Stress and Coping Strategies of Parents of Preterm Infants in Selected Tertiary Health Institutions in Ekiti State

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ABSTRACT

Background: Preterm birth is one the leading causes of death among children below the age of five years and involves all births that occur before 37 weeks of gestation. This study therefore examined the stress and coping techniques of preterm infants parents in Ekiti State University Teaching Hospital and Federal Teaching Hospital, Ekiti State.

Methodology: This study adopted quantitative research method and study was conducted among parents of preterm infants in two selected teaching hospital Ekiti State Nigeria. Sample size was determined using Fischer’s formula and the sample consisted of 82 respondents selected using purposive sampling technique. Data were collected using a standardized instrument (Family Inventory of Life Events and Changes) developed by McCubbin & Patterson (1983) with reliability index of 0.83. Data collected were analyzed using descriptive statistics of frequency, percentages, mean, standard deviation and tables while inferential statistics of chi-square and correlation were used to test stated hypothesis at 0.05 level of significance.

Results: The results showed that majority (32.1%) of preterm babies were jaundiced and were male (58.9%). Parents of preterm infants experienced moderate (85%) level of stress. However, finances and business strains were identified as major stress experienced by preterm infant parents. Overall coping level was high (65.2%) and coping strategies employed were seeking information and advice; positive reframing; and seeking for assistance. The findings also revealed

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INTRODUCTION

Preterm birth is considered one the leading causes of death among children below the age of five years and involves all births that occur before 37 weeks of gestation or fewer than 259 days since the first day of a woman’s last menstrual period. It is estimated that preterm birth occurs for a variety of reasons including spontaneous delivery, early induction of labour or caesarean birth, whether for medical or non-medical reasons [1]. The incidence of preterm birth is considered to be associated with biological and environmental factors like cervical insufficiency, previous abortion, foetal malformation, high Body Mass Index (BMI), late or no healthcare during pregnancy, smoking, stress, and exposure to certain environmental pollutants among other factors [2].

Other significant factors associated with preterm birth include multiple pregnancies, infections and chronic conditions such as diabetes and high blood pressure. More so, there could also be a genetic influence and these myriads of factors have led to an estimated global preterm birth prevalence of 5% to 18%(WHO, 2020a). According to World Health Organization [3] prevalence of preterm births is higher in low- and middle-resource countries compared to the more affluent nations of the world. As indicated in the World’s report [4], more than 60% of preterm births occur in Africa and South Asia with the highest prevalence occurring in India (3,519,100), China (1,172,300), Nigeria (773,600), Pakistan (748,100), Indonesia (675,700), United States of America (517,400), Bangladesh (424,100), Philippines (348,900), Democratic Republic of the Congo (341,400), and Brazil (279,300).

The birth of a preterm child is a significant sign of stress in the family and providing care for a preterm child can exert significant amount of stress on the family of the new born as have been demonstrated by several studies [5-8], compared to women who have full-term births, mothers of preterm babies tend to have more emotional distress after 24-72 hours following birth [5], reduced quality of life [9], This is as a result of various financial and emotional strains that parents have to go through in taking care of the child.

The burden of caring for a preterm child is often more aggravated in low-middle-income countries with highest prevalence of preterm births [1]. However, in high countries, pregnant women are able to have access to better socioeconomic conditions, lifestyles and nutrition, which often result into healthier pregnancies, and modern neonatal care technology as well as highly specialized and skilled health care givers. This is not often the case in low-income countries where modern technology is either not available, or properly manned and not accessible to the people who need them [5]. Consequently, having preterm births in such circumstances can lead to higher healthcare implications for both the mother and the child because the health of an infant is closely linked to the mother’s health and the care she receives in pregnancy and childbirth [10].

