



EFFECTS OF NURSING CARE SKILLS GUIDELINES ON STRESS AMONG MOTHERS HAVING CHILDREN WITH CLEFT LIP AND PALATE

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Abstract

Background:

The mothers of a child born with Cleft Lips and Palate (CLP) are likewise impacted by the disorder. When a child is diagnosed has an impact on how well mothers can adjust and cope. It has an impact on the family's way of life, and mothers who feel responsible for their child's condition go through periods of stress, fear, and care concerns

Objective: To determine the effects of Nursing Care Skills Guidelines on Stress among mothers having children with cleft lip and cleft palate.

Methodology: Two groups quasi experimental study design was used to carry out this study. Simple random Sample of n=36 was recruited in both groups. Validated tools of stress was used to collect the data from mothers in the intervention and control group. Pre-assessment was conducted to obtain baseline scores, after that interventional guidelines for a period of 6 months were delivered only to the interventional group and on the other hand the control group was observed with routine care. After the completion of intervention during post assessment, the data was again collected from the control and interventional group and was compared to see the effect of intervention.

Results: The findings suggested that at pre assessment, there was a non-significant mean difference between the control group and intervention group $t(.472) =$, p value=0.638, with mean and SD (101.56 \pm 10.188 vs. 100.31 \pm 12.172). Furthermore, independent sample t -test statistics used to evaluate effect of nursing skills guidelines on mothers' stress in the intervention group. After the intervention assessment showed statistically significant difference in control and interventional group scores of stress among mothers, $t(9.770)$, p value=0.000, with mean and SD (97.83 \pm 11.423 vs. 76.67 \pm 6.379)

Conclusion: This reflects that nursing skills guidelines have effects on stress among mothers of Cleft lip and palate children.

Key words: Cleft Lips, Cleft palate, Mothers, Nursing care skills guidelines, Stress, care provision

INTRODUCTION:

One of the most prevalent congenital malformations of the head and neck is cleft lip and palate (CLP), which affects one in every 700 live births worldwide each year (Mbuyi-Musanzayi et al., 2018). Cleft lip and palate, which can appear as cleft palate, lip clefts, or coexisting cleft lip and palate, is the most common congenital malformation in the jaw and face region. These anomalies can be divided into syndromic and non-syndromic categories. Cleft lip and palate is the most frequent congenital craniofacial defect in humans (CLP) (Bhutiani, Tripathi, & Rai, 2022).

Although this medical issue does not greatly increase the risk of death in industrialized countries, it does significantly increase the morbidity for afflicted children and their families (Lentge et al., 2022).

The prevalence of cleft lip and palate is highest in Asia (1/500), intermediate in Caucasians (1/1000), and low in Africa (1/2500) (Chukwuanukwu, Afiadigwe, Apakama, Chukwuanukwu, Uchekukwu Nwankwo, & Ilokanuno, 2021). In Colombia, the birth prevalence was 6.0 per 10 000 live births (95% confidence interval [CI], 5.67-6.35), while the population prevalence was 3.27 per 10,000 people (3.21-3.32, respectively). The population with CL/P is most prevalent in Bogotá. The largest percentage was found to be among newborn babies with CLP, according to a review of trends for the prevalence proportion by kind of clefts in newborn babies with clefts. Between 2014 and 2017, the prevalence of cleft lip (CL) went from 17.4% to 34.2%, that of cleft palate (CP) from 32.9% to 20.2%, and that of cleft lip and palate (CLP) from 49.6% to 45.5% (Alonso & Brigetty, 2020).

In Pakistan, there are 1.91 oral clefts for every 1000 live births, according to statistics. However, there are a very large number of Pakistani children who suffer from cleft lip and palate disorders. These children are predicted to experience additional difficulties as a result of their restrictions in the future. However, there are significant variances between and within national, ethnic, and geographic boundaries, which highlight the need of collecting unique subsets of data from various parts of the world (Huda, Shahzad, Noor, Ishaq, Anwar, & Kashif, 2021).

A study conducted in Lahore found that there were 73 cases of CP, with a male-to-female ratio of 1.21:1. Unilateral cleft lip and palate (UCLP) primarily impacted females (57.6%), with a left-side female preponderance, whereas bilateral cleft lip and palate (BCLP) primarily affected men (60%) (Qadeer, Jaafar, Khamis, Khan, Khan, & Saeed, 2022).

