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# Comparative Analysis of Social Responses Between Mothers with Preterm and Term Babies in Teaching Hospital, Ile - Ife, Osun State

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**ABSTRACT:** *Social response is the ability of a person to adjust to a new environment or circumstances with the goal of becoming a better person. Parenthood is often seen as a happy, gratifying, and fulfilling experience. Due to various reasons, babies' gestational age inclusive, mothers may exhibit diverse social responses. This can affect maternal bonding, immediate child's care and future development of the child, the family and society at large. This study therefore was conducted to comparatively analyze the social responses of mothers with preterm and term babies. The study adopted a quantitative descriptive non-experimental comparative survey design. A sample size of 98 and 102 mothers with preterm babies in neonatal and term babies in postnatal wards respectively in Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State were selected using a purposive sampling technique. A self-designed questionnaire with Cronbach's alpha consistency scores ranging from 0.78 – 0.88 was used for data collection. Data were analyzed with Statistical Package for Social Sciences (SPSS) version 21 using both descriptive and inferential statistics at 0.05 level of significance. Result showed that both group of mothers had higher positive social responses, mothers of term babies exhibited a slightly higher positive social response (84.3%) compared to mothers of preterm babies (76.5%). There was a significant difference between the social responses of mothers with preterm and term babies. However, the social response mean difference (0.078) was not statistically significant (p= .168). In conclusion, this study shows that women who experience a preterm birth express increased negative social responses compared to mothers with term babies. It was recommended that health care providers especially nurses must be adequately skilled with the ability to detect, and intervene promptly and appropriately in prevention and management of negative social responses in newly delivered mothers.*

**KEYWORDS**: mothers, preterm babies, social responses, term babies

## INTRODUCTION

Motherhood is understood to be a dynamic, life-altering, and ongoing process of identity change in a woman's life (Fontein-Kuipers, & Jomeen, 2019). Kuipers et al. (2021) argue that it is a

permanent change in a woman's life while Hoekzema et al. (2017) also infer that the perinatal period is recognized as a neuro-hormonal process. Parenthood is often seen as a happy, gratifying, and fulfilling experience marked by connectivity, affection, warmth, closeness, and interdependency in the mother-child dyad throughout motherhood. It is the period where parents form new, more accurate, objective and realistic representations of their baby compared to the expected image of baby that was fantasized and anticipated before delivery (Gonçalve et al., 2020). According to Kuipers et al. (2019) despite the benefits of motherhood, it is well recognized that the life balance of women who have children can be disrupted, regardless of gestational age or circumstances surrounding the delivery of the baby(ies). McLeish and Redshaw (2017) opinioned that the transition to parenting is a potentially sensitive time for mothers' mental health, with 9–21% of women experiencing overt or covert despair and/or anxiety while caring for their newborn. WHO (2019) reported that depression during or after childbirth affects approximately 13% of women during the postnatal period and 10% of women during pregnancy (WHO, 2020). Also, Gelaye et al. (2016) reported that psychosocial response is significantly higher in women residing in high-income countries compared to low and middle income countries such as Nigeria,

Mothers encounter a variety of problems, primarily social and psychological, depending on the moment of their child's birth. Mothers in various parts of the world struggle to be socially fit, depending on the conditions of their baby's birth patterns and time of birth. Baldwin et al. (2018) defined preterm newborns as those born before 37 weeks of pregnancy while term infants, on the other hand, are children born at a gestational age of more than 37 weeks and are able to adjust to extra uterine life with ease.

According to Trumello et al. (2018), parents who give birth to preterm babies are always concerned about the child's overall development as the child grows. Preterm babies as defined by Sansavini et al. (2015) are children that were born before the actual time of delivery and still need to be nourished and monitored in the hospital for optimal growth and development. Typically, such children are not allowed to be taken home by their mothers unless medical specialists approve such a decision. Preterm newborns were classified by Kvalvik et al. (2020) as babies who do not meet expected birth weight or gestational age, or both.

