International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2022): 7.942

Deciphering the Health Struggles of Working Women: An Analytical Exploration of Diabetes Causation

Nisha Sengar

P.G.D.A.V. College, University of Delhi, New Delhi, (India)
sengar.n[at]pgdave.du.ac.in

Abstract: ***This research paper delves into the intricate health challenges faced by working women, with a specific focus on understanding the causation of diabetes. Despite strides in gender equality, working women continue to confront unique health issues influenced by various factors, including socioeconomic status, work-related stress, and lifestyle choices etc. Through an analytical approach, this study investigates the multifaceted determinants contributing to the development of diabetes among working women. By synthesizing existing literature and empirical evidence, the research aims to elucidate the complex interplay of biological, environmental, and social factors underlying diabetes causation in this demographic.***

Keywords: Working women, Diabetes, Health disparities, Risk factors, Gender-specific, Work environment, social determinants of health, Health inequities, Evidence-based interventions, Women's health research

1. Introduction

The health of working women is influenced by numerous factors that intersect with their professional and personal lives. Among the many health concerns they face, diabetes stands out as a significant threat [6,28,32,41,50,67]. This paper aims to explore the challenges encountered by working women in relation to diabetes risk factors and emphasizes the necessity of understanding these issues to implement targeted interventions. By shedding light on the complex interplay between work related factors and diabetes risk, this research seeks to inform strategies for improving the health outcomes of working women [11,34,51,64,72]. Working women navigate a myriad of challenges that can impact their overall well-being. From balancing work and family responsibilities to coping with workplace stressors, they often face unique health risks compared to their male counterparts [3,14,24,47,87]. Gender disparities in healthcare access and utilization further compound these challenges, underscoring the need for a gender sensitive approach to health promotion and disease prevention. Diabetes has emerged as a significant health concern for working women, with rising prevalence rates globally [8,16,30,44,53,57,69]. Factors such as sedentary lifestyles, unhealthy dietary habits, and increased stress levels in the workplace contribute to the elevated risk of diabetes among this demographic [5,26,45,56,65,88].

Additionally, socioeconomic factors, including income inequality and access to healthcare, play a crucial role in shaping diabetes outcomes among working women [10,33,70,76,84,96]. The workplace environment can exert a profound influence on diabetes risk factors among working women. Sedentary jobs that involve prolonged sitting and minimal physical activity contribute to obesity and metabolic syndrome, both of which are key risk factors for type 2 diabetes. Shift work and irregular working hours disrupt circadian rhythms and sleep patterns, increasing the likelihood of insulin resistance and glucose intolerance. Moreover, workplace stressors, such as job strain and lack of autonomy, can trigger unhealthy coping mechanisms like overeating and smoking, further exacerbating diabetes risk. Effective interventions to address diabetes risk among working women must take a multifaceted approach that addresses both individual and systemic factors. Workplace wellness programs that promote physical activity, healthy eating, and stress management can help mitigate diabetes risk factors and improve overall health outcomes. Flexible work arrangements that allow for better work life balance can also contribute to reducing stress levels and promoting healthier lifestyles among working women. Additionally, targeted health education initiatives aimed at raising awareness about diabetes prevention and management can empower working women to take control of their health [2,17,23,37,46,66,91]. Diabetes represents a significant health challenge for this demographic, underscored by the need for targeted interventions to mitigate risk factors and improve health outcomes. By understanding the unique challenges faced by working women in relation to diabetes, stakeholders can develop comprehensive strategies. Genetic predisposition plays a significant role in the development of diabetes, and working women may be particularly susceptible due to inherited factors. Studies have shown that certain genetic variations can increase the risk of diabetes, with women often facing additional hormonal influences that further compound this risk [4,9,12,18,21,25,49]. Analyzing genetic markers and hormonal profiles can provide valuable insights into the biological mechanisms underlying diabetes causation in working women. The environment in which working women live and work can significantly impact their risk of developing diabetes. Factors such as urbanization, pollution, and access to healthy food options can influence diabetes prevalence rates among this demographic [27,36,40,86,93].

