



THE IMPACT OF CARDIOVASCULAR DISEASE ON PREGNANT WOMEN, IMPROVISING SELF-CARE AND ADVISORY MANAGEMENT

Salin Mathew¹, Dr. P. Shanthi IDA Sophia²

Department of Nursing

^{1,2}Shri Venkateshwara University, Gajraula, (Uttar Pradesh)

Abstract

The purpose of this study is to analyse the impact of cardiovascular disease on pregnant mothers and to elucidate self-care practises among moms with such disease. Several surveys are also done in order to managing the pregnant patients with cardiac disease. The goal of this study is to determine the level of knowledge about cardiovascular disease among pregnant mothers. The current study employed a non-experimental descriptive research design.

Keywords

cardiovascular disease, pregnancy, self-care management

Introduction

During the last 20 years, the populations of pregnant females have changed, result in a spike in the volume of young patients with metabolic syndrome. Several numbers of reasons have contributed to these advancements. Its most typical is a transfer in a patient's reproductive age from her mid-twenties to their mid-30s [1], therefore results in increased in the incidence of pregnancy patients with severe antihypertensive and vascular disease [2]. Reproductive age women having in artificial insemination form a separate at-risk group. Whether the condition was rectified in adolescence or is now being treated, the number of births from adults have severe heart illness has doubled. New mothers with heart events face severe risks to their own and future health habits, including a heightened incidence of underlying condition worsening, acute circulatory metabolic derangement, low birthweight, and fatalities. Clients with systemic arterial insufficiency, parental cerebral hypoxia, inadequate prenatal functionality classification, tachycardia, especially coagulation needs are highly sensitive to maternal and neonatal issues[3]. The most frequently acknowledged cause of backhanded maternal deaths, as well as the most widely recognised cause of death in general, was cardiac disease, according to the most current CEMACH data. Specifically, mortality due to myocardial localised necrosis, thoracic aortic dissection, and rheumatic mitral stenosis increased from 2003 to 2005[4].

To treatment unborn clients with vascular disease, a dedicated team of doctors, including a heart, coronary physician, nurturing medicines expertise, and countries . other countries, is required, also with object of providing the best prenatal result. Patients with significant attack and stroke should have their babies in a secondary care facility that can provide combined specialist medical access to medical. The hormonal disruptions while maternity, and also the care of all the most common cardiac problems affecting women who are pregnant, including hemodynamic



childbirth illnesses, defective valvular pathogens, arrhythmia, other artery ailments, are all studied in this research.

Objectives of the study

The objective of this study seems to be to determine the influence of heart events on childbearing. Furthermore addition, the additional goals of the project are included in this data analysis:

- To investigate how to handle a pregnant mother who is having problems while her pregnancies.
- To modify childbearing, the paternal aerobic system undergoes a variety of alterations in relation to just a necessary systemically vasodilation.
- Being aware of the reasons of established high cholesterol during childbearing.
- To be familiar with the basic treatment guidelines for atherosclerotic cardiovascular diseases, ischemic heart disease, including ventricular arrhythmias that occur during the project.

Need of the study

Individuals with underlying cardiovascular disease have a limited pattern of hemodynamic adaptations during childbearing, according to this study. Pulmonary hypertension progresses like a result of something like the perinatal mortality hemodynamic stress. In individuals with underlying cardiovascular diseases, our findings suggest a significant decrease in ventricular end - diastolic myocardial capabilities following childbirth.

Limitations

Following would be the limitation of the Study:

- The abrupt nature of cardiovascular changes can be a challenge particularly for women with limited cardiovascular reserve would be considered as limitation of the study.
- A possible limitation of the study would be the ischemic or myocardial injury.
- Apparatus error can be considered as limitation of the study.

Statement of the problem

The statement of the problem is described as “The impact of cardiovascular disease on pregnant women, improvising self-care and advisory management”.

