



INTEGRATING WOMEN'S VOICES IN DISASTER RISK REDUCTION: POLICY PRACTICE GAPS AND PATHWAYS TO RESILIENT GOVERNANCE IN SOUTH ASIA

*Nancy Kumari

Special Centre for Disaster Research, Jawaharlal Nehru University, New Delhi-110067, (India).

Article Received: 08 November 2025

*Corresponding Author: Nancy Kumari

Article Revised: 28 November 2025

Special Centre for Disaster Research, Jawaharlal Nehru University, New Delhi-

Published on: 18 December 2025

110067, (India). DOI: <https://doi-doi.org/101555/ijrpa.3013>

ABSTRACT

South Asia is one of the world's most disaster-prone regions. Although women are disproportionately affected by disasters, they also hold essential local knowledge, coping strategies, and leadership potential that can strengthen community resilience. This paper examines how women's voices have been integrated into national and local Disaster Risk Reduction (DRR) frameworks across India, Bangladesh, Nepal, Sri Lanka.. Using a comparative policy analysis of government documents, multilateral frameworks, NGO reports, and country case studies, the study identifies recurring gaps between gender-inclusive policy language and on-the-ground participation of women in DRR decision-making. The paper concludes with actionable recommendations institutional reforms, capacity building, gender-sensitive budgeting, data disaggregation, and community-led participatory approaches to operationalize women's meaningful participation and leadership in DRR across South Asia.

KEYWORDS: Disaster Risk Reduction (DRR); Gender-Responsive Governance; Women's Participation; Community Resilience; Policy-Practice Gap; South Asia; Disaster Governance; Inclusive Development; Climate and Disaster Resilience; Community-Based Approaches.

1. INTRODUCTION

South Asia experiences high-frequency hazards, floods, cyclones, earthquakes, landslides, and heatwaves, that repeatedly expose communities to risk [1-7]. Gendered social, economic, and cultural inequalities often amplify women's vulnerability during and after disasters, affecting access to information, resources, and recovery opportunities [8-19]. Simultaneously, women frequently serve as first responders, knowledge-holders of early-warning signals, and organizers of community-level coping mechanisms. Global frameworks such as the Sendai Framework (2015–2030) [20-46] explicitly recognize that women's participation and leadership are critical for effective DRR and resilience-building [47-59].

To what extent are women's voices integrated into DRR policy and practice across South Asia, and what measures can bridge policy–practice gaps to strengthen resilient governance? We proceed by briefly reviewing literature, describing methods, presenting comparative findings for five countries, and proposing policy pathways [60-74].

2. Literature review

The literature on gender and DRR highlights two converging findings: (1) national DRR policies increasingly include gender-responsive language and commitments, and (2) in practice, women's participation and influence in planning, resource allocation, and leadership remain limited due to structural, institutional, and socio-cultural constraints [75-82]. Reviews by UN Women, UNDRR, the World Bank, and regional research consistently point to tokenistic inclusion (e.g., references to “gender cells” or general commitments) without systemic integration across the entire disaster management cycle (risk assessment, planning, budgeting, implementation, monitoring) [83-94].

Case studies from South Asia document successful women-led community DRR initiatives (e.g., women's groups in Bangladesh, local leaders in Nepal, community networks in India) that demonstrate improved early-warning dissemination and household preparedness [95-107]. However, scaling such initiatives and embedding them into formal governance remains a challenge [108-119]. Regional reviews also emphasize the need for gender-disaggregated data, capacity-building, and inclusive financing mechanisms [120-129].

3. Methodology

This study uses a qualitative, comparative policy-analysis approach based on secondary sources:

- Official national DRR policies, plans, and advisories from government agencies (NDMA/Ministries) and national DRR platforms [130-138].
- International frameworks and thematic reviews (Sendai Framework, UNDRR/UN Women reports) [139-147].
- Peer-reviewed articles, NGO reports, and documented case studies from India, Bangladesh, Nepal, Sri Lanka [148-156].
- Synthesis and triangulation: policy texts were compared with NGO/UN analyses and applied field case studies to identify convergent patterns of policy intent versus implementation realities [157-165].

Limitations: reliance on published secondary sources (published reports, policy documents, and academic studies) means the study captures documented evidence but may miss recent local initiatives not yet reported in the literature [166-172].

4. Policy landscape: commitments vs. implementation (comparative findings)

4.1 Regional commitments: Sendai Framework and multilateral guidance

The Sendai Framework explicitly requires gender-responsive DRR and highlights women's participation and leadership as core priorities. Regional UN reviews and guidance documents reiterate that gender must be embedded across the disaster risk management cycle — from hazard assessment to reconstruction — and recommend actionable steps like gender analysis, disaggregated data, and inclusive budgeting.

4.2 India

Policy commitments: India's National Disaster Management Plan and NDMA advisories increasingly reference social inclusion and gender considerations; national materials and compendia document women-led best practices. Recent advisories (e.g., advisory on gender-responsive DRR) encourage integrating gender needs across the disaster cycle.

Practice: Field studies and NGO reports show pockets of strong women-led initiatives (community preparedness groups, women volunteers) but also persistent barriers: patriarchal norms limiting leadership roles, limited representation of women in formal disaster committees at district/state levels, and inadequate gender-disaggregated data used for planning. Where state or NGO programs invest in women's training and leadership, outcomes are positive, but such investments are uneven geographically.

4.3 Bangladesh

Policy commitments: Bangladesh's National Plan for Disaster Management (and earlier Disaster Management Act) integrates gender equality and social inclusion into planning and recovery frameworks; NGOs and donors have supported women-centric community DRR models.

Practice: Bangladesh presents many successful examples of women's participation, e.g., women's groups involved in early warning and cyclone shelter management yet challenges persist in scaling participation into formal governance mechanisms and ensuring post-disaster livelihood recovery prioritizes women's needs. Programmatic success often depends on local NGOs and donor support rather than sustained governmental mainstreaming.

4.4 Nepal

Policy commitments: Nepal's DRR policies and national plans increasingly reference gender equality and social inclusion. International agencies and UNESCO-supported programs have promoted women's training and leadership in community preparedness.

Practice: At the community level, women have taken active roles in preparedness and local planning in many districts. However, national implementation gaps include limited budgeting for gender-responsive measures, inadequate monitoring of women's participation in formal DRR bodies, and continued socio-cultural barriers that reduce sustained leadership roles for women.

