

*Original Research Article***“SUDDEN INFANT DEATH SYNDROME (SIDS)”**

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Abstract

It is also considered as cot death or crib death. It is the sudden and unexplained death of children especially infant. It can occur during sleep or in a sleep environment. It involves a large number of sudden and unexpected deaths of infant i.e. approximately 75-85%, it indicates a large number of infants deaths due to SIDS. Certain risk factors also make children more prone for sudden infant death syndrome.

The other factors related to death of infants like infections, genetic disorders, heart problems & other problems are approximately (15-25%). There is no specific treatment for SIDS, but a number of measures have been found to be effective in prevention of SIDS.

Key words: Syndrome, SIDS, Risk factor, infant

1 Definition

It is unpredictable & unpreventable and controllable in nature. It is defined as death of healthy infant child, whose death remains unexplained after a thorough case investigation including a complete autopsy, review of medical and clinical history and death scene investigation. It is principle cause of death in infants. It is very infrequent during the first month of life but very common after the age of 1 to 6 months, peak period is considered in between 2 & 4 months of age). Boys are more frequently suffered by SIDS than girl child. There's a higher risk among babies who've had siblings or cousin's die of SIDS. It is more frequently occurs in between month of October to February during the cold season.

Myths regarding SIDS

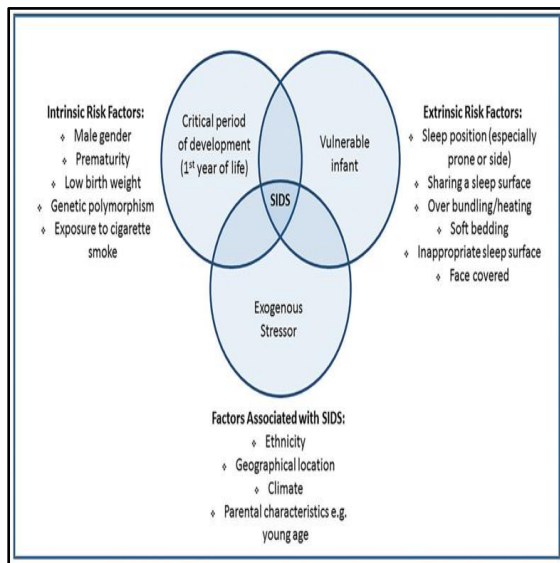
- 1. Vaccination cause SIDS:** - it is a myth that there is a connection between immunizations and SIDS.
- 2. Infants are at a higher risk of choking when sleeping on their backs:** - Many studies suggested that there is no relation found on increase in choking or other problems in infants who sleep on their backs.
- 3. Side sleeping is just as safe as back sleeping:** - Side sleeping is not considered as safe as back sleeping because infants who sleep on their sides they can roll on their stomachs, which makes them more susceptible for development of SIDS.
- 4. It is never safe for an infant to be placed on his or her stomach:** - Studies suggested that infants can be placed on their stomach when they are sleepless and when someone is caring of handling them. Tummy time is considered good for infant because it can helps to infant to develop coordination between

Neck and shoulder muscles.

- 5. Sleeping on the back is unhealthy because it causes depression of the back of the head:** - It is examined that sleeping on the back is not unhealthy because the flat spots on the back side of head of infants disappeared within a months, as the infant learns to sit up.
- 6. Placing the baby on his or her stomach while the baby is wakeful and curl-up the baby in the upright position can also help to reduce flat spots.** Frequently & timely changing the direction the baby's head, when he or she is put down is also help to reduce flat spots in infant.

Risk Factors and Causes: - Exact causes of SIDS are unknown, but there are evidences that environmental factors that make a baby more vulnerable for SIDS, along with this other factors like maternal, physical, and general factors may also increase the risk for developing the SIDS. Some of risk factors that can cause SIDS are as following:

- 1. Sleep Environmental Factors:** - Sleep conditions that increase SIDS risk included the following:
 - It is suggested that the babies who are placed on their stomach or side may have more difficulty breathing pattern and are more prone for developing the SIDS, than those babies who are placed on their backs
 - **Sleeping on a soft surface:** Babies who are sleep at a comfort, soft mattress or water bed are more prone for developing the SIDS because all it can block a baby's airways.
 - **Sharing a bed: Alcoholic or drug abuse parents or siblings, who share their beds with children, can also make the infants more susceptible for SIDS.**
 - **Overheating:** During the sleeping if the babies are overheating due to excessive clothing, blankets or high room temperature can increase the risk of SIDS.



