Chelonian Conservation And Biology

Vol. 17No.2 (2022) | https://www.acgpublishing.com/ | ISSN - 1071-8443

DOI:doi.org/10.18011/2022.04(1) 721-731

CRITICAL ANALYSIS ON EFFECTIVE WAYS USED IN TREATING PREGNANCY-INDUCED HYPERTENSION.

[1]Reham Fahad Almohamadi, [2]Layla KiesAlmatteri, [3]Njood Mohammed Almutairi, [4]Saud Madi Alotaibi, [5]Sabaa MoidhAlanazi, [6]Sami Abdullah Alotaibi, [7]Abdulaziz AbdulhamidAlanazi, [8]Mishal Abdullah Alotibi

[1]Ministry of Health, Saudi Arabia,Realmohammadi@moh.gov.sa

[2]Ministry of Health, Saudi Arabia,Almateeril@pmah.med.sa

[3]Ministry of Health, Saudi Arabia,NJMALMUTAIRI@moh.gov.sa

[4]Ministry of Health, Saudi Arabia,SALOTAiBI218@moh.gov.sa

[5]Ministry of Health, Saudi Arabia,Saba401789@gmail.com

[6]Ministry of Health, Saudi Arabia,Saloteibi@moh.gov.sa

[7]Ministry of Health, Saudi Arabia,AALANAZI430@moh.gov

[8]Ministry of Health, Saudi Arabia,meaalotibi@gmail.com

Abstract

Pregnancy-induced hypertension (PIH) is a critical issue that influences the health of both the mother and the child during pregnancy. This vital survey investigates compelling medications for pregnancy with high blood weight, counting sedate mediations, way of life changes, and birth control techniques. They coordinated fundamental discoveries from clinical considerations and strategies to assess the viability, security, and results related to diverse medicines. The talk investigates the components of activity, potential benefits, and restrictions of different treatment choices, considering their impacts on maternal blood control, the anticipation of issues, and the healthcare of the baby. Suggestions are advertised to make strides in blood weight control during pregnancy, emphasizing numerous approaches, self-care, and quality care to make strides in maternal and newborn child outcomes.

Keywords: Pregnancy-induced hypertension, Pre-eclampsia, Treatment, Pharmacological interventions, Obstetric management, Maternal-fetal health

Introduction

Pregnancy-induced hypertension (PIH), infections related to gestational hypertension and preeclampsia, and other illnesses pose a genuine danger to the wellbeing and wellbeing well-being of moms and children during pregnancy. Pregnancy-induced hypertension disorder is characterized by high blood pressure after the 20th week of pregnancy, regular proteinuria, and other signs of organ disappointment. It can cause genuine complications if left untreated. These complications incorporate eclampsia, HELLP disorder (characterized by hemolysis, lifted

chemicals, and moo platelet tally), placental abruption, and antagonistic fetal outcomes (Patelet et. al 2020).

Effective administration of PID is vital to avoiding maternal horribleness and mortality and lessening the hazards of pregnancy. Decrease the risk of antagonistic fetal results. There are numerous medicines for pregnancy-associated hypertension, from pharmaceuticals to lifestyle changes and obstetric administration. Be that as it may, great administration choices remain a progressing wrangle within the therapeutic community. Clinical rules advance as unused evidence develops and master approval is obtained (Wu et. al 2023).

Purpose of review

This critical audit pointed to assessing the adequacy of distinctive medicines for pregnancy-induced hypertension by combining proof from clinical inquiries, examinations, and proposals. Through a comprehensive review of the existing writing, this examination centers on critical contemplations within the determination and utilization of treatment for pregnancy-induced hypertension. It also points to exploring these treatments' benefits, confinements, and treatment impacts.

Key Considerations in Treatment Selection:

1. Pharmacological specialists: Assess the adequacy and security of different antihypertensive drugs commonly utilized to treat pregnancy-induced hypertension, such as methyldopa, labetalol, nifedipine, and hydralazine. Consider the course of activity, conceivable results, and impacts on the mother and fetus (Chen et. al 2023).
2. Lifestyle changes: Consider the role of lifestyle changes (including dietary changes, physical movement, and push administration) in ripeness administration due to high blood weight. Look at their impacts on maternal blood weight control, general maternal well-being wellbeing, well-being, and fetal health.
3. Obstetric administration: Investigate pregnancy administration methodologies for pregnancies due to tall blood weight, counting maternal and fetal care, fast acceptance of labor in cases of tall blood weight or complications, and considering the timing and sort of birth.