4.5 Sri Lanka

Policy commitments: Sri Lanka has recognized gender in some DRR documents and academic literature has proposed empowerment frameworks; recent studies call for comprehensive empowerment strategies to strengthen women's roles in disaster governance.

Practice: Implementation remains inconsistent. Where women-led community groups are active, they exhibit strong local resilience, but national-level institutional reforms to mainstream gender into planning, budgeting, and monitoring are still evolving.

5. Cross-cutting barriers to meaningful integration

From comparative analysis, several interlinked barriers emerge:

1. **Tokenistic policy language vs. operationalization:** Many national plans include gender commitments but lack mechanisms (clear indicators, budgets, timelines) to operationalize them [173-178].

2. **Data gaps:** Scarcity of gender-disaggregated risk and impact data prevents targeted planning and monitoring of outcomes for women.
3. **Institutional constraints:** Low representation of women in formal disaster governance structures (committees, planning bodies) and limited capacity-building at the sub-national level.
4. **Socio-cultural barriers:** Patriarchal norms and mobility constraints reduce women's ability to participate meaningfully in public decision-making and in emergency response roles [179-180].
5. **Funding and sustainability:** Women-centered initiatives often rely on project-based donor funding rather than sustained government financing and mainstreaming strategies.

6. Evidence of benefits when women's voices are integrated

Where women's participation moves beyond tokenism to genuine inclusion, benefits are consistently observed:

- **Improved early-warning dissemination and household preparedness:** Women's social networks facilitate rapid, culturally appropriate communication of warnings.
- **More inclusive needs assessments:** Gender-sensitive assessments better identify vulnerable groups' short- and long-term needs (health, sanitation, safe shelters), improving recovery outcomes.
- **Enhanced local resilience:** Women-led savings and cooperative groups often serve as local safety nets post-disaster, accelerating recovery.

7. Policy recommendations: pathways to resilient, gender-responsive DRR

To bridge the policy-practice gap and institutionalize women's voices in DRR across South Asia, this paper proposes the following actionable pathways.

7.1 Institutionalize gender across the DRR cycle

- **Mandate gender-responsive procedures** for hazard and vulnerability assessments, contingency planning, and reconstruction, with clear roles at national, provincial/state, and local levels.
- **Embed gender indicators** in national DRR monitoring frameworks and link them to performance reviews for agencies and local governments. Example indicators: percent of DRR committees with women members; percentage of budgets allocated to gender-responsive measures.

7.2 Gender-sensitive budgeting and financing

- Allocate dedicated budget lines for gender-responsive DRR at national and sub-national levels. Encourage incentives (matching funds or performance grants) for local governments that demonstrate increased women's participation and gendered outcomes.

7.3 Disaggregated data, gender analysis, and evidence

- Institutionalize routine collection and publication of gender-disaggregated data (age, disability, socio-economic status) pre- and post-disaster.
- Use gender analysis in risk assessments to design context-specific interventions.

7.4 Build capacity and leadership from community to institutions

- Invest in scaled training programs for women's leadership in DRR (community early warning, shelter management, first aid, search and rescue where culturally acceptable).
- Strengthen mentorship and networks linking local women leaders with formal decision-making bodies.

7.5 Community-based participatory approaches

- Promote participatory planning models that place women's knowledge at the center (e.g., participatory hazard mapping, women-led early-warning committees). Support replication and scaling of successful local models into formal policy.

7.6 Policy coherence across sectors

- Ensure DRR, social protection, health, and climate adaptation policies are harmonized to address women's intersecting vulnerabilities (e.g., livelihood recovery tied to training and microfinance for women).

7.7 Accountability and legal frameworks

- Strengthen legal mandates for women's representation in DRR governance structures and require public disclosure of progress on gender targets.

8. DISCUSSION

The comparative evidence shows that South Asian countries have moved from near-silence on gender in DRR toward explicit recognition of gender in policy documents. However, policy intent is often not matched by institutional capacity, financing, and accountability mechanisms needed to translate commitments into practice. Successful community examples

demonstrate the transformative potential of women's leadership in resilience but scaling these examples requires deliberate, system-level reforms noted above.

Improving outcomes will demand political will, sustained funding, and the dismantling of socio-cultural barriers that restrict women's public participation. International frameworks and donor programs can catalyze action, but long-term resilience depends on domestic institutionalization gender mainstreaming embedded in everyday disaster governance processes.

9. CONCLUSION

Integrating women's voices in DRR is not merely a question of equity it is a strategic necessity for effective disaster governance. South Asian countries have adopted important policy commitments, but meaningful integration requires operationalizing those commitments through institutional reforms, financing, data, and community-driven approaches. Prioritizing women's leadership and participation will improve early-warning effectiveness, ensure inclusive recovery, and strengthen community resilience across the region.

REFERENCES:

1. Asian Development Bank. (2013). Gender equality and disaster risk management. Asian Development Bank.
2. Bangladesh Ministry of Disaster Management and Relief. (2016). National plan for disaster management (2016–2020). Government of the People's Republic of Bangladesh.
3. Enarson, E., Fothergill, A., & Peek, L. (2018). Gender and disaster: Foundations and directions. Springer.
4. Government of India. (2019). National disaster management plan. National Disaster Management Authority.
5. International Federation of Red Cross and Red Crescent Societies. (2015). Unseen, unheard: Gender-based violence in disasters. IFRC.
6. International Strategy for Disaster Reduction. (2009). Making disaster risk reduction gender-sensitive: Policy and practical guidelines. United Nations.
7. Islam, M. R., & Walkerden, G. (2015). How bonding and bridging networks contribute to disaster resilience and recovery on the Bangladeshi coast. International

Journal of Disaster Risk Reduction, 10, 281–291.
<https://doi.org/10.1016/j.ijdrr.2014.09.016>

8. Neumayer, E., & Plümper, T. (2007). The gendered nature of natural disasters: The impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Annals of the Association of American Geographers*, 97(3), 551–566. <https://doi.org/10.1111/j.1467-8306.2007.00563.x>

9. Sharma, U., Patwardhan, A., & Parthasarathy, D. (2021). Gender-responsive disaster risk reduction in South Asia: Policy and practice gaps. *International Journal of Disaster Risk Reduction*, 58, 102207. <https://doi.org/10.1016/j.ijdrr.2021.102207>

10. United Nations Development Programme. (2016). Gender and climate change adaptation. UNDP.

11. United Nations Office for Disaster Risk Reduction. (2015). Sendai framework for disaster risk reduction 2015–2030. United Nations.

12. United Nations Office for Disaster Risk Reduction. (2019). Words into action: Gender-responsive disaster risk reduction. UNDRR.