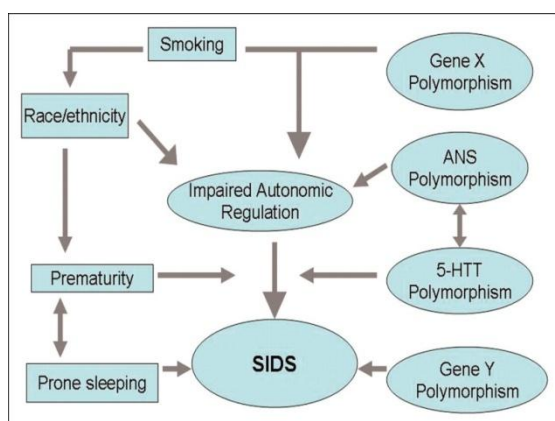
2. Maternal Risk Factors

Even before birth, mothers can also unwillingly increase their baby's SIDS risk. Maternal risk factors include if mother

- Young maternal age (under 20 years)
- Mothers who smoke during pregnancy
- Mothers who are not breastfeeding their babies
- Mothers who using alcohol or illegal drugs during pregnancy
- Mother who are not receiving prenatal care.

3. Physical Factors

- Some babies have problems with the part of the brain that helps control breathing and waking during sleep.
- Babies born with problems in other parts of the brain or body may also be more likely to die from SIDS
- Babies who born before 37 weeks considered as premature babies or babies whose weight is less than 5.5 lbs or 2.5 kg.
- Babies with mild & severe upper respiratory infection



4. Other Risk Factors includes: -

- Babies who stay with smokers
- **Differences in genes** and the environment
- Used of soft bedding or unsafe beds like couches, daybeds, waterbeds, blankets and pillows etc.
- Crowded or untidy sleep area
- Infants Not getting routine immunizations

Symptoms: studies suggested that there are typically no symptoms prior to onset of child's death, though SIDS can occur at any time during sleep & the deaths may also occur during time sleep (day or night).

Treatment & prevention: There is no specific treatment for SIDS, but a number of measures have been found to be effective in preventing SIDS.

1. **Allow the babies to sleep on his or her back:-** American Academy of Paediatrics began recommended that babies be placed on their backs to sleep; the number of SIDS fatalities has dropped by over 50-60%.
2. **Putting babies in other positions while they are awake:-** Putting baby in other positions helps the baby grow stronger. It also helps to prevent baby from having a misshaped head. When baby is awake, hold baby or give time to baby on his or her tummy as long as there is an adult watching. Try not to let baby sit in a seat or swing for long periods of time.
3. **Continuous& regular breastfeeding: -** **Mother milk is considered good nutrient for babies up to 6 months of age.** It means there is no water, sugar water, or formula or other nutrient. These practices are very helpful to reduce the risk for SIDS and other health problems.
4. **Providing proper& regular prenatal care:-** Early and regular prenatal care can help reduce the risk for SIDS. Mother should also follow a healthy diet and not smoke or use drugs or alcohol while she is pregnant. These things may reduce the chance of having a premature or low-birth-weight baby. Premature or low-birth-weight babies are at higher risk for SIDS.
5. **Proper bedding practices during resting and sleeping: -** Soft mattresses, sofas, waterbeds, sheepskins or other soft sleeping surfaces increase the risk of SIDS. Baby should sleep on a firm mattress or other firm surface covered by a fitted sheet. Don't use fluffy blankets or comforters.
6. **Always placing cribs, bassinets, and play yards in hazard-free areas.** Be sure there are no hanging cords, wires, or window curtains nearby. This reduces the risk for strangulation.

7. **Make sure the baby's head and face stay uncovered during sleep:** - If mother uses a blanket during sleep, make sure that it should be away from the baby's mouth and nose. To use a blanket, make sure the baby's feet are at the bottom of the crib, that the blanket is no higher than the baby's chest, and the blanket is tucked in around the bottom of the crib mattress.
8. **Reduction in overheating of baby-**Keep the baby's room at a body temperature that is comfortable for adults, and avoid over bundling, overdressing, or covering an infant's face or head.
9. **Offer a pacifier at nap time and bed time:** - Studies recommended that pacifiers may protect against SIDS. Pacifiers are recommended throughout the first year of life. The pacifier should be used when placing the baby down to sleep, but should not be reinserted once the infant falls asleep. If the infant refuses the pacifier, he or she should not be forced to take it. Pacifiers should be cleaned regularly and should not be coated with sweet substances.
10. **Caregivers or parents are not allowed to share the bed:** Don't put baby to sleep in a bed with other children. Don't put baby to sleep on a sofa, either alone or with another person. Mothers should not share their bed with baby, especially if mother is alcohol and drug abuser. Mothers are recommended to bring their baby to their bed for feedings and comforting, but return the baby to the crib for sleep.
11. **Do not allow caregivers smoking around baby:** - The prevalence or risk of SIDS is very higher in babies, whose mothers smoked during pregnancy. Mothers are recommended to not smoke when they are pregnant and others are also not allowed to smoke around baby. Babies and young children exposed to smoke have more colds and other diseases. They also have a higher risk for SIDS.
12. **Not using positioning devices and home cardio respiratory monitors:-**Don't use wedges, pillows, or special mattresses to help decrease the risk for SIDS and sleep-related infant death. Cardio respiratory monitors are also not helpful in preventing SIDS.
13. **Regular check-ups and vaccinations:** - Parents are advised to take their babies for regular check-ups and routine immunization. Studies recommended that higher rates of DTP immunization are associated with lower rates of SIDS.

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