In addition, the mental and emotional stress of having a pre-term child, coupled with the financial strain of having to pay for care in the hospital takes lots of toll on the parents which further affects the parents in many different ways [11]. In other words, the mother misses the joy of being able to hold her baby, breastfeed and bond right after delivery [12]. On the other hand, the father misses the expectation of being a father and also being able to nurture the mother and baby. Instead, they have to relate with the child, sometimes at a distance [13]. However, the outcome of a stressor is dependent firstly on the availability of resources to deal with the stress and the perception of the family about the situation. Ability to perceive, deal with, and handle the stressor well significantly affects a family’s ability to persevere through the stressful period. This invariably requires efficient coping techniques by the parents of preterm infants [14].

**Conclusion:** This study showed that parents of preterm infants experienced stress but developed coping techniques to suppress their level of stress. It is therefore recommended that nurses should develop proper understanding about the parents’ stressful situations to provide a holistic care to the neonates and their parents.

**Keywords:** Stress; coping technique; preterm birth; neonates; NICU.
Therefore, this study aimed to examine the stress and coping strategies of preterm infants’ parents in two (2) selected teaching hospitals, Ekiti State, Nigeria.

1.1 Objectives of the Study

1. To identify the type of stress experienced by parents of preterm infants;
2. To identify the factors that are associated with experience of stress among parents of preterm infants and
3. To determine the stress coping techniques adopted by parents of preterm infants

1.2 Hypotheses

1. There is no significant association between socio-demographic factors (gender, occupation, level of education, income) and perceived stress of parents with preterm infants.
2. There is no significant association between perceived stress and coping techniques among parents of preterm infant

2. METHODOLOGY

2.1 Research Design

This study adopted quantitative research methods to determine the level of stress and coping strategies among the parents of preterm infants.

2.2 Study Setting

This study was carried out among the parents of preterm infants in two (2) teaching hospitals (Ekiti State University Teaching Hospital and Federal Teaching Hospital, Ekiti State). These Tertiary health facilities serve as referral centres for various healthcare facilities within the State including private health centres and hospitals, maternity homes and primary health centres. The facilities accommodate comprehensive management of preterm labour, delivery and special care for the neonates.

2.3 Study Population

The population for the study was eighty-two (82) parents of preterm infants admitted to neonatal intensive care units (NICU) of Ekiti State University Teaching Hospital and Federal Teaching Hospital, Ekiti State, Nigeria.

2.4 Sample size and Sampling Technique

The sample size was determined using Fischer’s formula \( z = \text{standard normal deviate} = 1.96; \ P = \text{prevalence/estimate of preterm births, 5.7% [15]; D = Margin of error, 0.05; q = 1-P. facilities were selected using purposive sampling technique and samples were selected using convenient sapling technique for a period of eight (8) weeks among parents of preterm infants. That were present at the time of data collection.}

2.5 Tools for Data Collection

Data were collected using 2 standardized instruments ‘Family Inventory of Life Events and Changes (FILE) developed by [15] and Family Crisis Oriented Personal Evaluation Scales (F-COPES) developed by [16] to identify problem solving and behavioural strategies utilized by families in difficult situations. Family Inventory of Life Events and Changes (FILE) scale has 55 items grouped into nine subscales: (1) intra family strains or difficulties in family relationships, such as strains between parents and children or between ex-spouses; (2) marital strains; (3) pregnancy and childbearing strain; (4) financial and business strain; (5) work-family transitions and strains; (6) illness and family “care” systems; (7) losses (deaths in nuclear and extended family); (8) transitions “in and out” (children being launched or returning home after leaving); (9) family legal violations. Each item on the scale has separate weight of scores which is assigned only if the respondent replies ‘yes’ or ‘no’ to the question, ‘yes response attract a score of 1 while a ‘no’ attracts a score of zero. The FILE total score ranges from 0 – 55. Scores for each subscale are computed by summing the weighted items in the subscales. Also, Family Crisis Oriented Personal Evaluation Scales (F-COPES) scale comprises 7 coping behaviour items which focused on (1) the ways a family internally handles problems between its members; and (2) the ways the family handles external demands that affect the whole family. Consequently, the scale assesses five factors of coping: (i) acquiring social support, (ii) reframing, (iii) seeking spiritual support,(iv) mobilizing family to acquire and accept help, and (v) passive appraisals. Each item on the scale is measured on a Five-point Likert scale of strongly disagree (1) to strongly agree (5). This helps to identify the coping resources most often used by the family.
2.6 Data Analysis

Data collected were coded and analysed using statistical package for social sciences (IBM SPSS) version 25.0; variables were analyzed using descriptive statistics of frequency table, percentages, mean and standard deviation while hypothesis were tested using chi-square and correlation coefficient at 0.05 level of significance.