Research strategy

We start with the strategy of descriptive research which allows us to data collecting and management. Following the collection of data, we would investigate and conduct an analysis of the whole sampling. Most can be accomplished in one of two main ways: primary research collecting or deductive approach.



This principal focus is a site where we can receive maximum knowledge or authentic details about something like a topic. These data might be acquired mostly using approved fully accessible and shuttered questions.

Those business' publicly income statement, and other magazines and newspapers publications, should be used to obtain qualitative sources. This is a minor but crucial aspect of the research. Data for this section would be gathered via websites, journals, books, published articles, and an organization's records.

Research hypothesis

The primary hypothesis of the research is cardiovascular disease in Pregnancy affect the women health negatively.

Furthermore, some secondary hypothesis also exit as follows

(i) Whenever atherosclerotic cardiovascular disorders, myocardial infarction (mi, and abnormal heart rhythms occur after childbirth, there are broad therapeutic recommendations to follow.

(ii) Motherhood is nearly entirely composed of adaptive alterations in the paternal circulatory system in the form of system is a measure vasodilation.

Sampling of data

This research studied 500 women as sample which was taken from many hospitals and clinicsA total of 45 clinicians being questioned. Ladies with common congenital illness are more likely to have kids have catastrophic high blood pressure, hence specialised cardiac tests should have been offered from 15 and 17 months at least. The approach of randomization has been applied.

Data analysis and Interpretation

The technique of giving ordering, purpose, and explanation to a large volume of data is known as data mining. The experimental tests will be analysed using contents methodological approaches. It's a crucial and interesting stage there in research methodology. Collection of information is followed by analysis in any and all investigations. The quantifiable tests were done with SPSS 15.0, another all acknowledged genuine computing application. Illustrations and statistics were created using Computer Software with Microsoft Office.

➤ **Impact of cardiac disease**

There are various heart conditions found in pregnant women. The survey shows the following data

Opinion	No. of respondent
Fatigue	59
Shortness of breath	70
Dyspnea on exertion	80
Paroxysmal nocturnal dyspnea	23
Orthopnea	48
Increasing edema	41
Chest pain or angina	20
Lightheadedness	25
Syncope	56
Personal or familial history of heart disease especially in pregnancy	78

Table 1: The various heart conditions of pregnancy

This table 1 and survey research explain the various conditions of pregnancy, 59 respondents are agree with Fatigue, 70 respondents are agree with Shortness of breath, 80 respondents are agree with Dyspnea on exertion, 23 respondents are agree with Paroxysmal nocturnal dyspnea, 48 respondents are agree with Orthopnea, 41 respondents are agree with Increasing edema, 20 respondents are agree with Chest pain or angina, 25 respondents are agree with Lightheadedness, 56 respondents are agree with Syncope, 78 respondents are agree with option of Personal or familial history of heart disease especially in pregnancy.

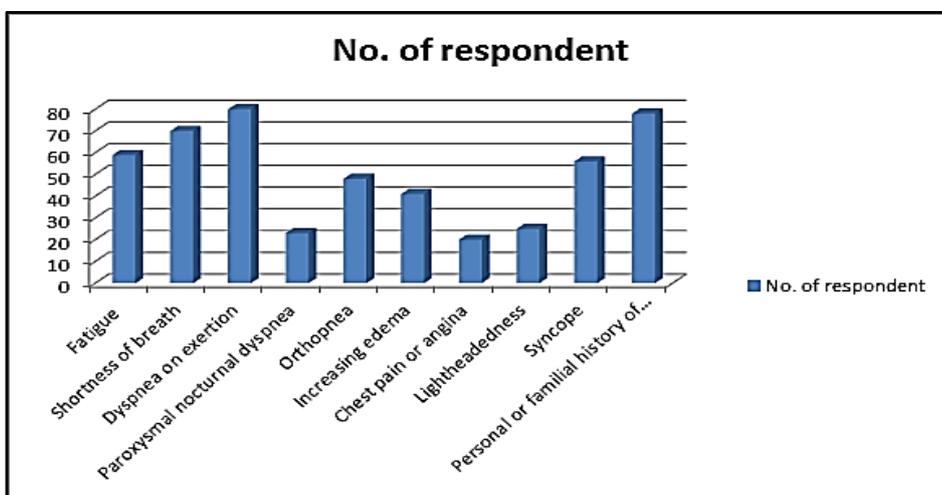


Figure 1: The various heart conditions of pregnancy

Due to the above stated conditions, complications related to heart disease may arise in pregnancy. Another survey for different complicated cases is given below.

