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Safe Sleep Intervention Program for Prevention of Sudden Infant Death Syndrome (SIDS)

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Abstract: **Sudden infant death syndrome (SIDS) is sudden death of the health infants less than one years of age without any identified cause. Neonatal nurse have a vital role in prevention of SIDS. Aim of the study: this study aimed to investigate the effect of implementing safe sleep intervention program on prevention of SIDS. Methods: A quasi-experimental research using one group (pre-test & post-test measures) was conducted at Neonatal Intensive Care Unit at Mansoura University Children's Hospital affiliated to Mansoura University and from Maternal and child health center at Met- Badr Khamis, Mansoura, Egypt. The study was conducted on 155 mothers who had children less than one year of age. Results: The result of our study revealed that, the majority of mothers had poor knowledge about recommendation for safe sleep practice and SIDS prevention, the majority of mothers sharing the same bed with their infant and had positive attitude about SIDS prevention. Conclusion and recommendation: The study concluded that, the safe sleep intervention program was effective in improving mothers knowledge, attitude and sleep practice for infant at home. The researchers recommended developing and implementing educational program for neonatal nurses about safe sleep practice.**

Keywords: **Sudden infant death, prevention, safe sleep practice, educational program, mother, recommendation for SIDS prevention.**

1. INTRODUCTION

"Sudden infant death syndrome (SIDS) or sudden unpredicted infant death (SUID)" is a medical terminology that describes the abrupt death of an infant beneath one year of age, which remains inexplicable after all famous and possible causes of death have been carefully ruled out **(Center for disease control and prevention (CDC), 2016)**. Unfortunately, SIDS still leftovers the number-one cause of death in infants under 1 year of age in many countries, despite epidemiological and pathological studies that continue to assess and searching for extra risk factors **(Duncan, & Byard, 2018)**. Every year, approximately 3,500 babies die suddenly and unexpectedly in the United State. The SIDS occurs in quiet manner and died infants appear healthy prior to death. Approximately 20% of SIDS cases occur in childcare settings. An accidental suffocation in a sleeping environment and other deaths from unknown causes may be included **(CDC, 2017)**.

A Proposed risk factors for SIDS as mentioned by **Colson, et al., (2013)** included firstly: subclinical tissue damage from infection; Secondly: environmental triggers, such as poor nutrition and medical care; and thirdly: poor postnatal development of reflexes and responses. Additionally, the contemporary triple risk model proposes that when three

conditions are present parallel, a sudden infant death occurs. These conditions are: first, the vulnerable infant (preterm birth, exposure to maternal smoking during pregnancy). Second a life-threatening development period (2-4 months of age); the third is an exogenous stressor such as prone sleeping, head covering, co-sleeping, infection and overheating. Moreover, in epidemiological studies have shown that, when the infant placed on their stomachs to sleep at home, low birth weight or preterm babies may be at higher risk for SIDS than babies born at or after 37 weeks' gestational age.

According to the American Academy of Pediatrics, the following suggestion and recommendations are helpful in decreasing the risk of all sleep-related infant deaths and promotes safe sleep environment. The AAP recommendations include supine positioning; the use of a firm sleep surface, sleeping on the same room not the same bed, and the avoidance of soft bedcovers and overheating. Additionally, the parents should also avoid the exposure of the infant to smoke, alcohol, and illegal drugs; promote breastfeeding; routine immunization; and use of a pacifier **(Moon et al., 2011)**. New evidence is presented for skin-to-skin care for newborn infants, use of bedside and in-bed sleepers, sleeping on couches/armchairs and in sitting devices, and use of soft bedding after 4 months of age **(Task Force on Sudden Infant Death Syndrome, (2016) & Farber, et al., 2015**).

