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RESEARCH ARTICLE

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Evaluation of Mothers Knowledge about Shaken Baby Syndrome

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ABSTRACT

Abusive head trauma (AHT), often known as shaken baby syndrome (SBS), is a type of brain damage induced by violent shaking in newborns and young children. SBS can be caused by shaking, dropping, or tossing a child. Anger directed towards a baby's caregiver who cries in an unfamiliar way is a common cause of shaking. As a result, parents and other newborn caregivers must monitor their own stress levels and establish good coping techniques. Shaken baby syndrome (SBS), a type of traumatic brain trauma, can occur when an infant is violently shaken. The goal of this study is to find out how much parents know about shaking baby syndrome. Participants in this study will be parents of infants under the age of a year. A survey was distributed to parents with newborns and toddlers. Questionnaires were distributed to participants after they provided informed consent. The questionnaires contained questions about age, education, nationality, and family size. Baby events throughout the first year of life, awareness of the risk of shaking your child during the first year, and familiarity with the phrase shaking baby syndrome were all included in SBS knowledge assessment questions. The sample size was limited to 200 participants. 60% of the population was under the age of 40, according to the demographic breakdown. Illiteracy affected 12% of the population. 56.6 percent of those experienced with SBS claimed they had shaken their baby to calm them down within the first year of life. Sixty-seven percent of parents interviewed claimed to being unaware of the risks of shaking a newborn during the first year of life. Furthermore, roughly 70% indicated they had never heard of SBS.

Keywords: Abusive head trauma, shaken baby syndrome, motherhood.

INTRODUCTION

Shaking an infant roughly by the shoulders, arms, or legs can cause Shaken Baby Syndrome (SBS), a severe type of physical child maltreatment that should be avoided. Shaking alone or combined with impact can also cause SBS. The most common kind of child maltreatment that ends in death or severe neurological impairment is shaking. Injury from shaking is most likely to occur in infants between the ages of one month and one year, particularly those between two and four months. It only occurs during the infant stage, when a child's anatomy is still developing. Blood clots in the brain and the retina are signs of a shaking injury. [1]

In 1974, an American radiologist named John Caffey gave this condition its current name—whiplash shaken infant syndrome. Subdural hemorrhage in babies was originally identified by a British neurosurgeon named Guthkelch. Later, the role of impact in triggering brain injury was recognized as crucial. Hypoxic ischemic encephalopathy has been identified as the root cause of brain damage because to advancements in neuropathology and imaging technology. The most sensitive and specific means of confirming a shaking injury is with diffusion weighted magnetic resonance imaging. Social service organizations should conduct exhaustive interviews with the families of children diagnosed with subdural hemorrhages [2].

Prolonged, inconsolable weeping frequently causes children to be frightened. The child could potentially be flung down in a rage. The offender typically lacks maturity and expertise in dealing with children. Some parents have acknowledged to shaking their children to stop them from crying. Male parents, partners, and caregivers account for the vast majority of cases like this. A head injury requires either translational or rotational forces. The brain moves in a straight path because of translational forces. For the most part, falls caused by such forces don't do much more than crack skulls. The brain rotates on its central axis or at its connection to the brainstem as a result of rotational forces experienced during shaking [3].

The bridging veins, which connect the cortex to the dural venous sinus, become stretched and torn as the brain moves within the subdural area. Blood loss into the subdural area, usually between 2 and 15 ml, is not hazardous. In the absence of a history of severe accidental head trauma, it gives conclusive proof of trembling. Traumatic axonal damage caused by vigorously shaking a newborn has been previously described in clinicopathological terms as diffuse axonal injury or axonal shearing. Clinical, radiological, or pathological evidence of impact is present in the majority of newborns diagnosed with shaking injury[4-5]. Shaking alone would not be enough to cause diffuse axonal damage in infants, according to experimental studies in primates and dolls [6-7].

Head traumas are the greatest cause of traumatic death and the primary cause of child abuse fatalities, as reported by the American Academy of Pediatrics (AAP) Committee on Child Abuse and Neglect (2001). When it comes to children under the age of four, homicide is also the primary cause of death from an injury. Unless there is a clear explanation for the injuries, such as trauma from a motor vehicle accidents, it is unlikely that serious injuries in newborns, especially those resulting in death, are unintentional. When severe injuries caused by simple accidents (such as skull fractures) were ruled out, it was shown that child abuse was responsible for 95% of major intracranial injuries and 64% of all head injuries in infants younger than 1 year. The purpose of this study was to assess the efficacy of teaching materials in raising mother's awareness, knowledge, and behavior about the risks associated with shaken baby syndrome [8].

