INTRODUCTION
Placenta is the most accurate record of the infants’ prenatal experience as stated by Benirschke [1]. Placenta is a vital organ for foetal development, derived from both foetal and maternal tissues, the maternal portion being the decidua basalis and the foetal portion is chorion frondosum [2]. It is basically meant for exchange of nutrients between maternal and foetal circulation to ensure an optimal environment for foetal growth and development [3, 4]. Foetal membranes chorion and amnion cover the placenta [2].

Common pathologies of pregnancy like intrauterine growth retardation, preeclampsia (pregnancy induced hypertension), are associated with incomplete vascular remodelling in the placenta [5]. It is a medical problem, when pregnancy is complicated by diabetes and or hypertension which affect maternal health, architecture and functions of the placenta may even jeopardise the foetal normalcy.

The placenta being the bridge between maternal foetal activities, considered as a window through which maternal dysfunctions and their impacts on foetal well being can be understood [6]. Placental examination is of critical value not only in gathering knowledge about aetiologies, outcome and management of the pathological processes affecting pregnancy, but also in improving the management in subsequent gestations [3, 4].

Hypertension, complicating 7% to 15% of all pregnancies, is a leading cause of maternal and foetal morbidity, particularly when elevated blood pressure (BP) is due to preeclampsia, either alone (pure) or “superimposed” on chronic vascular disease [7, 8].

Preeclampsia is a major cause of preterm birth and an early marker for future cardiovascular and metabolic diseases, whereas preterm delivery is associated
with immediate neonatal morbidity and has been linked to remote cardiovascular and metabolic disease in the newborns [8-12].

Pregnancy Induced hypertension is that hypertension that develop as a direct result of gravid state. It includes Gestational hypertension, pre-eclampsia and eclampsia. Where rise in systolic pressure is 30 mm Hg or diastolic pressure is 15 mm Hg over the previously know pressure [13].

Gestational hypertension is sustained rise of blood pressure to 140/90 mm Hg or more on at least two occasions 4 or more hours apart beyond the 20\textsuperscript{th} week of pregnancy or during the first 24 hrs after delivery in a previously normotensive woman [13]. Prevalence 7-15% in nulliparas & 2-4% in multiparas [13].

Pre-eclampsia is a multi system disorder of unknown aetiology characterised by development of hypertension to the extent of 140/90 mm Hg or more with proteinuria after 20\textsuperscript{th} week in a previously normotensive and non-proteinuric patient [13].

Incidence: 5-15%, In primigravida: 10%,In Multigravida 5% [14]

Pre-eclampsia when complicated with convulsion and/or coma is called eclampsia [13].

It may occur in patient with Pre-eclampsia or Pre-eclampsia superimposed on essential hypertension or chronic nephritis. Incidence in primigravidae 75%, antepartum 50%, intrapartum 30% and postpartum 20% [13].

Chronic hypertension disease (CHD) is defined as the presence of hypertension of any cause antedating or before the 20\textsuperscript{th} week of pregnancy and its presence beyond the 42 days after delivery [13].
Overall incidence 2-4% of which 90% due to essential hypertension [13].

Diabetes mellitus is a chronic metabolic disease due to either insuline deficiency or peripheral tissue resistance to the action of insulin which causes hyperglycemia [13].

About 1-14 % percent of all pregnancy are complicated with DM and 90% of them are Gestational diabetes mellitus (GDM) and 50% of this becomes overt diabetes (type-2) in 5 to 20 yrs [13].

Glucose tolerance test (GTT) is done to test diabetes. Test done before 20th week and thereafter. If fasting exceeds 95 mg/dl or if after 2 hrs of meal (75gm Glucose) over 120 mg/100ml [13].

It is abnormal carbohydrate tolerance with onset or first detected during the present pregnancy [13].

True GDM present late in the 2nd or 3rd trimester [13].

Potential candidates for GDM [13]:-

- Positive family history of diabetes
- Previous birth to overweight baby (≥ 4kg)
- Previous still birth with pancreatic islet hyperplasia.
- Unexplained perinatal loss.
- Presence of polyhydramnios or recurrent vaginal candidiasis in present pregnancy.
- Persistent glycosuria.
- Age over 30 yrs
• Obesity

• Ethnic group (East Asian, Pacific Island ancestry)