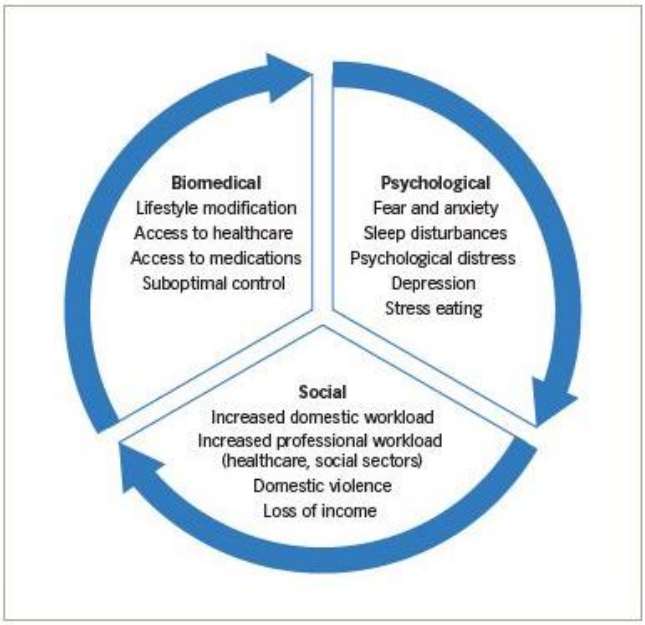

Figure 1: Challenges in working women with diabetes

Moreover, lifestyle factors, including diet, physical activity levels, and stress, play a crucial role in diabetes causation. Analyzing the interaction between environmental exposures and lifestyle choices can help identify modifiable risk factors and inform targeted interventions. Social determinants of health, such as socioeconomic status, education, and access to healthcare, exert a profound influence on diabetes risk among working women [19,42,52,74,89,94]. Women from marginalized communities or low-income backgrounds may face heightened barriers to diabetes prevention and management, including limited access to nutritious foods, healthcare services, and opportunities for physical activity. Analyzing disparities in social determinants of health can provide critical insights into the root causes of diabetes inequities among working women. The nature of women's work can expose them to unique occupational hazards that increase their risk of developing diabetes. Shift work, for example, disrupts circadian rhythms and can lead to disturbances in glucose metabolism and insulin sensitivity [20,43,54,58,71,78,81]. Additionally, sedentary occupations that require prolonged sitting and minimal physical activity contribute to obesity and metabolic syndrome, both of which are key risk factors for diabetes. Analyzing occupational exposures and health hazards can help identify workplace interventions to mitigate diabetes risk among working women.

2. Discussion

The research on diabetes causation in working women makes significant contributions to the field of women's health research by identifying gender-specific risk factors, understanding the impact of the work environment on health, addressing health inequities, informing evidence-based interventions, and advancing knowledge in the field [59,79,82,92]. By elucidating the complex pathways underlying diabetes risk in this demographic, this research has the potential to improve health outcomes and reduce disparities among working women, ultimately contributing to the broader goal of promoting health equity and well-being for all. By elucidating the complex interplay of factors influencing diabetes risk in this demographic, this research contributes valuable insights and advances our understanding of women's health disparities and disease prevention strategies [60,61,73,77,83]. The research identifies gender-specific risk factors contributing to diabetes development in working women, shedding light on the unique challenges faced by this demographic. By analyzing the intersection of work-related factors, socioeconomic status, and lifestyle choices, the study uncovers key determinants of diabetes risk that may be overlooked in traditional gender-neutral health research [38,63,75,80,82].