Numerous other issues are linked to cleft palate and lip. As if auto-logic disorders, issues with speech and articulation, dental anomalies, growth defects in the face, and psychological issues affecting kids and their families are some of these examples (Gavelle, Dissaux, Dupont, Khonsari, & Picard, 2022). Despite the fact that the exact source of these clefts is unknown, doctors believe that both environment and genetics play a part in how they develop. This number is predicted to be 1 per 1,000 live births based on the results of a meta-analysis of the prevalence rate of cleft lip and palate anomalies in the US from 2013 to 2015. (Salari, Darvishi, Heydari, Bokaee, Darvishi, & Mohammadi, 2021).

The position/location, scope, and severity of the clinical symptoms of CLP varies. It can range from a notch above the lip to a complete split of the lip and palate, and it can be unilateral or bilateral. Psychological anguish in both children and mothers as well as physiological and functional issues in affected children have been linked to CLP (Stock, Costa, Williams, Martindale, & Research, 2019). Newborns with CLP have nutritional needs equivalent to those of infants without CLP, but because of insufficient negative pressure and suction, they have trouble latching onto the breast and sucking the milk. Children with CLP may as a result have aerophagia, nasal regurgitation, choking, exhaustion, insufficient milk intake, failure to gain weight, increased feeding time, etc. (Srivastav, Duggal, Duggal, Tewari, Chaudhari, & Pandey, 2021).

The mothers of a child born with CL/P are likewise impacted by the disorder. When a child is diagnosed has an impact on how well mothers can adjust and cope. Prenatal diagnosis of cleft lip

and palate, enable the mothers to take expert opinions to improve the quality of life by timely treatment of their kids (Sreejith, Arun, Devarajan, Gopinath, & Sunil, 2018).

According to a study, a child's disease has an impact on the family's way of life, and mothers who feel responsible for their child's condition go through periods of anxiety, fear, and guilt. This has an impact on how well the family functions as a unit (Carvalho, Matos, Belchior, Araújo, Rocha, & Neves, 2021).

The mean stress among mothers having children born with CL/P was found greater than those of control mothers. Social support and parental stress were shown to be significantly negatively correlated in mothers of children born with CL/P. The mean parental stress levels were greater for women who responded preoperatively than for those who responded postoperatively among mothers of infants with CL/P. Higher stress levels were seen in mothers of children with clefts due to postpartum diagnosis, failure to breastfeed, feeding issues, the absence of fathers' support, the perception of a difficult infant temperament, and feelings of guilt, resentment, and worry about the future (Boztepe, Çınar, & Özgür, 2020).

Parental success during these first months of life will depend in part on the individual mental health of each parent, their coping skills, and the strength of the marital relationship. Parents who report high levels of stress during infancy that persists into toddlerhood also report higher levels of adjustment problems for their children (Kapp-Simon, 2006).

The literature describes a range of emotions of the families at the time of the delivery having children with CLP. It impacts on the families' life that mothers may experience. These reactions include fear, grief, guilt, concern, sadness, and fury. Mothers may desire to share their feelings and expectations at the time of the diagnosis and receive emotional assistance from trained professionals. This may help them to deal with their emotions effectively and restructure their lives to better care for their kids (Stock, Costa, White, & Rumsey, 2020).

The psychological strain on mothers begins with the diagnosis of CLP, either before or at delivery. Mothers may feel a range of emotions, including bewilderment, sadness, guilt, helplessness, loss of control, and even depression. Mothers may experience emotional harm due to their apparent inability to give birth to a baby who is healthy, happy, and devoid of any physical flaws (Sreejith et al., 2018). As a result, in order for mothers to embrace their child's uniqueness, they must go through a grieving process. The type of cleft may have an effects on how the deformity affects parent-infant relationships. It has been found that stress or parental representations have no effects on how severe a cleft is. Therefore, it would be useful to assess how the type of cleft affects the interaction between mothers and children (Stock et al., 2020).

