

# EDUCATIONAL METHODS TO IMPROVE THE ABILITY OF PARENTS TO PROVIDE DEVELOPMENTAL CARE FOR PREMATURE INFANTS: A LITERATUR REVIEW

*by* Indra Tri Astuti

---

**Submission date:** 07-Apr-2021 09:00PM (UTC+0800)

**Submission ID:** 1552732694

**File name:** TUGAS\_LR\_DR.\_Moses\_B.\_Inggris\_revisi\_turnitin.docx (106.75K)

**Word count:** 4546

**Character count:** 26608

# EDUCATIONAL METHODS TO IMPROVE THE ABILITY OF PARENTS TO PROVIDE DEVELOPMENTAL CARE FOR PREMATURE INFANTS: A LITERATUR REVIEW

Indra Tri Astuti<sup>1</sup>, Moses Glorino Rumambo Pandin<sup>2</sup>

<sup>1</sup>*Student of Doctoral Program In Nursing, Faculty of Nursing, Airlangga University*

<sup>2</sup>*Associate Professor, Faculty of Cultural Sciences, Airlangga University*

Email: [in.tri.astuti-2020@fkip.unair.ac.id](mailto:in.tri.astuti-2020@fkip.unair.ac.id)

## ABSTACT

### Introduction

Babies born prematurely are at risk of experiencing visual disturbances, hearing loss, disabilities, the risk of infection and even death. Care for premature babies requires serious attention for both health workers and parents. The role of parents is very important both during hospitalization and at home. Therefore, in order to improve the abilities of parents, it is necessary to make educational efforts with the right method.

### Objectives

This literature review aims to provide an overview of educational methods that nurses can use to improve the ability of parents to care for or care for the development of premature babies.

### Methods

The method used is to search for literature that fits the established theme using 5 data based, namely Scopus, ProQuest, Science Direct, Elsevier Clinicaly for Nursing and Web of Science. The strategy used in finding literature that fits the theme and is used in this literature review uses the PICOS framework. Then conducted a review with the PRISMA method.

### Results

The literature selection results obtained 572 publications, after going through the selection obtained 11 literatures that match the theme, with 11 educational methods. These methods can be grouped into ideas, namely increasing parental involvement during treatment, using technology, stress management and continuous monitoring.

### Conclusion

The ability of parents to care for premature babies is needed in order to minimize complications in infants, reduce morbidity, avoid disabilities, increase growth and development of premature babies optimally and reduce parental stress levels, increase parental confidence and good parents' self-efficacy. Choosing the right educational method can improve the ability of parents to properly care for and provide developmental care for premature babies.

**Keywords: educational method, parent, developmental care and premature infant**

## INTRODUCTION

### Background

It is estimated that 15 billion babies born prematurely, about 1 in 10 live birth(1). Indonesia itself is ranked fifth after India, China, Nigeria and Pakistan. The data on the birth of preature babies in Indonesia is as many as 675.000. Approximately 1 million premature babies in the world die from complications that occur (1). Other impacts of birth are high

morbidity and mortality rates, disabilities, learning difficulties, visual and hearing impairments and susceptibility to infection with infectious diseases in the future (1)

Various studies were developed to prevent and overcome various complications that can occur in premature babies. One method developed to address this problem is The **Neonatal Integrative Developmental Care Model** describes seven **Neuroprotective Core Measures for Family-Centered Developmental Care** (2). Seven things namely The **Healing Environment, Partnering with Families, Positioning & Handling, Safeguarding Sleep, Minimizing Stress & Pain, Protecting Skin, and Optimizing Nutrition**(2). This model requires an active role parent in the care of premature babies. A study in Finland found that parents really want to be responsible for caring for their babies both while still in the hospital and at home. They need nurses to empower them in providing care for their babies (3). One of the efforts to increase the ability of parent to play an active role in caring for premature babies, it is necessary to provide the parents with accurate information. One approach is used by teaching the stress and stability cues of preterm infants and a combination of four parental care involvement activities [PCIA's](4)