The term "Bed sharing" and "co-sleeping" are used interchangeable, but their meaning are different. Sleeping on the same room is a quite new term and is recommended by the AAP to facilitate feeding, caring and monitoring the infant. Infant sleeping in the same room not in the same bed has also been revealed to reduce the risk of SIDS by half. Sleeping the infant in the same bed with the mother or sibling and family member is common practice in many cultures and countries. A lot of mothers sleep at the same bed with their infants because it makes breastfeeding easier and promotes bonding. Some parent suppose that bed sharing is a protective strategy for SIDS because they nearby to monitor the baby; while, studies do not support that **(Task Force on Sudden Infant Death Syndrome, (2016).** Moreover, **Alm et al., (2016)** presumed that both breast feeding and use of a pacifier have a defensive effect on prevention of SIDS.

Furthermore, because parents or caregivers do not usually see these deaths as they happen, investigators may not be able to get a clear description of the circumstances surrounding the death, which are necessary for determining the cause **(CDC, 2017).** In the same line, health care providers and researchers don't know the exact causes of sudden infant death syndrome (SIDS). However, research shows parents and caregivers can help reduce the risk of SIDS and other sleep-related infant deaths. Therefore, parents and care givers must be educated routinely about safe sleep practice and prevention of SIDS. Therefore, the aim of this study was to investigate the effect of implementing safe sleep intervention program on prevention of SIDS.

Aim of the study

The aim of the study was to investigate the outcome of implementing safe sleep intervention program on prevention of SIDS this aim can be achieved through the following objectives:

1. Exploring the level of mothers knowledge and attitude about evidence-based guidelines for prevention of SIDS
2. Educate mothers about safe sleep practice for infant at home according to AAP guidelines.
3. Developing and implementing safe sleep intervention program for prevention of SIDS.

Hypothesis

Applying safe sleep intervention program for prevention of SIDS will improve mothers' knowledge, attitude and sleep practice for infant at home and prospectively reducing the incidence of SIDS.

2. METHODS

Design

A quasi-experiment design (one group pre-post test) was employed.

Setting and study participants

This study was carried out at the Neonatal intensive care unit, Mansoura University Children's Hospital affiliated to Mansoura University and from Maternal and child health center at Met- Badr Khamis; a small country near to Mansoura city, Egypt. The study sample included a convenience sample of one hundred fifty five mothers and their children (155) fulfilling the following inclusion criteria: welcoming to participate in the study and the infant age less than one year.

Procedure and Instruments

Mothers' safe sleep practice and SIDS prevention guidelines questionnaire

The researchers designed the questionnaire after reviewing related literature **(Aumua, 2017; Miladinia et al., 2015; Moon et al., 2010 & Rasinski et al., 2003)**. Inquirys were in the form of open ended question, multiple choice and true/false questions. The instrument was translated and presented for moms in Arabic language. The tool was divided into four parts as described:

Part I: Characteristics and clinical data of the mothers and their infant; it was contain questions related to mother age, education, marital status, mother smoking or exposed to smoker, infant gestational age at birth, age of the infant, gender, health status of the infant at birth, weight at birth, presence of twins, usual infant nutrition and previous history with SIDS.

Part II: Mothers' knowledge about SIDS. This part contains nine questions related to the definition, contributing factors; correct positioning of infant during sleep, using a pacifier and respiratory control devices to prevent SIDS. **Part III** of the survey involved questions related to safe sleep practice at home such as the place where the infant sleep, infant position during sleep, type of pillow and wrap during sleep. The last part of the tool was developed to evaluate mothers attitude about SIDS and its prevention; this part include seven statement with three response likert scales ranked from strongly agree, agree to disagree.

The scoring structure for the instrument was developed; the correct answer marked (1), incorrect answer (zero). The mothers considered that she has good knowledge if the percent score was 60% and more and poor knowledge if the score less than 60%. Similarly, the mothers had positive attitude if the percent score was 60% and more and negative attitude if the percent score was less than 60%.

Validity and reliability

The validity and reliability of the instrument was done by 10 specialists in pediatric and neonatal nursing and medicine. The reliability of tool was assessed using Alpha Cronbach's test; the alpha reliability was 0.891.

Data collection

The data collection for this study was conceded over seven months in the period from the 1st of February, 2018 to the end of August in the same year.