According to one definition, parenting stress is "a collection of processes that result in adverse psychological and physiological reactions emerging from attempts to adjust to the responsibilities of motherhood." In comparison to mothers of healthy children or kids with chronic physical illnesses mothers, report higher levels of parenting stress, anxiety, and melancholy. No significant changes in parenting stress, parental anxiety, or parental depression were detected for mothers of children with craniofacial problems or CL+P as compared to normative data or a control group (van Dalen et al., 2021).

Mothers, particularly the mother, require encouragement, time, and comfort as they process the information and come to terms with reality. Mothers go through several stages of tension and anxiety. Mothers frequently describe feeling out of control. Despite their best efforts, mothers are powerless to influence the fate of the pregnancy. Due to the belief that their bodies are the guardians and care givers of their unborn child, mothers in particular may feel a great deal of shame (Costa, Williams, Martindale, Stock, & Team, 2019).

The most frequent issue with cleft babies is excessive feeding time and insufficient nourishment. In fact, the majority of infants who are diagnosed with cleft palate after they have delayed presentation typically come from the pediatric department where they were brought for failure to thrive. How to feed the child is a parent's first concern when a child is born with cleft lip and palate? (Srivastav et al., 2021). Literature has shown that feeding problems are a major source of anxiety for a lot of

mothers. Feeding times have to be enjoyable for both mother and child. Long feeding sessions make the mother frustrated and the child unhappy (Visser, Krüger, & Kritzinger, 2018).

Therefore, it is crucial to ensure that mothers experience as little stress as possible because doing so may increase the likelihood that a child will grow up to be more secure and well-adjusted. In addition, stress needs to be looked at and reduced. Pediatric nurses are in a crucial position to assist mothers and reduce stress in this way. By ensuring that the mother feels competent, they appear to be helping to almost raise the child's development. Giving child rearing classes, focusing on the child with an orofacial cleft, managing daily schedules, adjusting to other people's reactions, learning to be flexible, and/or offering relaxing workouts are a few examples. Usually through encouragement and instruction (Bos, Prahl, & Sterkenburg, 2017).

OBJECTIVE OF THE STUDY

To determine the effects of Nursing Care Skills Guidelines on Stress among mothers having children with cleft lip and cleft palate.

MATERIAL AND METHODS

Quasi experimental study was conducted to determine the effects of Nursing Care Skills Guidelines on Stress among mothers having children with cleft lip and cleft palate. This study was conducted at Cleft Lip and Palate Association of Pakistan (CLAPP) hospital, Faisal Town Lahore. The study participants were mothers of those children who have cleft lips and cleft palate and are admitted for treatment. A simple random of n=36 participants was recruited in each, the intervention and control group based on the following criteria.

$$n = \frac{\sigma_d^2 (Z_\beta + Z_{\alpha/2})^2}{\text{difference}^2}$$

Where,

Intervention total care supportive score = 27.40 ± 5.86 (Hakim, Zakizadeh, Saki, & Haghghizadeh, 2021)

Post intervention total performance score = 14.15 ± 4.15 (Hakim et al., 2021)