Opinion	No. of respondent
Excess weight gain during pregnancy	92
Preeclampsia	48
Preterm birth	50
Intrauterine growth restriction	49
Hemorrhage	61
Placental abruption	48
Gestational diabetes	39
Progressive heart failure	68
Maternal or fetal death	45

Table 2: The following are some of the dangers illnesses such as heart disease during labor

This table 2 and survey research explain the Complications related to cardiac disease in pregnancy. 92 respondents are agreeing with Excess weight gain during pregnancy, 48 respondents are agreeing with Preeclampsia, 50 respondents are agreeing with Preterm birth, 49 respondents are agreeing with Intrauterine growth restriction, 61 respondents are agreeing with Hemorrhage, 48 respondents are agreeing with Placental abruption, 39 respondents are agreeing with Gestational diabetes, 68 respondents are agreeing with Progressive heart failure, 45 respondents are agree with Maternal or fetal death.

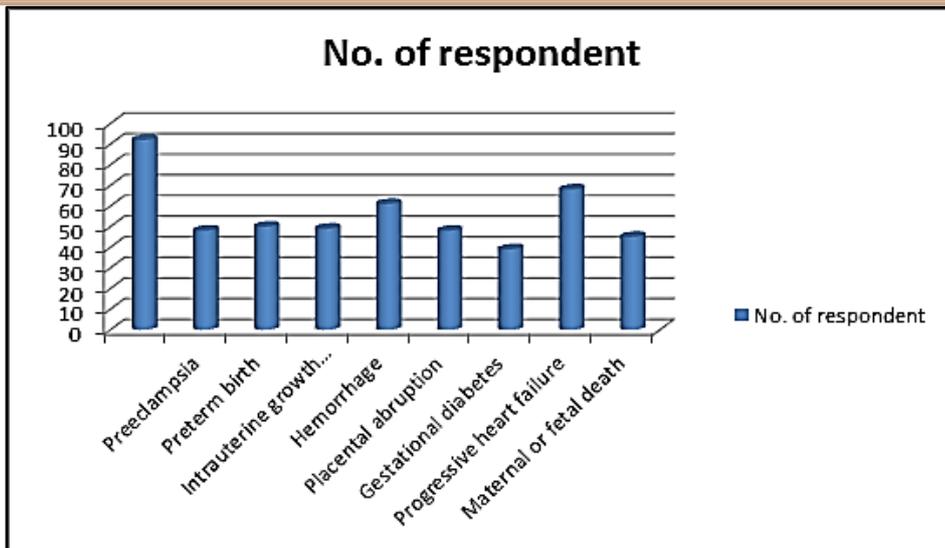


Figure 2: Complications related to cardiac disease in pregnancy include

Impact of cardiac disease are severe than expectation. It can cause or contribute to maternal death or other extensive situations. Surveys are done with different respondents to such cases and tabulated below.