3. RESULTS

3.1 Socio-Demographic Characteristics

Majority of the respondents were mothers 58(72.5%), professionals 27(33.8%), with tertiary level of education 52(65.0%) and earn less than 40,000 naira 30(37.5%) on monthly basis. The neonates were age less than seven days 38(48.2%), more than half were male 47(58.9%) with diagnosis of jaundice 27 (32.1%) as presented in Table 1.

3.2 Type of Stress Experienced by Parents of Preterm Infants

The study examined different types of perceived stress experienced by the parents of preterm infants and the findings revealed that parents of preterm infants experienced financial and business strains (72.6%) in the course of caring for their preterm infants. The perceived types of stress examined were reported in Table 2.

Table 1. Socio-Demographic Characteristics of the Respondents (n=80)

| Socio-demographic factors | Frequency | Percentage |
|---------------------------|-----------|------------|
| Average family monthly income |           |            |
| ≤40000                    | 30        | 37.5       |
| 40001-50000               | 19        | 23.8       |
| 50001-80000               | 12        | 15.0       |
| 80001 and above           | 19        | 23.8       |
| Parents                   |           |            |
| Fathers                   | 22        | 27.5       |
| Mothers                   | 58        | 72.5       |
| Occupation                |           |            |
| Professional              | 27        | 33.8       |
| Self-employed             | 12        | 15.0       |
| Civil servant             | 18        | 22.5       |
| Business/Trading          | 15        | 18.8       |
| Others                    | 8         | 1.0        |
| Highest Level of Education|           |            |
| None                      | 1         | 0.1        |
| Primary                   | 4         | 0.5        |
| Secondary                 | 23        | 28.8       |
| Tertiary                  | 52        | 65.0       |
| Age of the neonate (Days) |           |            |
| Less than 7               | 38        | 48.2       |
| 8-14                      | 19        | 23.2       |
| 15-21                     | 14        | 17.9       |
| 22 and above              | 9         | 10.7       |
| Gender                    |           |            |
| Male                      | 47        | 58.9       |
| Female                    | 33        | 41.1       |
| Diagnosis                 |           |            |
| Jaundice                  | 27        | 32.1       |
| Respiratory diseases      | 14        | 17.9       |
| Feeding intolerance       | 16        | 19.6       |
| Prematurity               | 16        | 19.6       |
| Malaria                   | 1         | 1.8        |
| Excessive crying          | 1         | 1.8        |
| Breech                    | 1         | 1.8        |
| Declined to respond       | 4         | 5.4        |
Table 2. Types of perceived stress among parents of preterm infants (n=80)