Figure 2: Symptoms of Diabetes in women

This research provides a comprehensive analysis of how the work environment influences diabetes risk among women. By examining occupational hazards, workplace stressors, and lifestyle factors, the study offers insights into the role of the workplace in shaping women's health outcomes. This understanding is essential for developing targeted interventions to promote health and well-being in the workplace [7,15,35,55,68,85]. By focusing on diabetes causation in working women, this research contributes to the broader goal of addressing health inequities and disparities. Women from marginalized communities or low-income backgrounds often face heightened barriers to healthcare access and experience higher rates of chronic diseases like diabetes [1,13,31,22,29,39,62,95]. By identifying social determinants of health and structural barriers to care, the study informs policy interventions aimed at reducing health disparities and promoting health equity among working women. The findings of this research inform the development of evidence-based interventions to prevent and manage diabetes in working women [2,48,90,97]. By identifying modifiable risk factors and key determinants of diabetes risk, the study provides a foundation for designing targeted health promotion programs, workplace wellness initiatives, and policy interventions tailored to the needs of this demographic. These interventions have the potential to improve health

outcomes and reduce the burden of diabetes among working women. Overall, this research contributes to the advancement of knowledge in the field of women's health research by addressing a significant gap in the literature on diabetes causation. By employing a multidisciplinary approach and integrating quantitative and qualitative methods, the study offers new insights into the complex interplay of factors influencing diabetes risk in working women. This knowledge not only enhances our understanding of women's health disparities but also informs future research directions and interventions aimed at promoting health and well-being in this population.

3. Conclusion

This research paper provides a comprehensive exploration of the multifaceted challenges concerning the health of working women, with a specific focus on understanding the causation of diabetes. Despite strides in gender equality, working women continue to confront unique health issues influenced by various factors, including socioeconomic status, work-related stress, and lifestyle choices. Through an analytical approach, this study investigates the complex interplay of biological, environmental, and social factors underlying diabetes causation in this demographic. By synthesizing existing literature and empirical evidence, the research aims to elucidate the pathways through which these factors contribute to the development of diabetes among working women. The findings of this research have significant implications for health promotion, disease prevention, and policy interventions. By identifying gender-specific risk factors, understanding the impact of the work environment on health, and addressing health inequities, this study contributes valuable insights to the field of women's health research. Moreover, the research informs evidence-based interventions tailored to the needs of working women, including workplace wellness programs, targeted health education initiatives, and policy interventions aimed at reducing health disparities and promoting health equity. This research contributes to the advancement of knowledge in the field of women's health research by addressing a significant gap in the literature on diabetes causation. By shedding light on the complex interplay of factors influencing diabetes risk in working women, this study lays the foundation for future research directions and interventions aimed at promoting health and well-being in this population.