Cases	Agree	Strongly Agree	Disagree	Strongly Disagree
Throughout the first weeks of gestation, an increase in pressure of 15 to 30 percent can contribute to increase in blood pressure(Fig.3)	180	171	90	59
In India, coronary illness is still the leading cause of maternal death(Fig.4)	168	149	93	90
Cardiac disease can stay undiagnosed which may cause to cardiovascular decompensation (Fig.5)	150	139	115	96
The effect of physiological changes to a pregnant lady with the cardiac disease will differ as per the sort and seriousness of the disease (Fig.6)	169	149	118	64

Table 3: Impact of cardiac disease, causing different situations

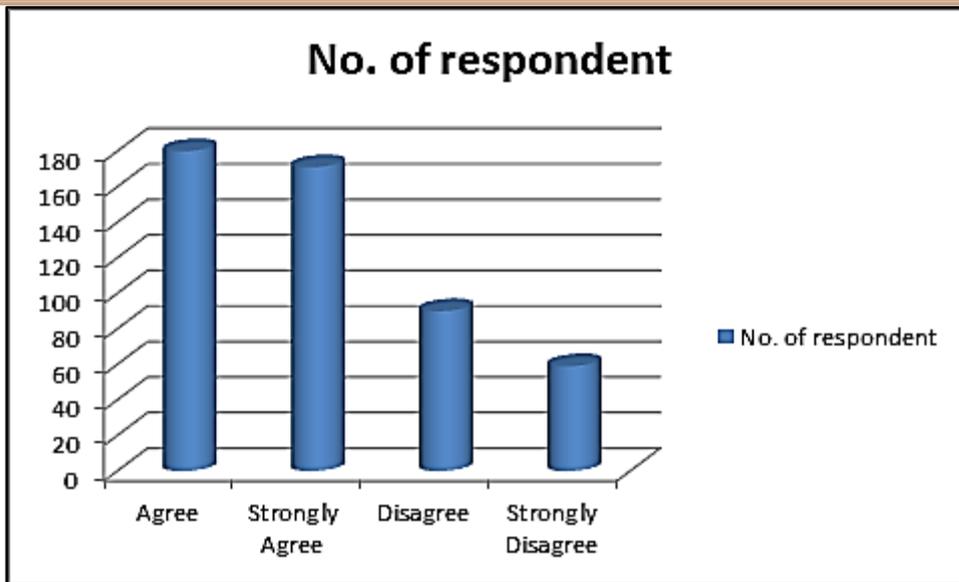


Figure 3:From the first weeks of gestation, the heart rate increases by 15 to 30 percent, which further corresponds to something like an increased heart rate.