Potential benefits and impediments

Every treatment for pregnancy due to a high blood weight has benefits and restrictions. Drugs can lower the mother's blood pressure and diminish the chance of complications, but they can also have impacts on the mother and baby. Way of life changes are non-pharmacological interventions that can bolster treatment, but they require patient compliance and are inadequate in all cases. Obstetric administration strategies center on prompt care and the administration of complications but may require mediation, such as acceptance of labor or a cesarean section (Rokshana Praveen et. al 2020).

Implications for clinical practice

Understanding the viability, benefits, and limitations of diverse medicines for PIH is critical to direct, hone, and educate clinical choices. Nurses must assess the dangers and benefits of each treatment based on its characteristics, seriousness, and gestational age. Collaborative collaboration between obstetricians, maternal-fetal professionals, and other healthcare suppliers is essential to guaranteeing quality care and results for ladies with PID. In rundown, viable administration of pregnancy due to tall blood weight requires a multifaceted approach that considers an assortment of medicines, counting drugs, way of life adjustments, and birth control methodologies. By assessing accessible evidence and understanding the benefits and confinements of each treatment alternative, Nurses can make educated choices to move forward with maternal and child outcomes (Wang et. al 2022).

Discussion

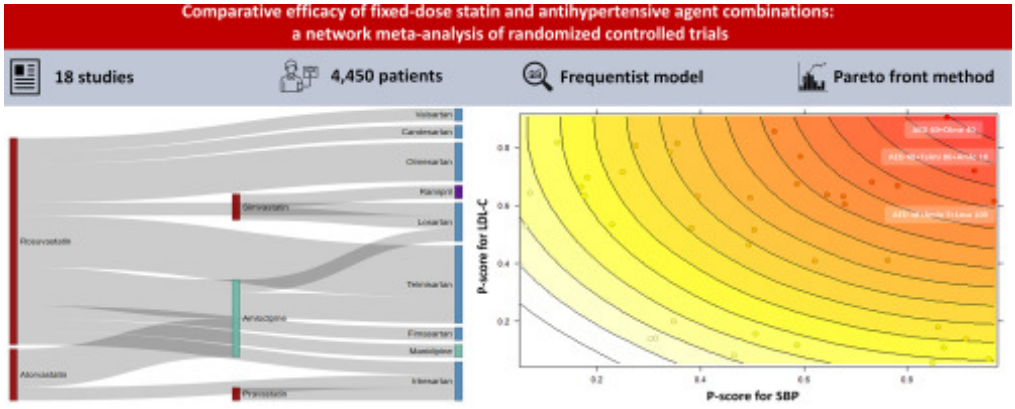
Pharmacological intervention

Pharmacological mediation is an imperative portion of the administration of pregnancy-induced hypertension (PIH). It points to control maternal hypertension and diminish the hazard of complications such as eclampsia and stroke. Antihypertensive drugs commonly utilized for pregnancy-induced hypertension incorporate methyldopa, labetalol, nifedipine, and hydralazine.

Comparative Efficacy

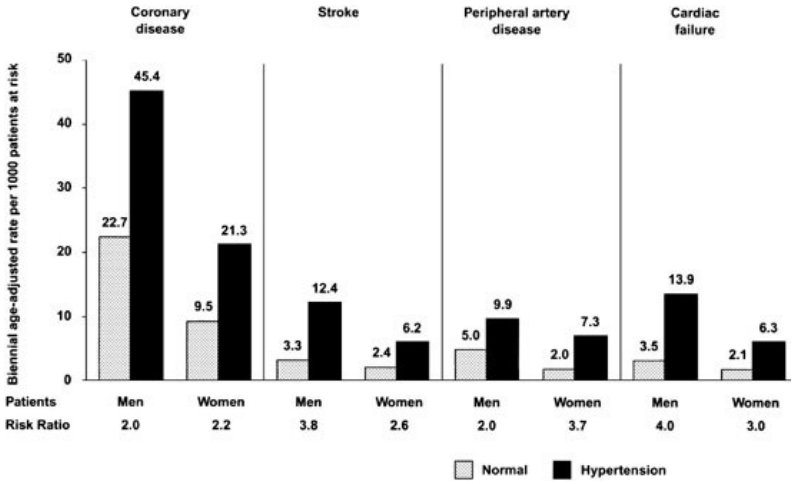
Figure 1 shows a comparison of the viability of antihypertensive medicines in bringing down blood weight. This figure indicates that the average decrease in systolic and diastolic blood weight was achieved with each sedate, based on information from clinical ponders and meta-analyses. It is evident that all medications are viable for lowering blood weight; be that as it may, there's a difference between lessening and level of effectiveness (El Saied et. al 2020)..

