Received : 03 February 2024, Accepted: 07 March 2024 DOI: <u>https://doi.org/10.33282/rr.vx9i2.20</u>

# FINDING THE RESULT OF TWIN PREGNANCY FOR NEWBORNS AND ANALYZE THE OUTCOME FOR NEWBORN PATIENTS FOR BOTH REGISTERED AND UNREGISTERED PATIENTS

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## ABSTRACT

**Background:** The risk of twin pregnancy is high. Specific emphasis from obstetricians is needed for twin pregnancy. Around 01% of all embryos are double and 10% perinatal deaths are linked to twinning. Many problems may occur with twins, such as anemia and birth delay.

**Objective:** To see the result of twin pregnancy for newborns and to analyze the accuracy between enrolled patients and non-registered patients.

**Methods**: This study was conducted in DHQ Hospital, Layyah. It took place between March 2022 and February 2023. There were 64 registered cases and 64 unregistered patients. Data on twins were gathered in 2 and 7 minutes about gestational age, death, admission to NICU and APGAR. These data have been obtained for both doubles so that this cross-sectional study may be compared and thus performed.

**Results**: For 2 weeks, the average gestation was 36.77. There was little difference in the average gestation of registered and unregistered patients. Twin I's 7 (52.8%) were SVD's, with LSCS' 63 (49.5%). Twin II had 65 (51%) SVDs while LSCS had 65 (51%). Living patterns between the registered and unregistered patients are not very variable; p>0.06. The 21 twins (15.9%) came to

an end and 110 (86.3%) survived. 10(8%) were born IUD and the rest 11 were killed perinatally. Unregistered patients had a higher expiration rate for both twin patients; p = 0.01. Five of twin I'm sick/toddy and cannot thus be moved to NICU. Of the other 118 twin 2, 37 (31.26 percent) had to move to NICU.

**Conclusion**: Unregistered individuals exhibited worse result in 1 and 5 minutes compared to registered groups for twins, admission to neonatal intensive care, and APGAR rating for both twins.

Keywords: Twin pregnancy; perinatal mortality, APGAR score, registered patients, antenatal care.

## **INTRODUCTION**

Compared to singletons, twinning adds a higher risk of pregnancy. They are highly risky as they enhance maternal and fetal hazards both during and throughout the prenatal period [1]. In North America and Europe, the occurrence of double pregnancy is 11/1000. The occurrence of merozygote twins (identic twins) varies with age, race, symmetry and usage of infertility treatment methods, to 3,5/1000 births. In individuals with ovulation induction, the incidence of twinning is 20-40% higher [2].

Due to advances in prenatal and neonatal care, preterm work, less than the usual weight of newborns and fetal delays in growth are important problems with the neonatal result of multiple pregnancies [3]. Roughly 1% of all pregnancies are twin, and 13% are associated with perinatal deaths. Newborns are at high risk for acute respiratory disorder, IV, Twin transfusion syndrome, retinopathy, enterocolitis necrotic, patented ductus arteriosus and extended hospital stays. Newborns are at high risk for prenatal abnormalities. The second twin is more vulnerable to poor perinatal outcomes, which also rely on the presentation and delivery method3. Chorionic detection is extremely crucial, and monochorionic pregnancy monitoring is very necessary for prenatal treatment only if regular antenatal visits are carried out by the patients [4].

A prospective research at SGRH Lahore, which comprised 2 000 8 16 births over a period of one year, was carried out for 40 1 pair twins. 2.45 per cent were twin pregnancies among such births. There were 11 registered patients and thirty emergency patients. 78% of the vaginally and abdominally administered patients were administered for 9 (21.8%) patients. There were 4

fatalities intrauterine and 4 neonatal deaths.

In infants between 29 weeks of gestation and 7 days, the mortality rate was 9 percent. Prenatally, women have problems such as anemia, PIH and premature work [5].

Compared to singletons, twinning adds a higher risk of pregnancy. Accurate intervention helps with prompt registration. Proper advice should be provided on the necessity of regular prenatal checkups. As the unregistered mother has a positive correlation with increased risk of adverse maternal fetuses, patients should be referred to a well-equipped healthcare center early.

We receive approximately 42% unregistered cases of twin pregnancy in our hospital. Our study intended to determine if regular prenatal visits offer the perinatal result of double pregnancy a particular benefit to the patient.

