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Research Article

**IMPACT OF INTENSITY OF LABOR PAIN ON
INTERACTION BETWEEN MOTHERS AND INFANTS**¹Ahmad Mukhtar, ²Dr Umair Muhammad Afzal, ³Dr Zarbakhat¹Reliever Medical Officer, BHUs of Lahore²Medical Officer in Cadet College Batrasi³DHQ Hospital Rajanpor

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Abstract:

Objective: This research carried out to know about the impact of the labor pain's intensity on the development of interaction between mother and infant.

Methodology: This research work was performed in the Gynecology Department of Sheikh Zayed Hospital, Lahore a capital city of province Punjab, Pakistan. The collection of the information carried out from June 2019 to December 2019. In the duration of this research work, total two hundred and twenty five females having babies underwent interviews if they fulfilled the prescribed criteria of the research work.

Results: The mean scores of the interaction between mother and infant were significant statistically in accordance with the ages of mothers; P value 0.0050 ($P < 0.050$), level of education; P value 0.000 ($P < 0.0010$) and duration of labor; P value is 0.0170 ($P < 0.050$). The type of labor did not have effect on the interaction between mother and infant; P value 0.5390 ($P > 0.050$). Difference between interaction scores and the starting period for feeding from breast was significant statistically; P value 0.000 ($P < 0.0010$). The intensity of the labor pain did not influence the interaction between mother and infant; P value 0.4370 ($P > 0.050$). However, when there was an increase in intensity of the labor pain, there was a decrease in the scores of interaction.

Conclusion: According to the results of this research work, it seems to be vital that during antenatal checkups, there should be implementation of the programs about the interactions between mothers and infants, particularly among females who are older, present with low level of education and multi-gravid. There is also suggestion that there should be utilization of the painless techniques of labor.

Key Words: Labor, breast, feeding, intensity, criteria, interaction, infant, gravid, implementations, antenatal.

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INTRODUCTION:

Quality of interaction among mothers and infants is most important predictors of the development and well-being of the neonates [1-3]. Pain of labor is important risk factor for the determination of the interaction between mothers and infants [3], because there is significant pain accompanied with the birth of child and it is the very severe experience of acute form of pain [4]. Research work conducted in the past have displayed that traumatic labors, like CS or utilization of forceps or vacuum, delay in the creation of the bond between mother and infants in just after postpartum period. It may be because of the long maternal preoccupation with the labor's experience which interferes with the emergence of the relationship [5, 6]. Many research works on the infant-mother interaction have focused upon the impacts of pain for long and short terms [4, 7].

There are very few research works on the impacts of intensity of labor pain on the relationship between mother and infant in our country, Pakistan. The main purpose of this research work was to examine the whether the intensity of labor pain have influences on the development of the interactions among mother and infants among mothers of our regions. .

METHODOLOGY:

The research work carried out in the Genecology Department of the Sheikh Zayed Hospital, Lahore. This research work covered a duration of complete seven months from June 2019 to December 2019. In the duration of this research work, total two hundred and twenty five mothers having infants who fulfilled the criteria of the research underwent interviews. The average of the mothers was 27.150 ± 5.930 with a range from 16 to 42 years. We observed the majority of the mothers (45.30%) were between 16 to 25 years of age, 50.70% females were present with the education of primary school and 62.70% females were present as multi-gravid. The inclusion of those females carried out who were present without any medical issue after labor and they all have term deliveries.

The collection of the information carried out on a questionnaire which was well-organized by our authors. We used the MIIAS (Mother-Infant Interaction Assessment Scale) for the determination of the relationship between mothers and infant. VAS (Visual Analogue Scale) was in use for the evaluation of the intensity of the labor pain. Questionnaire included the information about demography as age of mother, level of education, type of labor and number. The filling of the MIIAS carried out in the breastfeeding period. The

determination of the VAS scores carried out by mothers and we obtained signatures of mothers on those forms. The independent variables of this current research work were characteristics of demography. Dependent variables were the scores obtained by MIIAS & VAS. Stainton developed the MIIAS in 1981 [8], Pek checked the reliability of this scale [9]. VAS is much widely used instrument for the measurement of the intensity of pain and perception of pain [10-12]. In this scale, researcher displays the mother a ruler of ten centimeter and asks her to mark the level which exactly show the pain intensity in the labor period. There were 2 anchors on ruler as 0 for no pain at all and ten for worst type of pain [13]. Labor pain's intensity was elaborated as no pain (0 centimeters), mild pain (0.10-4.0 cm), moderate pain (4.10 to 7.0 cm) and pain of severe nature (7.10 to 10.0 cm) [12, 14].