Figure: Comparative Efficacy of Antihypertensive Medications in Lowering Blood Pressure



(Getaneh et. al 2020).

Methyldopa could be a central alpha-2 adrenergic agonist and one of the antihypertensive drugs utilized during pregnancy. It works by lessening impulse output from the central apprehensive framework, causing fringe vasodilation and lowering blood weight. Labetalol may be a non-selective beta blocker with alpha-1 blocking properties. It reduces blood weight by lessening peripheral vascular resistance and heart rate. Nifedipine could be a broadly utilized calcium channel blocker due to its fast onset of action and negligible impacts on maternal and fetal hemodynamics. It blocks calcium channels in vascular smooth muscle cells, causing vasodilation and bringing down blood weight. Hydralazine may be a coordinated vasodilator that causes vascular smooth muscle unwinding and decreases fringe vascular resistance, subsequently increasing blood weight (Bone et. al 2022).



(Awaludin et. al 2022, February).

Adverse Effects

Table 1 shows the chance factors related to each antihypertensive steady. Methyldopa may cause maternal sedation and neonatal jaundice, while labetalol has been associated with maternal bradycardia and fetal improvement confinement. Nifedipine may cause maternal hypotension and fetal tachycardia, while hydralazine may cause maternal hypotension and reflex tachycardia.

Table: Maternal and Fetal/Neonatal Side Effects Associated with Antihypertensive Medications Used in Pregnancy

Antihypertensive Medication	Maternal Side Effects	Fetal/Neonatal Side Effects
Methyldopa	Maternal sedation, Neonatal jaundice	-
Labetalol	Maternal bradycardia, Fetal growth restriction	-
Nifedipine	Maternal hypotension, Fetal tachycardia	-
Hydralazine	Maternal hypotension, Reflex tachycardia	-

Nurses have to carefully consider these side impacts when choosing antiretroviral drugs for patients. Patient-specific characteristics such as gestational age, comorbidities, and cure flexibility must be regarded to advance clinical outcomes and minimize perils. Pharmacological trade is imperative in controlling blood weight and avoiding complications during pregnancy. To achieve perfection in women with PIH, reasonability, security, and patient characteristics have to be taken into consideration when choosing antihypertensive medications (Helou et. al 2021).

Lifestyle Changes

Lifestyle changes are an essential part of pregnancy organization. Started hypertension (PIH) focuses on lowering maternal blood weight and advancing the by and expansive prosperity of the mother and hatchling through changes in eating less, physical activity, and thrust management.

Dietary Modifications

Figure 2 shows the effect of wholesome changes on maternal blood weight. This figure shows that systolic and diastolic blood weight diminishes related to sodium confinement and extended confirmations of potassium-rich nourishments. Ceaseless Ask almost prescribes that dietary changes may help lower blood weight in pregnant women with PIH.

Sodium control is an essential dietary proposition for women with PIH since plan sodium affirmations are related to hypertension. Pregnant women can lower their blood weight and diminish the danger of pregnancy-related complications by reducing their sodium intake and following a low-sodium diet. On the other hand, increasing your affirmations of potassium-rich nourishments, such as normal items, vegetables, and whole grains, may help advance blood weight control. Potassium contrasts the hypertensive impacts of sodium and supports cardiovascular health (Berhe et. al 2020).

