INTRODUCTION

Preterm labour and delivery is a major cause of perinatal morbidity and mortality in developed world and account for 8-10% of all births ***(Andrews et al., 1995).***

The aetiology of perterm labour is multi-factorial and as yet poorly understood. The study of these factors is an essential starting point for planning and development of interventional studies and for improvement of obstetric care to reduce the number of preterm deliveries which are associated with high rates of neonatal morbidity and mortality ***(Colton et al., 1995).***

Although much attention has been given to the prevention of preterm labour, the mainstay of management remains effective treatment once preterm labour has begun. However, the efficacy of currently available tocolytic agents is controversial as regard to maternal and neonatal outcome ***(Smith and Brien, 1998).***

Agents that have been used in the treatment of preterm labour include; alcohal, B agonists, magnesium sulfate, nifedipine and prostaglandine inhibitors. Oral B agonists are currently the mainstay of long-term therapy, however, they have been associated with undesirable and potentially life threatening side effects for the mother ***(Richard and Klingelberger 1987).***

Nitric oxide is a potent endogenous smooth muscle relaxant in the vasculature, gut and genitourinary tract. Decreased synthesis of nitric oxide in the uterus is associated with initiation of labour in animals ***(Moncada et al.,1991).***

Various studies involving human case series ***(Rowland et al., 1996),*** suggest that nitroglycerin, a nitric oxide donor drug, may be an effective tocolytic. A number of case reports also suggest that nitroglycerin is effective antepartum, intrapartum and postpartum in producing acute uterine relaxation ***(Smith and Brien, 1998).***

AIM OF THE WORK

The aim of this work is to assess the efficacy of nitroglycerin as a tocolytic in the treatment of preterm labour as regard to prolongation of gestation and maternal outcome.