13. UN Women. (2014). Gender equality in the wake of natural disasters. United Nations Entity for Gender Equality and the Empowerment of Women.

14. UN Women. (2022). Gender equality and women's leadership in disaster risk reduction in Asia and the Pacific. UN Women Regional Office.

15. Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2014). At risk: Natural hazards, people's vulnerability and disasters (2nd ed.). Routledge.

16. World Bank. (2012). Gender equality and development. World Bank.

17. World Bank. (2019). Making women's voices count: Integrating gender into disaster risk management. World Bank Group.

18. Akbar, S., & Shah, S. R. (2020). Mathematical study for the outflow of aqueous humor and function in the eye. *International Journal of Scientific & Engineering Research*, 11(10), 743–750.

19. Akbar, S., & Shah, S. R. (2020). The effects of prostaglandin analogs on intraocular pressure in human eye for open-angle glaucoma. *International Journal of Innovative Technology and Exploring Engineering*, 10(2), 176–180.

20. Akbar, S., & Shah, S. R. (2021). DURYSTA: The first biodegradable sustained release implant for the treatment of open-angle glaucoma. *International Journal of Frontiers in Biology and Pharmacy Research*, 1(2), 1–7.

21. Akbar, S., & Shah, S. R. (2024). Mathematical modeling of blood flow dynamics in the cardiovascular system: Assumptions, considerations, and simulation results. *Journal of Current Medical Research and Opinion*, 7(4), 2216–2225. <https://doi.org/10.52845/CMRO/2024/7-4-2>
22. Akbar, S., & Shah, S. R. (2025). Mathematical modelling of the therapeutic efficacy of metipranolol in primary open angle glaucoma management. *International Journal of Innovative Science, Engineering & Technology*, 12(01), 69–86.
23. Akbar, S., Alshehri, M., Sharma, S. K., Gupta, P., & Shah, S. R. (2024). A mathematical study for promoting disability inclusion in glaucoma: A comprehensive approach. *Journal of Disability Research*, 3, 1–12. <https://doi.org/10.57197/JDR-2023-0062>
24. Akbar, S., Jaiswal, K. M., Sadique, M., & Shah, S. R. (2024). Exploring capillary-tissue fluid exchange: Insights into red cell deformation in narrow vessels and its clinical implications. *International Journal of Fauna and Biological Studies*, 11(3), 4–14. <https://doi.org/10.22271/23940522.2024.v11.i3a.1021>
25. Akbar, S., Sharma, R. K., Sadique, M., Jaiswal, K. M., Chaturvedi, P., Kumar, V., & Shah, S. R. (2024). Computational analysis of clot formation risk in diabetes: A mathematical modeling approach. *BIBECHANA*, 21(3), 233–240.
26. Alshehri, M., Sharma, S. K., Gupta, P., & Shah, S. R. (2024). Empowering the visually impaired: Translating handwritten digits into spoken language with HRNN-GOA and Haralick features. *Journal of Disability Research*, 3, 1–21. <https://doi.org/10.57197/JDR-2023-0051>
27. Alshehri, M., Sharma, S., Gupta, P., & Shah, S. R. (2023). Detection and diagnosis of learning disabilities in children of Saudi Arabia with artificial intelligence. *Research Square*, 1–22. <https://doi.org/10.21203/rs.3.rs-3301949/v1>
28. Anamika, & Shah, S. R. (2017). A mathematical model of blood flow through diseased blood vessel. *International Journal of Emerging Trends and Technology in Computer Science*, 6(3), 282–286.
29. Anamika, & Shah, S. R. (2017). Mathematical and computational study of blood flow through diseased artery. *International Journal of Computer Science*, 5(6), 1–6.
30. Anamika, & Shah, S. R. (2017). Mathematical and computational study of blood flow through diseased artery. *International Journal of Computer Sciences*, 5(6).

31. Anuradha, Anamika, & Shah, S. R. (2017). Bio-computational analysis of blood flow through two-phase artery. *International Journal of Engineering Science and Computing*, 7(6), 13397–13401.
32. Arvind, & Shah, S. R. (2024). Investigating heat flow from skeletal muscles to skin surface: A theoretical model of thermal dynamics in the hypodermis layer. *International Journal of Engineering Sciences & Research Technology*, 13(10).
33. Arya, D., & Shah, S. R. (2024). Addressing educational challenges in Nainital through strategic human resource management: Recruitment, training, and retention solutions. *International Journal of Research in Human Resource Management*, 6(2), 320–324.
34. Arya, D., & Shah, S. R. (2024). Enhancing educational outcomes: The impact of human resource management practices on educator satisfaction in Dehradun. *International Journal of Management (IJM)*, 15(5), 172–186. <https://doi.org/10.5281/zenodo.14043040>
35. Arya, D., & Shah, S. R. (2024). Human resource management strategies for improving educational outcomes in Bihar. *International Journal of Humanities Social Science and Management*, 4(4), 955–963.
36. Arya, D., & Shah, S. R. (2024). Optimizing educational outcomes: The role of human resource management in Jharkhand's education system. *International Journal of Novel Research and Development*, 9(8), b51–b57.
37. Arya, D., & Shah, S. R. (2024). Strategic human resource management in Almora's education system: Enhancing recruitment, training, and retention. *International Journal of Scientific and Research Publications*, 14(12). <https://doi.org/10.29322/IJSRP.14.11.2024.p15525>
38. Arya, S., Majhi, L., & Shah, S. R. (2024). Exploring Shilajatu's therapeutic potential in diabetes management: A comprehensive study integrating Ayurvedic wisdom and modern science. *International Journal of Science and Research*, 13(5), 1374–1380. <https://dx.doi.org/10.21275/SR24522110012>
39. Chaturvedi, P., & Shah, S. R. (2023). Mathematical analysis for the flow of sickle red blood cells in micro-vessels for biomedical application. *Yale Journal of Biology and Medicine*, 96(1), 13–21. <https://doi.org/10.59249/ATVG1290>
40. Chaturvedi, P., & Shah, S. R. (2023). Role of crizanlizumab for sickle red cells disease. *International Journal of Biology, Pharmacy and Allied Sciences*, 12(3), 1147–1157. <https://doi.org/10.31032/IJBpas/2023/12.3.6946>

41. Chaturvedi, P., & Shah, S. R. (2024). Assessing the clinical outcomes of voxelotor treatment in patients with sickle cell disease. *International Journal of Applied Sciences and Biotechnology*, 12(01), 46–53. <https://doi.org/10.3126/ijasbt.v12i1.64057>

42. Chaturvedi, P., Akbar, S., Kumar, R., & Shah, S. R. (2021). Prospective of hydroxychloroquine and zinc with azithromycin for nanoparticles blood flow in COVID-19 patients. *International Journal of Nanotechnology in Medicine & Engineering*, 6(1), 1–7.