Boyle et al. (2016) stated that late and moderately preterm infants are at significantly increased risk of delayed social competence compared with term-born babies (26.4% vs. 18.4%; adjusted-relative risk [RR] 1.28; 95% CI, 1.03-1.58) while some declare that all children are important, regardless of the circumstances that may surround their birth and subsequent growth. The social responses of mothers, putting medical advice into practice, regular counseling, and many other factors are among factors that needs to be considered while caring for newborns irrespective of their gestational age at birth.

The ability of a person to adjust to a new environment or circumstances with the goal of becoming a better person is referred to as social responses. Different dimensions can be used to examine social responses. Changes in the human environment or realities necessitate adaptation to the new and current environment. Given that the postpartum period is a critical period for both mothers

and infants as stated by Boyle et al.( 2016) and that parents, particularly mothers, are responsible for caring for infants after discharge (World Health Organisation [WHO)], 2016), it is beneficial to investigate factors that can influence mothers' caring behavior. There is no way to best consider preterm and term babies without taking into account the parents' social responses, particularly mothers'. The foregoing is one of the reasons why Leahy-Warren et al. (2020) argued that while mothers of preterm babies have unique social obstacles, mothers of term babies also face similar challenges.

The gestational age of a newborn is an important risk factor that can cause an unexpected interruption of the transition to motherhood. It that can have either a positive or negative impact on a mother's well-being and her subsequent interactions with her child, family and the society at large. These negative social responses are a big challenge as it can affect both mother and child's health, disrupt the family process and be a big burden on the health sector. Furthermore, Phuma-Ngaiyaye and Kalembo (2016) asserted that babies born at term or preterm face unique issues that must be addressed by both parents in the areas of development, nutrition, socializing, and a variety of other areas.

There is evidence of increasing psychosocial disease burden in newly delivered mothers impacting significantly on maternal functioning. It prevents the mother from being socially available to meet the demands of her child with the babies suffering early life exposure to physical and mental health problems in their childhood and beyond thus having adverse effects on infant and child health outcome (Jidong et al., 2021).

Several studies have found that mothers who have recently given birth to newborns experience a variety of social responses (Phuma-Ngaiyaye & Kalembo 2016; Trumello et al., 2018). In other words, while some women experience joy and rejoice as a result of their births, others experience sadness and social disintegration. Some studies found that most mothers are confident about the future and optimistic about their ability to establish positive relationships with their infants (Bakermans-Kranenburg et al., 2019). Other studies concluded that some mothers feel alienated and have negative social responses (Ionio et al., 2022; McLeish & Redshaw, 2017; Trumello et al., 2018).

Although it is easy to assume that mothers of preterm neonates do not have positive social responses, the fact remains that some women do have negative social responses regardless of their neonate's gestational age. Thus in order to make scientific rather than speculative conclusions about women's reactions to childbirth, it is necessary to compare the social responses between mothers of preterm and term newborns. Therefore, this study uses a comparative approach to examine the social responses between women with preterm and term newborns. The main aim of this study was to carry out a comparative analysis of the social responses between mothers with preterm and term babies in Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State. The specific objectives of the study are to:

i. ascertain the proportion of preterm and term mothers with social responses in Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State; and
ii. identify the social responses of mothers with preterm and term babies in Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State

**Research Hypothesis**

$H_0$1: There is no significant difference between the social responses of mothers with preterm and term babies in Obafemi Awolowo University Teaching Hospital Complex, Ile- Ife, Osun State.

## METHODOLOGY

This study utilized a quantitative research adopting a descriptive non-experimental comparative survey design. The population of this study consisted of mothers with preterm babies in neonatal ward and mothers of term babies in postnatal ward in OAUTHC Ile-Ife, Osun State. Mothers with preterm or term newborns, with diverse educational attainments, ages ranging from 18 to 51+, and varying degrees of experience in child care made up the population. They were approximately 330 mothers for a three-month period. The sample size was calculated using Cochran formula considering preterm prevalence rate of 14.25% -14.46% for black women (March of Dimes 2021). Therefore, the sample size for this study was 216. Mothers having preterm babies in neonatal ward and mothers with term babies in postnatal ward both in Obafemi Awolowo Teaching Hospital Complex were chosen purposively based using purposive sampling technique.