Pilot study

The rseearchres evaluate the feasibility, applicability and clarity of the tool through implementing a pilot study on 20 mothers; some modifications were made accordingly and the mothers were not included in the study.

Ethical Considerations

Ethical approval was achieved from the "Research Ethics Committee at the Faculty of Nursing-Mansoura University". An executive agreement was gained by convenience of official letter to the director of the hospital and the leader of the MCH center to implement the study after clearing up the study aim. Written permission was obtained from mothers after give details about the study; confidentiality of data and the mothers' right to drawback from the study was assured.

3. DATA ANALYSIS

The collected data for this study was analyzed through the application of statistical procedures and by using (SPSS) version (23) which may assist to determine the study results. A descriptive statistical data analysis approach was used to describe the study variables: frequencies, mean, standard deviation and percentages. Wilcoxon and Mc Nemar tests were used to detect differences between mothers' knowledge about SIDS prevention before and after the program. Comparison of means was performed using paired-sample t-test. Correlation among variables was done using Pearson correlation coefficient. Level of significance at $p<0.05$, 0.001 were used as the cut of value for statistical significance.

4. RESULTS

Table (1); showed the demographic and clinical data of the studied mothers. It was clear that the mean age of the mothers was 28.18± 5.05 and half of them (51%) had higher school education. In addition, approximately half of the mothers (45.2% & 46.5%) replied that they do not exposed to smoking and the same percent of mothers reported that their

husbands were smoking respectively. The same table also portrait that 19.4% of mothers replied that her husbands were smoking inside the house. In addition, the majority of mothers (96.8%) reported that they don't have previous history of SIDS.

Demographic and clinical data of the studied infant were represented in **Table (2)**; it was clear that, the mean age of the studied infants were 4.86±3.05 and half of them (49.7% & 45.8%) were boys and taking breast feeding only respectively. Furthermore, approximately two thirds of infants were using the pacifier and 72.3% of them were healthy at birth.

Table (3); mothers knowledge regarding SIDS and its prevention; it was observed that there were statistical significant differences between mothers knowledge pre and post program implementation regarding prevention of SIDS. Approximately a quarter of the studied mothers (23.9%) replied the correct answer regarding definition of SIDS and the percentage was improved to (91%) post program. Also, on third of mothers (32.3%) were knew that the supine positioning help to reduce SIDS pre program compared to 93.5% post program. In addition, more than a quarter of mothers (27.1% &29.7%) were reported that, breath monitoring devices and sleeping the infant in separate be in mothers' room was the preventive measures of SIDS respectively.

There were statistical significant differences between mothers reported practice about infant safe sleep pre and post program implementation as it was illustrated in **table (4)**. The majority of mothers (83.9%) were reported that the infant were sleep with her in the same bed in the same room before the program and the percentage was dropped to 58.7% after program. Furthermore, approximately half of the mothers (47.7%) replied that they wrapping the baby to help maintain his body temperature.

Table (5) showed mothers attitude about prevention of SIDS; it was observe that, the majority of mothers (92.9% & 90.3% respectively) not agree with the statements related SIDS caused by to evil spirits or it can be prevented by changing the quality of the child's clothes (the boy is wearing the girls' clothes and vice versa) pre & post program implementation and the difference was statistically significant. More than two thirds of mothers (69%) disagree that the use of pacified help in prevention of SIDS pre program and their attitude was improved after the program implementation.

Figure (1); Mothers reasons for sleeping on the same bed with their infants showed that, the majority of mother (66%) replied that their culture and tradition the small baby sleep in the same bed with the mother. In addition, higher percent of mothers sleeping with their infants on the same bed for the following reasons easy of breast feeding, safety of the infants and easy to caring for infants especially during illness (49%, 47.4% & 57.4% respectively).

