare system.

CONCLUSION

This study provided an overview of Afghanistan's healthcare system and services, identifying the challenges, opportunities, and potential solutions in this critical social and economic area. Based on the findings, the following general conclusions can be drawn:

The results indicate multiple challenges faced by Afghanistan's healthcare system. These challenges include more healthcare infrastructure, a need for more specialized human resources, and managerial problems. Additionally, limited access to healthcare services in remote and rural areas has been identified as a critical issue. These problems affect the quality of healthcare services and increase public dissatisfaction with the healthcare system.

Despite the challenges, the study also identified significant opportunities to improve the healthcare system. These opportunities include international collaborations, the development of training programs for medical staff, and increased financial resources through governmental and non-governmental institutions. Such measures can strengthen infrastructure and improve the quality of healthcare services.

REFERENCES

- Acerra, J. R., Iskryan, K., Qureshi, Z. A., & Sharma, R. K. (2009). Rebuilding the Health Care System in Afghanistan: An Overview of Primary Care and Emergency Services. *International journal of emergency medicine*, pp. 2, 77–82. <https://doi.org/10.1007/s12245-009-0106-y>
- Alemi, Q., Panter-Brick, C., Oriya, S., Ahmady, M., Alimi, A. Q., Faiz, H., . . . Naseri, R. (2023). Afghan Mental Health and Psychosocial Well-Being: Thematic Review of Four Decades of Research and Interventions. *BJPsych open*, 9(4), e125. <https://doi.org/10.1192/bjo.2023.502>
- Amilia, S., Zati, M. R., & Rosalina, D. (2023). Evaluation of Consumer Attitudes: Attributes of Langsa Hutan Lindung Park Tourism Services. *International Journal of Social Science and Business*, 7(3), 569–578. <https://doi.org/10.23887/ijssb.v7i3.50247>
- Andronis, L., Maredza, M., & Petrou, S. (2019). Measuring, Valuing and Including Forgone Childhood Education and Leisure Time Costs in Economic Evaluation: Methods, Challenges and the Way Forward. *Social Science & Medicine*, 237, 112475. <https://doi.org/10.1016/j.socscimed.2019.112475>
- Basij-Rasikh, M., Dickey, E. S., & Sharkey, A. (2024). Primary Healthcare System and Provider Responses to the Taliban Takeover in Afghanistan. *BMJ Global Health*, 9(2), e013760. <https://doi.org/10.1136/bmjgh-2023-013760>
- Croke, K., Mohd Yusoff, M. B., Abdullah, Z., Mohd Hanafiah, A. N., Mokhtaruddin, K., Ramli, E. S., . . . Virk, A. K. (2019). The Political Economy of Health Financing Reform in Malaysia. *Health Policy and Planning*, 34(10), 732–739. <https://doi.org/10.1093/heapol/czz089>
- Essar, M. Y., Siddiqui, A., & Head, M. G. (2023). Infectious Diseases in Afghanistan: Strategies for Health System Improvement. *Health Science Reports*, 6(12), e1775. <https://doi.org/10.1002/hsr2.1775>
- Islam, Z., Kokash, D. M., Babar, M. S., Uday, U., Hasan, M. M., Rackimuthu, S., . . . Nemat, A. (2022). Food Security, Conflict, and COVID-19: Perspective from Afghanistan. *The American Journal of Tropical Medicine and Hygiene*, 106(1), 21. <https://doi.org/10.4269/ajtmh.21-1058>

