

Sudden Infant Death Syndrome in Al-Ahsa Area: Community Awareness

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Abstract:Introduction: Although the prevalence of sudden infant death syndrome (SIDs) is not low in Saudi Arabia, local community is still not well aware about it.

Methods: We conducted a cross sectional study through a pre-structured questionnaire, distributed among the residents of Al Ahsa, Saudi Arabia.

Results: The results showed that 80% of the population was not aware of dealing with infants with SIDs. The results further revealed that there was no significant association between the level of education and the awareness regarding SIDs. Moreover, those who lived in the urban areas had a higher incidence of SIDs as compared to the rural areas; however, health facilities are much better in rural areas with better availability of health care centers with multiple specialties.

Conclusion: The underlying basic association of SIDs not well discovered so more researches need to be conducted. In addition, we should find out a road map for spreading the awareness regarding SIDs. Extra effort and more educational campaigns and compulsory sessions for the families might help in improving the practices and reduce the incidence in the upcoming time.

Keywords: Sudden Infant death Syndrome, Awareness, Saudi, Family

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I. Introduction

Sudden infant death syndrome (SIDs) is defined as the unexplained death, usually during sleep, of a seemingly healthy baby less than a year old. SIDs is sometimes known as crib death because the infants often die in their cribs. SIDs is one of the main global causes for death in the post neonatal period (1).

Approximately 3500 infants die every year due to SIDs in United States (2). However, in Saudi Arabia the incidence of SIDs is 17.5% compared to 82.5% who were expected to die after birth (3).

The literature suggests that the cause of SIDs is unknown however; it may appear that the abnormalities in the portion of an infant's brain higher centers, which control breathing and arousal from sleep (2). Other studies show some different mechanism and suggest that the sleeping position may also have an impact on the incidence of SIDs (4). The researchers further state that some of the good habit like breastfeeding may lower the cases of SIDs (3).

The aim of the present study is to measure the awareness of the community especially those with a family history towards SIDs and elaborate underlying associations with those families that may lead to SIDs since there is no previous study has been conducted in Saudi Arabia regarding SIDs.

II. Methodology

The study was cross sectional and conducted among the residents of the Al-Ahsa, Saudi Arabia between 29-12-2015- and 26-4-2016. All the identified families with SIDs living in the region were included in the study who have a history of SIDs. The families were identified through contact with community and electronic announcement through sharing the research through the active people in the community and with interviews with the families.

A self-structured questionnaire was constructed through Delphi technique and a pilot was run to check the reliability of the questionnaire. We also obtained the expert opinion after running pilot and minor changes were made. After obtaining the consent from the residents, the questionnaire was distributed among the population. The consent was taken from all participants.

The questionnaire starts by the consent to participate by WHO consent form, general information about the couples status and the family educational, economic, social activity and category. The last part prepared based on the based on the literature reviews, knowledge and behavior related to SIDs.

Our research is supported by king Faisal University, college of medicine and will not include any harm to the families. The main purpose of our research is to find and interpret the association between the families and sudden infant death syndrome. The data will be kept confidential without elaboration. . Data was cleared then entered into SPSS. A descriptive statistical analysis used for the study as the frequency, Chi-square used with a confidence interval 95%.

III. Results

In all families with a history of SIDs participated in the study of which 77.8 % were male and 22.2 % were females. More than 80% of the families have not been involved in any session or have read a book about dealing with the infant after the delivery specifically in the first year. It suggests there is a high chance that the low knowledge about SIDs in the family can be one of the main associations leading to the death especially there are many misconceptions are still used in the community which were suggestive to be associated with SIDs like prone sleeping position. 25% parents complained about the fever before having SIDs and rest of the parents did not mention any symptom. Regarding mother's level of education, 25% of the mother who did not attend any school or have attended high school had more than one infant died suddenly. Whereas, the mothers having university degree (37%) reported to hospital in first year of delivery. Surprisingly, more than 25% of the mothers having university degree also did not enough knowledge to deal with the infant.

