

## HEALTH EDUCATION PROGRAMME AS A MEANS OF REDUCING THE PREVALENCE OF HYPERTENSION AMONG PREGNANT WOMEN IN NIGERIA

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### Abstract

This paper discussed the roles of health education programme as a means of reducing the prevalence of hypertension among pregnant women. To achieve this, the concept of hypertension, forms of hypertensive disorders of pregnancy, prevalence of hypertension among pregnant women and role of health education programme in preventing the prevalence of hypertension in pregnant women were discussed. The paper recommends, among other things that Government should develop appropriate policy that need to be put in place to reduce work load on pregnant women, such policies may include pregnant leave this will helps in reducing the stress and pressure in pregnant women which in turns decrease the chance of pregnant women to develop hypertension. In addition, Government should promote health education programmes in schools, organizations, hospitals, industries, market e.tc to educate pregnant women on the dangers and complications associated with hypertension in pregnancy and ways of preventing it. This will helps a lot in reducing the prevalence of hypertension among pregnant women.

**Keywords:** Health education programme, hypertension, pregnant women.

### Introduction

High blood pressure (Hypertension) is when the force of blood pumping through the arteries is high enough to cause problems with your health (Levener,2022). Arteries are blood vessels that carry blood from the heart throughout the body. Hypertension is the most common medical dis order of pregnancy and is reported to complicate up to 2 in to 10 gestations and affects an estimated 30,000 pregnant women globally (Jeffers, 2021). The primary concern about elevated blood pressure relates to the potential harmful effects on both mother and fetus. These potential adverse effects range in severity from trivial to life threatening (Douglas, 2020). Pregnancy is one of the most important periods of a woman, a family and a society. Pregnancy –induced hypertension (PIH) is one of the leading causes of maternal and prenatal mortality (Sebastian,2019). Pregnancy –induced hypertension is the third leading cause of maternal mortality world- wide after indirect cause of death in pregnant women, such as HIV and Diabetes, and post-partum hemorrhage (PPH). It has been associated with long-term health problems such as kidney failure, chronic hypertension, or nervous system disorder (Abou zahr, 2016).

The National high blood pressure education programme (NHBPE) in United State classifies hypertension disorders of pregnancy into the following categories: Chronic hypertension, Gestational hypertension and

post-partum hypertension. Hypertension in pregnancy is defined as a systolic of 140mmhg or greater or diastolic of 90mmhg or greater.

- *Chronic hypertension:* This happens when you had high blood pressure before you became pregnant, and it continues during pregnancy. Hypertension that develops before you are 20 weeks pregnant and continues during the pregnancy is also called chronic hypertension. If you have chronic hypertension, it will not go away after you have your baby. You will need follow up visits with your health care providers after you have your baby. Your health care provider may want you to keep taking medicine for your blood pressure.
- *Gestational hypertension:* This is hypertension that develops after the 20<sup>th</sup> week of pregnancy. Gestational hypertension usually goes away after you have your baby, but your health care provider will need to monitor your blood pressure to make sure that it is getting better.
- *Postpartum hypertension:* This is the high blood pressure that was present before delivery and continuous after delivery or that starts after delivery. This usually occurs within 48hours after childbirth but may occur up to 6 weeks after giving birth.

### **Complications, Risk Factors and Symptoms Associated With Hypertension in Pregnancy**

When hypertension during pregnancy is severe, it is a medical emergency that requires treatment right away (Lovens,2020). Women who have hypertension during pregnancy have a greater chance of developing hypertension later in life or during future pregnancies (Harisson,2021). In some cases hypertension during pregnancy can cause serious complications, such as: stroke, heart attack, injury to other organs, (such as kidneys, lungs, or liver), preeclampsia, convulsions or seizures, placental abruption e.tc. Hypertension during pregnancy can affect your baby. Your baby may be born early (prematurely), not weight as much as he or she should at birth (low birth weight), not tolerate labor well, leading to an unplanned cesarean delivery. This condition may also result in a baby's death before birth (still birth).