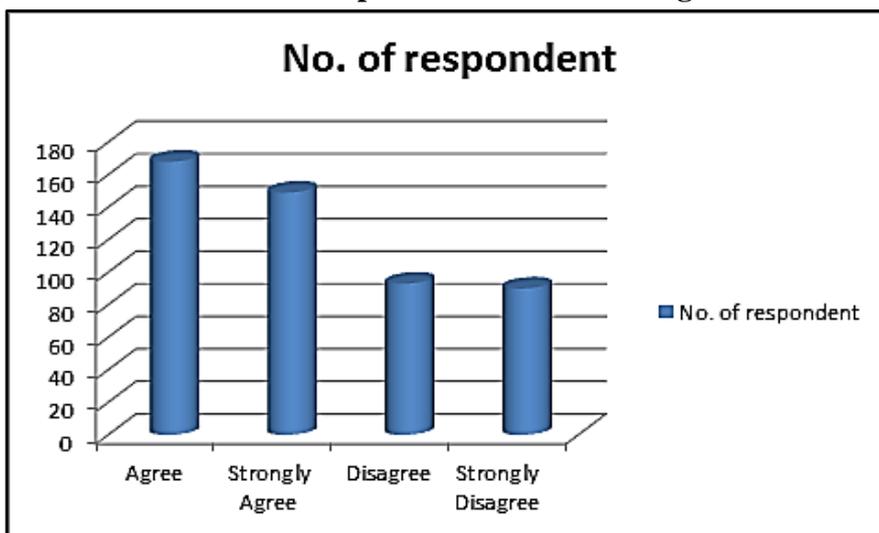


Figure 4:Cardiac disease remains the main source of maternal death in India

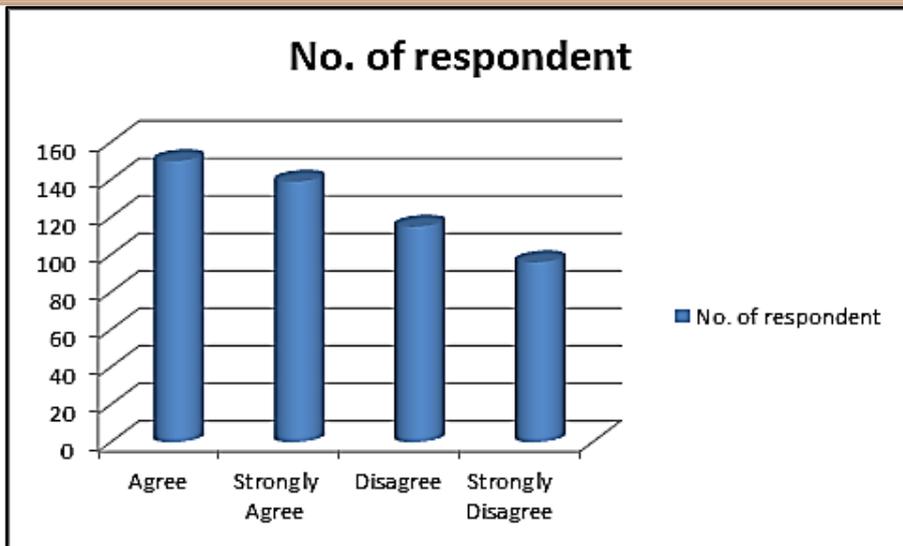


Figure 5: Cardiac disease can stay undiagnosed; it might give cardiovascular decompensation during pregnancy

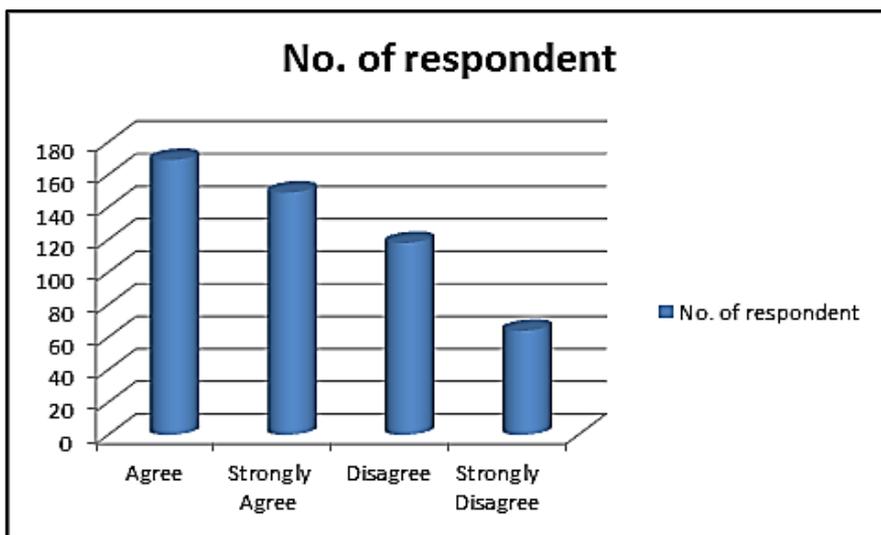


Figure 6: The effect of physiological changes to a pregnant lady with the cardiac disease will differ as per the sort and seriousness of the disease

Women and girls have an increased concentration of metabolic syndrome (CVD), with CVD amongst pregnant females offering a complex clinical scenario for which the prescribing psychiatrist's responsibilities stretches to the unborn human. Obstetric eddies undergo significant alterations that may have the ability to harm maternal and foetal health, particularly in the context of chronic cardiac problems. a maximum of While having no prior medical history, 4% percent infants could result in cardiac problems.

➤ **Self-care and advisory management**

The first tip for self-care is, women should be concerned to go for a consultant from an early state of pregnancy. We have done a survey on which type of specialist should be consulted at any of the above cases and survey research (Fig. 7) explains that 220 respondents are agree with High-risk obstetrician, 160 respondents are agree with Cardiology, 120 respondents are agree with Perinatologist.