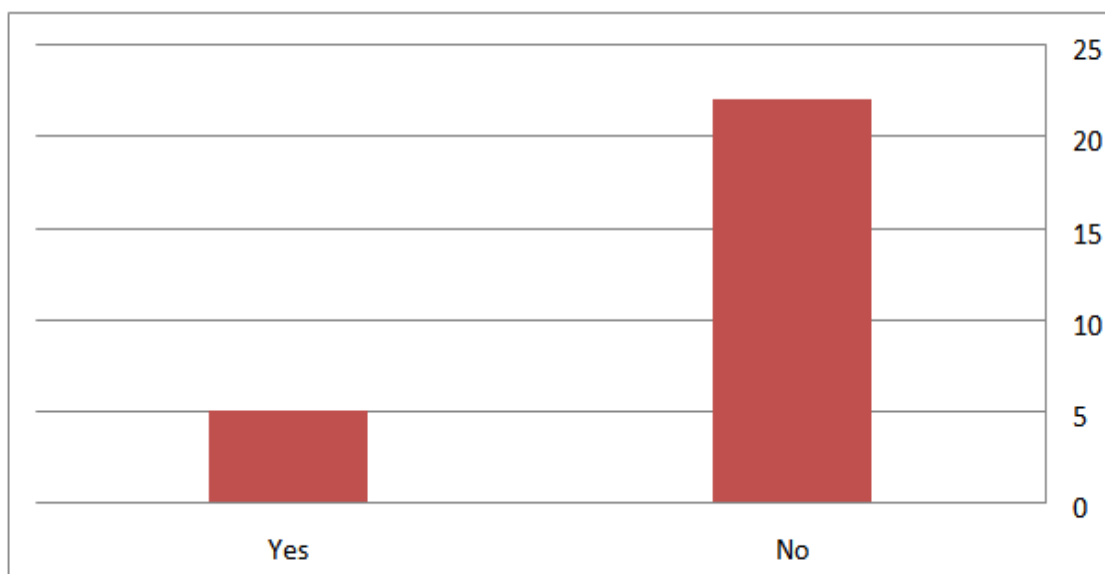


Diagram 1: Showing the percentage of the families who were having as ideas about dealing with an infant and aware about SIDs which represent about 18.5% of the total population.

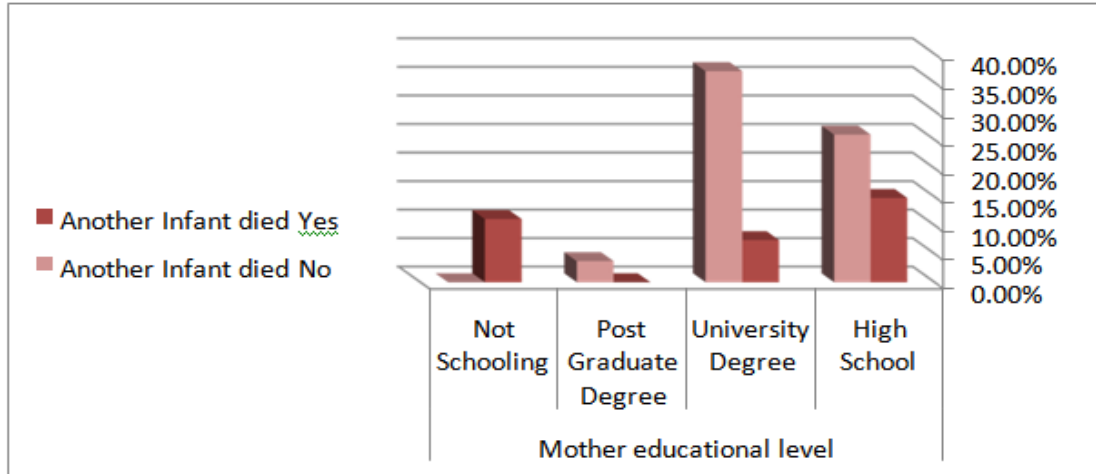


Diagram 2: showing that more about 25% of the mother who are not schooling or have only the high school certificate they have more than one infant died (P value = 0.045)