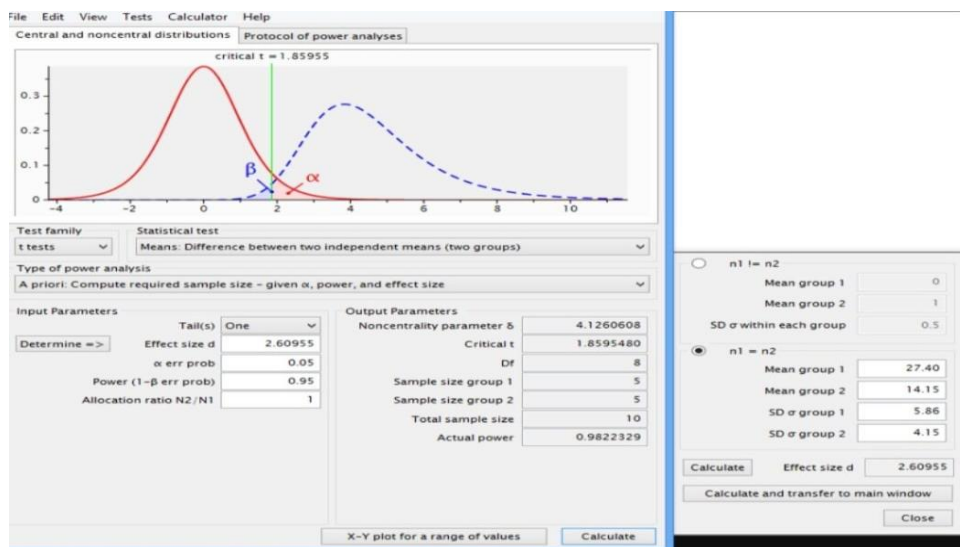
$\sigma_d = 1.71$

$\mu_d = 13.25.28$

$Z_\beta = 1.28$

$Z_{\alpha/2} = 1.96$

n = 36 in control group n= 36 in interventional group



Inclusion criteria

- I. Mothers who have kids with cleft lip and palate.
- II. Mothers who are already in stress.
- III. Low to medium stress mothers.
- IV. Mothers with only one kid.
- V. Duration of stress under 2-years age.
- VI. Mothers with No previous participation in similar training

Exclusion criteria

- I. Working mothers not fully involved in primary care of child
- II. Mother who have serious mental trauma or death in the family in the past 6 months

The rules and regulations set by the ethical committee of university of Lahore were followed while conducting the research and the rights of the research participants were respected. Permission was taken from head of the concerned hospital. Written informed consent was taken from all the participants. All information and data collection was kept confidential. Participants were kept anonymous throughout the study. A close ended checklist for assessing stress was used. **In the** intervention group, an educational program was developed with the help of different books, internet material and Cleft lip and palate experts. The educational intervention consisted of 5 sessions where each session consisted of 30-45 minutes. Each session had specific objectives. This was done through different learning and teaching methods like brain storming, lecture, discussion and handout, Use illustrated media e.g. video, pictures and lab top.

To conduct this educational program, the participants were approached and small groups were developed to provide the educational program. The educational interventions plan were started one month after the pre assessment was completed.

Intervention:

- Session1: Assisting mothers in feeding related concerns
 Session2: Oral Care and dental checkup related guidance
 Session 3: Guidance to mothers related to speech problems
 Session 4: Hearing difficulties assessment and guidance to
 Session 5: Psychological guidance and counseling to mothers.

Following the execution of the intervention, the participants were asked to fill the data collection tool. Stress was again assessed through the stress assessment questionnaire which consisted of 38 items. After data collection it was entered and analyzed in SPSS version- 21. Quantitative variables were presented in the form of mean \pm standard deviation. Qualitative variables were presented in the form of frequency and percentages. The mothers' stress data was normally distributed, so parametric independent t test was used.

RESULTS**DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS:****Table 1.** Age distribution of the Control group (n=36) & interventional group (n=36)

Age (Years)	Range	Minimum	Maximum	Mean Age (Years)	Standard Deviation
Control Group	20	20	40	28.44	5.267
Intervention Group	18	18	36	26.03	4.971

Table 1 presents descriptive statistics for the variable "Age" within the studied population, encompassing information on the minimum, maximum, range, mean, and standard deviation of ages among the participants. Notably, both the control group and the interventional study group consist of 36 participants each. The average age of the control group is 28.44 years, while the interventional

group has an average age of 26.03 years. In the control group, participant ages span from a minimum of 20 years to a maximum of 40 years, resulting in a range of 20 years. Similarly, the age range in the interventional group extends from 18 years to 36 years, with a corresponding range of 18 years.

Table 2: Demographics of Control group (n=36) & interventional group (n=36)