Parents who have premature babies not only need clear information regarding their baby's health development and care. But also need additional emotional support, clear and honest communication, way to deal with stress in dealing with situations as well as knowledge about managing babies in the transition from hospital to home(5). Premature babies and their families also often need ongoing **community-based care** once the baby is at home(6). In this regard, nurses need to identify the **specific needs of parents in order to provide optimal support** including emotional support(7). The identification of these needs becomes the basis for a nurse to make an appropriate discharge plan. Discharge planning related studies are developed and it is known that with proper planning parents will be ready to care for their babies at home (8)

The method of providing information greatly affects the ability of parents to absorb information and apply the information obtained. This literature review discusses various methods that can be used to provide information to increase the knowledge and abilities of parents in providing developmental care or caring premature babies

### **Context**

This literature review discusses various studies on educational methods or health education for parents to improve the ability of parents to care for or provide developmental care for premature babies.

## **Purpose**

The general purpose of this literature review is to describe various educational methods that can improve the ability of parents to provide developmental care for premature babies.

## **Question**

What educational methods can enhance the role of parents in providing developmental care for premature babies?

## **METHOD**

The literature search in this review literature uses 5 data based Scopus, ProQuest, Science Direct, Elsevier Clinicaly for Nursing dan Web of Science. The data used in the literature search was from March too April 2021. The data used in writing this literature were secondary data obtained not from direct observation but obtained from the results of research that had been conducted by previous researchers. The sources used are in the form of journals both national and international with predetermined themes. The protocol and evaluation of this review literature used the PRISMA checklist. Which was tailored to the objectives of this review literature. Whatever the theme established in this literature is method for enhancing parental participation in developmental care for premature infants. Searching for articles or journals used in this literature uses keywords and Boolean operators (AND, OR, AND NOT) which are used to expand or specify the search, making it easier to find journals that match the theme and will be used in writing this literature. The keywords used in finding journals that are in accordance with the review literature are adjusted to the Medical Subject Heading (MeSH), the keywords used in the review literature are as follows:

**Table 1 Keyword Literature Review**

<b>Educational Methods</b>	<b>Subjects</b>	<b>Developmental Care</b>	<b>Premature</b>
Educational method	Parent	Developmental Care	Premature Infants
OR	OR	OR	OR
Health Education	Family	Care	Preterm Infants
OR	OR	OR	OR
Training	Mother	Caring	Premature Babies
OR	OR		OR
Education	Father		Preterm Babies

The strategy used in finding literature that fits the theme and is used in this review literature uses the PICOS framework, which consists of:

1. Population/ problem namely the population or problem to be analyzed in accordance with the themes that have been determined in this literature review
2. Intervention, namely the implementation of cases of individuals or communities as well as application of the implementation os studies in accordance with pre determined theme
3. Comparison, is an intervention or other implementation that used as a comparison, if not available, a control group can be used in the selected study.
4. Outcome, namely the results and outcomes obtained in previous studies that are in accordance with the themes specified in this literature review
5. Study design, namely the research design used in the articles to be reviewed .

The PICOS format used in this literature review is described in table 2

**Table 2 Literature Review Based On The PICOS Format**

<b>Criteria</b>	<b>Inclusion</b>	<b>Exclusion</b>
Population/ Problem	Parent or Family or Mother or Father	Not Parent or Family or Mother or Father
Intervention	Educational method for parent	Not Educational method for parent
Comparation	Role parent	
Outcome	Educational Method For Parent In Developmental Care For Premature Infants	Didn't explain about Educational Methode For Parent In Developmental Care For Premature Infants
Study Design and Puplication Tiper	Quasi-experimental studies, Randomized Control and Trial	
Publication Years	Post-2021	Pre-2019
Language	English	Language other than English

Based on the literature selection results, 572 publications were obtained from searching data bases. The results of this selection are described in Figure 1.