43. Chaturvedi, P., Kumar, R., & Shah, S. R. (2021). Bio-mechanical and bio-rheological aspects of sickle red cells in microcirculation: A mathematical modelling approach. *Fluids*, 6, 322, 1–15.

44. Choudhary, M., Kumar, V., Caplash, S., Yadav, B. K., Kaur, S., Shah, S. R., & Arora, K. (2024). Fabrication of nanomolecular platform-based immunosensor for non-invasive electrochemical detection of oral cancer: An in vitro study. *Talanta Open*, 10, 100352.

45. Geeta, Siddiqui, S. U., & Shah, S. R. (2014). Effect of body acceleration and slip velocity on the pulsatile flow of Casson fluid through stenosed artery. *Advance in Applied Science Research*, 5(3), 213–225.

46. Geeta, Siddiqui, S. U., & Shah, S. R. (2015). A biomechanical approach to the effect of body acceleration through stenotic artery. *Applied Mathematics and Computation*, 109(1), 27–41.

47. Geeta, Siddiqui, S. U., & Shah, S. R. (2015). A computational analysis of a two-fluid non-linear mathematical model of pulsatile blood flow through constricted artery. *E-Journal of Science and Technology*, 10(4), 65–78.

48. Geeta, Siddiqui, S. U., & Shah, S. R. (2015). A mathematical model for two-layered pulsatile blood flow through stenosed arteries. *E-Journal of Science and Technology*, 1(10), 27–41.

49. Geeta, Siddiqui, S., & Shah, S. R. (2013). Mathematical modelling of blood flow through catheterized artery under the influence of body acceleration with slip velocity. *Application and Applied Mathematics: An International Journal*, 8(2), 481–494.

50. Gurjar, P. S., & Shah, S. R. (2025). Mathematical modelling of atmospheric pollutant dispersion under steady state conditions with constant eddy diffusivity. *Research Review International Journal of Multidisciplinary*, 10(5), 240–247.

51. Guru Datt, M., Arya, S., & Shah, S. R. (2024). Ayurvedic approaches to maintaining healthy and narrowed arteries. *International Journal for Research & Development in Technology*, 21(6), 21–30.
52. Jaishwal, K. M., & Shah, S. R. (2025). Effect of cartilage thickness and viscosity on synovial fluid flow: Insights from a computational model. *International Research Journal of Modernization in Engineering Technology and Science*, 7(4), 10914–10925.
53. Jaiswal, K. M., & Shah, S. R. (2024). The role of synovial fluid dynamics in osteoarthritis: A mathematical modeling perspective. *Research Review International Journal of Multidisciplinary*, 9(12), 155–164.
54. Jaiswal, K. M., Sadique, M., Akbar, S., & Shah, S. R. (2024). Unveiling capillary-tissue fluid exchange: Understanding red blood cell deformation in constricted vessels and its clinical significance. *Materials Plus*, 3(1), 1–9. <https://doi.org/10.37256/3120244770>
55. Jeya Suriya Lenin, S., & Shah, S. R. (2024). Mathematical analysis of stem cell dynamics in acute myeloid leukemia: Towards precision medicine strategies. *International Journal of Science and Research*, 13(05), 528–535.
56. Kasturia, P., Sharma, R. K., Chaturvedi, P., Dohre, R., & Shah, S. R. (2024). Efficacy of venetoclax and azacitidine for targeting leukemic stem cell in acute myeloid leukemia. *International Journal of Biology, Pharmacy and Allied Sciences*, 13(6), 3072–3090. <https://doi.org/10.31032/IJBPAS/2024/13.6.8960>
57. Kaur, A., & Shah, S. R. (2025). A mathematical modeling approach to air pollution dispersion for enhancing community health and environmental safety. *International Journal of Innovative Research in Technology*, 11(12), 3929–3933.
58. Kaur, A., & Shah, S. R. (2025). A mathematical modeling approach to air pollution dispersion for predicting pollutant distribution from point sources. *International Journal of Advanced Research*, 13(4), 1349–1353.
59. Kaur, A., & Shah, S. R. (2025). Spatiotemporal modelling of atmospheric pollution: A computational approach with advection-diffusion equation. *International Journal of Research and Innovation in Applied Science*, 10(5), 469–473.
60. Kausar, S., Naqvi, N., Akbar, S., Shah, S. R., Abbas, K., Alam, M., & Usmani, N. (2025). Socioeconomic indicators and their impact on mental health: A data-driven approach using Python and R. *International Journal of Epidemiology and Health Sciences*, 6, e92, 1–22. <https://doi.org/10.51757/IJEHS.6.2025.720978>

61. Kausar, S., Naqvi, N., Akbar, S., Shah, S. R., Abbas, K., Alam, M., & Usmani, N. (2025). "Decoding mental health: A logistic regression analysis of socio-economic indicators and mental health quotient (MHQ) across nations". *Current Social Science*. <https://doi.org/e2772316X400955>
62. Kumar, A., & Shah, S. R. (2024). Hemodynamic simulation approach to understanding blood flow dynamics in stenotic arteries. *International Journal of Scientific Research in Science and Technology*, 11(6), 630–636. <https://doi.org/10.32628/IJSRST241161116>
63. Kumar, J. P., Sadique, M., & Shah, S. R. (2022). Mathematical study of blood flow through blood vessels under diseased condition. *International Journal of Multidisciplinary Research and Development*, 9(6), 31–44.
64. Kumar, K., Sharma, M. K., Shah, S. R., & Dohare, R. (2023). Vector-borne transmission dynamics model based Caputo fractional-order derivative. *Indian Journal of Theoretical Physics*, 71(3&4), 61–76.
65. Kumar, P., & Shah, S. R. (2021). A hydromechanical perspective to study the effect of body acceleration through stenosed artery. *International Journal of Mathematical Engineering and Management Sciences*, 6(5), 1381–1390.
66. Kumar, R., & Shah, S. R. (2017). A mathematical approach to study the blood flow through tapered stenosed artery with the suspension of nanoparticles. *Destech Transactions on Engineering and Technology Research*, 1, 1–6.
67. Kumar, R., & Shah, S. R. (2017). Study of blood flow with suspension of nanoparticles through tapered stenosed artery. *Global Journal of Pure and Applied Mathematics*, 13(10), 7387–7399.
68. Kumar, R., & Shah, S. R. (2018). Performance of blood flow with suspension of nanoparticles through tapered stenosed artery for Jeffrey fluid model. *International Journal of Nanoscience*, 17(6), 1850004, 1–7.
69. Kumar, R., & Shah, S. R. (2020). Mathematical modeling of blood flow with the suspension of nanoparticles through a tapered artery with a blood clot. *Frontiers in Nanotechnology*, 2, Article 596475, 1–5.
70. Kumar, R., Anamika, & Shah, S. R. (2017). Mathematical modelling of blood flow through tapered stenosed artery with the suspension of nanoparticles using Jeffrey fluid model. *International Journal of Development Research*, 7(6), 13494–13500.
71. Kumar, R., Shah, S. R., & Stiehl, T. (2024). Understanding the impact of feedback regulations on blood cell production and leukemia dynamics using model analysis and