There are certain factors that make it more likely for you to develop hypertension during pregnancy (WHO,2018). These include: Having hypertension due to a previous pregnancy or a family history of hypertension, being overweight, being age 35 or older, being pregnant for the first time, being pregnant with more than one baby, becoming pregnant using fertilization methods such as in vitro fertilization (IVF), having other medical problems such as diabetes, kidney disease or lupus. Some of the early symptoms of hypertension during pregnancy include: headache, nausea or vomiting, abdominal pain, dizziness e.tc other symptoms of serious complication include: severe abdominal pain, severe headache, serious vomiting, sudden rapid weight gain or swelling in your hands, ankles or face, vaginal bleeding, blood in your urine, shortness of breath or chest pain, weakness on one side of your body or difficulty speaking.

### **Prevalence of Hypertension in Pregnant Women**

Hypertension during pregnancy continues to be a matter of concern. Risk factors profiling of pregnant women is of utmost important to identify those who may be likely to develop hypertensive disorders during pregnancy (Zack,2020). Hypertension in pregnancy is a major challenges in antenatal practice due to its important on obstetric and fetal outcomes. Hypertension plays a significant role in up to 15% of complications over the course of pregnancy and the postpartum period (WHO,2020). Hypertension disorders of pregnancy encompass preexisting (or chronic) hypertension, gestational hypertension, preeclampsia, and eclampsia; accounting for an estimated prevalence of 5% to 10% in women belongings to the reproductive age group (Umesawa,2017). These are significant contributor to maternal and perinatal

morbidity and mortality and account for 30,000 maternal death annually at the global level and 10% to 15% maternal death in low – and middle – income countries (Hafez, 2014). A multicenter study performed in four developing countries (Nigeria, India, Pakistan and muzambique) found that one out of every ten pregnant women had hypertension (magee,2019). Studies have found pregnancy – induced hypertension to be a significant independent risk factor for developing gestational diabetes mellitus (Aburezq, 2020).

The risk of developing cardiovascular disease in later life is reportedly higher among women with history of raised blood pressure during pregnancy (WHO, 2020). This has been attributed to the presence of common cardiovascular disease risk factor such as type of diabetes, chronic hypertension, and raised blood lipids associated with rapid urbanization and changing lifestyle (stuart, 2018). The incidence of hypertension during pregnancy is on the rise and is associated with an increased risk of fetal growth retardation and adverse birth outcome (Doke, 2019). Studies from india report that hypertension during pregnancy may contribute to up to one- third of maternal death (Konar, 2019).

### **Health Education Programmes**

Health education programmes are planned opportunities for people to learn about health, and to understand voluntary changes in their behavior (Jasmon, 2022). Such programmes may include providing information, exploring values and attitudes, making health decisions and acquiring skills to enable behavior change to take place. They involved developing self-esteem and self-empowerment so that people are enabled to take action about their health. This can happen on a personal one –to one level such as health visitor/client, teacher/pupil, or in a group such as smoking cessation group or exercise class, or reach large population groups through the mass media, health fairs or exhibitions (morgan,2018). Health education programmes may also be a part of health care and personal social services, and because of this it is useful to understand the concept of primary, secondary and tertiary health education (Furry,2020).

- *Primary health education:* This would reflect McKinley’s (1979) vision of upstream, prevention activity. It is directed at healthy people, and aims to prevent ill health arising. Most of health education for children and young people falls in to this category, dealing with such topics as sexual health, nutrition and social skills and personal relationships, and aiming to build up a positive sense of self-work in children. Primary health education is concerned not merely helping to prevent illness but with positive wellbeing.
- *Secondary health education:* Health education plays a significant role when people are ill. It may be possible to prevent ill health moving to a chronic or irreversible stage, and to restore people to their former state of health. This is known as secondary health education, educating patients about their condition and what to do about it. Restoring good health may involve the patient in changing be behavior (such as stopping smoking) or in complying with a therapeutic regime and, possibly, learning about self-care and self-help. Clearly health education of the patient is of great importance if treatment and therapy are to be effective and illness is not to recur.
- *Tertiary health education:* There are, of course, many patients whose ill health has not been, or could not be prevented and who cannot be completely cured. These are also people with permanent disabilities. Tertiary health education is concerned with educating patients and their care givers about how to make the most of the remaining potential for healthy living, and how to avoid unnecessary hardships, restrictions and complications. Rehabilitation programmes contain a considerable amount of tertiary health education with a focus on improving quality of life.

### **Importance of Health Education Programmes**

1. Health education programmes can improve physical, psychological, educational, and work outcomes for individuals and help control or reduce overall health care costs by emphasizing prevention

of health problems, promoting healthy life styles, improving patient compliance, and facilitate access to health services and care.