A self-designed instrument titled: "Questionnaire on Comparative Analysis of Social Responses between Mothers with Preterm and Term Babies" was used to collect data for the study. The instrument was divided into two sections: A and B. Consultations with specialists in the disciplines of Nursing Science and Tests & Measurement were used to determine the instrument's validity. The experts assessed the items in terms of subject matter relevancy, linguistic appropriateness, and clarity of intent. The experts determined whether the instrument has sufficient face and content validity. A pretest was undertaken at UNIOSUN Teaching Hospital Osogbo among 20 randomly selected mothers (10 mothers with preterm babies in Neonatal Ward and 10 mothers with term babies in Postnatal ward) to determine the reliability of the questionnaire. Cronbach Alpha was used to statistically analyze the reliability coefficient which yielded reliability coefficient value of 0.780 for preterm and 0.860 for term reliability test.

The lead investigator was in charge of data collection, with two qualified research assistants who assisted the researcher. The mothers' signed informed consent form was obtained without coercion. Each eligible respondent was given a one short self-administered questionnaire to complete and return as soon as possible to the researcher or research assistant. As needed, assistance was provided to the individual while filling out the questionnaire. The data was coded and sorted using the Statistical Package for Social Sciences (SPSS) Version 21 program. The data collected were analysed using descriptive and inferential statistics.

## RESULTS

**Table 1 Socio-demographic variables of respondents with term and preterm babies (N = 200)**

| Socio-demographic variables | TERM (N = 102) | | | PRETERM (N = 98) | | |
|---|---|---|---|---|---|---|
| **Items** | **Freq.** | **%** | **Mean ± SD** | **Freq.** | **%** | **Mean ± SD** |
| **Age group** | | | | | | |
| 18 -19 (Teenage mothers) | 3 | 2.9 | 30 ± 6.03 | 4 | 4.1 | 30 ± 5.98 |
| 20-34 (Young mothers) | 71 | 69.6 | | 70 | 71.4 | |
| 35-44 (Elderly mothers) | 28 | 27.5 | | 24 | 24.5 | |
| **Marital Status** | | | | | | |
| Married | 97 | 95.1 | | 90 | 91.8 | |
| Single | 5 | 4.9 | | 8 | 8.2 | |
| **Religion** | | | | | | |
| Christianity | 73 | 71.6 | | 66 | 67.3 | |
| Islam | 27 | 26.5 | | 27 | 27.6 | |
| Traditional | 2 | 2 | | 5 | 5.1 | |
| **Family type** | | | | | | |
| Monogamy | 88 | 86.3 | | 76 | 77.6 | |
| Polygamy | 14 | 13.7 | | 22 | 22.4 | |
| **Number of children** | | | | | | |
| 1 child | 35 | 34.3 | 2 ± 1.0 | 31 | 31.6 | 2 ± 1.34 |
| 2-4 children | 66 | 64.7 | | 60 | 61.2 | |
| 5-7 children | 1 | 1 | | 7 | 7.1 | |
| **Educational qualifications** | | | | | | |
| Primary six certificate | 8 | 7.8 | | 7 | 7.1 | |
| WASSCE/GCE | 42 | 41.2 | | 29 | 29.6 | |
| OND/NCE | 23 | 22.5 | | 26 | 26.5 | |
| HND/BSC | 25 | 24.5 | | 33 | 33.7 | |
| MSc/MBA | 4 | 3.9 | | 3 | 3.1 | |
| **Occupation** | | | | | | |
| Civil servant | 25 | 24.5 | | 30 | 30.6 | |
| Self employed | 46 | 45.1 | | 28 | 28.6 | |
| Unemployed | 11 | 10.8 | | 14 | 14.3 | |
| Trader | 19 | 18.6 | | 24 | 24.5 | |
| Student | 1 | 1 | | 2 | 2 | |