Table (1): Demographic and clinical data of the mother

Variables	No (155)	%
Age of the mother	mean age ± SD (28.18± 5.05)	
Mother's education		
Uneducated	8	5.2
Less than high school	17	11
High school	79	51.0
Collage	47	30.3
Master	4	2.6
Marital status		
Married	154	99.4
Divorced	1	0.6
Residence		
Countryside	127	81.9
City	28	18.1
Exposure to smoking		
No	70	45.2
The husband is a smoker	72	46.5
One member of the family is smoker	13	8.4
Husband smoking at		
No	83	53.5
Smoking inside the house	30	19.4
Outside the house and the balcony	42	27.1

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Previous history of SIDS		
No	150	96.8
One child	3	1.9
Two children	2	1.3
Family history of SIDS		
Yes	26	16.8
No	129	83.2

Table (2): Demographic and clinical data of the infant

Variable	No (155)	%
Child age / month	4.86±3.05	
Child weight at birth	2.900±.51	
Gender		
Boy	77	49.7
Girl	78	50.3
No of children		
One	35	22.6
Two	65	41.9
Three & more	55	35.5
Child's gestational age at birth		
> 37 weeks	21	13.5
< 37 weeks	134	86.5
Twins births		
Yes	1	0.6
No	154	99.4
Health status of the child at birth		
Good & healthy	112	72.3
Suffers from health problem	43	27.7
The usual feeding for infant less than 6 months		
Breast feeding only	71	45.8
Breast feeding with bottle feeding	54	34.8
Bottle feeding only	30	19.4
Use of pacifier		
Yes	98	63.2
No	57	36.8

Table (3): Mothers knowledge about SIDS and its prevention

Variables	Pre		Post		Test of significance	
	No (155)	%	No (155)	%		
Definition of SIDS						
The death of an infant due to disease	50	32.3	5	3.2	Wilcoxon	<0.001**
Unexpected death of a healthy child without any warning or obvious cause	37	23.9	141	91		
The death of a child due to the evil spirit of Jean	5	3.2	1	0.6		
I do not know	63	40.6	8	5.2		
Factors contributing to the SIDS				Mc nemar		
Prone positioning during sleep day & night	27	17.4	84	54.2	Chi=45.4	<0.001**
Mothers smoking during pregnancy	19	2.3	54	34.8	23.5	<0.001**
Exposure to smoking during pregnancy	21	13.5	38	24.5	7.3	0.007
Premature infants	20	12.9	42	27.1	11.02	<0.001**
Low birth weight infants	31	20	76	49	28.8	<0.001**
Putting the baby on his back during sleep reduces the risk of SIDS						
True	50	32.3	145	93.5	Wilcoxon	<0.001**
False	26	16.8	8	5.2		
Don not know	79	51.0	2	1.3	Z=-5.4	
Prone positioning helps to improve the child's health and prevent the risk of SIDS						

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True	37	23.9	7	4.5	Wilcoxon	<0.001**
False	50	32.3	146	94.2		
Don not know	68	43.9	2	1.3	-8.9	
Breast feed infant is less prone to SIDS compared to formula feed infants						
True	71	45.8	147	94.8	Wilcoxon	<0.001**
False	25	16.1	7	4.5		
Don not know	59	38.1	1	0.6	-4.2	
Pacifier use during infant sleep has no role in prevention of SIDS						
True	48	31.0	44	28.4	Wilcoxon	<0.001**
False	48	31.0	106	68.4		
Don not know	59	38.1	5	3.2	-7.4	
Overheating of the infant help in prevention of SIDS						
True	59	38.1	17	11	Wilcoxon	<0.001**
False	57	36.8	134	86.5		
Don not know	39	25.2	4	2.6	-7.6	
All parents should use respiratory monitoring devices to prevent SIDS						
True	42	27.1	79	51	Wilcoxon	<0.001**
False	34	21.9	46	29.7		
Don not know	79	51	30	19.4	-4.1	
To prevent the SIDS, infant should sleep in separate bed inside the mothers room						
True	46	29.7	150	96.8	Wilcoxon	0.182
False	49	31.6	4	2.6		
Don not know	60	38.7	1	0.6	-1.3	
Total level of mothers knowledge	**Mean ±SD**		**Mean ±SD**		**Paired T test**	
	13.52±3.01		17.30 ± 2.47		**P value=<0.001**	