Demographic characteristics	Control F (%)	Interventional group F (%)
Gender of Baby		
Female	18 (50%)	16 (44.4%)
Male	18 (50%)	20 (55.6%)
Mother Education Status		
Uneducated	14 (38.9%)	2 (5.6%)
Primary	9 (25%)	7 (19.4%)
Middle	7 (19.4%)	23 (63.9%)
High school and above	6 (16.7%)	4 (11.1%)
Mothers' Occupation		
Housewife	34 (94.4%)	35 (97.2%)
Private employee	1 (2.8%)	1 (2.8%)
Govt. Employee	1 (2.8%)	0 (0.0%)
Monthly Income		
< 20,000 PKR	13 (36.1%)	1 (2.8%)
20,000-30,000 PKR	12 (33.3%)	15 (41.7%)
30,000-40,000 PKR	10 (27.8%)	17 (47.2%)
>40,000 PKR	1 (2.8%)	3 (8.3%)
Family Marriage		
Yes	21 (58.3%)	19 (52.8%)
No	15 (41.7%)	17 (47.2%)
Other Children with CLP		
Yes	4 (11.1%)	09 (25%)
No	32 (88.9%)	27 (75%)
Type of CLP		
Clift Lip	14 (38.9%)	13 (36.1%)
Clift Palate	14 (38.9%)	15 (41.7%)
Both	8 (22.2%)	8 (22.2%)

Table 2 provides a thorough summary of diverse demographic variables along with their respective frequencies and percentages within the specified context. The following descriptions outline each variable and its corresponding percentage representation.

The gender distribution of the surveyed individuals shows relatively similar representation, both in control group and intervention group where in control group males and females both were n=18 (50%) where as in intervention group males were n=20 (55.6%) and females were n=16 (44.4%). When it comes to education status, the data is categorized into four levels, uneducated, primary, middle and high school and above. In the control group n=14 (38.9%) of the study participants were found in the "uneducated" category, while few, n=9 (25%) fall into the "primary education and n=7 (19.4%) were up to middle. A small proportion, n=6 (16.7%), were categorized as having "high school and above" education. In contrast in intervention group n=2 (5.6%) marked as uneducated, n=7 (19.4%) as primary educated while the majority, n=23 (63.9%) fall into the "middle education and very few n=4 (11.1%) had "high school and above" education. The occupation of the participants is divided into housewife, private employee and government employee where in control group majority, n=34 (94.4%) were housewife. Similarly in the intervention group n=35 (97.2%) were found as housewife. Regarding monthly income, in the control group n=13 (36.1%) were having monthly less than 20,000 pkr per month, n=12 (33.3%) had 20,000-30,000 pkr, n=10(31.4%) were unemployed. Similarly in the intervention group n=9 (27.8%) had monthly income 30,000 to

40,000 pkr and only n=1 (2.8%) had more than 40,000 pkr monthly income. The interventional group also had somewhat similar statistics as the control group. Regarding family marriage, in the control group n=21 (58.3%) were having family marriage and in the interventional group n=19 (52.8%) were having family marriage.

Similarly the participants were asked if they have other children with CLP, in response it was found that in the control group n=4 (11.1%) said yes while in the interventional group n=9 (25%) said they have other children with CLP. In the same way among the control and intervention group n=14 (38.9%), 13 (36.1%) had cleft lip, n=14 (38.9%), 15 (41.7%) had cleft palate and n=8 (22.2%) each had both cleft lip and palate respectively.

DESCREPTIVE STATISTICS

Table 3: Mothers' Stress intervention group versus control group (n=36, n=36)

Stress Among Mothers	Control Group		Intervention Group	
	Pre N (%)	Post N (%)	Pre N (%)	Post N (%)
Low stress level = Scores < 76 or <50%	0 (0%)	05 (13.9%)	0 (0%)	18 (50%)
Medium stress level = Score 76-107 or 50%-70%	23 (63.9%)	22 (61.1%)	20 (55.6%)	18 (50%)
High stress level = Score >107 or >70%	13 (36.1%)	09 (25%)	16 (44.4%)	0 (0%)

Table.3 above showed the participants' stress levels before the intervention and at end of the intervention for both the control as well as the intervention groups. Results presented above revealed that in the control group prior to the interventional program, n=0 (0%) were having low stress, n=23 (63.9%) had medium stress level and 13 (36.1%) had high stress level. Findings did not change much in the post assessment phase where n=5 (13.9%) had low stress, n=22 (61.1%) had medium stress and n=09 (25%) had high stress level. Opposite to this in interventional group the stress level changed after the intervention where before intervention n=0 (0%) had low stress, n=20 (55.6%) had medium stress and n=16 (44.4%) had high stress, but after the intervention no one found having high stress. Similarly after the intervention n=18 (50%) had medium stress and half 50% had low stress level at the end of the interventional program.