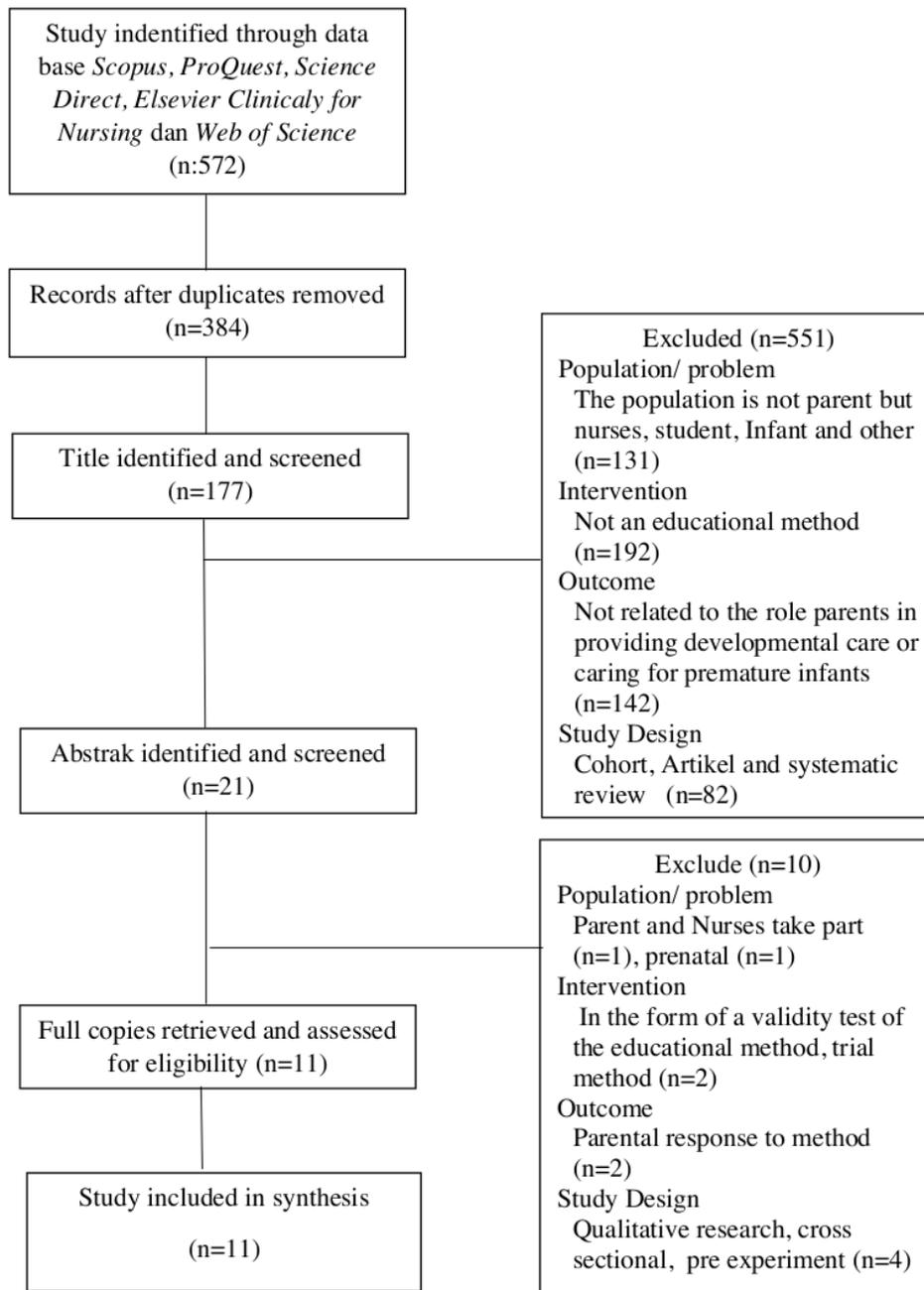


Figure 1 Flow of Literature Review Based on PRISMA 2009 (Polit and Beck, 2013)

Analysis of the methodological quality in each literature obtained was carried out by means of a checklist of assessment lists with several questions to assess the quality of the literature study critical appraisal

## RESULTS

The results of a literature study related to educational methods to improve the ability of parents to provide developmental care for premature babies are describe in Table 3