Table 1 shows the socio-demographic variables of respondents. The ages of the respondents ranged from 18 to 44 years. The majority of both group of mothers are within 20 -34 years with a close mean age ± standard deviation of 30 ± 6.03 years (term mothers) and 30 ± 5.98 (preterm mothers). Majority are married (Term: 95.1 % and Preterm: 91.8%) in a monogamous family setting (Term: 86.3% and Preterm: 77.6%), Christians (Term: 71.6% and Preterm 67.3%) with a mean number of children ± standard deviation of (Term: 2 ± 1.0 and Preterm: 2 ± 1.34). The two groups of mothers have at least basic education similar to each other with majority of term mothers having

WASSCE/GCE certificate (41.2%). Only 1% of term and 2% of preterm mothers are students with majority of term mothers self-employed (45.1%) and 30.6% of preterm mothers are civil servants

**Table 2 Birth information of respondent with term and preterm babies (N = 200)**

| Birth Information | TERM (N = 102) | | | PRETERM (N = 98) | | |
|---|---|---|---|---|---|---|
| **Items** | **Freq.** | **%** | **Mean ± SD** | **Freq.** | **%** | **Mean ± SD** |
| **Sex of the index baby** | | | | | | |
| Boy | 52 | 51 | | 41 | 41.8 | |
| Girl | 50 | 49 | | 57 | 58.2 | |
| **Gestational age range (weeks)** | | | | | | |
| 26-34 | - | - | 38 ± 2.25 | 92 | 93.9 | 31 ± 2.53 |
| 35-37 | 36 | 35.3 | | 6 | 6.1 | |
| 38-43 | 66 | 64.7 | | - | - | |
| **Number of baby delivered** | | | | | | |
| Single | 93 | 91.2 | | 78 | 79.6 | |
| Twins | 9 | 8.8 | | 18 | 18.4 | |
| Triplets | - | - | | 2 | 2 | |
| **Apgar's score at 5 minutes** | | | | | | |
| Mild asphyxia | 11 | 10.8 | 8 ± 2.28 | 7 | 7.1 | 7 ± 3.57 |
| Normal asphyxia | 91 | 89.2 | | 91 | 92.9 | |
| **Age of the new baby** | | | | | | |
| I month | 100 | 98 | 7 ± 7.07 | 95 | 96.9 | 9 ± 21.7 |
| 2 months | 2 | 2 | | 2 | 2 | |
| 3 months | - | - | | 1 | 1 | |
| **Health status of the index baby** | | | | | | |
| Death/stillbirth | 1 | 1 | | - | - | |
| Alive but not satisfactory | 13 | 12.7 | | 22 | 22.4 | |
| Alive and fairly satisfactory | 30 | 29.4 | | 56 | 57.1 | |
| Alive and very satisfactory | 58 | 56.9 | | 20 | 20.4 | |

Table 2 shows the birth information of respondents. Majority of both group of mothers delivered a single baby while only 2(2%) mothers of preterm delivered triplets. The mean gestational age in weeks for term babies was 38 ± 2.25 while that of the preterm babies is 31 ± 2.53. Only 1 (1%) preterm was three months at the time of this study and 1 ((1%) term baby died.

**Table 3.: Proportion of social responses of mothers with preterm babies (N = 98)**

| Social response of mothers with preterm babies | Always | | Sometimes | | Rarely | | Never | |
|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| I don't have sense of returning to my workplace as soon as possible | 18 | 18.4 | 29 | 29.6 | 14 | 14.3 | 37 | 37.8 |
| I don't like people seeing my baby since the day he/she was born | 23 | 23.5 | 21 | 21.4 | 17 | 17.3 | 37 | 37.8 |
| Attending social events seems not appealing to me since delivery of this baby | 31 | 31.6 | 25 | 25.5 | 19 | 19.4 | 23 | 23.5 |
| I am not comfortable with people visiting me since I delivered this baby | 27 | 27.6 | 26 | 26.5 | 14 | 14.3 | 31 | 31.6 |
| I don't like carrying the baby out for visitors to see since delivery | 31 | 31.6 | 28 | 28.6 | 17 | 17.3 | 22 | 22.4 |
| I have been withdrawing from my friends since the delivery | 20 | 20.4 | 22 | 22.4 | 14 | 14.3 | 42 | 42.9 |
| I don’t feel among in the midst of friends and relatives because of the baby's condition | 31 | 31.6 | 12 | 12.2 | 16 | 16.3 | 39 | 39.8 |
| I don't feel like grooming myself anymore because of what I am experiencing with this baby now | 13 | 13.3 | 19 | 19.4 | 14 | 14.3 | 52 | 53.1 |
| I don't feel like playing or talking to people nowadays since the delivery of this baby | 15 | 15.3 | 27 | 27.6 | 6 | 6.1 | 50 | 51.0 |
| I am optimistic that I will bounce back to life soon after this experience | 74 | 75.5 | 4 | 4.1 | 16 | 16.3 | 4 | 4.1 |