Table (4): Mothers reported practice about infant safe sleep

Variables	**Pre**		**Post**		**Test of significance**	
	No (155)	%	No(155)	%		
In your home the baby sleep in						
A single bed in a private room	7	4.5	6	3.9	Wilcoxon -5.06	<0.001**
A single bed in the same room	18	11.6	58	37.4		
Sleep with mother in the same bed	130	83.9	91	58.7		
Problems that can occur if the baby sleeps in the same bed						
No problem	78	50.3	8	5.2	62.6	<0.001**
suffocation	37	23.9	67	43.2	14.5	<0.001**
One of the parents sleeps over the child without knowing	29	18.7	94	60.6	57.6	<0.001**
Breathing the same air exhaling from the parents will be choking	4	2.6	16	10.3	155	0.008
Normal sleep position for the infant						
back	62	40.0	86	55.5	Z=-2.7	0.005
Abdomen	41	26.5	26	16.8		
Side lying	52	33.5	43	27.7		
Causes of avoiding back positioning						
My infant feel comfortable in abdomen or side lying position	61	39.4	42	27.1	Z=-2.5	< 0.001**
Fear of suffocation	51	32.9	81	52.3		
Back position increase the risk of gastro-esophageal reflux	20	12.9	14	9.0		
Supine position does not fit the developmental needs of the child	23	14.8	5	3.2		
Type of pillow used for infant						
Normal	81	52.3	6	40.6	Z=-0.6	0.54
Smooth soft	65	41.9	89	57.4		
Cover the head of the child during sleep	9	5.8	3	1.9		

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How to warm your child in winter						
Sit the baby and wrap well	74	47.7	43	27.7	Z=-5.2	< 0.001**
Use additional blankets or caps if necessary to maintain the baby's temperature during sleep	47	30.3	32	20.6		
Keep the room temperature warm so that the adult can sleep comfortably in light clothing and the baby dress the same way	24	15.5	68	43.9		
Sleep with the baby to help maintain body temperature	10	6.5	12	7.7		
Total level of mothers practice	**Mean ±SD**		**Mean ±SD**		**Paired T test**	
	1.561±0.75		1.651 ±0.818		**P value= 0.22**	

Table (5): Mothers' attitude about prevention of SIDS

Statement	Pre (155)			Post (155)			Test of significance	
	Strongly Agree	Agree	Disagree	Strongly Agree	Agree	Disagree	Z	P value
1. I think the SIDS is due to evil spirits or touching the jinn	3 (1.9)	8(5.2)	144 (92.9)	0	1(0.6)	154 (99.4)	-2.9	0.004
2. The SIDS can be prevented by changing the quality of the child's clothes (the boy is wearing the girls' clothes and vice versa)	2 (1.3)	13 (8.4)	140 (90.3)	0	3 (1.9)	152 (98.1)	-2.8	0.004
3. The pacifier should be offered to the infant when sleeping at any time	6 (3.9)	42(27.1)	107 (69)	37 23.9)	92 (59.4)	26 (16.8)	-8.1	<0.001**
4. The risk of sudden infant death increased with the smoking in the infants' home environment.	47(30.3)	87 (56.1)	21(13.5)	99 (63.9)	51 (32.9)	5 (3.2)	-6.3	<0.001**
5. To avoid SIDS, the baby should wear heavy clothes so that they are warmer than adult in the same room.	15 (9.7)	99(63.9)	41 (26.5)	9(5.8)	59(38.1)	87 (56.1)	-5.3	<0.001**
6. To avoid the SIDS; the infant bed should be free from blanket & toys	25 (16.1)	72 (46.5)	58 (37.4)	49(31.6)	88 (56.8)	18 (11.6)	-5.6	<0.001**
7. The child should sleep with the parents in the same room but in a separate bed to avoid SIDS	24 (15.5)	41 (26.5)	90 (58.1)	62 (40.0)	84 (54.2)	9 (5.8)	-7.8	<0.001**
Total level of mothers attitude	**Mean ±SD**			**Mean ±SD**			**Paired T test**	
	6.24±2.17			12.32±1.78			**P value=<0.001**	