### **METHODOLOGY:**

The study was done from March 2022 to February 2023 at DHQ Hospital, Layyah. The study comprised sixty-eight registered and sixty-eight patients unregistered. Group-A 68 cases registered and Group-B 68 cases not registered. Consecutive method of sampling was not utilized in probability. These are patients with twin gestation in the workplace who have completed three weeks of pregnancy. At least 5 prenatal visits are required for booked cases in the obstetrical department of the institution referred to above. The excluded individuals were: patients >35 years, patients identified with ultrasonography fetal abnormalities, medical illnesses including diabetes mellitus, breathing, heart, liver, intestinal issues, neoplastic or hematological conditions, patients with medical condition, Patient patients who first birth twin outside of the hospital and then take preterm, pre-membrane ruptures to the hospital. All patients with double pregnancy were admitted into the workplace by OPD and emergency after approval by the ethical hospital committee. Consent form has been received informatively. The duty doctor conducted a general physical review and a systematic assessment of the patient. All information about reservation status, gestational age and birth method was recorded on a Performa. APGAR perinatal mortality admission data were gathered. Data were gathered. These data have been collected for two twins so that this cross-sectional study and hence may be compared.

Every data is examined using version 22 of SPSS. For numerical data, e.g., gestation age and APGAR score, mean and standard deviation (mean + SD) were computed. Twin pregnancy

frequency and percentages were computed for admittances to NICU and perinatal death. The NICU admission rate was compared with the neonatal circumcision by Chi square testing.



Figure 1:

## RESULTS

128 women with twin pregnancy were involved in this study. The gestational age was between 28 and 42 weeks with 35.75 2.4 weeks in median pregnancy. In registered patients, the average gestational age was 37.091.6 weeks, in unregistered patients, 36.242.9. Hence more premature births relatively (Table 1).

Spontaneous vaginal births were mostly supplied. Twin I had 66(51,6%)SVDs and LSCS were 62(48.4%). Twins II had sixty-four (50) and LSCS had sixty-four (50) per cent. Of the twins I twenty (15.9%) expired and 110 (86.3%) survived. 10(8%) were IUD/morbid and the other 11 were deaths perinatal (Table 2).

The 18 (17.4%) twin II came to an end, and 112 (87.9%) survived. Eight (8 percent) were IUD/mortar and the rest twelve were perinatal (Table 3).

Of the twin 105 cases registered in 65 (2.57%), 17 instances expired from unregistered in 65 (24.5%). The probability value for this expiry difference between the groups was 0.01, i.e. (Table 2).

Of twin II, 01 cases out of 64 (6.25%) were registered whereas 16 of 64 cases out of 64 (25%) were registered cases unregistered. The probability value was 0.00 for this difference between two groups, i.e. (Table 3). There was therefore a considerably high death rate in unregistered patients.

Of twin I, 9 infants have IUD/mortuaries and cannot thus be sent to NICU. 36(30,25 percent) of the remaining 119 twin I needed NICU (Table 4).

7 infants had IUD/torture and so cannot have been sent to NICU among Twin II. Among the 121 twin I surviving, 39 (32.2%) needed NICU (Table 5).

Of the 64 (9.8 percent) patients that survived, 06 had to move to NICU instead of 32 (56.4 percent) of 57 cases that did not have to have to be registered. The likelihood value was 0.01, meaningful silent for this difference in the admission to newborn critical care between two groups (Table 4).

Of twin II survivors, 05 of 64 (6.8%) registered patients required NICU transfer, compared with 35 (59.7%) out of 56 unregistered cases. This difference was probably 0,00 in the admission of newborn intensive care units from two groups, i.e., quietly substantial (Table 5).

Therefore, the number of non-registered patients admitted to the NICU was far greater. For the twin I, the average APGAR score for the group registered was 8,77 1,65 and for the unregistered group, the average APGAR score was 6,65,54; for the APGAR score difference between two groups the probability value was 0,01, mean that there is a noiseless noise (Table 6).

Among twin I, the average five-minute APGAR score in the registered group was 9.36 1.72 and in the unregistered group the average APGAR score at 5 min. was 7.82, 3.8; the average 5-minute APGAR score was 0.01, i.e., significantly silent (Table 6).

Among twin IIs, in the registered group, the average APGAR rating was 7.76 1.45 and in the unregistered group, the average APGAR scoring was 5.8 2.33, The significance level for this variation was 0.01, i.e. a quiet meaningful (Table 7) in one minute APGAR score between the two groups.