Table 3 shows the proportion of social responses of mothers with preterm babies. Majority74 (75.5%) are optimistic that they will bounce back to life soon after this experience

**Table 4: Proportion of social responses of mothers with term babies (N = 102)**

| Social response of mothers with term babies | Always | | Sometimes | | Rarely | | Never | |
|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| I don't have sense of returning to my workplace as soon as possible | 23 | 22.5 | 19 | 18.6 | 19 | 18.6 | 41 | 40.2 |
| I don't like people seeing my baby since the day he/she was born | 16 | 15.7 | 26 | 25.5 | 13 | 12.7 | 47 | 46.1 |
| Attending social events seems not appealing to me since delivery of this baby | 25 | 24.5 | 26 | 25.5 | 23 | 22.5 | 28 | 27.5 |
| I am not comfortable with people visiting me since I delivered this baby | 17 | 16.7 | 20 | 19.6 | 21 | 20.6 | 44 | 43.1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I don't like carrying the baby out for visitors to see since delivery | 15 | 14.7 | 22 | 21.6 | 23 | 22.5 | 42 | 41.2 |
| I have been withdrawing from my friends since the delivery | 10 | 9.8 | 23 | 22.5 | 16 | 15.7 | 53 | 52.0 |
| I feel among in the midst of friends and relatives because of the baby's condition | 26 | 25.5 | 14 | 13.7 | 28 | 27.5 | 34 | 33.3 |
| I don't feel like grooming myself anymore because of what I am experiencing with this baby now | 13 | 12.7 | 15 | 14.7 | 27 | 26.5 | 47 | 46.1 |
| I don't feel like playing or talking to people nowadays since the delivery of this baby | 15 | 14.7 | 25 | 24.5 | 16 | 15.7 | 46 | 45.1 |
| I am optimistic that I will bounce back to life soon after this experience | 77 | 75.5 | 4 | 3.9 | 11 | 10.8 | 10 | 9.8 |

Table 4 shows the proportion of social responses of mothers with term babies. Majority 77 (75.5%) of the mothers are optimistic that they will bounce back to life soon after this experience. Almost half of them show positive responses in all the social questions asked.

**Table 5: Social responses between mothers with preterm and term babies**

| Social responses of mothers with preterm and term babies | Preterm | | Term | |
|---|---|---|---|---|
| | Freq. | % | Freq. | % |
| **I don't have sense of returning to my workplace as soon as possible** | | | | |
| Always | 18 | 18.4 | 23 | 22.5 |
| Sometimes | 29 | 29.6 | 19 | 18.6 |
| Rarely | 14 | 14.3 | 19 | 18.6 |
| Never | 37 | 37.8 | 41 | 40.2 |
| **I don't like people seeing my baby since the day he/she was born** | | | | |
| Always | 23 | 23.5 | 16 | 15.7 |
| Sometimes | 21 | 21.4 | 26 | 25.5 |
| Rarely | 17 | 17.3 | 13 | 12.7 |
| Never | 37 | 37.8 | 47 | 46.1 |
| **Attending social events seems not appealing to me since delivery of this baby** | | | | |
| Always | 31 | 31.6 | 25 | 24.5 |
| Sometimes | 25 | 25.5 | 26 | 25.5 |
| Rarely | 19 | 19.4 | 23 | 22.5 |
| Never | 23 | 23.5 | 28 | 27.5 |
| **I am not comfortable with people visiting me since I delivered this baby** | | | | |
| Always | 27 | 27.6 | 17 | 16.7 |
| Sometimes | 26 | 26.5 | 20 | 19.6 |
| Rarely | 14 | 14.3 | 21 | 20.6 |
| Never | 31 | 31.6 | 44 | 43.1 |
| **I don't like carrying the baby out for visitors to see since delivery** | | | | |
| Always | 31 | 31.6 | 15 | 14.7 |