| S/N | Types of perceived stress                                                                 | Yes | % | No | % |
|-----|-------------------------------------------------------------------------------------------|-----|---|----|---|
|     | **Intra family Strains**                                                                   |     |   |    |   |
| 1   | Increase of husband/father's time away from family                                         | 60  | 75.0 | 20 | 25.0 |
| 2   | Increase of wife/mother's time away from family                                           | 33  | 41.3 | 47 | 58.8 |
| 3   | A member appears to have emotional problems                                               | 48  | 60.0 | 32 | 40.0 |
| 4   | Increase in conflict between husband and wife                                             | 29  | 36.3 | 51 | 63.7 |
| 5   | Increase in arguments between parent(s) and child(ren)                                    | 25  | 31.3 | 55 | 68.8 |
| 6   | Increase in conflict among children in the family                                         | 26  | 32.5 | 54 | 67.5 |
| 7   | Increased difficulty in managing school age child(ren) (6 - 12 yrs)                        | 34  | 42.5 | 46 | 57.5 |
| 8   | Increased difficulty in managing preschool age child(ren) (2.5 - 6 yrs)                   | 37  | 46.3 | 43 | 53.8 |
| 9   | Increased difficulty in managing toddler(s) (1 - 2.5 yrs)                                 | 41  | 51.2 | 39 | 48.8 |
| 10  | Increased difficulty in managing infant(s) (0 - 1 yrs)                                    | 46  | 57.5 | 34 | 42.5 |
| 11  | Increase in the amount of "outside activities" which the children are involved in          | 45  | 56.3 | 35 | 43.8 |
| 12  | Increased disagreement about a member's friends or activities                              | 33  | 41.3 | 47 | 58.8 |
| 13  | Increase in the number of problems or issues which don't get involved                     | 39  | 48.8 | 41 | 51.2 |
| 14  | Increase in the number of tasks or chores which don't get done                             | 46  | 57.5 | 34 | 42.5 |
| 15  | Increased conflict with in-laws or relatives                                               | 37  | 46.3 | 43 | 53.8 |
|     | **Marital Strains**                                                                        |     |   |    |   |
| 16  | Spouse/parent was separated or divorced                                                   | 21  | 26.3 | 59 | 73.8 |
| 17  | Spouse/parent had an "affair"                                                              | 18  | 22.5 | 62 | 77.5 |
| 18  | Increased difficulty in resolving issues with a "former" or separated spouse               | 24  | 30.0 | 56 | 70.0 |
| 19  | Increased difficulty with sexual relationship between husband and wife                     | 34  | 42.5 | 46 | 57.5 |
|     | **Pregnancy and Childbearing Strains**                                                     |     |   |    |   |
| 20  | Spouse had unwanted or difficult pregnancy                                                | 28  | 35.0 | 52 | 65.0 |
| 21  | An unmarried member became pregnant                                                       | 24  | 30.0 | 56 | 70.0 |
| 22  | A member had an abortion                                                                  | 24  | 30.0 | 56 | 70.0 |
| 23  | A member gave birth to or adopted a child                                                  | 24  | 30.0 | 56 | 70.0 |
|     | **Finance and Business Strains**                                                           |     |   |    |   |
| 24  | Took out a loan or refinanced a loan to cover increased expenses                           | 51  | 63.7 | 29 | 36.3 |
| 25  | Went on welfare                                                                           | 55  | 68.8 | 25 | 31.3 |
| 26  | Change in conditions (economic, political, weather) which hurts the family investments and/or income | 64  | 80.0 | 16 | 20.0 |
| 27  | A member started a new business                                                           | 64  | 80.0 | 16 | 20.0 |
| 28  | Change in Agric market                                                                    | 62  | 77.5 | 18 | 22.5 |
| 29  | Purchased or built a home                                                                  | 36  | 45.0 | 44 | 55.5 |
| 30  | A member purchased a car or other major item                                              | 43  | 53.8 | 37 | 46.3 |
| 31  | Increased financial debts due to overuse of credit cards                                  | 64  | 80.0 | 16 | 20.0 |
| 32  | Increased strain on family "money" for medical/dental expenses                            | 72  | 90.0 | 8  | 10.0 |
| 33  | Increased strain on family "money" for food, clothing, energy, home care                   | 73  | 91.3 | 7  | 8.8 |
| 34  | Increased strain on family "money" for child(ren)'s education                             | 55  | 68.8 | 25 | 31.3 |
|     | **Work-Family Transitions and Strains**                                                    |     |   |    |   |
| 35  | Decrease in satisfaction with job/career                                                   | 53  | 66.3 | 27 | 33.8 |
| 36  | A member changed to a new job/career                                                       | 29  | 36.3 | 51 | 63.7 |
| 37  | A member lost or quit a job                                                                | 25  | 31.3 | 55 | 68.8 |
| 38  | A member retired from work                                                                | 25  | 31.3 | 55 | 68.8 |
| 39  | A member was promoted at work or given more responsibilities                              | 41  | 51.2 | 39 | 48.8 |
| 40  | Family moved to a new home/apartment                                                       | 29  | 36.3 | 51 | 63.7 |
| 41  | A child/adolescent member changed to a new school                                         | 39  | 48.8 | 41 | 51.2 |
|     | **Illness and Family Care Strains**                                                        |     |   |    |   |
| 42  | Parent/spouse became seriously ill or injured                                             | 29  | 36.3 | 51 | 63.7 |
| 43  | Child became seriously ill or injured                                                      | 30  | 37.5 | 50 | 62.5 |
| 44  | Close relative or friend of the family became seriously ill                               | 29  | 36.3 | 51 | 63.7 |
| 45  | Increased responsibility to provide direct care or financial help to husband's and/or wife's parents | 33  | 41.3 | 47 | 58.8 |
|     | **Losses**                                                                                |     |   |    |   |
| 46  | A parent/spouse died                                                                     | 7  | 8.8 | 73 | 91.3 |
| 47  | A child member died                                                                      | 10 | 12.5 | 70 | 87.5 |
3.3 Level of Stress Experienced by Parents of Preterm Infants