Amongst twin II, the average APGAR rating in the registered group was 9.291.558 at five minutes while in the unregistered group the average APGAR rating was 6.842.76 at five minutes. The probability value for this five-minute APGAR difference between the two groups was 0.01.

Category	Average Std. Deviation		Std. Error Mean	
Gestation in weeks				
Registered	39.0967	2.61367	.20325	

Table 1: Contrast of gestational age of Registered and Un-registered cases:

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April 2024, Volume: 9, No: 2, pp.346-354 ISSN: 2059-6588(Print) | ISSN 2059-6596(Online)

Un Registered	37.247	3.92895	.36612

## Table 3:

Set	Mortality of twin-2	
	No	Yes
Registered	2	60
Un-Registered	18	47
Total	20	107

## Table 4:

Group	Shifting to NICU of twin I	
	Yes	No
Registered	7 (6.7%)	62
Un Booked	33 (56.4%)	27
Total	40	89

P value: 0.01

## Table 5:

Group	Shifting to NICU of twin II	
	Yes	No
Registered	6 (6.8%)	61
Un Booked	35 (36.7)	26
Total	41	83

P value: 0.01

#### Table 6:

				Standard. Error	
Group	No.	Average	Std. Deviation	average	
APGAR scoring at 1 minute (p value 0.01)					
Registered	64	7.79	1.644	.207	
Unregistered	64	5.65	2.53	.317	
APGAR scoring at 5 minutes (p value 0.01)					
Registered	68	8.36	2.72	.215	
Unregistered	68	7.82	3.7	.369	

## Table 7:

				Standard.
Group	No.	Average	Std. Deviation	Error average
APGAR scoring at 1 minute (p value 0.01)				
Registered	64	7.75	1.436	1.78
Unregistered	64	5.70	2.320	.291
APGAR scoring at 5 minutes (p value 0.00)				
Registered	68	8.29	2.556	.195
Unregistered	68	7.86	3.757	.345

## **DISCUSSION:**

Twinning imposes risk to pregnancy. Twin pregnancyneeds special care from paediatricians and obstetricians. Approximately one percent of all the pregnancies are twin and 10% of perinatal mortality is related to twinning2. There may be many abnormalities in twins like anemia and growth retardation at birth [6]. Second twin is especially at a greater risk even during labor and of poor perinatal outcome which also depends on the presentation and mode of delivery3. The average gestational age of the registered patients was 37.09 1.6 weeks while the average gestational age of the unregistered patients was36.34 2.9. Hence relatively more preterm births [7].

In the research done at Peshawar similar findings were obtained. Our total death rate for twin I and II was 19 & 17, and it was greater than in a registered case if we looked at mortality for registered and non-registered people. In a research carried out by Naqvi et al, the same findings were found. Many problems with twin pregnancies can contribute to both mother and fetal morbidity and hence to cause potency. If adequate monitoring is done during the whole gestation, regular scans and upon delivery skilled professional staff with pediatricians who are present in full equipped nurseries is expected to get a favorable result [8]. In a research done at Peshawar 9, the number of twins I & twin II entries in the newborn intensive care unit were greater in one recorded patient. Therefore, there were large admissions among unregistered patients into neonatal intensive care units so that twin pregnancy may be given in an environment where NICU is accessible and it is typically achievable if the patient has been registered. With regard to APGAR, it was high in both twin I & II patients at a rate of 01 & 05 minutes in our research compared with twins who were not recorded and comparable results in two studies of 7,9. Again, it is important to reserve and hence to provide in fully-equipped NICU hospitals [9]. Females with greater gestation are more susceptible to antepartum and intrapartum disorders and their children need special attention. In order to offer appropriate prenatal care and to deliver neonatal and maternal critical care in hospitals, these instances must be identified at an early stage [10].

## **CONCLUSION:**

The results of neonatal weights, perinatal mortality, NICU shift, and APGAR scores at 1 to 5 minutes compared to a registered group of patients that are not registered have been complex. Fetuses and newborns are at higher risk in twin pregnancies. In order to reduce difficulties and poor outcomes during double pregnancies and to limit the need for continuous social and medical care for mothers and children, specialized prenatal care is necessary. In order to know the frequency of the problems, however, each set-up must be supervised.

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