Table 3 Literature Search Results

Author and Year	Study Design, Sampel, Variabel, Instrument, Analysis	Outcome	Summary of Results
Askary, et al. (2020)	<p><b>Design:</b> Randomized Controlled Trial (RCT)</p> <p><b>Sample:</b> using ramdomiced block design, 45 respondent (each group 15 respondent)</p> <p><b>Variable:</b> Creating Opportunities for Parent Empowerment (COPE) program and the perceived maternal parenting self-efficacy (MP-SE)</p> <p><b>Instrument:</b> using the 20-item Efficacy subscale of the Parenting Sense of Competence scale</p> <p><b>Analysis:</b> Anova</p>	Creating Opportunities for Parent Empowerment (COPE)	COPE can increase parental confidence, increase knowledge as well as the desire to increase the ability to care for premature babies(9)
Abbass-Dick, et al.. (2020)	<p><b>Design:</b> Randomized Controlled Trial (RCT)</p> <p><b>Sample:</b> sample size of 112 (56 per group)</p> <p><b>Variable:</b> Breastfeeding attitude, breastfeeding knowledge, Breastfeeding self-efficacy, Breastfeeding partner support and Breastfeeding co parenting</p> <p><b>Instrument:</b> Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) and an adapted version for co-parents (Dennis, 2003b , 2018). Comprehensive Breastfeeding Knowledge Scale (CBK S) (Abbass-Dick et al., 2020 ). Iowa Infant Feeding Attitude Scale (IIFAS) ( de la Mora et al., 1999 ).</p>	E Health	The results of this study indicate that e-health can help parents, especially in finding sources of information(10).

Author and Year	Study Design, Sampel, Variabel, Instrument, Analysis	Outcome	Summary of Results
	<p>Postpartum Partner Support Scale (PPSS; Dennis, Brown &amp; Brennenstuhl, 2017), Breast-feeding Co-parenting Framework (Abbass-Dick and Dennis, 2017).</p> <p><b>Analysis:</b> Chi Square tests and ANOVA</p>		
Benzies, et al. 2020	<p><b>Design:</b> Randomized Controlled Trial (RCT)</p> <p><b>Sampel:</b> sampling technique using simple random sampling. 718 infants/614 mothers (Alberta FiCare group 353 infants/308 mothers and standar care 365 infants/306 mothers)</p> <p><b>Variable:</b>            Infant: Primery outcome; Length of stay, days            Unadjusted. Adjusted for site geographic area. Adjusted for site geographic area/ infant risk factors. Secondary outcomes            Hospital readmission to 2 months CA. Emergency department visit to 2 months CA.</p> <p><b>Maternal Outcome:</b>            psychosocial distress (anxiety, depressive symptoms, and stress) and parenting self-efficacy at discharge.</p> <p><b>Instrument:</b> anxiety using the State-Trait Anxiety Inventory (STAI) , depressive symptoms using the Edinburgh Postnatal Depression Scale (EPDS), stress using the Parental Stressor Scale: NICU (PSS:NICU), and parenting self-efficacy using the Perceived Maternal Parenting Self-Efficacy (PMP S-E) tool.</p> <p><b>Analysis:</b> Pearson's Chi-square tests and linear regression.</p>	Alberta Family Integrated Care (Alberta FiCare)	<p>The results obtained from the Alberta FiCare application are, the length of stay (LOS) is lower, the re-visits related to emergencies in infants are lower, the type of feeding when the go home is more well, maternal psychosocial stress and parenting self efficacy on discharge from the</p>

Author and Year	Study Design, Sampel, Variabel, Instrument, Analysis	Outcome	Summary of Results
Montazeri, et al (2020)	<p><b>Design:</b> Randomized Controlled Trial (RCT)</p> <p><b>Sample: 70</b> (participants (35 in each group), Using randomized block design stratified</p> <p><b>Variable:</b> Socio-Demographic characteristics of participants, nfant sleep quality, anxiety, frequency of lactation, infant’s anthropometric and developmental indices</p> <p><b>Instrument:</b> Socio-demographic questionnaire, Beck Anxiety Inventory (BAI), Infant Sleep Questionnaire (ISQ), Ages and Stages Questionnaire (ASQ), Infant Anthropometric Parameters Checklist, and the Exclusive Breastfeeding Checklist.</p> <p><b>Analysis:</b> Chi-square, independent t, Fisher’s exact tests, ANOVA,</p>	Journal therapy counseling	<p>hospital were better(11)</p> <p>The results of this study explain that the maternal anxiety score is lower in the intervention group than in the control group. The importance of stress management in mothers because mothers who are anxious and experiencing psychological stress can affect the quality of sleep of the baby and the duration os the baby’s sleep is also lower (12).</p>
Yoo Jin Heo, Won-Oak Oh (2019)	<p><b>Design:</b> This study consisted of two phases. The first phase was developing the Parent Participation Improvement Program. The second phase, a parallel, 2-group randomized controlled trial with a prospective pretest-posttest experimental design, was conducted to evaluate the program’s effectiveness.</p> <p><b>Sample:</b> total sampel of 66 premature infants and their 132 parents (66 mothers and 66 fathers) were enrolled in this study.</p> <p><b>Variable:</b> Demographic and clinical characteristics of the preterm infants and parents</p>	The Parent Participation Improvement Program	<p>The Parent Participation Improvement Program was proven effective in improving parents’ partnerships with nurses and attachment to their infants. The results are expected to more effectively facilitate parent participation in neonatal care.</p>