References

[1] Abramson, J.H., Hopp, C., Epstein, L.M. (1981), 'The epidemiology of varicose veins' Journal of Epidemiology & Community Health, 35:213-217.
[2] Ahuja, R. (1993). Indian Social System. Rawat Publications, Jaipur.
[3] American Diabetes Association. (2021). Statistics about diabetes.
[4] Anamika, Shah, S. R., "Mathematical and Computational study of blood flow through diseased artery", International Journal of Computer Science, 5, (6), 1-6, (2017).
[5] Anamika, Singh A., Shah, S. R., "Mathematical Modelling Of Blood Flow through Three Layered Stenosed Artery", International Journal for Research in Applied Science and Engineering Technology, 5, (6), 1-6, (2017).
[6] Anamika, Singh, A., Shah, S. R., "Bio-Computational analysis of blood flow through two phase artery", Int. J. of Engineering Science and Computing, 7, (6), 13397-213401, (2017).
[7] Centers for Disease Control and Prevention. (2020). National diabetes statistics report. U.S. Department of Health and Human Services.
[8] Chaturvedi, P., Shah, S. R., "Assessing the Clinical Outcomes of Voxelotor Treatment in Patients with Sickle Cell Disease", International Journal of Applied Science and Biotechnology, 12(1), 46-53, (2024).
[9] Chaturvedi, P., Shah, S. R., "Mathematical Analysis for the Flow of Sickle Red Blood Cells in Microvessels for Bio-Medical Appl., Yale J. of Biology and Medicine,96(1),13-21, (2023).
[10] Cheturvedi, P., Kumar, R., Shah, S. R., "Bio-Mechanical and Bio-Rheological Aspects of Sickle Red Cells in Microcirculation: A Mathematical Modelling Approach, Fluids, 6, 322, 01-15, (2021). https://doi.org/10.3390/fluids6090322.
[11] Dayal, L. (1983). "Women Health and Sexual Division of Labour: A case study of Women's Health Movement.
[12] Desai, R and Gaur, R (2004). Occupational Stress of Women in Small-Scale Industry. Journal of Health.
[13] Eurostat (1995), Women and Men in the European Union: A Statistical Portrait, Office for Official Publications of the European Communities, Luxembourg.
[14] Geeta, Siddiqui S. U., Sapna, "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, (2013).
[15] Geeta, Siddiqui S. U., Shah, S. R. "A Biomechanical approach to the effect of body acceleration through stenotic artery", Applied Math. and Computation, 109(1), 27-41, (2015).
[16] Geeta, Siddiqui S. U., Shah, S. R., "A Mathematical Model for two layered pulsatile blood flow through stenosed arteries", E-Journal of Sci. and Tech. 109 (11), 27-41, (2015).
[17] Geeta, Siddiqui S. U., Shah, S. R., "Effect of body acceleration and slip velocity on the pulsatile flow of casson fluid through stenosed artery", Advance in applied science research, 5(3), 231-225, (2014).
[18] Geeta, Siddiqui S. U., Shah, S. R.,"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, (2015).
[19] Gerhardsson, L. & Ahlmark A. (1985), 'Silicosis in women: experience from the Swedish pneumoconiosis register', J Occupational Health 27(5):347-350.
[20] Golden, S. H., Brown, A., Cauley, J. A., Chin, M. H., Gary-Webb, T. L., Kim, C., Sosa, J. A., Sumner, A. E., & Anton, B. (2012). Health disparities in endocrine disorders: Biological, clinical, and nonclinical factors—An Endocrine Society scientific statement.