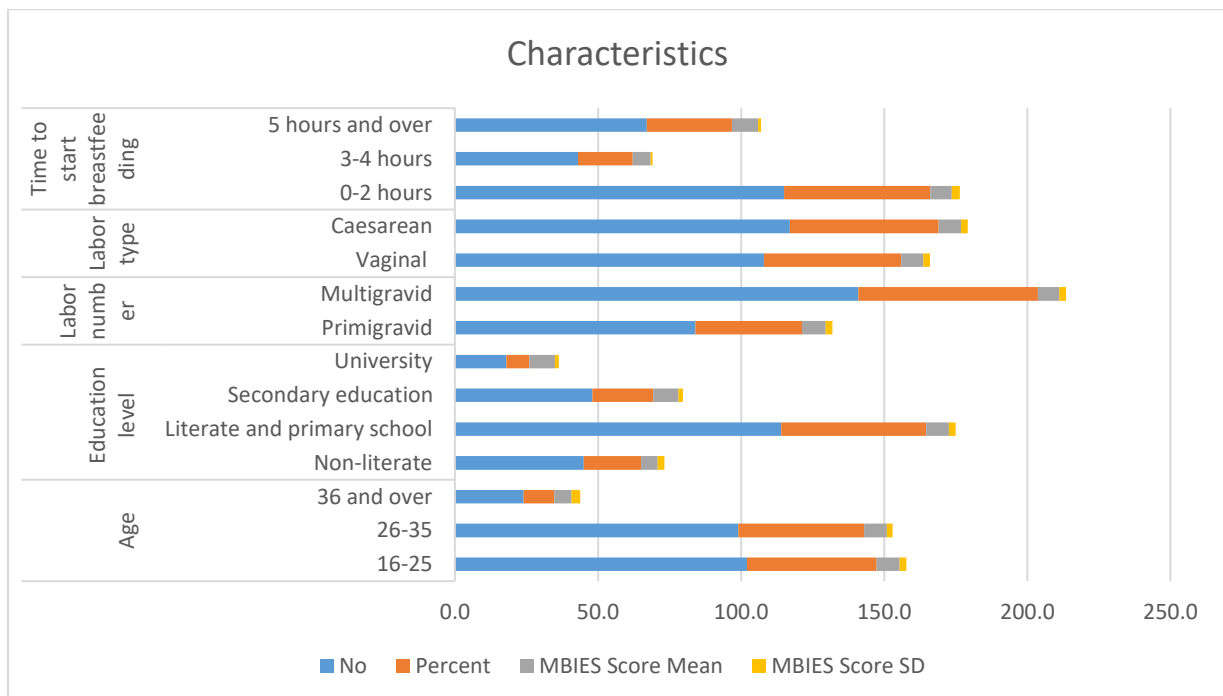
SPSS V. 20 was in use for the statistical analysis of the collected information. We expressed the quantitative data in averages and SDs and we expressed the categorical data in in frequencies. P value of less than 0.050 was significant statistically. Ethical committee of the institute gave the permission to conduct this research work. We took the written consent from all the participants of this research work after explaining them the purpose of this research work.

RESULTS:

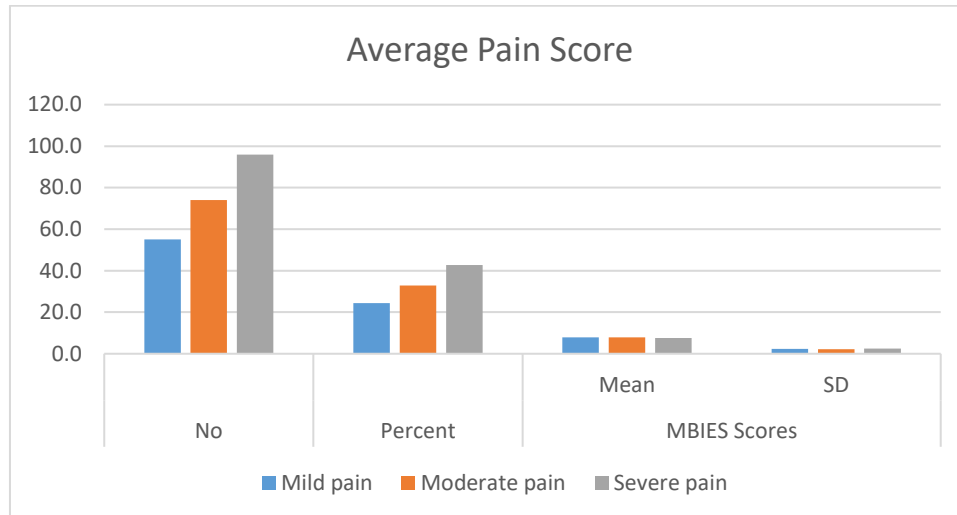
This research work interrogated whether the intensity of labor pain and characteristics of mothers like age of mothers, level of education, duration of labor, type of labor on the development of the relationship among mothers and infants in mothers of our nation. In this research work, when the age of the mothers was younger (from 16 to 25 years of age) and their level of qualification was high, there was an increase in the scores of interaction and multigravida females were present with less scores of interaction. The mean scores of interaction among mother and infant were significant statistically in accordance with age of mothers; P value 0.0050 ($P < 0.050$), level of education; P value 0.000 ($P < 0.0010$) and duration of labor; P value is 0.0170 ($P < 0.050$). The type of labor had no impact on the relationship among mother and infant; P value 0.5390 ($P > 0.050$). The difference between scores of interaction and initial period of starting the feeding from breast was also much significant; P value is 0.000 ($P < 0.0010$) (Table-1). The intensity of labor pain did not have impact on the mother-infant relationship; P-value 0.4370 ($P > 0.050$) (Table-2).