(**) Statistically significant at p <0.001

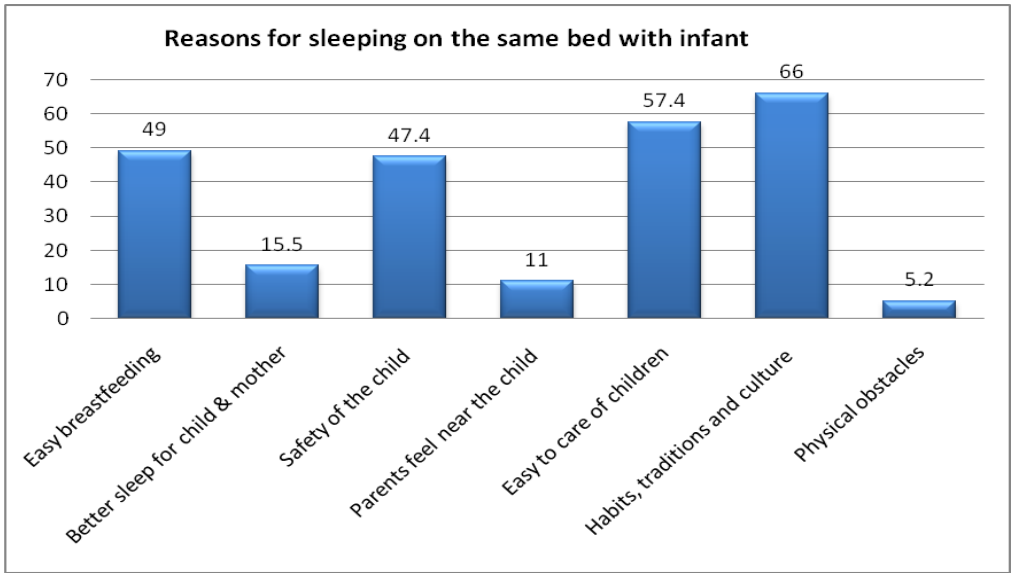

Figure (1): Mothers reasons for sleeping on the same bed with their infants

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5. DISCUSSION

Our study results showed that the mothers' knowledge, attitude and practice about safe sleep practice and SIDS prevention are improved with education and follow up. Our results showed that the majority of mothers sleeping with their infants on the same bed and replied that no problem can occurs with that practice. In addition, the mothers had positive attitude regarding causes of SIDS and its prevention. Level of mothers' knowledge about SIDS was low at baseline and improved after program implementation.

Findings of the current study showed the demographic and clinical data of the studied mothers. It was clear that, the mean age of the mothers was 28.18± 5.05 and half of them had higher school education. Similar study conducted by **Moon et al., (2017)** revealed that, the mean age of the studied mothers was 28.1 years. While, **Capt & Chung-Park, (2012**), study clarified that, the age of the participants ranged from 17 to 39 years. Approximately half of participants had some college education. In the study conducted by **David, et al., (2010)**, revealed that, more than half of the Māori mothers were smoking during pregnancy. This finding was in contradiction with our findings which showed approximately half of the mothers doesn't expose to smoking and their husbands were smoking. Furthermore, **Farber,et al., (2015)** reported that mothers smoking during pregnancy or exposure to passive smoking increasing the incidence of SIDS and the death rate are greater three times for infants exposed to smoking compared to non exposed infants.

