***CORRELATION BETWEEN PLACENTA WIEGHT***  ***, UMBILICAL CORD LENGTH AND***  ***BIRTH WEIGHT AND ACTIVITY***

***INTRODUCTION***

***IN RELATION BETWEEN PLACENTA WEIGHT AND FETAL WEIGHT ::***

The ability of the fetus to grow and thrive in utero depends on the placental function .1 The ratio between placenta weight and birth weight of the newborn is varies, However, methods of measurement vary widely particularly due to differences in placental preparations.2 Placental weight and its relationship to infant size at birth have been studied for more than a century.3 Past studies indicated that placental weight was associated with pregnancy outcome. High placenta weight was associated with a poor perinatal outcome, a low Apgar score, respiratory distress syndrome and prenatal death; whereas a low placental weight was associated with medical complications in the mother.4 Barker et al reported that altered growth of the placenta was a predictor of maternal medical diseases including cardiovascular disease, hypertension and diabetes mellitus.5 Other factors such as race and socioeconomic status also affect the placental weight.

Careful examination of the placenta can provide insight regarding the in utero environment of the fetus before delivery. Two standard references are endorsed by the College of American Pathologists: absolute placental weight and fetal/placental weight (F/P) ratio. Clinical associations with placental weights and F/P ratio have been documented. For example, small placentas may be associated with trisomies, whereas large placentas may be associated with maternal diabetes. Disproportionately large placentas (low F/P ratio) could reflect acute placental injury resulting in villous edema or a chronic process requiring placental overgrowth, such as maternal anemia or malnutrition. Disproportionately small placentas (high F/P ratio) may be seen in maternal hypertension, and may result in fetal distress or low Apgar scores. Recent birth weight tables show fetal birth weights at term have increased over time. There is a positive correlation between fetal weight and placental weights. The standard method of weighing the placenta, after trimming the placental disk of membranes and umbilical cord, may also merit simplification. Leary et al suggested that the fetal weight/placental weight correlation does not change when placentas are weighed trimmed compared to when they are weighed untrimmed.12 The placenta can be weighed with membranes and cord attached, but the standard approach since its proposal by Benirschke in the early 1960s is to weigh the placenta after the extra placental membranes and the umbilical cord are trimmed from the disk.13 This limits the measurement to the weight of the placental disk, the actual nutrient exchange part of the placenta. However, Leary et al suggested that trimmed and untrimmed placental weights are exchangeable, based on their high correlation.12 Paucity of report in literature on placental weight and its relationship to the weight of the neonate at birth in albatol teaching hospital , informed this study