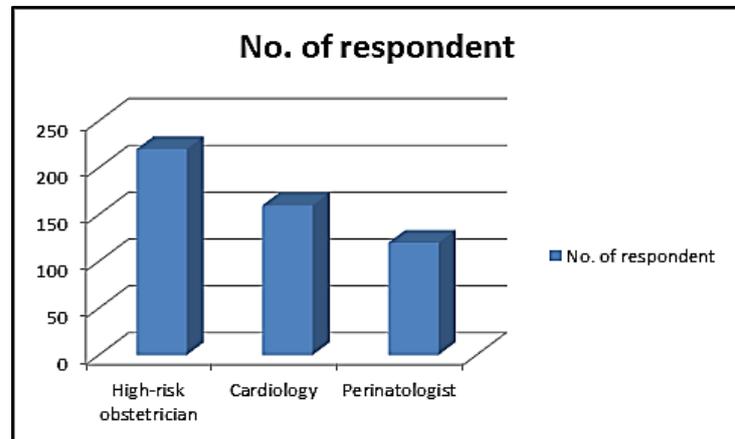


Figure 7: Consultations should include

Unless there are specific obstetric indications of breakdown in cardiac activity that necessitates an early birth, most cases with heart problems are advised for vaginal delivery [5]. Vaginal delivery with low-measurements provincial analgesia and careful fluid management is the favored delivery mode as a rule. The survey research (Fig. 8) for this case explains that 149 respondents are agree, 139 respondents strongly agree, 109 respondents disagree, and 103 respondents strongly disagree to the vaginal delivery method.

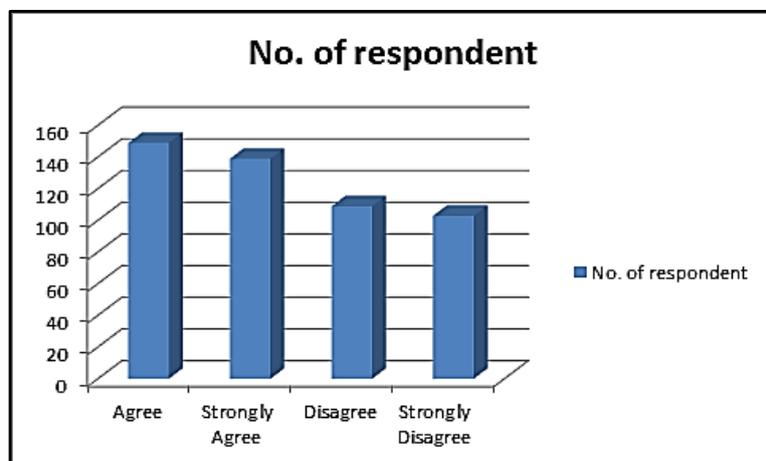


Figure 8: Vaginal delivery with low-measurements provincial analgesia and careful fluid management is the favored delivery mode as a rule

To direct comfortably through pregnancy, women with heart disease need support from a multidisciplinary team. Careful pregnancy and delivery management is required. To avoid complications, proper organization of treatment and contact among all professionals involved in the care of these women is of paramount importance. The new Guidelines for the treatment of cardiovascular diseases during pregnancy from the European Society of Cardiology include specific medical knowledge and guidance to support multidisciplinary teams in their tasks.

Survey research has been done on some factors which can improve the practice of managing a pregnant patient with cardiovascular disease and different opinions are summarized below.