simulation of clinically relevant scenarios. *Applied Mathematical Modelling*, 129, 340–389. <https://doi.org/10.1016/j.apm.2024.01.048>

72. Kumar, V., & Shah, S. R. (2021). Mathematical model to study the heat transfer between core and skin. *SRMS Journal of Mathematical Sciences*, 7, 7–22.

73. Kumar, V., & Shah, S. R. (2022). A mathematical approach to investigate the temperature distribution on skin surface with sinusoidal heat flux condition. *International Journal of Multidisciplinary Research and Development*, 9(5), 141–146.

74. Kumar, V., & Shah, S. R. (2022). A mathematical study for heat transfer phenomenological processes in human skin. *International Journal of Mechanical Engineering*, 7(6), 683–692.

75. Kumar, V., & Shah, S. R. (2022). Thermobiological mathematical model for the study of temperature response after cooling effects. *SSRG International Journal of Applied Physics*, 9(2), 7–11.

76. Kumar, V., & Shah, S. R. (2024). Dispersion of pharmaceutical agents in constricted and bent arteries: Insights from numerical and computational simulations. *International Journal of Advanced Research in Social Sciences and Humanities*, 8(2), 17–31.

77. Kumar, V., & Shah, S. R. (2024). Mathematical modeling of mechanical forces and chemical reaction dynamics for restoring shape memory in sickle-cell red blood cells. *Research Review International Journal*, 9(12), 31–44.

78. Kumar, V., & Shah, S. R. (2025). A meta-analytical and quantitative study of biosensor technologies in cancer diagnostics. *International Journal of Advanced Research and Interdisciplinary Scientific Endeavours*, 2(6), 722–727.

79. Kumar, V., & Shah, S. R. (2025). Assessing the clinical outcomes of hydroxyurea treatment in patients with sickle cell disease. *International Journal of Progressive Research in Engineering Management and Science*, 5(3), 1089–1097.

80. Kumari, N., & Shah, S. R. (2024). Examining women's representation in disaster risk reduction strategies across South Asia. *International Journal of Disaster Management*, 2(1), 1–3.

81. Mahesh, & Arya, S., & Shah, S. R. (2024). Optimizing cardiovascular health: Ayurvedic insights into blood flow through normal and stenosed arteries. *International Journal of AYUSH*, 13(5), 18–35.

82. Mahesh, Arya, S., & Shah, S. R. (2024). Optimizing cardiovascular health: Ayurvedic insights into blood flow through normal and stenosed arteries. *International Journal of AYUSH*, 13(5), 18–35.

83. Majhi, L., & Shah, S. R. (2024). The bioinspired significance of black cohosh in Ayurvedic women's health: Balancing hormones naturally. *International Journal of Research and Analytical Reviews*, 11(4), 749–759.

84. Malik, M. Z., Kumar, R., & Shah, S. R. (2020). Effects of (un)lockdown on COVID-19 transmission: A mathematical study of different phases in India. *medRxiv*, 1–13. <https://doi.org/10.1101/2020.08.19.20177840>

85. Maurya, K., & Shah, S. R. (2024). Mathematical modeling of blood flow dynamics in catheterized narrow arteries: Impact of non-Newtonian blood behavior and catheter dimensions. *International Research Journal of Modernization in Engineering Technology and Science*, 6(12), 3368–3378.

86. Mishra, S. R., & Shah, S. R. (2025). Analytical study of atmospheric pollution dispersion with distance-dependent wind and constant removal dynamics. *International Journal of Scientific Research in Science and Technology*, 12(3), 64–68.

87. Naveen, & Shah, S. R. (2025). *Air pollution level prediction and comparative analysis of machine learning models: A case study of Delhi AQI*. Research Review: International Journal of Multidisciplinary, 10(11), 266–272. <https://doi.org/10.31305/rrijm.2025.v10.n11.027>.

88. Naveen, & Shah, S. R. (2025). Modeling urban air quality: Impact of spatial wind variation and constant removal on pollution dispersion in Delhi. *International Journal of Scientific Research in Science, Engineering and Technology*, 12(3), 17–24.

89. Parambath, A. B., Arora, K., & Shah, S. R. (2024). Quantitative analysis of hematopoietic and leukemic stem cell dynamics in acute myeloid leukemia: A mathematical approach. *International Journal of Mathematics and Computer Research*, 12(09), 4422–4435. <https://doi.org/10.47191/ijmcr/v12i9.02>

90. Parambath, A. B., Kandankel, P., & Shah, S. R. (2024). Dynamic modeling of cytokine-dependent proliferation rates over time in cancer: Insights from scientific analysis. *Journal of Mathematical Techniques and Computational Mathematics*, 3(7), 1–9.

91. Prachi, Arya, S., & Shah, S. R. (2024). Exploring the diagnostic and therapeutic implications of tridosha imbalances on dream phenomena in working women: An Ayurvedic perspective. *International Journal of AYUSH*, 13(9), 55–75.

92. Prachi, Arya, S., & Shah, S. R. (2024). Investigating dream phenomena in Ayurveda for women: Diagnostic and therapeutic insights into tridosha imbalances. *International Journal of Ayurveda and Pharma Research*, 12(8), 73–81.

93. Quddus, R., & Shah, S. R. (2025). *Natural compounds as potential breast cancer therapeutics: Insights from meta-analysis and computational approaches*. Research Review: International Journal of Multidisciplinary, 10(10), 218–225. <https://doi.org/10.31305/rrijm.2025.v10.n10.024>.