Parent of preterm infants showed moderate level of stress (85%) as presented in Table 3.

3.4 Coping Techniques Adopted by Parents of Preterm Infants

Coping techniques adopted by the parents were assessed using the F-COPE questionnaire were presented in Table 4. The findings revealed that preterm infants parents mostly adopted “having faith in God” (Mean= 3.66, S.D = 1.4). Facing the problems head on and trying to get solution right away was also a coping technique often used by preterm parents (Mean=3.5, SD = 1.5). “Seeking information and advice from persons in the families who have faced the same similar problems” and “Seeking professional counseling and help for family difficulties” had the same mean score but different SD (Mean =3.31, S.D= 1.5, 1.6) respectively. “Seeking information and advice from family doctor” and “Defining the family problem in a more positive way so as not to be too discouraged” were two coping strategies with less than weighted mean of 3.00; hence, they were termed poor coping strategies with value of (Mean =2.86, S.D = 1.4) and (Mean =2.90, S.D= 1.3) respectively.

3.5 Pattern of Stress Experienced by Parents of Preterm Infants

The pattern of stress experienced by preterm infants parents were reported in Fig. 1. over two-third of the respondents reported finance and business strains, work family transition strains, transition in and out, and intra family strains as perceived stress experienced. On the other hand, marital strain, pregnancy and child bearing strains, losses and family legal violation were not the perceived stress experienced by the respondents.

### Table 3. Level of stress experienced by parents of preterm infants (n=80)

| Extent of Stress | frequency | %   | x       |
|------------------|-----------|-----|---------|
| Low Stress       | 5         | 6.3 | z ≤15.5 |
| Moderate Stress  | 68        | 85.0| 15.5 ≥ z ≤29.6 |
| High Stress      | 7         | 8.7 | 29.7 ≥ z ≤43.7 |

*x = score in McCubbin Scale of Stress, n = total number of items in McCubbins Scale, z = weighted stress value*

### Table 4. Coping Techniques adopted by parents of preterm infants (n=80)

| S/N | Coping techniques adopted by parents | 5 | 4 | 3 | 2 | 1 | Mean | S.D | Remark |
|-----|-------------------------------------|---|---|---|---|---|------|-----|--------|
| 1   | Having faith in God                  |   |   |   |   |   | 3.66 | 1.4 | GS     |
| 2   | Seeking professional counselling and help for family difficulties | 28 | 25 | 7 | 12 | 8 | 3.31 | 1.5 | GS     |
| 3   | Facing the problems "head on" and trying to get solution right away | 16 | 35 | 4 | 8 | 17 | 3.50 | 1.5 | GS     |
| 4   | Seeking information and advice from the family doctor | 30 | 19 | 2 | 19 | 10 | 2.86 | 1.4 | PS     |
| 5   | Defining the family problem in a more positive way so that we do not become too discouraged | 14 | 14 | 13 | 25 | 14 | 2.90 | 1.3 | PS     |
| 6   | Accepting that difficulties occur   | 9  | 22 | 14 | 22 | 13 | 3.11 | 1.6 | GS     |
Table 5. Fisher’s-Exact Test for the relationship between Socio-demographic factors and perceived stress of parents with preterm infants

