Keywords:

between the dependant and independent variables to determine their

2(0.6%) of the case the number of time the vaginal examination done was greater than or equals to four times.

Regarding to the fetal outcomes in 253 (80.0%) of the cases APGAR scores at 5th minuet was greater than or equals to seven, 44 (14.1%) were admitted to special nursery unit and 24(7.7 %) died during the frst 6hours of delivery (Table 2).

Nature of occurrence of birth outcome indicators and birth outcome levels

Te birth outcome measures were further evaluated to see the nature of occurrence of outcomes. Accordingly only 130/313 (41.5%) were normal spontaneous vaginal delivery. As to the level of birth outcomes 130(41.5%) indicated good birth outcome and 183 (58.5%) were poor birth outcome.

Association between dependant and independent variables

Dependant and independent variables were cross tabulated with

T ere were no signif cant statistical associations observed between utilization of partograph and maternal age, parity, gestational age, bad obstetric history.

On contrary there were signif cant statistical association (p<0.05) between utilization of partograph with time of admission to the hospital (2=4.137, p=0.042), nature of membrane on admission (2=6.897, p=0.009). Bivariate logistic regression analysis shows mothers admitted a f er 12 hours of onset of labour were 2.723 times less likely to be monitored with partograph UOR of 2.723 and mothers admitted before rupture of membrane were 9.48 times more likely to monitor with partograph UOR of 9.48. However; multi-variate logistic regression showed only those mothers admitted before rupture of membrane were 8.090 times more likely to monitored with partograph than those a f er rupture of membrane [AOR (95% CI)=8.090(1.072,61.041)].

T ere were no signif cant statistical associations (p<0.05) observed between partograph use with caesarean section, augmentation of labour, use of analgesia, occurrences of PPH, blood transfusion, number of babies admitted to special nursery unit and number of babies died during the f rst 6hours of delivery maternal.

On contrary there were signif cant association between instrumental delivery (2=4.164, p=0.041), duration of labour (2=60.849, p=0.000), number of time the vaginal examination done (2 = 25.874, p=0.000), APGAR scores at 5th minute (2=4.754, p=0.029) with utilization of partograph and utilization of partograph with birth out comes levels (2 =14.403, p=0.000). Bivariate logistic regression analysis shows mothers whose duration of labour was less than 18hours were 5.79 times more likely to monitor with partograph UOR of 5.79 and mothers monitored with partograph were 8.276 times more likely to have good birth out comes UOR of 8.276. However; in multi-variate logistic regression showed mothers whose duration of labour was less than 18hours were 34.9% times more likely to be monitored with partograph [AOR (95% CI)=0.349(0.190,0.641)] and mothers monitored with partograph were 41.564 times more likely to have good birth out comes [AOR (95% CI)=41.564(7.76,222.66)] (Table 3).

Discussion

T e partograph is a tool that has been recommended by WHO and other authorities in maternal health for routine monitoring of labour to provide early warning system [25].

From this study, the utilization of partograph was very poor as only 19/274 (6.9%) of mothers were monitored with it, while 274 (80.6%) had a partograph in their f le. Surprisingly only in 2(10.53%) of the records of the mothers' monitored with it had correct documentation of some of the key events which indicates poor monitoring of the key events against standards and of the utilized partograph none of them f ts the criteria for good utilization.

T is f nding was not constant with what has been observed in Kenya Kakamega province hospital where its utilization was very low and 24% of the records of the mothers' monitored with it had correct documentation of the key events, while 88.2% had a partograph in their f les (56), in eight Ecuador hospitals where in 17.7% of the records of the mothers' had documentation of the key events but only 5.4% correctly graphed, in Nigeria, Bangladesh, East African where the utilization was 24(8.7%), 6%, 14% respectively, in South Africa where utilization was 69.9% but that to the standard was only 2% and in Ethiopia 312/666 women were arrived before fully dilation and for about 90% ((85(12.8%)) partograph used and about 80% of the key events completed correctly [22,26-28].

T e likely explanations for this dissimilarity might be di f erence in sample size, hospital policies, set up, study subjects, negligency of care providers, operationalisation of utilization and correct documentation. Also this could be supported by the study conducted in eight Ecuador hospitals indicated as there was a di f erence in utilization level of partograph not only among countries but also among types of health facility [27].

In this study the factors that have been indicated as predictors for the low utilization of partograph were: none availability of partograph as reported by more than three f f h (61.8%), sta f shortage, lack of protocol, attitude of care providers, time of admission of mothers for delivery, lack of controlling system and availability of other modern tools.

In this study, the overall birth outcome was poor as 183 (58.5%) of the mothers had at least one of the poor birth outcome indicators.

Factors/Variables		COR(95%CI)	P	AOR(95%CI)	P
Time of admission and onset of labour	After 12hourrs	1			
	and others				
	Before 12hours	2.723(1.003, 7.389)	0.049	8.128(.883, 74.843)	0.064
Membrane on admission	Ruptured	1			
	Intacted	9.485(1.246, 72.231)	0.03	8.090(1.072, 61.041)	0.043
Duration of labour	• K R X U V	1			
	< 18hourrs	5.786(3.025, 11.066)	0	0.349(0.190, 0.641)	0.001
Use of partograph and birth out come	Not used	1			
	Used	8.276(2.329, 29.406)	0.001	41.564(7.759,222.659)	0

NB: 7 K H V H Y D U L D E O H V D U H I U R P W K H W R W D O Y D U L D E O H V V W D W L V W L F D O V L J Q L ¿ F D Q W Z K L O H F R U V V W D training, attitude of care providers, availability partograph, specialty of health care providers, instrumental delivery, duration of labour, number of time the vaginal examination done, APGAR scores at 5th minute and utilization of partograph with birth out comes levels)

Table 3: Bivariate and multivariate logistic regression model showing predictors of utilization of partograph, utilization and birth outcomes among delivery conducted from Jan. 2005- Dec. 2011 and care givers at JUSH, February – March 2012

This was not consistent with the findings of the study in Jinnah Postgraduate Medical Center; Harvard university medical science hospital, Karachi in which 88% had normal vaginal delivery, 21 (72.4%) had combination [2].

The possible explanations for this contrast might be due to variation in study setup, health care providers believes, awareness of health, guideline on child birth and delivery, training, availability of modern tools and disparity in judging birth outcome as good or poor.

This study further revealed the association between utilization of partograph with birth outcome and there was significant statistical association observed between them where mothers monitored with partograph were 41.564 times more likely to have good birth out comes [AOR (95% CI) = 41.564(7.76,222.66)].

This result was similar with what had been observed in Iran at

32. Massawe SN (2002) Training of maternity care providers in regional hospital: Tanzania.

33. : R U O G   + H D O W K] D W L R Q   (I I H F W   R I   S D U W R J U D P   R Q   S H U L Q D W D O   D Q G   P D W H U Q D O   P R U E L G L W \   D Q G   P R U W D O L W \   : L O H \   R Q O L Q H   / L E U D U \   U H I H U H Q F H   W Z D U

34. Simbar M, Ghafari F, Zahrani ST, Majd HA (2009) Assessment of quality of midwifery care in labour and delivery wards of selected kordestan medical V F L H Q F H   X Q L Y H U V L W \   K R V S L W D O V   , Q W   -   + H D O W K   &

35. U L P H U F H O   W Z D U   8 V L Q J   F O L Q L F D O   D X G L W   W R   L P S U R Y H   W K H   T X D O L W \   R I   R E V W H W U L F   care. Tibetan Delek Hospital in North India 3: 3-9.