	<p>participation improvement program</p> <p><b>Instrument:</b> The Pediatric Nurse-Parent Partnership Scale (Choi and Bang, 2013). The Maternal Attachment Inventory, translated into Korean and revised (Han, 2002),</p> <p><b>Analysis:</b> T-test, chi-squared test. A Shapiro-Wilk test was used to test for normal distribution of the data. Two sample t-tests and a Mann-Whitney U test</p>		
Lotfalipour, et al. (2019)	<p><b>Design:</b> Quasi experiment</p> <p><b>Sample:</b> 52 mother as a respondent, Teknik sampling convenience sampling</p> <p><b>Variable:</b> Mother's Mood State</p> <p><b>Instrument:</b> The Profile of Mood States questionnaire</p> <p><b>Analysis:</b> Kruskal-Wallis, Mann-Whitney U, Wilcoxon, and <math>\chi^2</math> tests.</p>	Involved in nursing action or nursing implementation	The results showed that mothers who were involved in the infant massage intervention experienced a greater increase in mood than the control group(13).
Hunter,et al. (2021)	<p><b>Design:</b> one-group pre-/post-intervention design</p> <p><b>Sample:</b> A convenience sample of mothers of infants admitted to the SCN was used for this project. Respondent, 22 mother and 22 infant</p> <p><b>Variable:</b>Parental Stress and Self confidence</p> <p><b>Instrument:</b> the Parental Stress Scale: Neonatal Intensive Care Unit (PSS: NICU) and the Perceived Maternal Parenting Self-Efficacy (PMP SE) questionnaire</p> <p><b>Analysis:</b> Paired t Test</p>	Help, Understanding, and Guidance (HUG) your baby	The results showed a decrease in stress and an increase in the confidence of mothers in caring for their children(14)
Baraldi, et al. (2020)	<p><b>Design:</b> Randomized clinical trial</p> <p><b>Sample:</b> Block Randomized, 130 partisipants</p>	Stockholm preterm interaction-based	The results of this study show positive results on parent-child interaction,

	<p><b>Variable:</b> Child cognitive development, Child motor development, Emotional availability, Parent-child interaction, Parental mental health, Self-regulation</p> <p><b>Instrument:</b> Client Satisfaction Questionnaire (CSQ-8). Emotional Availability Scales (EAS), cognitive, language, and motor development of the children, Bayley Scales of Infant and Toddler Development, Third Edition (BSID-III), parental Self-Efficacy Scale (PSE), Resilience Scale (RES), Hammersmith Neonatal Neurological Outcome (HNNE), Modified Checklist for Autism in Toddlers (M-CHAT), Infant Behaviour Questionnaire (IBQR), Client Satisfaction Questionnaire (CSQ-8), Child Engagement Questionnaire (CEQ), Swedish questionnaire Ert Barn Vårt Samspel (EBVS), the ICF-Core sets</p> <p><b>Analysis:</b> Mann-Whitney U test, Generalized Estimating Equation (GEE), Generalized linear modelling, Poisson regression model. Person Chi Square. Qualitative variables from the semi-structured interviews will be analysed for their thematic content.</p>	intervention (SPIBI)	child development, mental health development of parents and children's participation in preschool(15)
Biarag, et al. (2021)	<p><b>Design:</b> Randomized controlled trial</p> <p><b>Sample:</b> Block randomization method. Sample size 68 (each group 34)</p> <p><b>Variable:</b> supportive counselling, mental health (primary outcome), mother-child bonding and infant anthropometric indices</p>	Supportive counseling	<p>2</p> <p>The results of this study explain that supportive counselling can improve mental health and postpartum bonding in the mothers of</p>