Reliable factors to manage the pregnant patient with cardiac disease	Agree	Strongly Agree	Disagree	Strongly Disagree
Decrease by use of a large number different pharmaceuticals and prescriptions that are commonly taken at all other occasions of that week(Fig. 9)	155	140	121	84
Should coronary heart diseases, ischemic heart disease, including cardiovascular events occur during maternity, there are still some broad therapeutic strategies to follow(Fig. 10)	149	138	108	105
Nurses have a vital role in the healthcare setting (Fig. 11)	178	159	111	52

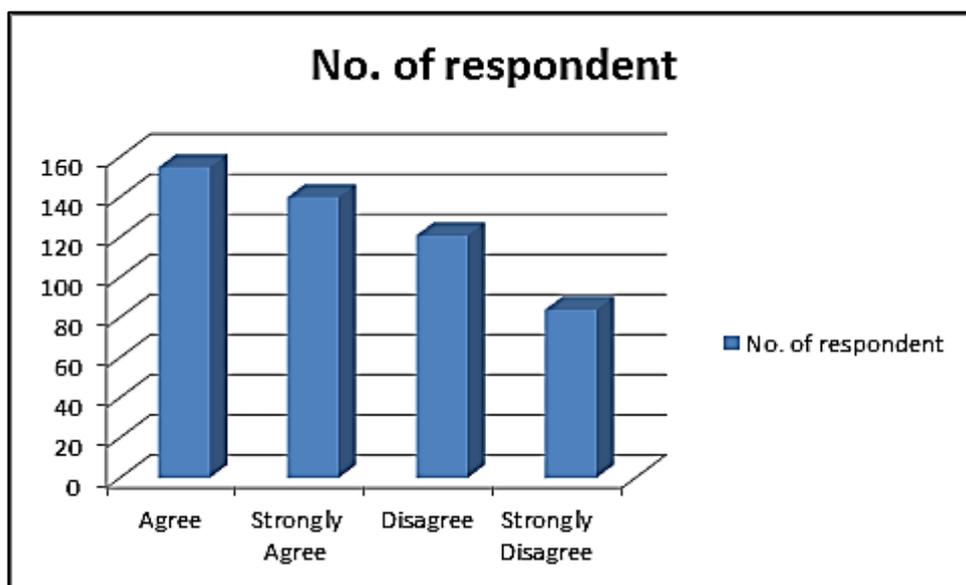
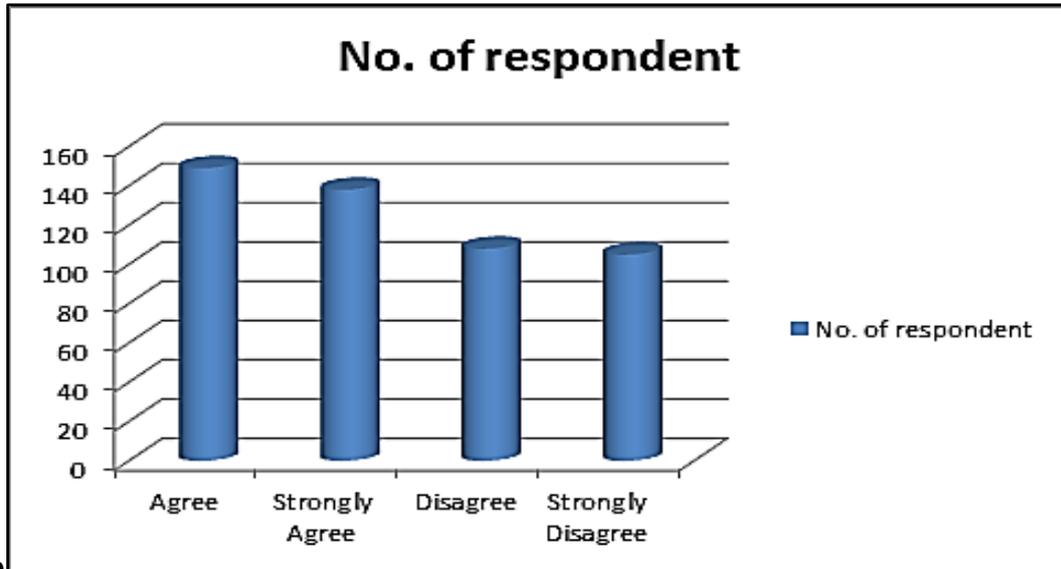