EFFECT OF INTERVENTION ON MOTHERS' STRESS:

Table 4: Comparison of control versus intervention Pain Assessment score

Value	Score Label	Control Group (Mean)	Interventional Group(Mean)	t-test	P-value
Stress among Mothers	Pre Assessment	101.56 ±10.188	100.31 ±12.172	.472	0.638
	Post Assessment	97.83 ±11.423	76.67 ±6.379	9.770	0.000

Independent t test with $p < .05$ value as significant

Table 4 above revealed that an independent sample *t*-test was used to evaluate the effect of nursing skills guidelines on stress among mothers. The findings suggested that at pre assessment, there was a non-significant mean difference between the control group and intervention group (p value=0.638). Furthermore, independent sample *t*-test statistics used to evaluate effect of nursing skills guidelines on mothers' stress in the intervention group. After the intervention assessment showed statistically significant difference in control and interventional group scores of stress among mothers (p value=0.000).

DISUSSION

Findings of this current study revealed that the age statistics were quite similar between the control versus experimental groups where average age of the control group is 28.44 years, and interventional group has an average age of 26.03 years. Similarly, the age range in the interventional group extends from 18 years to 36 years, with a corresponding range of 18 years.

This result is consistent with a past research where above one-third of the mothers in the intervention and control group were between the ages of 20 and 30, with respective means of 22.73 ± 4.54 and 22.96 ± 4.36 (Ragab, Abed-El-kreem, Mohamed, & Abolwafa, 2023). This result also agreed with another previous study, where they in intervention group mothers of CLP children have mean age, 28 years, while mothers' in control group have mean age 29.7+ 5.25 years old (Çınar & Koc, 2020). The current study's findings are in line with those of (Kapos, White, Schmidt, Hawes, & Starr, 2021) who investigated the risk of non-syndromic orofacial clefts by maternal race/ethnicity, rural-urban residence, and age, finding that most mothers of infants with orofacial clefts are between the ages of 20 and 34 (Kapos, White, Schmidt, Hawes, & Starr, 2021).

Inconsistent results were obtained from a past study where the mothers in the intervention and control groups were, respectively, 33.3 (6.3) and 33.5 (5.8) years old on average (Hemati, Abbasi, Paki, & Kiani, 2017). Moreover another found inconsistent findings where mothers' aged 25–30, secondary school graduate (34%), (Erdost, Ari, Yalçın, Demirezen, Melenkis, & Aydin, 2023).

The survey participants' gender distribution reveals a fairly equal representation in the control and intervention groups, with men and females in the former group comprising $n = 18$ (50%) and females in the latter group comprising $n = 16$ (44.4%).

This findings are inconsistent with a past study where in the Intervention group 15 (75%) CLP children were male, and 5 (25%) were females, while in control group 14 (70%) were males and, 6(30%) were female (Hakim et al., 2021).

In this current study among the control group $n = 14$ (38.9%) were "uneducated", $n = 9$ (25%) and $n = 7$ (19.4%) had primary education or higher education and Only $n=6$ (16.7%) having completed "high school and above" education. Contrarily, in the intervention group, $n = 2$ (5.6%) and $n = 7$ (19.4%) were classified as uneducated and primary educated, respectively, while the majority, $n = 23$ (63.9%), had "middle education," and just a small percentage, $n = 4$ (11.1%), had "high school and above" education.

The current study's results were consistent with those of Ragab et al. (2023), who found that less than half of the control group and half of the intervention group were illiterate and that less than one-third of the mothers in both the study and the control group had only completed secondary school (Ragab et al., 2023). The current study's findings were also in line with those of Kruppa, Krüger, Vorster, and der Linde (2022), who found that less than 25% of the control group and around one-third of the intervention group, respectively, had completed their primary and secondary schooling (Kruppa, Krüger, Vorster, & der Linde, 2022).

The current study's findings conflicted with those of Wijekoon et al. (2019), who reported that over half of moms of children with cleft lip and palate had a high level of education. That study focused on infants with cleft lip and palate understanding of feeding, growth, and development (Wijekoon, Herath, & Mahendran, 2019). Another study also found different findings in which the majority of individuals in the control group (11 individuals, or 55%) and the intervention group (10 individuals, or 50%) both held diplomas (Hakim et al., 2021).