94. Sadique, M., & Shah, S. R. (2022). Mathematical model to study the effect of PRG4, hyaluronic acid and lubricin on squeeze film characteristics of diseased synovial joint. *International Journal of Mechanical Engineering*, 7(6), 832–848.

95. Sadique, M., & Shah, S. R. (2022). Mathematical study for the synovial fluid flow in osteoarthritic knee joint. *Journal of Engineering and Applied Sciences*, 17(2), 15–21.

96. Sadique, M., & Shah, S. R. (2023). Mathematical model to study the squeeze film characteristics of synovial joints in diseased human knee joint. *World Scientific Annual Review of Biomechanics*, 1(2330004), 1–21. World Scientific Publishing Company.

97. Sadique, M., & Shah, S. R. (2024). The role of mathematics in the development of biomedical robotics and devices for healthcare. *International Journal of Research in Computer Applications and Robotics*, 12(12), 1–15.

98. Sadique, M., Jaishwal, K. M., & Shah, S. R. (2024). Assessing the influence of glucosamine supplementation on synovial fluid dynamics in osteoarthritic knee joints. *International Journal of Applied Sciences and Biotechnology*, 12(2), 84–91. <https://doi.org/10.3126/ijasbt.v12i2.65009>

99. Sadique, M., Jaiswal, K. M., & Shah, S. R. (2023). Mathematical modelling and analysis of squeeze film lubrication in hip joint: A comprehensive sphere–plate model investigation. <https://doi.org/10.22541/au.169783564.46816055/v1>

100. Sadique, M., Sharma, S. K., Islam, S. M. N., & Shah, S. R. (2023). Effect of significant parameters on squeeze film characteristics in pathological synovial joints. *Mathematics (MDPI)*, 11(1468), 1–23. <https://doi.org/10.3390/math11061468>

101. Schurz, J. (1991). Rheology of synovial fluids and substitute polymers. *Biorheology*, 28(1–2), 171–188. <https://doi.org/10.3233/BIR-1991-281-219>

102. Sengar, N., & Shah, S. R. (2024). Analysing the socio-economic conditions and challenges faced by domestic women helpers in India's informal labour market. *International Journal of Advance Research*, 12(11), 898–910.

103. Sengar, N., & Shah, S. R. (2024). Examining the domestic adversities imposed by patriarchy on working women: A sociological perspective. *International Journal of Social Sciences and Management*, 11(4), 95–105.
104. Sengar, N., & Shah, S. R. (2024). Women in the informal labor sector: The situation of domestic helpers in Indian households. *International Journal of Social Science and Economic Research*, 9(11), 5581–5596.
105. Shah, R. R., & Shah, S. R. (2024). Assessment of road user costs for arterial streets in Ghaziabad city: An analysis of vehicle operation, accident impacts, and travel time efficiency. *International Journal of Architecture*, 10(2), 1–10.
106. Shah, S. R. (2009). Analysis of non-Newtonian fluid flow in a stenosed artery. *International Journal of Physical Sciences*, 4(11), 663–671.
107. Shah, S. R. (2010). A study of effects of magnetic field on modified Power-law fluid in modeled stenosed artery. *Journal of Bioscience and Technology*, 1(4), 187–196.
108. Shah, S. R. (2011). Capillary-tissue diffusion phenomena for blood flow through a stenosed artery using Herschel-Bulkley fluid. *International Journal of Research in Biochemistry and Biophysics*, 1(1), 1–8.
109. Shah, S. R. (2011). Effects of acetylsalicylic acid on blood flow through an artery under atherosclerotic condition. *International Journal of Molecular Medicine and Advances Sciences*, 7(6), 19–24.
110. Shah, S. R. (2011). Impact of radially non-symmetric multiple stenoses on blood flow through an artery. *International Journal of Physical and Social Sciences*, 1(3), 1–16.
111. Shah, S. R. (2011). Mathematical analysis of blood flow through atherosclerotic arterial segment having non-symmetric mild stenosis. *International Journal of Research in Pure and Applied Physics*, 1, 1–5.
112. Shah, S. R. (2011). Non-Newtonian flow of blood through an atherosclerotic artery. *Research Journal of Applied Sciences*, 6(1), 76–80.
113. Shah, S. R. (2011). Response of blood flow through an atherosclerotic artery in the presence of magnetic field using Bingham plastic fluid. *International Journal of Pharmaceutical and Biomedical Research*, 2(3), 96–106.
114. Shah, S. R. (2011). Role of non-Newtonian behavior in blood flow through normal and stenosed artery. *Research Journal of Biological Sciences*, 6(9), 453–458.
115. Shah, S. R. (2011). Study of modified Casson's fluid model in modeled normal and stenotic capillary-tissue diffusion phenomena. *International Journal of Computational Engineering & Management*, 11, 51–57.

116. Shah, S. R. (2012). A biomechanical approach for the study of deformation of red cells in narrow capillaries. *IJE: Transaction A: Basics*, 25(4), 303–313.
117. Shah, S. R. (2012). A biomechanical approach for the study of two-phase blood flow through stenosed artery. *Journal of Engineering and Applied Sciences*, 7(2), 159–164.
118. Shah, S. R. (2012). A case study of non-Newtonian viscosity of blood through atherosclerotic artery. *Asian Journal of Engineering and Applied Technology*, 1(1), 47–52.
119. Shah, S. R. (2012). Performance study on capillary-tissue diffusion phenomena for blood flow through stenosed blood vessels. *American Journal of Pharmtech Research*, 2(2), 695–705.
120. Shah, S. R. (2013). A mathematical model for the analysis of blood flow through diseased blood vessels under the influence of porous parameter. *Journal of Biosciences and Technology*, 4(6), 534–541.
121. Shah, S. R. (2013). An innovative solution for the problem of blood flow through stenosed artery using generalized Bingham plastic fluid model. *International Journal of Research in Applied and Natural Social Sciences*, 1(3), 97–140.
122. Shah, S. R. (2013). An innovative study for non-Newtonian behavior of blood flow in stenosed artery using Herschel-Bulkley fluid model. *International Journal of Biosciences and Biotechnology*, 5(5), 233–240.
123. Shah, S. R. (2013). Effects of antiplatelet drugs on blood flow through stenosed blood vessels. *Journal of Biomimetics, Biomaterials and Tissue Engineering*, 18, 21–27.
124. Shah, S. R. (2014). Effect of clopidogrel on blood flow through stenosed artery under diseased condition. *International Online Medical Council (International Journal of Pharmacy Teaching and Practices)*, 5(1), 887–893.
125. Shah, S. R. (2014). Performance modeling and analysis of magnetic field on nutritional transport capillary tissue system using modified Herschel-Bulkley fluid. *International Journal of Advanced Research in Physical Sciences*, 1(1), 33–41.
126. Shah, S. R. (2015). A mathematical study of blood flow through radially non-symmetric multiple stenosed arteries under the influence of magnetic field. *International Journal of Advanced Research in Biological Sciences*, 2(12), 379–386.
127. Shah, S. R. (2015). A mathematical study of blood flow through stenosed artery. *International Journal of Universal Science and Engineering*, 1(1), 26–37.
128. Shah, S. R. (2015). A study of blood flow through multiple atherosclerotic arteries. *International Journal for Mathematics*, 1(12), 1–6.