Author and Year	Study Design, Sampel, Variabel, Instrument, Analysis	Outcome	Summary of Results
	<p>(secondary outcomes) in mothers of premature infants.</p> <p><b>Instrument:</b> General Health Questionnaire (GHQ) was used to assess mental health. the Mental Health Questionnaire, Postpartum Bonding Questionnaire and the anthropometric indices checklist, (including height, weight, and head circumference of the infants) were completed at week 8 postpartum. The PBQ consisted of 25 items indicating the mother's feelings and attitude toward her infant.</p> <p><b>Analysis:</b> Ancova</p>		<p>premature babies (16)</p>
<p>Gholami, et al. (2021)</p>	<p><b>Design:</b> Quasi Experimental Study</p> <p><b>Sample:</b> Sampel size 288, by convenience sampling</p> <p><b>Variable:</b> telenursing, the rate of readmissions in premature infants</p> <p><b>Instrument:</b> Mothers and Infants Demographic and Clinical information Form and Awareness Assessment Checklist</p> <p><b>Analysis:</b> Anova, regresi logistic</p>	<p>Telenursing</p>	<p>The implementation of educational intervention through telenursing reduces the readmission rates in premature infants. Considering that the provision of this service is inexpensive and easy, it can be considered as a strategy to reduce readmission rates.</p>
<p>Wu, et al. (2019)</p>	<p><b>Design:</b> Ramdomized control trial</p> <p><b>Sample:</b> sample size 200,</p> <p><b>Variable:</b> duration of breastfeeding, exclusive breastfeeding, knowledge of mothers about breastfeeding, early initiation of breastfeeding and introduction of food</p> <p><b>Instrument:</b> questionnaire explanation, smartphone usage for collecting data</p>	<p>WeChat</p>	<p>This study proves that the use of WChat can increase exclusive breastfeeding in China(17)</p>

## DISCUSSION

The results of literature study regarding the methods used to improve the ability of parents to provide developmental care for premature babies can be grouped into several ideas:

### 1. Increase parental involvement during care

The methods used to parental involvement during care include Alberta Family Integrated Care (Alberta FiCare)(11), The Parent Participation Improvement Program(18), Involved in nursing action or nursing implementation(13),

Alberte FiCare is a development of the FiCare method. The FiCare method has been developed to support family involvement in wind care at NICU level III. Alberte FiCare develops the FiCare model for level II NICUs. FiCare is one of the recommended methods for implementing family centered care (FCC) in the NICU. As a result, parent feel respected and dignified. Communication with health workers is good, the information provided by the family is good and complete, the family is also involved in decision making during treatment. The parent are more involved, the length of stay is shorter and the morbidity rateis also low(19). This is one of the bases for developing Alberte FiCare. The Results obtained from the Alberte FiCare application, lower length of stay (LOS), lower re-visits related to emergencies in infants, better types of eating when going home, maternal psychosocial pressure and better parenting self-sefficacy when discharge from the hospital (11).

The Parent Participation Improvement Program aims to develop a program to increase parental participation in caring for infants who are cared for in the Intensive Unit (NICU) and to evaluate their effects on nurse-parent cooperation, closeness to infants and infant weight(18). This research was conducted in two stages, the first to develop a parental participation program, the second phase to conduct a trial program to determine the effectiveness of the program being made. In this second phase, it was carried out in several stages in intervention group, namely the interaction stage, the pre-participation stage and the active participation stage, while the control group was allowed to make regular visits(18). The results showed tha this program was able to increase the cooperation between nurses and parents as well as their closeness to their babies.