| Social responses of mothers with preterm and term babies | Preterm | | Term | |
|---|---|---|---|---|
| | Freq. | % | Freq. | % |
| Sometimes | 28 | 28.6 | 22 | 21.6 |
| Rarely | 17 | 17.3 | 23 | 22.5 |
| Never | 22 | 22.4 | 42 | 41.2 |
| **I have been withdrawing from my friends since the delivery** | | | | |
| Always | 20 | 20.4 | 10 | 9.8 |
| Sometimes | 22 | 22.4 | 23 | 22.5 |
| Rarely | 14 | 14.3 | 16 | 15.7 |
| Never | 42 | 42.9 | 53 | 52 |
| **I feel among in the midst of friends and relatives because of the baby's condition** | | | | |
| Always | 39 | 39.8 | 34 | 33.3 |
| Sometimes | 16 | 16.3 | 28 | 27.5 |
| Rarely | 12 | 12.2 | 14 | 13.7 |
| Never | 31 | 31.6 | 26 | 25.5 |
| **I don't feel like grooming myself anymore because of what I am experiencing with this baby now** | | | | |
| Always | 13 | 13.3 | 13 | 12.7 |
| Sometimes | 19 | 19.4 | 15 | 14.7 |
| Rarely | 14 | 14.3 | 27 | 26.5 |
| Never | 52 | 53.1 | 47 | 46.1 |
| **I don't feel like playing or talking to people nowadays since the delivery of this baby** | | | | |
| Always | 15 | 15.3 | 15 | 14.7 |
| Sometimes | 27 | 27.6 | 25 | 24.5 |
| Rarely | 6 | 6.1 | 16 | 15.7 |
| Never | 50 | 51 | 46 | 45.1 |
| **I am optimistic that I will bounce back to life soon after this experience** | | | | |
| Always | 74 | 75.5 | 77 | 75.5 |
| Sometimes | 16 | 16.3 | 11 | 10.8 |
| Rarely | 4 | 4.1 | 4 | 3.9 |
| Never | 4 | 4.1 | 10 | 9.8 |

Table 5 shows the social responses between mothers with preterm and term babies in Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State. Results from the study showed that both group of mothers expressed similar notion (75.5%) that they are optimistic that the will bounce back to life soon after this experience. A total of 18 (18.4%) of mothers with

preterm babies when asked if they had the sense of returning to their workplace as soon as possible showed reluctance as they claimed they weren't always ready to return while a total of 23 (22.5%) of mothers with term babies expressed similar notion.