The Journal of Clinical Endocrinology & Metabolism, 97(9), E1579–E1639.
[21] Gupta, P., Alshehri, Mo., Sharma, S. K., Shah, S. R., "Empowering the visually impaired: Translating Handwritten Digits into Spoken Language with HRNN-GOA and Haralick Features", J. of Disability Research, 3, 1-21, (2024).
[22] Haralambus, M and Heald, R.M. (2009). Sociology: Themes and Perspectives. in Britain". International Journal of Health Service. 13(3):12-17, India, Vol. 13. No. 4. April 2013. P. 208-221
[23] Kumar, P., Shah, S. R., "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, (2021). 10.33889/IJMEMS.2021.6.5.083.
[24] Kumar, R., Chaturvedi, P., Akbar, S., Shah, S. R., "Prospective of Hydroxychloroquine and Zinc with Azithromycin for Nanoparticles Blood Flow in Covid-19 Patients, International Journal of Nanotechnology in Medicine & Engineering, 6 (1), 01-07, (2021).
[25] Kumar, R., Shah, S. R., "A mathematical approach to study the blood flow through tapered stenosed artery with the suspension of nanoparticles" Destech Transactions on Engineering and Technology Research, 01, 1-6, (2017). 10.12783/dtetr/amsm2017/14809
[26] Kumar, R., Shah, S. R., "Mathematical Modeling of Blood Flow with the Suspension of Nanoparticles Through a Tapered Artery With a Blood Clot", Frontiers in Nanotechnology, 2, 596475, 1-5, (2020).
[27] Kumar, R., Shah, S. R., "Performance of blood flow with suspension of nanoparticles though tapered stenosed artery for jeffrey fluid model" International Journal of Nanoscience, 17, 6, 1850004 (1-7), (2018). 10.1142/S0219581X18500047.
[28] Kumar, R., Shah, S. R., "Study of blood flow with suspension of nanoparticles through tapered stenosed artery", Global J. of Pure and Applied Math., 13(10), 7387-7399, (2017).
[29] Kumar, V., Shah, S. R., "A Mathematical study for heat transfer phenomenological processes in human skin", Int.J. of Mechanical Engineering, 7 (6), 683-692, (2022).
[30] Kumar, V., Shah, S. R., "Mathematical modelling to study the heat transfer between core and skin", SRMS, Journal of Mathematical Sciences, 7, 7-12, (2024).
[31] Kumar, V., Shah, S. R., "Thermobiological Mathematical Model for the study of temperature response after cooling effects", SSRG Int. J. of Applied physics, 9 (2), 2022, 7-11.
[32] Kumar., V., Shah, S. R., "A mathematical approach to investigate the temperature distribution on skin surface with sinusoidal heat flux condition, Int. J. of Multidisciplinary Research and Development, 9 (5), 2022,141-146.
[33] Lenin, J. S., Shah, S. R., "Mathematical Analysis of Stem Cell Dynamics in Acute Myeloid Leukemia: Towards Precision Medicine Strategies", International Journal of Science and Research, 13(05), 528-535, (2024).
[34] Management (Special Issue on Occupational Health of Women). Vol. 6. No. 2. 2004. P. 141-146 No. 507, Government of India.
[35] NSS (National Sample Survey Organization), (2004). Morbidity, health care & the condition of the aged. Report
[36] Patel, P and I Kapoor (1996). "Listening and talking with women on Health social change, 26:3-4
[37] Paul, M. (ed) (1993), Occupational and Environmental Reproductive Hazards: A guide for clinicians, Williams & Wilkins, Baltimore.
[38] Rajasekhar, D and Sasikala, B (2013). An Impact of Stress Management on Employed Women, Language.
[39] Sadique, Mo., Shah, S. R., "Mathematical model to study the study the squeeze film characteristics of synovial joints in diseased human knee joint", World Scientific Annual Review of Biomechanics, 1 (2330004) 1-21, (2023).
[40] Sadique, Mo., Shah, S. R., "Mathematical study for the synovial fluid flow in Osteoarthritic knee joint", Journal of Engineering and Applied Sciences, 17(2),15-21, (2022).
[41] Sardar, S. K., Sharma, M. N. Islam, Sadique, Mo., Shah, S. R., "Effect of Significant Parameters on Squeeze Film Characteristics in Pathological Synovial Joints", Mathematics (MDPI), 11 (1468) 1-23, (2023). https://doi.org/10.3390/math11061468.
[42] Shabab A., Shah, S. R., "Mathematical Analysis of Stem Cell Dynamics in Acute Myeloid Leukemia: Towards Precision Medicine Strategies", Journal of Current Medical Research and Opinion, 07 (04), 2216-2225, (2024).
[43] Shabab, A., Shah, S. R., "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, (2024).
[44] Shabab, A., Shah, S. R., "The Effects of Prostaglandin Analogs on Intraocular Pressure (IOP) in Human Eye for Open Angle Glaucoma. Int. J. of Innovative Technology and Exploring Engineering, 10 (2), 176-180, (2020).
[45] Shabab, A., Shah, S. R., Mohammed Alshehri, Sharma, S. K., Gupta, P., "A Mathematical Study for Promoting Disability Inclusion in Glaucoma: A Comprehensive Approach", Journal of Disability Research, 3, 1-12, (2024).
[46] Shah, S. R., "A biomechanical approach for the study of deformation of red cells in narrow capillaries", IJE: Transaction A: Basics, 25(4), 303-313, (2012).
[47] Shah, S. R., "A case study of non-Newtonian viscosity of blood through artherosclerotic artery", Asian Journal of Engineering and Applied Technology, 1(1), 47-52, (2012).
[48] Shah, S. R., "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, (2013).
[49] Shah, S. R., "A mathematical study of blood flow through radially non-symmetric multiple stenosed arteries under the influence of magnetic field", Int. J. of Advanced Research in Biological Sciences, 2 (12), 379-386, (2015)