Table-I: The average scores of interaction according to mothers' characteristics.

Characteristics		No	Percent	MBIES Score		P value
				Mean	SD	
Age	16-25	102.0	45.30	8.040	2.400	
	26-35	99.0	44.00	7.880	2.020	
	36 and over	24.0	10.70	6.080	3.060	Significant
Education level	Non-literate	45.0	20.00	5.910	2.310	
	Literate and primary school	114.0	50.70	7.870	2.390	
	Secondary education	48.0	21.30	8.810	1.630	
	University	18.0	8.00	8.940	1.390	Significant
Labor number	Primi-gravid	84.0	37.30	8.260	2.310	
	Multi-gravid	141.0	62.70	7.470	2.390	Significant
Labor type	Vaginal	108.0	48.00	7.660	2.410	Not Significant
	Caesarean	117.0	52.00	7.860	2.360	
Time to start breastfeeding	0-2 hours	115.0	51.10	7.480	2.870	
	3-4 hours	43.0	19.10	6.270	0.700	
	5 hours and over	67.0	29.80	9.200	1.020	Significant
Total		225.0	100.0			

**Table-II: The average pain scores of mothers according to VAS.**

VAS	No	Percent	MBIES Scores		P value
			Mean	SD	
Mild pain	55.0	24.40	7.960	2.320	
Moderate pain	74.0	32.90	7.930	2.230	
Severe pain	96.0	42.70	7.530	2.530	Not Significant
Total	225.0	100.00			



DISCUSSION:

In this research work, we observed that in the mothers of young age, there were more interaction scores and there was significant difference in the interaction scores and age. In one research work conducted in past, there was positive correlation of pain with the age of mothers [4]. This outcome may be associated to the healthy physique of the young females who may not feel labor pain as threat and they may have more mental ability to handle the labor pain [4, 16, and 17]. The results of this current research work are similar with mentioned studies. We also noticed that when there was an increase in the level of education of mothers, there was increase in the scores of interaction and the difference between level of education and scores of interaction are significant.

Previous research works on development of the mother-infant relationship have stated that education level of mother is an important predictor of level of maternal sensitivity [1, 18]. The findings of this research work are consistent with the results of our study. Our research work determined that multigravida females were present with less scores of interaction and there was significant difference among various age groups. In research works conducted in past, it was stated that when there was increase in the duration of labor, there was decrease in the tolerance of pain and then there was development of negative behaviors of mothers [15, 19-21].

We also observed that type of labor did not have impact on the mother-infant relationship and there was not significant difference between interaction and type of labor. So, it confirmed that type of labor was not an effectual factor on this relationship. Similar findings was also the outcome of one previous research work [22]. We also observed that when there was increase in the intensity of the labor

pain, there was a decrease in the scores of interaction but the intensity of labor pain did not have significant impact on the mother-infant relationship.

CONCLUSION:

The findings of this research work concluded that primi-gravida younger mothers with high level of education and feeding their babies through their breast after 5 hours of birth had high scores of interaction as compared to others which is significant. It is vital that in the duration of antenatal period, there should be implementation of the programs about the interactions between mother and infants for elder, multigravida females with low level of education. This research work also stated that when there was increase in the intensity of labor pain, there was decrease in the scores of interaction but intensity of labor pain did not affect the interaction between mothers and infant much significantly.

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