

# Risk Factors related to Sudden infant death syndrome (SIDS)

Hussein Jassim Mohammed<sup>1</sup>, Musadaq Abdulkadhim Dohan<sup>2</sup>, Nuhad Mohammed Kassim<sup>3</sup>,  
Mohamed Igrish<sup>5</sup>, R.N Kadhim Hussein Jassim<sup>6</sup>

<sup>1</sup>PhD Community Health Nursing, College of Nursing, University of Babylon, <sup>2</sup>Diploma, Pediatric Medicine, Ministry of Health, Iraq, <sup>3</sup>PhD Child Health, Nursing, College of Nursing, University of Babylon, <sup>4</sup>Babylon Health directorate/Iraq, <sup>5</sup>Babylon Health directorate/Iraq

## Abstract

Sudden infant death syndrome (SIDS) is a phenomenon of unknown cause among infants between 1 month and 1 year of age”. Methodology: descriptive design conducted through September 2018 to the end of March 2019, mothers attended health centers in Al- Hilla City, who consists of (120 meters). Data were collected through using SIDS\_QA-508 after doing some adjustment on the questionnaire, The questions that used in collecting data were checked out for any mistake or error and scrutinized, Data of the 120 participant’s were entered and analyzed by means of the statistical package for social sciences (SPSS) .The results indicated that the children age (65.0%) was less one year aged, (41.7%) mother’s educational attainment with primary school. (94.2%) with pre- term pregnancy, (74.2%) were married, (77.5%) from the population present their satisfaction concerning monthly income and (55.0%) had health problems through their pregnancy. Most mothers have low knowledge regarding abrupt baby death, which correlated for mother’s age, sources of knowledge as weak correlation. Recommendations: Hospital staff should instruct parents who, in turn, must emphasize to secondary caregivers that the baby must always be placed to sleep on the back and never on the tummy, since prone sleep increases the risk of SIDS.

**Key words:** *Infant, death syndrome*

## Introduction

“Sudden infant death syndrome (SIDS)” is an unknown reason of death among infants within the first year, which has a critical link with abdominal sleeping since 1965. The pathophysiology of SIDS is incompletely <sup>1</sup> understood, but the critical period of newborn development exposed him to triggers and unexpected death could be allied to immaturity of respiratory control which cause hypoxemia and long apnea (Coverstone, 2019, Wilson, 2017 ). “The philosophies of safe sleeping practices among infancy are not well recognized, however, a considerable body of evidence supports back sleep. As long as, many sudden baby death risk factors are <sup>2</sup> linked to certain unexpected influences occurring during sleep, “the American Academy of Pediatrics” expanded

its strategy to comprehend diversity of harmless sleep performs that can diminish hazard for sleep-related infant death to endorse discouraged bed sharing and smoking, and authorized the use of the supine position and fitting surfaces for all sleep, breastfeeding, and adequate prenatal care. Risk factors of “SIDS” are complicated by social and economic factors, whereas, in United States, the young, poor, and minority women are at elevated risk for this problem <sup>3</sup>, in addition to lack of prenatal care, low socioeconomic status, smoking, and low birth weight babies are also associated with increased risk . It was influenced by community norms and cultural practices <sup>4</sup>, in particular infant sleep practices, moreover, multiple epidemiologic studies have shown a strong relationship between paternal smoking and SIDS <sup>6</sup>. These unsafe issues increase the infant mortality rate “(IMR) in the world is 29.5 (2017) Iraq IMR is 23.3 per 1000 , Iran is 12.1 per 1000, Jordan is 13.8 per 1000, Egypt is 17.5 per 1000 (2013)” — a proportion greater than most other developed countries abrupt death and suffocation account for more than half of all unexpected infant , which considered as the

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### Corresponding author

**Hussein Jassim Mohammed,**

E-mail: halabrahemi@yahoo.com.

leading causes of post neonatal infant death in the US. (Aitken“The infant’s grandmother and other caregivers can effect on mother’s decision in selection of the sleep position and their beliefs about infant comfort and other traditions may also affect attitudes to risk reduction. Researcher’s always focuses on reassuring the non-risky behaviors, specifically focusing on supine position and sleep location <sup>7</sup>. Over and above, interested in differences between grandmothers’ behavior in their own homes compared to the home of the parent, along with, whether safe sleep practices were associated with beliefs in sleep safety. So, the present study aims to assess the risk factors related to “Sudden Infant Death Syndrom” through the first year of life.

### Methodology

II.1: The design and setting of the study; A descriptive study was conducted on a number of mothers who lost their babies with less than one year age in Babel province during the period from October 2018 to April 2019.

The study was conducted with mothers who visit “MCH” centers, which include Shemali , Al Huda , Meditative Model , Qasim, Hashemite .

II.2: Study sample: Mothers included were (120 mothers) who attended health centers in Al- Hilla City

II.3: Instrument of the Study: Data were collected through using “SIDS\_QA-508 (NIH Pub. No. 07-7202 June 2007)”. The researchers used a standardized questionnaire to identify the risk factors for sudden and pre-programmed death syndrome for the same purpose in European and Arab countries.