[50] Shah, S. R., "A mathematical study of blood flow through stenosed artery", International Journal of Universal Science and Engineering, 1(1), 26-37, (2015).
[51] Shah, S. R., "A study of blood flow through multiple atherosclerotic arteries", International Journal for Mathematics, 1, (12),1-6, (2015).
[52] Shah, S. R., "A study of effects of magnetic field on modified Power-law fluid in modeled stenosed artery" J. of Bioscience and Technology, 1 (4),187-196, (2010).
[53] Shah, S. R., "An innovative solution for the problem of blood flow through stenosed artery using generalized bingham plastic fluid model", Int. J. of research in applied and natural social sciences, 1(3), 97-140, (2013).
[54] Shah, S. R., "An innovative study for non-Newtonian behavior of blood flow in stenosed artery using Herschel-Bulkely flud", Int. J. of biosiences and biotechnology, 5(5), 233-240, (2013).
[55] Shah, S. R., "Capillary-tissue diffusion phenomena for blood flow through a stenosed artery using herschel-bulkley fluid" Int. J. of research in Bioch. and Biophy., 1 (1),1-8 (2011).
[56] Shah, S. R., "Effect of clopidogrel on blood flow through stenosed artery under diseased condition", Int. Journal of Experimental Pharmacology, 4(1),887-893, (2014).
[57] Shah, S. R., "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, (2011).
[58] Shah, S. R., "Effects of antiplatelet drugs on blood flow through stenosed blood vessels", Journal of Biomimetics, Biomaterials and Tissue Engineering, 18, 21-27, (2013).
[59] Shah, S. R., "Impact of radially non-symmetric multiple stenoses on blood flow through an artery", Int. Journal of Physical and Social Sciences, 1 (3), 1-16, (2011).
[60] Shah, S. R., "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, (2011).
[61] Shah, S. R., "Mathematical Study of Blood Flow through Atherosclerotic Artery in the Presence of Porous Effect", Int. Journal of Modern Sciences and Engineering Technology, 2, (12), 12-20, (2015).
[62] Shah, S. R., "Non-Newtonian flow of blood through an atherosclerotic artery", Research journal of applied sciences. 6 (1), 76-80, (2011). 10.3923/rjasci.2011.76.80.
[63] Shah, S. R., "Performance modeling and analysis of magnetic field on nutritional transport capillary tissue system using modified Herschel-Bulkely fluid", Int. J. of Advanced research in physical sciences, 1(1), 33-41, (2014).
[64] Shah, S. R., "Performance Study on Capillary-Tissue Diffusion Phenomena for Blood Flow through Stenosed Blood Vessels", American J. of pharm. research, 2(2), 695-705, (2012).
[65] Shah, S. R., "Response of blood flow through an atherosclerotic artery in the presence of magnetic field using Bingham plastic fluid" Int. J. of Pharmaceutical and Biomedical Research, 2(3), 96-106, (2011).
[66] Shah, S. R., "Role of Non-Newtonian behavior in blood flow through normal and stenosed artery", Research journal of Biological sciences, 6(9), 453-458, (2011).
[67] Shah, S. R., "Significance of Aspirin on Blood Flow to Prevent Blood Clotting through Inclined Multi-Stenosed Artery", Letters In Health and Biological Sci., 2(2), 97-100, (2017).
[68] Shah, S. R., "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, (2022).
[69] Shah, S. R., "Study of modified Casson's fluid model in modeled normal and stenotic capillary-tissue diffusion phenomena" Int. J. of Compu. Eng. & Manag., 11, 51-57, (2011).
[70] Shah, S. R.,"A biomechanical approach for the study of Two-phase blood flow through stenosed artery", International Journal of research studies in biosciences, 1(2),24-32, (2013).
[71] Shah, S.R., "Clinical influence of hydroxychloroquine with azithromycin on blood flow through blood vessels for the prevention and Treatment of covid-19", Int. J. of Bio., pharmacy and allied science, 10(7), 2195-2204, (2021).
[72] Siddique, S. U., Shah, S. R., "Achievement of Pentoxifylline for Blood Flow through Stenosed Artery", J. of Biomimetics, Biomaterials and Tissue Engineering, 13 81-89, (2012).
[73] Siddiqui S. U., Shah, S. R., "A Physiologic Model for the problem of blood flow through Diseases blood vessels", Int. J. of advances in Applied Sciences, 5(2), 58-64, (2016).
[74] Siddiqui, S. U., Shah, S. R., "A Comparative Study for the Non-Newtonian Behaviour of Blood Flow through Atherosclerotic Arterial Segment", Int. J. of Pharmaceutical Sci. Review and Research, 9 (2), 120-125, (2011).
[75] Siddiqui, S. U., Shah, S. R., "Two-phase model for the study of blood flow through stenosed artery", Int. J. of Pharmacy and Biological Sciences, 1(3), 246-254, (2011).
[76] Singer, M. A., Hopman, W. M., MacKenzie, T. A., MacMillan, E. A., Arden, W., & Hipolito, J. (2018). Women's health: A new global agenda. BMJ Global Health, 3(2), e000734. https://doi.org/10.1136/bmjgh-2018-000734
[77] Singh, A., Shah, S. R., Siddiqui S. U., "Effects of inclined multi-stenoses arteries on blood flow characteristics using bingham plastic fluid", Int. J. for Math., 1, (12), 7-14, (2015).
[78] Singh, A., Shah, S. R., Siddiqui S. U., "Mathematical Modeling and Numerical Simulation of Blood Flow through Tapered Artery", International Journal of Innovative Science, Engineering & Technology, 3, (2), 710-717, (2016).
[79] Singh, A., Shah, S. R., Siddiqui S. U., "Mathematical Modelling and Analysis of Blood Flow through Diseased Blood Vessels", Int. J. of Engineering and Management Research, 5, (6), 366-372, (2015).