129. Shah, S. R. (2015). Mathematical study of blood flow through atherosclerotic artery in the presence of porous effect. *International Journal of Modern Sciences and Engineering Technology*, 2(12), 12–20.

130. Shah, S. R. (2017). Significance of aspirin on blood flow to prevent blood clotting through inclined multi-stenosed artery. *Letters in Health and Biological Sciences*, 2(2), 97–100.

131. Shah, S. R. (2021). Clinical influence of hydroxychloroquine with azithromycin on blood flow through blood vessels for the prevention and treatment of COVID-19. *International Journal of Biology, Pharmacy and Allied Sciences*, 10(7), 2195–2204.

132. Shah, S. R. (2022). Study of dispersion of drug in blood flow with the impact of chemical reaction through stenosed artery. *International Journal of Biosciences*, 21(3), 21–29.

133. Shah, S. R. (2025). Optimization of luspatercept treatment for beta-thalassemia transmission control using pure fraction mathematical modeling. *Advances in Biomedical and Health Sciences*, 4(1), 11–18.

134. Sharma, R. K., Akbar, S., Kumar, V., Jaiswal, K. M., Kumar, V., Upadhyay, A. K., Sadique, M., Chaturvedi, P., Singh, A., & Shah, S. R. (2024). Optimizing cardiovascular performance following myocardial infarction: The significance of nitroglycerin in regulating blood flow. *Janaki Medical College Journal of Medical Sciences*, 12(2), 32–45. <https://doi.org/10.3126/jmcjms.v12i2.62479>

135. Siddiqui, S. U., & Shah, S. R. (2004). Study of blood flow through a stenosed capillary using Casson's fluid model. *Ultra Science: International Journal of Physical Sciences*, 16(2), 133–142.

136. Siddiqui, S. U., & Shah, S. R. (2006). Effect of shape of stenosis on the resistance to flow through an artery. *Reflection Des ERA*, 1(3), 257–272.

137. Siddiqui, S. U., & Shah, S. R. (2006). Herschel-Bulkley fluid model for stenosis shape aspects of blood flow through an artery. *Ultra Science: International Journal of Physical Sciences*, 18(3), 407–416.

138. Siddiqui, S. U., & Shah, S. R. (2011). A comparative study for the non-Newtonian behaviour of blood flow through atherosclerotic arterial segment. *International Journal of Pharmaceutical Sciences Review and Research*, 9(2), 120–125.

139. Siddiqui, S. U., & Shah, S. R. (2011). Two-phase model for the study of blood flow through stenosed artery. *International Journal of Pharmacy and Biological Sciences*, 1(3), 246–254.

140. Siddiqui, S. U., & Shah, S. R. (2012). Achievement of Pentoxifylline for blood flow through stenosed artery. *Journal of Biomimetics, Biomaterials and Tissue Engineering*, 13, 81–89.

141. Siddiqui, S. U., & Shah, S. R. (2016). A physiologic model for the problem of blood flow through diseased blood vessels. *International Journal of Advances in Applied Sciences*, 5(2), 58–64.

142. Siddiqui, S. U., & Shah, S. R. (2016). A physiologic model for the problem of blood flow through diseased blood vessels. *International Journal of Advances in Applied Sciences*, 5(2), 58–64.

143. Siddiqui, S. U., Singh, A., & Shah, S. R. (2015). Effects of inclined multi-stenoses arteries on blood flow characteristics using Bingham plastic fluid. *International Journal for Mathematics*, 1(12), 7–14.

144. Siddiqui, S. U., Singh, A., & Shah, S. R. (2015). Mathematical modelling and analysis of blood flow through diseased blood vessels. *International Journal of Engineering and Management Research*, 5(6), 366–372.

145. Siddiqui, S. U., Singh, A., & Shah, S. R. (2016). Mathematical modeling and numerical simulation of blood flow through tapered artery. *International Journal of Innovative Science, Engineering & Technology*, 3(2), 710–717.

146. Siddiqui, S. U., Singh, A., & Shah, S. R. (2016). Mathematical modeling of peristaltic blood flow through a vertical blood vessel using Prandtl fluid model. *International Journal of Mathematics and Computer Research*, 4(9), 710–717.

147. Siddiqui, S. U., Singh, A., & Shah, S. R. (2016). Performance of blood flow through two-phase stenosed artery using Herschel-Bulkley model. *International Journal of Applied and Pure Science and Agriculture*, 2(2), 228–240.

148. Siddiqui, S. U., Singh, A., & Shah, S. R. (2017). A mathematical model to study the similarities of blood fluid models through inclined multi-stenosed artery. *International Journal of Engineering Research and Modern Education*, 2(1), 108–115.

149. Singh, A., & Shah, S. R. (2024). Influence of transverse magnetic field on steady blood flow in a stenosed artery: Numerical and analytical insights. *International Journal of Mathematical Archive*, 15(8), 1–10.