- Karami, A., Ghasemi, M., Sen, S., Moraes, M. F., & Shah, V. (2019). Exploring Diseases and Syndromes in Neurology Case Reports from 1955 To 2017 with Text Mining. *Computers in Biology and Medicine*, 109, 322-332. <https://doi.org/10.1016/j.compbiomed.2019.04.008>
- Karyda, K., & Moka, D. (2022). Afghanistan: The Changing State of its Health System and the Contribution of NGOs and the International Community. *International Journal of Social Science Research and Review*, 5(10), 160-176. <https://doi.org/10.47814/ijssrr.v5i10.645>
- Manuaba, I. M. P., Sanjaya, I. K. P. W., & Ganawati, N. (2024). Improvement of Performance Lemon Farmer Group in Marga Dajan Puri Village Marga District Tabanan Regency. *Community Services: Sustainability Development*, 2(1), 121-125. <https://doi.org/10.61857/cssdev.v2i1.85>
- Naik, N., Hameed, B. Z., Sooriyaperakasam, N., Vinayahalingam, S., Patil, V., Smriti, K., . . . Singh, A. (2022). Transforming Healthcare Through a Digital Revolution: A Review of Digital Healthcare Technologies and Solutions. *Frontiers in digital health*, 4, 919985. <https://doi.org/10.3389/fdgth.2022.919985>
- Newbrander, W., Ickx, P., Feroz, F., & Stanekzai, H. (2014). Afghanistan's Basic Package of Health Services: Its Development and Effects on Rebuilding the Health System. *Global Public Health*, 9(sup1), S6-S28. <https://doi.org/10.1080/17441692.2014.916735>
- Rahmani, H., Wafa, W., & Yar, F. G. M. (2021). The Importance of Public Awareness in Environmental Protection: A case study in Paktika, Afghanistan. *Nature Environment and Pollution Technology*, 20(4), 1621-1626. <https://doi.org/10.46488/NEPT.2021.v20i04.024>
- Schuh, M., & Bush, M. L. (2021). Defining Disparities in Cochlear Implantation Through the Social Determinants of Health. *Seminars in Hearing*, <https://doi.org/10.1055/s-0041-1739282>
- Sharma, L., Singh, J., Dhiman, R., Nunez, D. R. V., Ba, A. E., Joshi, K. J., . . . Seidel, M. (2024). Advancing Solar Energy for Primary Healthcare in Developing Nations: Addressing Current Challenges and Enabling Progress Through UNICEF and Collaborative Partnerships. *Cureus*, 16(1). <https://doi.org/10.7759/cureus.51571>
- Suryanti, R. A. R., Yuniarta, G. A., & Werastuti, D. N. S. (2022). Determinants of the Financial Statements Quality of the Ministry at the State Treasury Services Office. *JIA (Jurnal Ilmiah Akuntansi)*, 7(1), 128-146. <https://doi.org/10.23887/jia.v7i1.44678>
- Theobald, S., Brandes, N., Gyapong, M., El-Saharty, S., Proctor, E., Diaz, T., . . . Elsey, H. (2018). Implementation Research: New Imperatives and Opportunities in Global Health. *The Lancet*, 392(10160), 2214-2228. [https://doi.org/10.1016/S0140-6736\(18\)32205-0](https://doi.org/10.1016/S0140-6736(18)32205-0)
- Wenang, S., Schaefer, J., Afdal, A., Gufron, A., Geyer, S., Dewanto, I., & Haier, J. (2021). Availability and Accessibility of Primary Care for Indonesia's Remote, Rural, and Poor Population. *Frontiers in Public Health*, 9, 721886. <https://doi.org/10.3389/fpubh.2021.721886>
- WHO, C. O. (2020). World Health Organization. Air Quality Guidelines for Europe (91).
- Yar, F. G. M., & Shaheedzooy, M. I. (2024). The Effect of Climate and Environment on Human Mental State and Health. *Randwick International of Social Science Journal*, 5(1), 75-83. <https://doi.org/10.47175/rissj.v5i1.888>
- Yar, F. G. M., & Yasouri, M. (2024). Rural Development Challenges in Addition to Effective Solutions to Overcome Obstacles. *Zhongguo Kuangye Daxue Xuebao*, 29(3), 79-90.
- Yar, F. G. M., & Zarghani, S. H. (2024). *Investigating the Consequences of Climate Change and its Impact on Afghanistan's Security*. NUIJB, 498-502. <https://doi.org/10.70436/nuijb.v3i02.276>