| Socio-demographic factors          | Average family monthly income | Low  | Moderator | High | \( \chi^2 \) | \( p \) value |
|-----------------------------------|-------------------------------|------|-----------|------|-------------|--------------|
| Family income ≤ 40000             | 4                             | 19   | 7         |      | 2.740       | 0.867        |
| 40001-50000                       | 5                             | 12   | 2         |      |             |              |
| 50001-80000                       | 2                             | 7    | 3         |      |             |              |
| 80001 and above                   | 4                             | 12   | 3         |      |             |              |
| Sex                               |                               |      |           |      |             |              |
| Fathers                           | 1                             | 20   | 1         |      | 10.295      | 0.004*       |
| Mothers                           | 14                            | 30   | 14        |      |             |              |
| Occupation                        |                               |      |           |      |             |              |
| Professional                      | 4                             | 14   | 9         |      | 10.424      | 0.196        |
| Self-employed                     | 1                             | 11   | 0         |      |             |              |
| Civil servant                     | 4                             | 12   | 4         |      |             |              |
| Business/Trading                  | 4                             | 10   | 1         |      |             |              |
| Others                            | 2                             | 3    | 1         |      |             |              |
| Highest Level of Education        |                               |      |           |      |             |              |
| None                              | 0                             | 0    | 1         |      |             |              |
| Primary                           | 0                             | 4    | 0         |      |             |              |
| Secondary                         | 6                             | 16   | 1         |      | 9.630       | 0.086        |
| Tertiary                          | 9                             | 30   | 13        |      |             |              |

\( \chi^2 \): Fisher’s-exact Test

Fig. 1. Pattern of perceived stress experienced by the respondents
3.6 Relationship between Socio-demographic Factors and Perceived Stress of Preterm Infants’ Parents

A Fisher’s-exact test ($\chi^2$) showed that there was no statistically significant relationship between socio-demographic factors such as occupation ($\chi^2 = 10.424$, $p = .196$), level of education ($\chi^2 = 9.630$, $p = .086$), income ($\chi^2 = 2.740$, $p = .867$) and perceived stress of parents with preterm infants; however, gender with ($\chi^2 = 10.295$, $p = .004$) shows significant relationship this suggest that male and female parents perceived stress differently as presented in Table 5.

3.7 Relationship between Perceived Stress and Coping Technique among Parents of Preterm Infants

There is no significant relationship between perceived stress and coping strategies adopted by preterm infants’ parents. Chi square Test between Perceived Stress and Coping techniques among Parents of Preterm babies was presented in Table 6.

Table 6. Chi square Test between Perceived Stress and Coping techniques among Parents of Preterm babies