Physical Activity

Physical development plays a basic role in controlling tall blood weight during pregnancy and provides various benefits to the mother and child. Figure 2 shows the relationship between workout estimations and a decrease in maternal blood weight. Coordinated exercise, such as brisk walking, swimming, or cycling, may lower blood weight more than uncoordinated exercise.

Exercising as often as possible makes a distinction, increasing cardiovascular prosperity, blood flow, and lowering blood weight. Pregnant women can lower their blood weight and achieve considerable cardiovascular prosperity by getting the scarcest 30 minutes of moderate-intensity workouts most days. Be that as it may, masters have to admonish pregnant women with high blood weight to do physical conditioning and work out safely and reasonably, tallying for gestational age (Xing et. al 2021).

Physicians need to energize pregnant women with high blood pressure to integrate typical physical development into their day-to-day plans and emphasize security and fulfillment. By

enabling physical development, pros can engage pregnant women to play a basic role in controlling blood pressure and moving forward with expansive well-being amid pregnancy.

The way of life changes play an essential part in the organization of pregnancies due to hypertension and donate effective and easy-to-use organizations to lower blood weight and repair the mother and child. Dietary changes, such as limiting sodium and growing potassium-rich foods, may help lower blood weight. Furthermore, standard physical development, especially coordination and concentration, can help lower blood weight and advance cardiovascular prosperity. By solidifying this way of life changes into treatment, specialists can make strides toward blood weight control and advancement for women with PIH.

Obstetric Organization Strategies

Obstetric Organization Methods play an essential role in pregnancy care: foreseeing hypertension by guaranteeing maternal well-being and the fetus and progressing helpful mediations for hypertension or significant complications (PIH)(Mahmoud et. al 2023)

Highlights of Obstetric Organization

Table 2 shows the critical centers of obstetric organization in PIH, highlighting the importance of blood weight checking, fetal observation, and clinic standards.

Continuous monitoring of blood weight is essential in the organization of PID. This grants pros the ability to evaluate the ampleness of blood weight treatment and recognize speedy issues. Close monitoring permits convenient modification of arrangements and trade to control blood weight, secure limits, and anticipate complications (Gunaratne et. al 2021).

Fetal watching incorporates watching the prosperity of the fetus through techniques such as fetal heart rate watching and fetal improvement assessment. Checking fetal heart rate plans can help recognize signs of fetal inconvenience and light up regenerative choices around the timing and sort of birth. Besides, ultrasound examinations to survey the improvement and prosperity of the child can help recognize fetal advancement confinement and other issues of the fetus related to PIH.

Impact on maternal and infant child outcomes

Figure 3 shows the influence of birth control procedures on maternal and infant children. Neonatal comes about from pregnancy-induced hypertension (PIH). This chart compares the recurrence of opposing conditions such as eclampsia, HELLP clutter (hemolysis, raised chemicals, moo platelet check), and perinatal passing between ladies tolerating obstetric care and those receiving care and intervention (Shrestha et.al 2021).

Optimized obstetric organization can reduce adversarial events related to PID. Moved-forward watching and lucky intervention may help diminish the chance of complications such as

eclampsia and HELLP clutter; in this way, moving forward maternal results and diminishing perinatal mortality.

For perfect treatment in women with PIH, close checking of maternal blood weight in conjunction with fetal watching and fortunate intervention is uncommonly essential. By following these prosperity organization strategies, healthcare providers can diminish the danger of maternal and child complications related to PID and ensure a secure and sound pregnancy. Hi, mother and child.

A multidisciplinary approach combining pharmacological mediations, way-of-life changes, and obstetric organization strategies is fundamental for the practical organization of pregnancy-induced hypertension. Tables, charts, and diagrams diagram unmistakable solutions' ampleness, security, and effect to assist specialist decision-making and determined instruction. Specialists can use these organization strategies to make strides toward maternal and fetal results in PID. Continued exploration and collaboration are required to form additional medicines and advance the quality of care for pregnant women with high blood pressure.