### 2. Using technology to increase the knowledge and abilities or parents in caring for or providing care including E Health(10), Telenursing(20) and WeChat(17)

E-Health is a type of health service that has complex information data. The complexity of e-health can be seen from services which include content, commerce, connectivity, and care. E-health which was developed in the study through 2 stages, namely participants were given access to the parenting website developed, so that they could access them during the perinatal periode(10). The information that can be accessed includes reasons for breastfeeding, how to breastfeed the first days of life, general problems, support from

mothers/ fathers/ spouses/ partners, where to get help, daily life and useful links(10). Second stage couples who are willing to be informed about the resources of breast milk available resources of breast milk available in the community. This aims to increase cooperation with partners in meeting the goals of breastfeeding(10). The results of this study indicate that e-health can help especially in finding sources of information(10). Another study explains that health education through technology (e-health) can improve optimal health outcomes for infants and their families(21).

The development of e-health is also developed with smartphones. Smartphones have become one of the most readable communication tools in the world, through smartphones people can share information. One of the applications on smartphones is WeChat. In this study, the steps for developing educational techniques using WeChat are as follows: 1) developing information-based data, 2) meeting research groups to identify messages to be published, 3) developing multimedia according to the content to be used, 4) socializing to respondents. (17). The implementation of education using the WeChat application is carried out for the first 1 month after childbirth, then followed by 4 post delivery. Furthermore, a competition was conducted to find out the mother's knowledge about breastfeeding, as well as to monitor the child's growth. Next, online meetings are held and there is a reward for respondent who has a good score. This study proves that the use of WeChat can increase exclusive breastfeeding in China (17)

Other research related to the effectiveness of using smartphones as a medium for health education, also proves that users are satisfied with applications made and increase the tendency of mothers to find out what is needed in caring for their babies(22). The content developed in this study included physical conditions and emotional needs, nutrition, sleep and hygiene, medical and nursing needs as well as vaccinations and growth curves(22).

### 3. Stress Management

The mental health of the mother at the time of giving birth to a premature baby is one of the important factors that can affect the mental health of the child and the stability of their family(23). This is because women are more susceptible than men to psychological problems such as depression, anxiety and other disorders(23). The birth of a premature baby can have a psychological impact on the mother, such as changes in mood, stress and depression(13). Treatment of premature babies requires parent to stay in the hospital, where the length of stay can be from days to months. This can negate the psychological impact of the parents, because the NICU is a stressful and environmental stressful place for parents(14).

Good stress management can help parents reduce stress, increase self-confidence and the ability to care for premature babies. Some of the methods obtained in this literature study include involved in nursing action or nursing implementation(13), Help, Understanding, and Guidance (HUG) your baby(14), Journal therapy counseling(12) dan Supportive counseling(16).

Increasing the participation of mothers in the care of premature babies can improve the mental health of mothers. Various methods were carried out by scientists, one of the studies conducted by Lotfalipour, et al, aimed to determine the effect of maternal involvement in one of the selected interventions, namely infant massage on the mother's mood(15). The intervention was carried out for five days, while the results of the study showed a **greater improvement in mood compared to the control group**(13).

The HUG Your Baby program was developed to reduce parental stress and increase parental confidence in caring for their babies when they are discharged(14). Interventions are carried out by providing videos and handouts related to standar knowledge usually this interventions id carried out between 4-6 days after the patient is admitted. The next step id for participant to make the program coordinator to face-to-face education, discussion and clarification os the point taught in the HUG program(14). Visits can be made while still being treated and before the baby comes home. Evaluation is carried out by means of a questionnaire and demonstration of the knowledge taught. Some of the things that were evaluated included eating the baby, skin-to-skin contact, holding and talking to the baby, recognizing excessive stimulation or sign and signs of active sleep and restful sleep. The results showed a decrease in stress and an increase in mother confidence in caring for her child (14).

Journal therapy counseling was conducted with three face-to-face journal therapy sessions and three telephone counseling sessions. The results of this study explained that the maternal anxiety score was lower in the intervention group than in the control group. The importance of stress management in mothers because mothers who are anxious and experiencing psychological stress can affect the quality of sleep of the baby and the duration of the baby's sleep is also lower(12). Another study explained that depressed mothers tended to be less close to their babies, they were also less concerned with their babies, had less exercise and also had an effect on the quality of breastfeeding than mothers who were not depressed (24).