[80] Singh, A., Shah, S. R., Siddiqui S. U., "Performance of blood flow through two phase stenosed artery using Herschel-Bulkley model", Int. J. of Applied And Pure Science and Agriculture, 2, (2), 228-240, (2016).
[81] Singh, A., Siddiqui S. U., Shah, S. R., "A Mathematical Model to study the similarities of blood fluid models through inclined multi-stenosed artery", International Journal of Engineering Research and Modern Eduacation, 2, (1), 108-115, (2017).
[82] Singh, A., Siddiqui S. U., Shah, S. R., "Mathematical Modeling of peristaltic blood flow through a vertical blood vessel using prandtl fluid model", Int. J. of Mathematics and Computer Research, 4, (9), 710-717, (2016).
[83] Singh, S., "A two-layered model for the analysis of arterial rheology" International Journal of Computer Science and Information Technology, 4, 37-42. (2011).
[84] Singh, S., "Clinical significance of aspirin on blood flow through stenotic blood vessels" Journal of Biomimetics, Biomaterials and Tissue Engineering, 10 (17) 24-35, (2011).
[85] Singh, S., "Effects of shape of stenosis on arterial rheology under the influence of applied magnetic field" Int. J. of Biomedical Eng. and Technology, 6 (3), 286-294, (2011).
[86] Singh, S., "Influence of magnetic field on blood flow through stenosed artery using casson's fluid model", Int. J. of Bio-Engineering, Cardio Pulmonary Sci. & Tech. 1,1-7, (2010).
[87] Singh, S., "Numerical modeling of two-layered micropolar fluid through a normal and stenosed artery", International journal Engineering, 24 (2), 177-187, (2011).
[88] Singh, S., "Numerical modelling for the modified Power-law fluid in stenotic capillary-tissue diffusion phenomena", Archives of Applied Science Resaerch, An Int. peer reviewed J. of Appl. Sci., 2 (1), 104-112, (2010).
[89] Singh, S., "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, (2011).
[90] Singh, S., and Shah, R. R., "A numerical model for the effect of stenosis shape on blood flow through an artery using power-law fluid", Advance in applied science research, An Int. peer reviewed J. of Sc*i.*, 1, 66-73, (2010).
[91] Stellman, J.M. (1997), 'Women's Work, Women's Health: Myths and Realities' Pantheon Books, New York.
[92] Subha.J.R. (2019). Health status and problems of working women in women Hostels, Madurai.
[93] Thamilratan, M. (2016). Medical Sociology, Rawat Publication.
[94] Thomas, S., Kumar, R., Shah, S. R., "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, (2024).
[95] United Nations. (2021). Women and health. Vishwa Kumar, R.K. (1991)."Health status of the under privileged,‖ World Health organization.10-13.
[96] WHO (2009). Colombo Call for Action Adopted at Colombo, SriLanka
[97] World Health Organisation (1994), Declaration on Occupational Health for All, WHO/OCH/94.1, Geneva