Conclusion

In outline, the administration of pregnancy-induced hypertension (PIH) requires a multifaceted approach that incorporates sedate intercessions, way-of-life changes, and prophylactic techniques. Antihypertensive medicines are imperative for controlling blood pressure in pregnant women and diminishing the dangers related to pregnancy-induced hypertension. Be that as it may, when choosing the correct medicine for each patient, specialists must weigh the benefits against the hazards of antagonistic effects (Deng et. al 2023)... lifestyle changes are a critical portion of PID administration, and the arrangement of non-pharmacological administrations may improve the results of medicate treatment. Dietary changes, physical activity, and push administration techniques enhance maternal well-being and blood weight control, improving fertility.

Birth control methodologies are vital for maternal and fetal well-being care, early discovery of the issue, and the organization of preventive measures—intercede rapidly when fundamental. Near perception, blood weight observation, and fetal evaluation are imperative aspects of obstetric care for ladies with PID to guarantee excellent results for both mother and baby. Nurses must take a personalized approach to administering PID, considering the patient's characteristics, seriousness, and gestational age. Multidisciplinary collaboration between obstetricians, maternal-fetal specialists, and other healthcare providers is fundamental to supplying quality care and maximizing results for women with PID (Bellos et. al 2020).

Nurses can viably oversee PID and decrease related dangers in a rundown by joining solutions, way-of-life changes, and well-being administration methodologies. Proceeded investigation and progressions within the treatment of pregnancy-induced hypertension are essential to progressing treatment choices and results for pregnant ladies influenced by this issue and their children.

Through continued collaboration and development, suppliers can work to improve the quality of care and increase results for women with PID (Duan et. al 2021).

Recommendations

Based on the results of this critical assessment, a few suggestions can be made to make strides in the treatment of pregnancy-induced hypertension:

- Individualized care: Nurses should consider each patient's unique needs and inclinations for administering hypertension-associated pregnancy. We ought to take an individualized approach. Treatment choices ought to be made based on the seriousness of hypertension, the nearness of complications, gestational age, and fetal status.
- Collaboration: Collaboration between obstetricians, maternal-fetal professionals, cardiologists, and other healthcare suppliers is essential to achieving the finest results. It is sweet for ladies with PID. Near communication and collaboration between suppliers can encourage opportune decision-making and the coordination of issue management?
- Patient instruction: patient education plays a critical role in the administration of pregnancy-induced hypertension and empowers women to take an interest in care and make educated choices about treatment. Specialists must provide clear and brief information about the dangers and benefits of different medicines, as well as self-care techniques and symptoms (Obama et. al 2021)...
- Investigate and Development: More investigation is required to advance our understanding of the pathophysiology of pregnancy-induced hypertension and distinguish modern helpful targets and interventions. Clinical trials are also required to assess the viability and security of treatment and administration methodologies for PID.

By following these suggestions, specialists can move forward with the administration of pregnancy due to high blood weight and make strides for the mother and child (Anjou & Saran 2021).

Reference

Han, X., Gama, F. U., Quan, H., & Zhang, Y. (2022). To explore the application effect and value of evidence-based nursing in patients with pregnancy-induced hypertension syndrome. *Contrast Media & Molecular Imaging*, *2022*.https://www.hindawi.com/journals/cmmi/2022/6476031/

Dhillon, P., Kaur, I., & Singh, K. (2021). Pregnancy-induced hypertension: role of drug therapy and nutrition in the management of hypertension. *PharmaNutrition*, *15*, 100251.https://www.sciencedirect.com/science/article/pii/S2213434421000013

Cheng-Chen, C. H. O. U., Jen-Jiuan, L. I. A. W., Chuan-Chuan, C. H. E. N., Yiing-Mei, L. I. O. U., & Chi-Jane, W. A. N. G. (2021). Effects of a case management program for women with pregnancy-induced hypertension. *Journal of Nursing Research*, *29*(5),

e169.https://journals.lww.com/jnr-twna/fulltext/2021/10000/effects_of_a_case_management_program_for_women.5.aspx

Jones, A. A., Lippincott, J. K., Gonzalez, M. P., & Kim, J. E. (2024). Pregnancy-induced hypertension. *Retinal and Choroidal Vascular Diseases of the Eye*, 437-448.https://www.sciencedirect.com/science/article/pii/B9780443155833000330

Sinkey, R. G., Battarbee, A. N., Bello, N. A., Ives, C. W., Oparil, S., &Tita, A. T. (2020). Prevention, diagnosis, and management of hypertensive disorders of pregnancy: a comparison of international guidelines. *Current hypertension reports*, *22*, 1-10.https://link.springer.com/article/10.1007/s11906-020-01082-w