Figure 9: Many treatments and pharmaceuticals that are commonly taken at the other points of the year may indeed be harmful to pregnant ladies and/or their children in the



womb

Figure 10: Once ischemic heart malformations, ischemic heart disease, and dysrhythmias occur during gestation, there's a few broad therapeutic strategies to follow

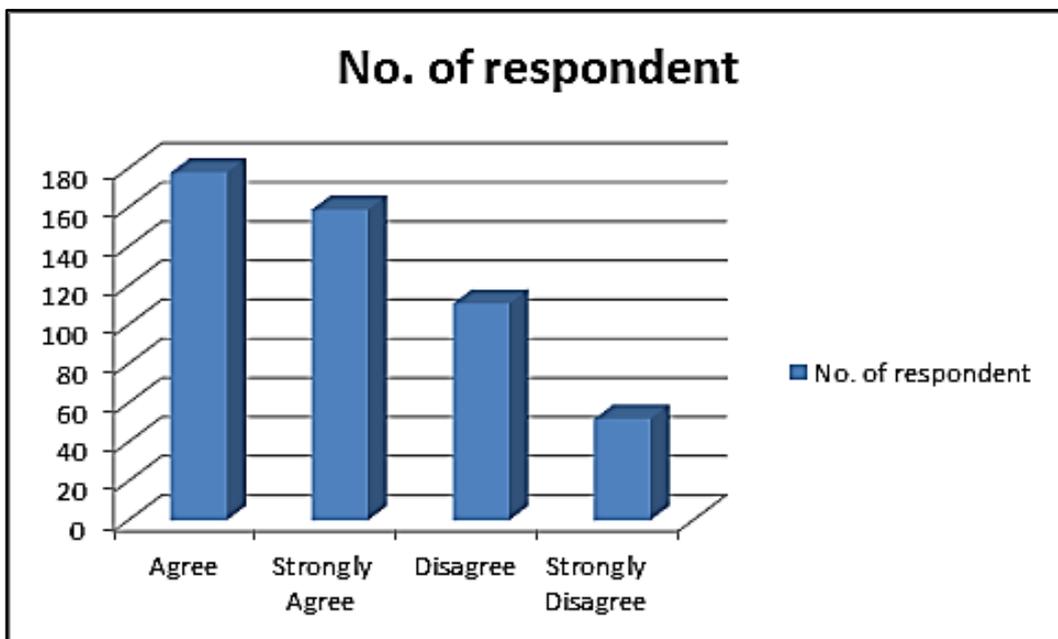


Figure 11: Nurses play a significant role inside this therapy of prenatal treatment of heart illness



Conclusion and Discussion

Cardiac illness is the most commonly recognized cause of maternal death in India. Cardiac disease might go unnoticed for a long time, causing cardiovascular decompensation during pregnancy, delivery, or the infant blues. Cardiologists are increasingly likely to be called upon to treat these women, and cardiovascular teaching programmes are increasingly offering instruction on managing cardiovascular problems during pregnancy.

Early risk assessment, progression, general observing for weakening, delivery planning, and surveillance for disintegration in the short baby blues period are the main elements of management. In most cases, vaginal birth with low-dose provincial analgesia and careful fluid management is the preferred delivery method. Generally, pulmonary embolism does not induce dyspnea or tachycardia. If the tests for this are negative, an echocardiogram and a cardiology supposition opinion should be undertaken. The cardiovascular system is put to a lot of work during pregnancy. As a result, it follows that a lady with circulatory compromise due to cardiac disease necessitates authoritative input and attentive supervision prior to, during, and after childbirth.

However, there are several unsolved concerns about the best treatment, and clinicians usually work in data-free environments. Fortunately, this topic is increasingly being handled at national events, and science appears to be progressing at a faster rate than in the past throughout the previous decades. As a result, additional research on appropriate care for these women during pregnancy may become available in the future, potentially improving outcomes for both mothers and foetuses.

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