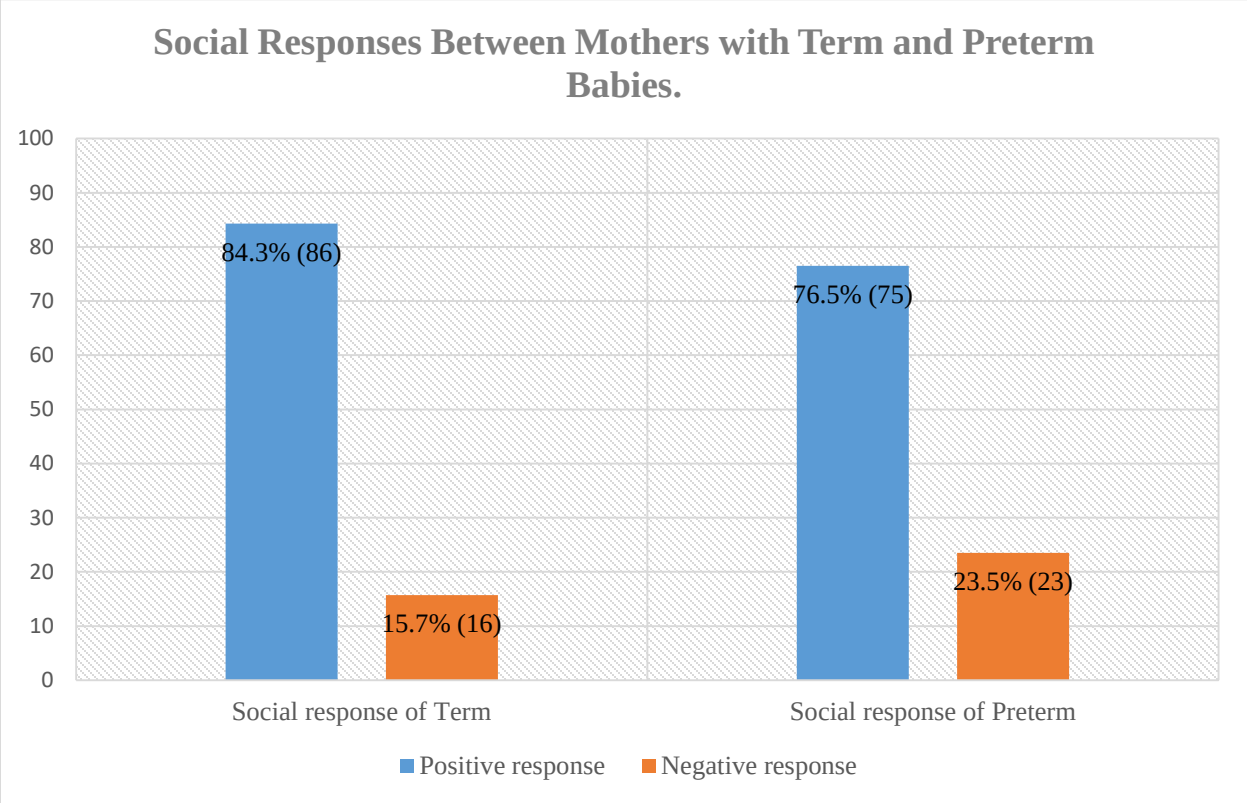


**Figure 1: Social Responses between Mothers with Term and Preterm Babies.**

Figure 1 shows the social responses between mothers with term and preterm babies in the study area. Although both group of mothers had higher positive social, mothers with term babies exhibited a slightly higher positive social response (84.3%) compared to mothers of preterm babies (76.5%). Also, mothers with term babies exhibited lesser negative social responses (15.7%) compared to mothers of preterm babies (23.5%).

**Test of Hypothesis**

**$H_o1$:** There is no significant difference in the social responses between mothers of preterm and mothers term babies in the study area.

**Table 6: Mean difference between social responses of mothers with preterm and term babies**

| Preterm and term | Social response of mothers | | | | | | |
|---|---|---|---|---|---|---|---|
| | N | Mean | Mean diff | F | T | df | Sig |
| Preterm | 98 | 1.77 | 0.078 | 7.849 | -1.384 | 190.977 | 0.168 |
| Term | 102 | 1.84 | | | | | |
| Total | 200 | | | | | | |

Table 6 shows that there was difference in the social responses between mothers with preterm and term babies. In other words, the mothers of term babies fare better in their social response than mothers with preterm babies. However, the social response mean difference (0.078) was not statistically significant ($p$ = .168). The null hypothesis one ($H_o$ 1) was therefore accepted.

## DISCUSSION OF FINDINGS

The study was carried out among 200 postpartum mothers in Neonatal and Post-natal wards of Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), Ile Ife, Osun State. The study used a variety of responses from mothers with preterm and term babies in conducting a comparative analysis on the social responses between these mothers with preterm and term babies. The study's findings revealed that up to half of the mothers were sometimes and always never happy about the circumstances surrounding their children's birth similar to a study done by Ramos-Lira, et al (2020) where women were discovered to be more socially responsive to negative situations. This study also revealed that the higher proportion of unhappy mothers were mothers of preterm babies similar to a study done by Bay and Sayiner (2021) on the "Perception of traumatic childbirth of women and its relationship with postpartum depression. This is due to the fact that most preterm infants are born ill and the mother, in this context, experiences several feelings, like fear, uncertainty, anguish and anxiety, postpartum depression, post-traumatic stress disorder (PTSD) and most of all problems bonding with their babies in line with the result of a study done by Abdollahpour, et al. (2016) revealing that traumatic childbirth is among the important factors that make childbirth an unpleasant experience and has psychological negative effects on women.