2. Health education programmes play a role in creating healthier individuals, families, communities, workplaces and organizations.
3. Health education programmes contribute an environment that promotes and supports the health of individuals and the overall public.
4. Health education programmes take advantage of pivotal position of their setting (for example, schools, work-places, health care organizations, or communities) to reach children, teenagers, adults, and families with the knowledge and skills they need to make informed decisions about their health.

### **Role of Health Education Programme in Reducing the Prevalence of Hypertension in Pregnant Women**

Health education programmes are a bridge between medicine and health and are part of an ongoing dialogue about how to improve the health and wellbeing of individuals across settings (mark,2020). Health education programme is an important tool which helps in reducing the prevalence of hypertension among pregnant women and other complications associated with pregnancy. There were many studies done which found that educated women have better pregnancy outcomes compared with uneducated women and that education during antenatal period can reduce pregnancy and delivery complications (Harrisson,2021). Health education programme helps in reducing the prevalence of hypertension among pregnant women in the following ways:

1. Health education programme provides an important opportunity for discussion between pregnant women and a health care provider about health behavior during pregnancy such as avoiding products that contain nicotine or tobacco. These products include cigarettes, chewing tobacco e.tc. are one of the major cause of hypertension and other pregnancy related complications. Avoiding smoking helps a lot in reducing the prevalence of hypertension among pregnant women.
2. Health education programme create awareness and encourage pregnant women to engage on regular exercise. Exercise increase the efficiency of heart muscles this enables the heart to pump blood with less pressure. Exercise also reduced the risk of becoming obese. Obesity is a risk factor of hypertension. Conclusively, exercise plays pivotal role in reducing the prevalence of hypertension among pregnant women.
3. Health education programme helps pregnant women to know the relationship between stress and hypertension and the coping strategies to relief stress. Stress is a major risk factor of hypertension, it cause a heart to pump blood with high pressure. Avoiding stress or taking measures to relief stress helps in reducing the prevalence of hypertension among pregnant women.
4. Health education programme encourage pregnant women for antenatal care visit. During the antenatal care their blood will be checked and monitor to know whether they are hypertensive or they are at risk of becoming hypertensive so that appropriate measures will be taken. This helps in reducing the prevalence of hypertension and other complications associated with pregnancy.
5. Health education programme enlighten and encourage pregnant women to take adequate rest and sleep. Adequate rest and sleep helps in reducing the risk of becoming hypertensive.
6. Health education programme promotes postnatal family planning/birth spacing. Frequent giving birth is associated or is a risk factor of hypertension. Family planning reduced the prevalence of hypertension among pregnant women.
7. Health education programme foster a good relationship between husband and wife. Through health education programme, pregnant women become more close to their husbands this helps them to get

maximum support, care, respect and love from their husbands which in turns decrease the chance for them to develop hypertension.

8. Health education programme encourage pregnant women on healthy eating. Such as green vegetables, it is rich in potassium and magnesium. These minerals lowers blood pressure.

**Conclusion** Hypertension in pregnancy has remained as one of the world's most important health problems. Pregnancy is one of the most important periods of a woman, a family and a society. It is a time of enjoyment and fulfillment of womanhood. Naturally pregnancy goes with significant physiological changes such as palpitations and signs such as an ejection of systolic murmur. However, the very high level mortality and morbidity in pregnant women in developing countries like Nigeria puts them in a high risk group, however complications during pregnancy especially hypertension have negative effect on the women and child birth which is the leading cause of death among women of reproductive health. Health education programmes are the product of deliberate effort and work by many people and organizations to address a health concern in a community, school, health care organization, or work place. Health education programme is one of the most important tool used in reducing the complications associated within pregnancy which decrease maternal mortality and morbidity.

### Recommendations

1. Government should develop appropriate policy that need to be put in place to reduce the work load on pregnant women, such policies may include amongst others pregnant leave. This will helps in reducing the stress and pressure on pregnant women which in turns reduce the prevalence of hypertension among them.
2. Adequate family planning methods should be made available and should be put in place in order to check the number of children a woman will have by reducing her likelihood of hypertension in pregnancy.
3. There is need for government to make more effort through organized health education programmes to inculcate in pregnant women a positive attitudes and healthy life style towards gestational hypertension so as to reduce prevalence of gestational hypertension in Nigeria.

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