Concerning the demographic and clinical data of the studied infant in our study, it was clear that, the mean age of the studied infants was 4.86±3.05 and half of them were boys and taking breast feeding. Furthermore, approximately two thirds of them were using the pacifier and nearly three quarters of them were healthy at birth. These findings was in disagreement with **MOON, et al., (2017)** who showed that the mean (SD) infant age was 11.2 weeks (4.4 weeks) and 51.2% were female. Similarly, **Miladinia, et al., (2015)** reported in his study entitled " Sudden Infant Death Syndrome: Risk Factors and the Relationship between Them" that, half of studied infant were breast feed during the first 6 months of life and the majority of them were born after completed 37 weeks gestation.

Our findings showed that, the implementation of SIDS prevention intervention successfully changes our participants' level of knowledge. The intervention was associated with an improvement in post intervention than in pre intervention with a statistical significant difference. This finding was in agreement with **Moon et al, (2008) & Hamadneh (2014);** who found that, the education provided for parents improved knowledge, practice behaviors about the validity of safe sleep for their infants. These studies support the importance of educating parents about reducing the risk for SIDS and for nurses and providers to be role models for new parents regarding newborn sleep positions and other preventive measures regarding SIDS risks.

As showed in our findings that, there were statistical significant differences between mothers subjective practice about infant safe sleep pre and post program implementation as it was illustrated that the majority of mothers were sleep with their infants in the same bed in the same room before the program and the percentage was declined to approximately half after the program. The current findings were in accordance with the American Academy of Pediatrics recommends a safe sleep environment that can reduce the risk of all sleep-related infant deaths. It includes supine positioning, the use of a firm sleep surface, room-sharing without bed-sharing, and the avoidance of soft bedding and overheating. More recommendations for SIDS reduction include the avoidance of exposure to smoke, routine immunization; and use of a pacifier. Additionally, the protective effect of breastfeeding increases with exclusivity. However, any breastfeeding has been shown to be more protective against SIDS than no breastfeeding **(Task Force on Sudden Infant Death Syndrome, (2016).**

As regards to mothers' attitude about prevention of SIDS, the majority of mothers were disagree with the statements related SIDS caused by to evil spirits or by changing the quality of the child's clothes (the boy is wearing the girls' clothes and vice versa) in pre the program implementation but after the program implementing showed a decline in disagree with statistically significant difference between pre & post program implementation.

In line with current findings, Research links reported that increased SIDS risk with infant over heating either by excessive wrapping or cloths or higher room temperature. Parents and caregivers should watch for signs of overheating, and then keep the baby’s face and head uncovered during sleep. Overall all, infants should be wearing appropriate clothes suitably for the environment. Sleep surface and sleep environment material are also an important issue in preventing SIDS. Infants who sleep on a soft surface, such as an adult mattress, or under a soft covering, such as a soft blanket or quilt, are more likely to die of SIDS or suffocation **(MichelleCaraballo, et al., 2016; Megan, et al., 2016).**

Many of observational studies reported that, there were a relationship between pacifier use and SIDS incidence reduction **(Blair 2009; Moon, 2011; Psaila, et al., 2017);** these studies were in contradiction with our findings, which showed that, more than two thirds of mothers disagree that the use of pacifier help in prevention of SIDS before the program, then was improved after the program implementation as the percentage of mother disagree with pacifier use dropped to less than quarter.

Finally, appropriate intervention and education plans are successful in increasing safe sleep practice. Hospitals and child clinics are important followers for teaching and reinforcing infant safe sleep practices and help in educating the global community on the prevention of SIDS. Safe sleep education should provide for all who care for infants, including neonatal nurse, parents, child care providers, grandparents, foster parents, and baby sitters.

6. CONCLUSION & RECOMMENDATION

The study concluded that, after the implementation of safe sleep intervention program mothers' knowledge, reported practice and attitude about prevention of SIDS were improved significantly. According to the results of our study the subsequent recommendation must be considered: the neonatal nurses should be educated about prevention of SIDS to provide discharge teaching and guidance for parents and improve compliance with SIDS prevention guidelines at home.

Limitation of the study

The study was conducted on small sample size; so, the results may not be generalized. In addition, the effect of safe sleep intervention program not measured the incidence of SIDS after program implementation.

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Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research and publication of this article

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