In the study both group of mothers (term: 15.7%; preterm: 23.5%) exhibited negative social responses as a result of the stressful experiences they had before, during and after pregnancy showed that both group of mothers expressed similar notion (75.5%) that they are optimistic that the will bounce back to life soon after this experience. A total of 18 (18.4%) of mothers with preterm babies when asked if they had the sense of returning to their workplace as soon as possible showed reluctance as they claimed they weren't always ready to return to work while a total of 23 (22.5%) of mothers with term babies expressed similar notion this is similar to a study done by McLeish and Redshaw (2017) and a study done by Grunberg, et al., (2018).

The results of a comparative analysis of social responses between mothers of preterm babies and mothers of term babies revealed that mothers of term babies had more positive social responses than mothers of preterm babies which corresponds with the study conducted by Ghorbani, et al. (2014) and Trumello et al. (2018). This is in contrast to study done by Hall, et al. (2015) that revealed that a premature childbirth does not necessarily generate disrupted maternal representations of the infant but maternal interactive behavior appears to be an important mechanism through which maternal representations influence the development of infant attachment in full-term and preterm infants. So usually, the experience of premature birth does not

impact solely on the infant and mother as individuals but occurs in the context of a critical point in time when they are developing a relationship with one another (Leahy-Warren et al., 2020).
In the hypothesis testing to determine whether there is difference between social responses of mothers with preterm and term babies, the mothers of term babies fare better in their social response than mothers with preterm babies. However, the social response mean difference (0.078) was not statistically significant ($p$ = .168) similar to a study done by Ghorbani, et al. (2014), where the results revealed that while the anxiety levels of parents in the two groups were not statistically different, the trait anxiety levels of mothers ($p$ = .001) and fathers who had preterm infants ($p$ = .01) were significantly higher than those of parents of full-term infants. It was discovered that the parents of premature infants are more likely to suffer from mental illnesses than the parents of term infants as revealed in this study. It is also similar to a study done by Gatta, et al. (2017) where the quality of family relationships was significantly poorer in the preterm group than in the at-term group.

## CONCLUSION

This study has shown that mothers who experience negative social responses are usually unable to bond with their baby. Also premature birth and the child's hospitalization could have a negative impact on the mothers' social state, their perception of parental self-image, and, as a result, the child's early bond regardless of the infants' gestational age at the time of the preterm delivery. The findings highlighted the importance of involving NICU nurses and clinicians in order to optimize care for mothers immediately following a preterm birth and during the infant's hospitalization, while also taking into account the psychological needs of mothers irrespective of the gestational age.

### Recommendations

Based on the result from this study, the following recommendations were made:

1. Training of health care workers especially nurses to be able to detect, monitor, and intervene promptly in the management of negative social responses. Holistic health care should be given by skilled healthcare providers. This should be in the entire health care domains; physical, social, mental and spiritual without neglecting any aspect.
2. Proper management of preterm labour to increase the gestational age before delivery. If preterm delivery is imminent, comprehensive care in a standard hospital should be ensured.
3. There should be policy development in order to enhance family centered care in the neonatal intensive care unit so as to uphold social support for mothers.

### Implication of the study to nursing practice

The mother is the central figure in the care of the newborn. She experiences and expresses her feelings based on the situation and experiences that surrounds the birth of her child. This can be either positive or negative. It is up to the clinical staff to access, detects and promptly intervene where necessary based on the type of social responses that the mother is exhibiting. Thus the study emphasizes the importance of involving NICU nurses and clinicians in order to optimize the care

for mothers immediately after birth irrespective of gestational age and during the infant's hospitalization, taking into account the psychosocial needs of mothers during these periods.

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