The questionnaire consisted of two parts: the first related to demographic information and the second contains (40) bubbles allied to the subject of the study. The internal correlation coefficient between these paragraphs was calculated and the results were shown (0.79). Few modifications done on it, like reducing the scale from five to three scales, and delete some points from demographical) (“Increasing the number of scale categories did not necessarily improve performance”).

The sample are (120) mothers , selected from more than 3000 visitors to “MCH” centers, the information was collected by interviewing mothers who lost their children under the age of the year .

The researchers interviewed mothers and explained the dimensions and importance of their participation in

the research and the results of this study, in addition to helping them to understand some of the issues related to the questionnaire.

II.4: Data Collection: After the collection of information according to the questionnaire, which was approved by the” Health Directorate of Babylon”

II.5: The Statistical Analysis: The researchers collecting data construct a database on the (SPSS, version 24,2016) statistical system and analyzed; using descriptive statistics to calculate the frequencies, percentages and standard deviation.

II.6: Ethical consideration: All participants were informed fully about current study and its aims and voluntary verbal consent was obtained from the participants in order to participate in the study. Besides, it has been taken into account the confidentiality of information obtained.

### Results

**Table (1) shows the risk factors related to “SIDS”**

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Was the baby crying, strong after birth?	Freq.	%
No	78	65.0
Yes	42	35.0
Total	120	100.0
The child was given oxygen after birth	Freq.	%
No	53	44.2
Yes	67	55.8
Total	120	100.0
Has the baby sharing your bed through feeding	Freq.	%
No	50	41.7
Yes	70	58.3
Total	120	100.0
Type of feeding	Freq.	%
Breastfeeding	60	50.0
Bottle feeding	42	35.0
Mix	18	15.0
Total	120	100.0
Feeding the baby during sleep	Freq.	%
No	59	49.2
Yes	61	50.8
Total	120	100.0
Baby choked during feeding?	Freq.	%
No	49	40.8
Yes	71	59.2
Total	120	100.0

This table indicated that the factors effect “RDS” are ,(65.0%) of the baby had notcry strongly after the birth, (55.8%) of the children were given oxygen after birth, while (58.3%) of the babiessharing mothers’ bed throughout feeding or sleeing, (50.0%)were fed from breast, (50.8%) feeding the baby during sleep and (59.2%) the baby were choked during feeding. The risk factors of “SIDS” are complicated by societal

and financial factors; which almost allied with lack of prenatal care, low socioeconomic status, smoking, and low birth weight. In addition to cultural practices have a great impact on infant sleep practices. "Regardless the age of a new mother, intergenerational transmission of childrearing practices is common<sup>8-10</sup>. Table (1) revealed that nearly half of the sample included in the study are educated primarily, (41.7%) of the mothers with poorly follow-up through pregnancy with non suitable safe practices, which effect on their babies weights to have a low birth baby wqhich constituting (52.5%), whereas (94.2%) as preterm delivery, and (45%) of them exposed to smoking besides to other indicators could be clearly detected in same table. (35%) of the babies crying strong along the night, (50%) of them feed just from breast with more than half, despite the fact (58%) were sharing mother's bed for the period of sleeping; which considered as a chief cause for "SIDS". In 2015 US, more than half (61.4%) of the respondents reported in bed sharing with their infant, and(37.0%) reporting "rarely or sometimes" and 24.4% responding "often or always" bed sharing, Self-report of any bed sharing varied by state, ranging from 49.0% in West Virginia to 78.9% in Alaska. The prevalence of bed sharing varied by maternal characteristics, gestational age at birth, and breastfeeding at 8 weeks postpartum being elevated. Bed sharing prevalence was higher among respondents in American Indians/Alaska Natives, non- Hispanic blacks, or Asians/Pacific Islanders compared with non-Hispanic whites or Hispanics<sup>11</sup>. The population effected by many beliefs from their mothers when mentioned that they must to share because the babies in majority (59.2%) choking through night feeding. CAPTMin S, (2013) stated that the reasons of practicing or choosing non supine sleep positions with their sharing reported by parents in this study; were for infant preference, comfort, and fear of choking or safety on supine position. Conversely, those that chose supine sleep position did so for safety reasons, based on advice and recommendation from their health care providers and their knowledge that this position reduced the risk for "SIDS". Similarly, The participation of nurses in the care of newborns reduces the risk of deformities in the head while lying down.

### Conclusion

The study concludes that infants less one year aged, their weight less than two Kg, estimating equal sex between male and female, as well as, mother's educational attainment with primary school most mothers had pre- term babies in majority, they had not

health problems during pregnancy and complications occurred during childbirth, delivered by normal birth, the baby had not cried, strong after the birth and feeding the baby during sleep which get choked during feeding.

**Financial Disclosure:** There is no financial disclosure.

**Conflict of Interest:** None to declare.

**Ethical Clearance:** All experimental protocols were approved under the College of Nursing, University of Babylon, Iraq and all experiments were carried out in accordance with approved guidelines.

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