In the current study, in the control group $n=21$ (58.3%) were having family marriage and in the interventional group $n=19$ (52.8%) were having family marriage. The current study's findings aligned with those of a study conducted in 2021 by Jahanbin, Jamalinasab, and Niazi regarding variations in orofacial clefts, which found that over half of the parents were married consanguineously (Jahanbin, Jamalinasab, & Niazi, 2021). Also the results were found consistent with another past study, about how consanguinity affects familial clefting in Palestinians, where over half of women were married into consanguineous marriages (Saeed, Moore, Zawahrah, Tayem, Kavooosi, & van Aalst, 2019).

Non similar results were found in a previous study where mothers who were not consanguineous were found in 73.3% of the cases group and 70% of the control group (Ragab et al., 2023). These findings also contradicted the findings of (Desai et al., 2019), who found that less than 25% of patients had consanguineous marriages in their study on correlated causal factors in cleft lip and palate patients (Desai, Patel, Sinha, Jain, Patel, & Bhanat, 2019).

Results presented in this study revealed that in interventional group the stress level changed after the intervention where before intervention $n=0$ (0%) had low stress, half 50% had low stress level at the end of the interventional program. Findings are consistent with past research where in the intervention group's mean stress level decreased substantially between before and after the nursing intervention (Bahlgerdi, Miri, Sharifzadeh, Norozi, & Hosseini, 2021).

The findings suggested that at pre assessment, there was a non-significant mean difference between the control group and intervention group (p value=0.638). Furthermore, independent sample t -test statistics used to evaluate effect of nursing skills guidelines on mothers' stress in the intervention group. After the intervention assessment showed statistically significant difference in control and interventional group scores of stress among mothers (p value=0.000).

The results align with a previous study in which the Independent t -test revealed a significant difference ($P<0.05$) between the mean perceived stress scores of the two groups following training, but not a statistically significant difference between the two groups prior to training (Hemati et al., 2017). Findings are also consistent with another previous study where according to an independent t test, the intervention and control groups' mean stress score varied considerably after training (Bahlgerdi et al., 2021).

These results are incongruent with a study conducted from September 2018 to the first week of March 2019, where the findings showed that the mothers experienced high levels of stress and nursing support. There was no statistically significant correlation between the overall support and stress levels (Attia, Elkazaz, & El-Monshed)

Furthermore, paired t test statistics was also used to evaluate effect of nursing skills guidelines on the participants' stress level at pre interventional and post interventional readings. A statistically significant difference was found in results of pre intervention and post interventional scores of stress among mothers (p value =0.000).

A past study found congruent results where the intervention group's mean stress score showed a significant difference before and after training ($P<0.05$) according to the paired t test, but the control group's difference did not reach statistical significance ($P>0.05$) (Hemati et al., 2017). According to a paired t test revealed that the intervention group's mean stress level varied substantially between before and after the nursing intervention (Bahlgerdi et al., 2021).

CONCLUSION

On the basis of findings from this current study it is concluded that majority of mothers taking care of CLP children in interventional group had decreased level of stress as compared to the control group. The difference between the intervention and control group was statistically significant P -value at 0.000 between pre and posttest. This reflects that the intervention program regarding nursing skills guidance for cleft palate children's mothers was very effective. And also, there was statistically significant effect of the nurse led skills guidelines for mothers on their stress while taking care of cleft lips and palate children.

RECOMMENDATIONS

- ✓ There is need of Continuous nurse training and guidance programs for pediatric surgical nurses and mothers about cleft palate about care for cleft palate children.
- ✓ Raising awareness among the surgical pediatric nurses regarding supportive mother care of children with CLP
- ✓ Pediatric surgical nurses are advised to provide mothers with various alternative methods of feeding neonates and infants with cleft lips and palate and how to cope with caring concerns.
- ✓ Educational sessions to guide mothers about care practice should be developed as well as implemented by multidisciplinary experts to maintain appropriate care of CLP children
- ✓ It is recommended that the pediatric surgical unit provide ongoing education and orientation programs to all members of the healthcare team who work with infants who have cleft palate and lip

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