The supportive counseling method aims to improve the mental health of mothers who have premature babies, besides this method also aims to improve the bond between mother and baby, and its effect on the growth of premature babies (16). This method was developed in 6 stages starting from introduction, counseling, infant massage training, educational films, to follow-up activities. The results of this study explain that supportive counseling can improve mental health and postpartum bonding in mothers of premature babies (16)

#### 4. Conducting continuous education and monitoring during treatment until at home

The results of the literature study obtained several sustainable education and monitoring methods, including Stockholm preterm interaction-based intervention (SPIBI)(15) and Creating Opportunities for Parent Empowerment (COPE).

Stockholm preterm interaction-based intervention (SPIBI)(15), is one of the methods used to improve people's ability to provide developmental care. Stockholm preterm interaction-based intervention (SPIBI) is a planning model or preparation for the discharge of premature babies (discharge planning) in the Intensive Unit (NICU) developed in Stockholm Sweden for extremely preterm (EPT) babies. Interventions from SPIBI are brief, namely providing strength-based support from parent-child interactions, making parents sensitive to baby cues, providing support for further developmental care when they are at home and improving self-regulation and joint regulation (15). The results of this study show positive results on parent-child interaction, child development, mental health development of parents and children's participation in preschool (15)

<sup>3</sup> Creating Opportunities for Parent Empowerment (COPE) is a behavior education designed to provide support for parents. A study suggests that COPE can reduce stress through increasing parental knowledge and changing beliefs in caring for premature babies (9). The steps for implementing COPE are by providing behavioral education in the form of compact disks (CDs) along with instructions and strengthening activities in the form of workbooks. The COPE program is implemented in four stages. The first is carried out after the baby has been treated for 2- 4 days. The second phase is 2-4 days after the first phase is carried out, the third phase is 1-4 days before discharge, while the fourth phase is carried out 1 week after discharge. This activity is also monitored by a supervisor, apart from serving as a therapist as well as providing daily comments in the workbook. Assessment was followed up for 1 month after discharge. This method can increase parents' confidence, knowledge and also the desire to improve their ability to care for premature babies(9).

This assistance is needed because the process after being discharged from the hospital is the most difficult period for both the baby and the parents. This can affect the quality of life for both mother and family(25). The importance of discharge planning and the development of educational strategies used in training babies and parents since they are still in the hospital is needed, so that the next nursing process when at home can run well and have no impact on babies, mothers and their families.

## **CONCLUSION**

The ability of parents to care for premature babies is needed is ordered to minimize complications in infants, reduce morbidity, avoid disabilities, increase growth and optimal development of premature babies. In addition, increasing parental abilities can also reduce parental stress levels, increase parental confidence and self efficacy of good parents. Selection of the right educational method can improve the care for and provide developmental care for premature babies.

## **REFERENCES**

# EDUCATIONAL METHODS TO IMPROVE THE ABILITY OF PARENTS TO PROVIDE DEVELOPMENTAL CARE FOR PREMATURE INFANTS: A LITERATUR REVIEW

---

## ORIGINALITY REPORT

---

13%

SIMILARITY INDEX

10%

INTERNET SOURCES

9%

PUBLICATIONS

5%

STUDENT PAPERS

---

## PRIMARY SOURCES

---

1	<a href="http://bmcpediatr.biomedcentral.com">bmcpediatr.biomedcentral.com</a> Internet Source	3%
2	<a href="http://bmcpregnancychildbirth.biomedcentral.com">bmcpregnancychildbirth.biomedcentral.com</a> Internet Source	2%
3	<a href="http://www.ncbi.nlm.nih.gov">www.ncbi.nlm.nih.gov</a> Internet Source	2%
4	Yoo Jin Heo, Won-Oak Oh. "The effectiveness of a parent participation improvement program for parents on partnership, attachment infant growth in a neonatal intensive care unit: A randomized controlled trial", International Journal of Nursing Studies, 2019 Publication	2%
5	<a href="http://nantconference2020.s3.amazonaws.com">nantconference2020.s3.amazonaws.com</a> Internet Source	1%
6	Submitted to Western Governors University Student Paper	1%

---

7

pubmed.ncbi.nlm.nih.gov

Internet Source

1%

8

Submitted to University of Maryland, University  
College

Student Paper

1%

9

scholarscompass.vcu.edu

Internet Source

<1%

Exclude quotes On

Exclude matches < 8 words

Exclude bibliography On