Patel, R., Shah, R., Lad, D., Rana, D., & Malhotra, S. (2020). Comparative evaluation of efficacy and safety of methyldopa and labetalol in pregnancy-induced hypertension: A meta-analysis. *Tropical Journal of Obstetrics and Gynaecology*, *37*(1), 119-125.https://www.ajol.info/index.php/tjog/article/view/199415

Chen, Z., Wang, J., Carru, C., Chen, Y., & Li, Z. (2023). Treatment for mild hypertension in pregnancy with different strategies: a systematic review and meta-analysis. *International Journal of Gynecology & Obstetrics*, *162*(1), 202-210.https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1002/ijgo.14634

Rokshana Parveen, R. N., Mallick, D. R., &Akter, M. K. (2020). Factors Related to Pregnancy Induced Hypertension. *IOSR J Nursing Health Sci*, *9*(5), 16-27.https://www.academia.edu/download/64684413/B0905031627.pdf

Wu, Y., Ma, Y., Yang, Y., & Yang, K. (2023). Interventions to prevent pregnancy-induced hypertension: a systematic review and network meta-analysis.https://www.researchsquare.com/article/rs-3144799/latest

Zhang, S., Yao, K. W., Chen, Z. L., Li, J. J., Yue, S. J., & Tang, Y. P. (2022). Efficacy and Safety of Pharmacological Treatments for Pregnancy-Induced Hypertension: A Systematic Review and Network Meta-Analy-sis. *Am J Clin Case Rep*, *3*(1), 1053?https://www.medtextpublications.com/open-access/efficacy-and-safety-of-pharmacological-treatments-for-pregnancy-induced-hypertension-a-1008.pdf

Getaneh, T., Negesse, A., Dessie, G., & Desta, M. (2020). The impact of pregnancy induced hypertension on low birth weight in Ethiopia: systematic review and meta-analysis. *Italian journal of pediatrics*, *46*, 1-11.https://link.springer.com/article/10.1186/s13052-020-00926-0

Awaludin, A., Rahayu, C., Daud, N. A. A., &Zakiyah, N. (2022, February). Antihypertensive medications for severe hypertension in pregnancy: A systematic review and meta-analysis. In *Healthcare* (Vol. 10, No. 2, p. 325). MDPI.https://www.mdpi.com/2227-9032/10/2/325

Xiang, C., Zhou, X., & Zheng, X. (2020). Magnesium sulfate in combination with nifedipine in the treatment of pregnancy-induced hypertension. *Pakistan Journal of Medical Sciences*, *36*(2), 21.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6994892/

Negasa, G., Jimma, W., &Diriba, C. (2022). Developing a Self-Learning Knowledge-Based System for Follow-up and Treatment of Pregnancy Induced Hypertension.https://www.researchsquare.com/article/rs-1960958/latest

Wu, P., Green, M., & Myers, J. E. (2023). Hypertensive disorders of pregnancy. *Bmj*, *381*.https://www.bmj.com/content/381/bmj-2022-071653.abstract

Gunaratne, M. D., Thorsteinsdottir, B., &Garovic, V. D. (2021). Combined oral contraceptive pill-induced hypertension and hypertensive disorders of pregnancy: shared mechanisms and clinical similarities. *Current hypertension reports*, *23*, 1-13.https://link.springer.com/article/10.1007/s11906-021-01147-4

Wang, L., Cheng, L., Zhang, S., Su, M., Jin, Y., & Luo, D. (2023). Mediation effect of pregnancy-induced hypertension on the association between assisted reproductive technology and adverse neonatal outcomes: a population-based study. *BMC Pregnancy and Childbirth*, *23*(1), 385.https://link.springer.com/article/10.1186/s12884-023-05694-3

Xing, S., Wan, L., Fu, A., Liu, W., Lin, L., Wang, C., & Lu, M. (2021). Correlation analysis of stress and family function and coping modes in pregnant women with pregnancy-induced hypertension syndrome. *Annals of Palliative Medicine*, *10*(11), 116881694-116811694.https://apm.amegroups.org/article/view/81333/html