| Stress Level | Coping technique adopted | df | $\chi^2$ | P   |
|--------------|--------------------------|----|---------|-----|
|              | Having Faith in God      |    |         |     |
| High         | 2 1 1 2 1                |    | 6.28    | 0.75|
| Moderate     | 25 23 6 8 6             | 8  | 13.32   | 0.25|
| Low          | 1 1 0 2 1               |    | 6.56    | 0.72|
|              | Seeking professional counselling and help for family difficulties | | | |
| High         | 0 3 0 1 3               |    | 10.38   | 0.25|
| Moderate     | 15 32 3 5 13            | 8  | 5.69    | 0.58|
| Low          | 1 0 1 2 1               |    | 4.92    | 0.90|
|              | Facing the problems head on and trying to get solution right away | | | |
| High         | 2 1 0 3 1               |    | 5.26    | 0.57|
| Moderate     | 27 15 2 16 8            | 8  | 4.92    | 0.90|
| Low          | 1 3 0 0 1               |    | 3.69    | 0.58|
|              | Seeking information and advice from the family doctor | | | |
| High         | 1 2 0 4 0               |    |         |     |
| Moderate     | 13 10 11 20 14          | 8  |         |     |
| Low          | 0 2 2 1 0               |    |         |     |
|              | Defining the family problem in a more positive way so that we do not become too discouraged | | | |
| High         | 1 3 0 2 1               |    |         |     |
| Moderate     | 8 18 12 18 12           | 8  |         |     |
| Low          | 0 1 2 2 0               |    |         |     |
|              | Accepting that difficulties occur expectedly | | | |
| High         | 2 1 0 1 3               |    |         |     |
| Moderate     | 19 16 4 13 16           | 8  |         |     |
| Low          | 1 2 1 0 1               |    |         |     |
|              | Seeking information and advice from persons in other families who have faced the same similar problem | | | |
| High         | 3 1 0 2 1               |    |         |     |
| Moderate     | 26 9 41 16 11           | 8  |         |     |
| Low          | 0 2 1 1 1               |    |         |     |
4. DISCUSSION

The findings from the study showed moderate level of stress among parents of preterm infants. This finding was in tandem with the report of Madhi [17] that revealed moderate level of stress among their participants. In addition to this, Gurgani & Jogi [18] also reported moderate level of stress amount the preterm parents. This study also revealed that coping strategies adopted by the respondents were faith in God, seeking professional counseling, seeking information and advice from the family doctors. This showed that the parents exhibited high level of coping strategies. In support of these findings, Gurgani & Jogi [18] reported high level of coping strategies among preterm parents, however, in contrast to the findings from this study, [19], reported moderate level of coping which is also in agreement with the findings from [17] that reported moderate level of coping in different domains like cognitive domain, emotional coping domain, spiritual coping domain, and physical domain.

The findings from the study also revealed no statistically significant relationship between socio-demographic characteristics such as level of education, occupation, and average monthly income and stress perceived by the parents of preterm infants. This finding is at variance with the result of study conducted by [19] that showed a statistically significant association between the stress and coping strategies of mothers and their ages, educational level and occupation. However, in support of the findings from the study, [20] reported no significant association between parents’ age, education level, occupation, infant birth weight and stress; except in occupation which was significant.

The study also revealed no statistically significant relationship between perceived stress and coping techniques among the respondents. The finding of the study was aligned with the results of [21] who also found out that there was no significant relationship between the level of stress and coping strategies used by parents of neonates admitted in intensive care units.

5. CONCLUSION

In conclusion, this study showed that majority of preterm babies were jaundiced and their parents experienced moderate level of stress. High coping level was observed among parents of preterm infants and coping strategies utilized include seeking information and advice; positive reframing; and seeking for assistance. Finances and business strains were identified as major constraints experienced by preterm infants’ parents. Socio-demographic factors were not associated with the level of stress experienced by the parents and the stress experienced is not a function of coping techniques adopted, thus there was no correlation between perceived stress and coping technique. Therefore, parent of preterm infant in neonatal intensive care unit need advice and support while taking care of the infants in NICU.

DISCLAIMER

The products used for this research are commonly and predominantly used products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

ETHICAL CONSIDERATION AND CONSENT

Ethical approval to conduct the study was obtained from the Ethics and Research Committee of Afe Babalola University, Ado-Ekiti. Ethical clearance was obtained from the Ethics and Research Committee of the two (2) selected teaching hospitals; Ekiti State University Teaching Hospital and Federal Teaching Hospital with reference/protocol number EKSUTH A67/2021/04/002 and ERC/2021/03/08/492B respectively. Also, the researcher had obligation to the subjects by getting their informed consent consistent with the principle of individual autonomy. Their voluntary participation, anonymity, privacy and confidentiality when collecting the data were also guaranteed. Their right to participate and not to participate was duly respected and any respondents that want to opt out during the study were allowed.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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