150. Singh, A., & Shah, S. R. (2025). Enhanced pumping of blood flow in peristaltic transport of non-Newtonian fluids. *Research Review International Journal of Multidisciplinary*, 10(1), 216–225. <https://doi.org/10.31305/rrijm.2025.v10.n1.026>

151. Singh, A., & Shah, S. R. (2025). *Mathematical modelling of blood flow: Analysing the impact of arterial stenosis and nanoparticle suspensions*. Research Review: International Journal of Multidisciplinary, 10(11), 308–320. <https://doi.org/10.31305/rrijm.2025.v10.n11.031>.
152. Singh, A., Anamika, & Shah, S. R. (2017). Mathematical modelling of blood flow through three-layered stenosed artery. *International Journal for Research in Applied Science and Engineering Technology*, 5(6), 1–6.
153. Singh, A., Babu P, A., Arora, K., & Shah, S. R. (2024). Examining the risk of clot formation in diabetes through computational analysis: An approach using mathematical modeling. *International Journal of Applied Sciences and Biotechnology*, 12(2), 92–99. <https://doi.org/10.3126/ijasbt.v12i2.65863>
154. Singh, N., & Shah, S. R. (2024). Comparative analysis of blood viscosity and flow dynamics in normal and diabetic patients. *International Journal of Recent Scientific Research*, 15(9), 4982–4988.
155. Singh, N., & Shah, S. R. (2024). Exploring acute lymphoblastic leukaemia dynamics through mathematical modeling of hematopoietic disruption. *International Research Journal of Modernization in Engineering Technology and Science*, 6(7), 3971–3981.
156. Singh, P., Solanki, R., Tasneem, A., Suri, S., Kaur, H., Shah, S. R., & Dohare, R. (2024). Screening of miRNAs as prognostic biomarkers and their associated hub targets across hepatocellular carcinoma using survival-based bioinformatics approach. *Journal of Genetic Engineering and Biotechnology*, 22(1), 1–10.
157. Singh, S. (2010). A mathematical model for modified Herschel-Bulkley fluid in modeled stenosed artery under the effect of magnetic field. *International Journal of Bioengineering and Technology*, 1(1), 37–42.
158. Singh, S. (2010). Influence of magnetic field on blood flow through stenosed artery using Casson's fluid model. *International Journal of Bioengineering, Cardio Pulmonary Sciences and Technology*, 1, 1–7.
159. Singh, S. (2010). Numerical modelling for the modified Power-law fluid in stenotic capillary-tissue diffusion phenomena. *Archives of Applied Science Research*, 2(1), 104–112.
160. Singh, S. (2011). A two-layered model for the analysis of arterial rheology. *International Journal of Computer Science and Information Technology*, 4, 37–42.
161. Singh, S. (2011). Clinical significance of aspirin on blood flow through stenotic blood vessels. *Journal of Biomimetics, Biomaterials and Tissue Engineering*, 10, 17–24.

162. Singh, S. (2011). Effects of shape of stenosis on arterial rheology under the influence of applied magnetic field. *International Journal of Biomedical Engineering and Technology*, 6(3), 286–294.

163. Singh, S. (2011). Numerical modeling of two-layered micropolar fluid through a normal and stenosed artery. *International Journal Engineering*, 24(2), 177–187.

164. Singh, S. (2011). The effect of saline water on viscosity of blood through stenosed blood vessels using Casson's fluid model. *Journal of Biomimetics, Biomaterials and Tissue Engineering*, 9, 37–45.

165. Singh, S., & Shah, R. R. (2010). A numerical model for the effect of stenosis shape on blood flow through an artery using power-law fluid. *Advance in Applied Science Research*, 1, 66–73.

166. Singh, S., & Shah, S. R. (2025). Understanding blood flow in stenosed arteries: Newtonian and non-Newtonian fluid comparisons. *Research Review International Journal of Multidisciplinary*, 10(1), 203–215.

167. Singh, V., & Shah, S. R. (2024). Enhancing cardiovascular health: The positive impact of yoga on blood flow and circulation. *Indian Journal of Yoga Exercise & Sport Science and Physical Education*, 9(2). <https://doi.org/10.58914/ijyesspe.2024-9.2.4>

168. Singh, V., & Shah, S. R. (2024). The multifaceted health benefits of yoga: A comprehensive review of physical, mental, and quality of life improvements. *International Journal of AYUSH Case Reports*, 8(3), 436–447.

169. Singh, V., & Shah, S. R. (2025). Holistic benefits of yoga: A dual approach to cardiovascular health and obesity control. *International Journal of Yoga and Allied Sciences*, 14(1), 118–130.

170. Singh, V., & Shah, S. R. (2025). Integrating evidence-based teaching in yoga and Ayurveda: Bridging tradition with modern pedagogy. *International Journal of Yogic, Human Movement and Sports Sciences*, 10(1), 141–145.

171. Singh, V., Yadav, K., Khute, U. K., & Shah, S. R. (2025). *Harmonizing tradition and science: An evidence-based educational approach to yoga and ayurveda*. Research Review: International Journal of Multidisciplinary, 10(11), 288–298. <https://doi.org/10.31305/rrijm.2025.v10.n11.029>.

172. Somveer, & Shah, S. R. (2024). Bioinspired mathematical modeling of chemical dispersion in narrow and curved arteries: A computational approach. *International Journal of Mathematical Archive*, 15(11), 1–9.

173. Upadhyay, A. K., & Shah, S. R. (2025). *Machine learning-based prediction of air quality index (AQI) in Mumbai: Comparative analysis of linear regression, random forest, and XGBoost models*. Research Review: International Journal of Multidisciplinary, 10(11), 299–307. <https://doi.org/10.31305/rrijm.2025.v10.n11.030>.

174. Upadhyay, A. K., & Shah, S. R. (2025). Modeling and analysis of atmospheric pollution dispersion under distance-dependent wind and constant removal. *International Research Journal of Modernization in Engineering Technology and Science*, 7(5), 547–552.

175. Upadhyay, A. K., Vashisth, M., Kaur, A., & Shah, S. R. (2025). “*Mathematical modeling of atmospheric pollutant dispersion under periodic emissions: Implications for respiratory and cardiovascular health*”. *International Journal of Science, Engineering and Technology*, 13(5).

176. Yadav, P., & Shah, S. R. (2024). Female domestic laborers in the urban informal economy: A case analysis of Delhi. *International Research Journal of Modernization in Engineering Technology and Science*, 6(8), 216–225.

177. Yadav, P., Sengar, N., & Shah, S. R. (2024). Economic conditions and age profile of women domestic workers in Delhi’s urban informal sector. *International Journal of Research Publication and Reviews*, 15(8), 494–500.

178. Yadav, P., Sengar, N., & Shah, S. R. (2025). An analysis of occupational health risks and outcomes among female agricultural laborers in India. *International Journal of Progressive Research in Engineering Management and Science*, 5(2), 1202–1211.

179. Yadav, P., Sengar, N., & Shah, S. R. (2025). Analysing occupational health issues among female farm laborers in India. *International Journal of Science and Management Studies*, 8(2), 105–114.

180. Yadav, V., Shah, S. R., & Dixit, A. (2025). *The scientific interplay of sports, human movement science, and yoga in education and society: Short communication*. International Journal of AYUSH Case Reports, 9(4), October–December.