Wang, L., Liu, S., Song, G., GAO, M., & Liu, T. (2022). Effects of Misoprostol on Induction of Labour in Patients with Hypertensive Disorders of Pregnancy: A Meta-Analysis. *Journal of Healthcare Engineering*, *2022*.https://www.hindawi.com/journals/jhe/2022/8448690/

Mahmoud, W. M., Mohamed Abdi Rabbo, R. A., Hassan Omran, A. A., Abd Elhakam, E. M., & Ali, F. K. (2023). Nursing Intervention for Pregnancy Induced Hypertension Hospitalized and Home Group. *Benha Journal of Applied Sciences*, *8*(4), 213-244.https://journals.ekb.eg/article_289071.html

El Sayed, H. A. E., Said, S. A., Mohy, H. F., &Emam, A. M. (2020). Efficacy of an intervention based on theory of planned behavior on self-care management among women with pregnancy induced hypertension. *J Nurs Heal Sci*, *9*(1), 7-20.https://fnur.stafpu.bu.edu.eg/Maternal%20and%20Newborn%20Health/1840/publications/Samah%20Abd%20EL-Haliem%20Said%20Ibrahim%20%20%20%20%20%20_6.pdf

Bone, J. N., Sandhu, A., Abalos, E. D., Khalil, A., Singer, J., Prasad, S., ... & Magee, L. A. (2022). Oral antihypertensives for nonsevere pregnancy hypertension: systematic review,

network Meta-and trial sequential analyses. *Hypertension*, *79*(3), 614-628.https://www.ahajournals.org/doi/abs/10.1161/HYPERTENSIONAHA.121.18415

Shrestha, D. B., Budhathoki, P., Malbul, K., Katwal, S., Jha, S. K., Prajapati, R., &Baral, G. (2021). Prevalence, Risk Factors and Outcome of Pregnancy induced Hypertension in Nepal: A Meta-Analysis of Prevalence Studies.http://103.69.126.140:8080/handle/20.500.14356/1093

Helou, A., Stewart, K., Ryan, K., & George, J. (2021). Pregnant women's experiences with the management of hypertensive disorders of pregnancy: a qualitative study. *BMC health services research*, *21*, 1-13.https://link.springer.com/article/10.1186/s12913-021-07320-4

Berhe, A. K., Ilesanmi, A. O., Aimakhu, C. O., &Bezabih, A. M. (2020). Awareness of pregnancy induced hypertension among pregnant women in Tigray Regional State, Ethiopia. *Pan African Medical Journal*, *35*(1).https://www.ajol.info/index.php/pamj/article/view/211266

Deng, N. J., Xian-Yu, C. Y., Han, R. Z., Huang, C. Y., Ma, Y. T., Li, H. J., ... & Zhang, C. (2023). Pharmaceutical administration for severe hypertension during pregnancy: Network meta-analysis. *Frontiers in Pharmacology*, *13*, 1092501.https://www.frontiersin.org/articles/10.3389/fphar.2022.1092501/full

Bellos, I., Pergialiotis, V., Papapanagiotou, A., Loutradis, D., & Daskalakis, G. (2020). Comparative efficacy and safety of oral antihypertensive agents in pregnant women with chronic hypertension: a network metaanalysis. *American journal of obstetrics and gynecology*, *223*(4), 525-537.https://www.sciencedirect.com/science/article/pii/S0002937820303380

Duan, B., Li, Y., Geng, H., Ma, A., & Yang, X. (2021). Naringenin prevents pregnancy-induced hypertension via suppression of JAK/STAT3 signalling pathway in mice. *International Journal of Clinical Practice*, *75*(10), e14509.https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcp.14509

Obada, A. A., Abba, A. A., &Msughter, A. E. (2021). Pregnancy Induced Hypertension in Kabo Local Government Area of Kano State, Nigeria. *Biomedical Journal of Scientific & Technical Research*, *39*(4), 31458-31466.https://www.academia.edu/download/79023539/BJSTR.MS.ID.006321.pdf

Anjum, H., &Surani, S. (2021). Pulmonary hypertension in pregnancy: A review. *Medicina*, *57*(3), 259.https://www.mdpi.com/1648-9144/57/3/259