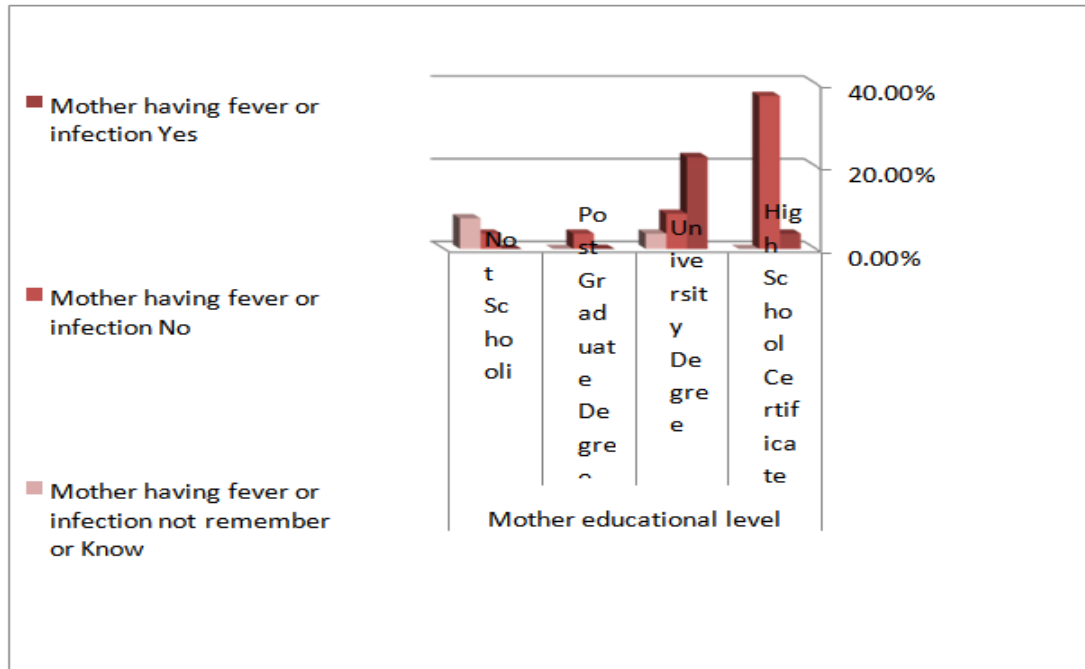


Diagram 3: Showing 22.2% of the mother has the university degree having an infection or fever after the delivery during the period of taking care of the infant. (P value = 0.007)

Educational Level and another Infant Died by SIDs

| | | Another Infant died | | Total | P value |
|--------------------------|----------------------|---------------------|----------|-------|---------|
| | | Yes | No | | |
| Mother educational level | High School | 4(14.8%) | 7(25.9%) | 11 | 0.045 |
| | University Degree | 2(7.4%) | 10(37%) | 12 | |
| | Post Graduate Degree | 0 | 1(3.7%) | 1 | |
| | Not Schooling | 3(11.1%) | 0 | 3 | |
| Total | | 9 | 18 | 27 | |

Table 1: This table shows that more about 25% of the mother who are not schooling or have only the high school certificate they have more than one infant died suddenly.

IV. Discussion

The present study was conducted in Al-Ahsa to measure the awareness about SIDs among the families who have a history with SIDs and to find out association, which could help to reduce the incidence more in the future.

More than 80% of the families have not been involved in any session or have read a book about dealing with the infant after the delivery specifically in the first year. It suggests there is a high chance that the low knowledge about SIDs in the family can be one of the main associations leading to the death specially there are many misconceptions are still used in the community which were suggestive to be associated with SIDs like prone sleeping position(6).

Surprisingly, the result shows more than 25% of the mothers have a university degree; they are not having enough knowledge to deal with the infant. Presenting with infection close to the infant, a high chance the infection that can be transmitted to the infant and a result of the immature immune system of the infant it might lead to the sudden death.

Second surprisingly finding that, about 40% of the mothers who have a university degree educational level their infant presented with a health problem during the first year. It can lead to the death that which show carelessness from the mother that the infant presenting with a problem and the mother does not take a serious action about it.

This can be because as a social culture in the Kingdom of Saudi Arabia most of the marriage happened in an early age without full concern or responsibility from both of parents and this can be one of main associations of the presentation of SIDs in the family even when the mother has a university degree.

Other finding in the research which shows that there is no relationship between living in the urban area in Al-Ahsa better than rural area that shows it is not associated with fever or even difficulty in the respiration for the baby. Even though smoking and rowdiness and crowded with many members being in contact with the infant (7). This can be explained by since now more health facilitation and transports easier in the urban area which helps the family to take fast action in case they suspect something not well to the baby, which consider Urbanization is good and can help to reduce the incidence of SIDs in the future.

The finding of the research also shows a relationship support our thesis that mother with low educational level had a history of more than one infant died suddenly. This can be explained by repetition of the same behavior(8) without knowing well or trying to find out about the underlying causes or association which might help them to do not have another infant died suddenly which can indicate that families who have university degree the prevalence is not more than one infant in the same family.

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