MATERIALS AND METHODS

Plan of Research

From January 28th, 2021 to March 10th, 2021, a questionnaire was used in a cross-sectional epidemiological study to assess mothers' levels of understanding of shaken baby syndrome. Mothers with infants under the age of one year old were the focus of this study. Mothers with infants younger than one year were given a questionnaire to fill out. Once participants gave their informed consent, questionnaires were sent out to them. Questions about respondent age, education, and occupation were included in the survey's demographics section. Questions about respondents' SBS knowledge included those about the frequency with which they shake their babies, their familiarity with the phrase "nationality," and the number of children they have.

Data collection

The study's researchers sought out mothers of newborns and toddlers. After explaining the project and obtaining parental permission, researchers will hand out questionnaires to children.

Ethical Considerations

The study followed the ethical guidelines for medical research laid out in the Declaration of Helsinki by the World Medical Association. The Research Committee at the University of Tikrit's School of Applied Medical Sciences approved the study. The parents gave their agreement for their children to participate in the study.

Statistical analysis

Statistical tests were run in SPSS 25.0 (Statistical Package for the Social Sciences) (IBM Corp, Armonk, NY). Numbers of respondents, percentages, the mean, the standard deviation (SD), and the median were all determined using descriptive statistics for the variables describing the respondents' expertise and experience.

RESULTS

There were 200 people total in the sample. According to the demographic breakdown, 60% of the population was younger than 40. 12 percent of the population was illiterate.

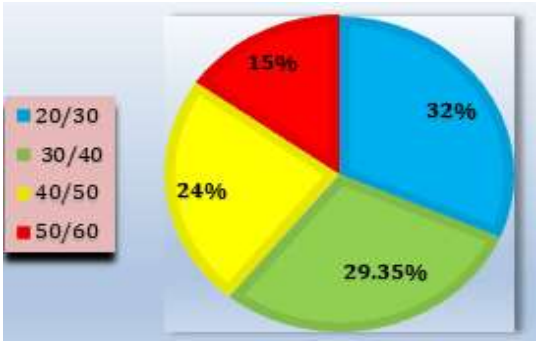

FIGURE 1: Distribution according to age

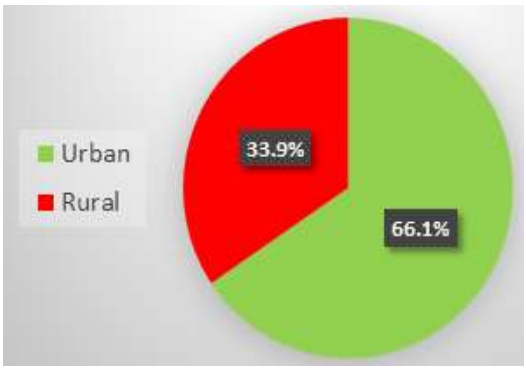

FIGURE 2: Distribution according to residence

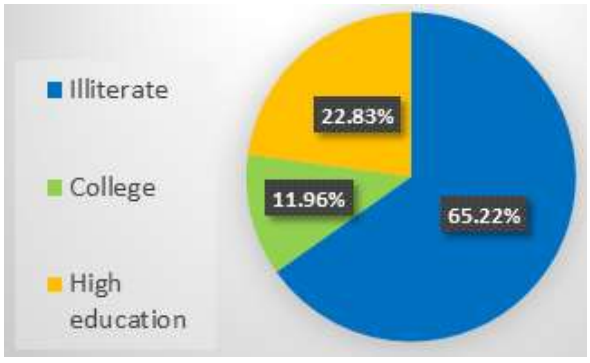

FIGURE 3: Distribution according educational level

Within the first year of life, 57.61% of parents admitted to shaking their baby to calm them down. Sixty-seven percent of parents surveyed (67.39%) indicated they were unaware of the dangers of shaking their infant within the first year of life. In addition, about 70% said they have never even heard of SBS.

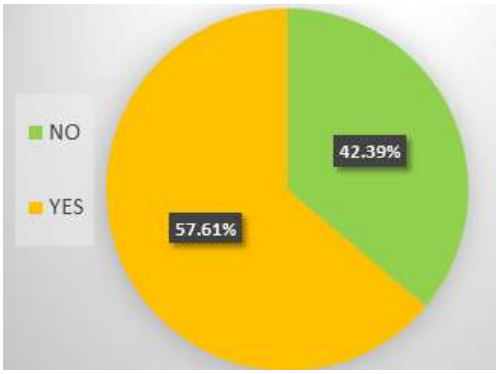

FIGURE 4: Are you aware of the risks of shaken a baby during the year of life ?

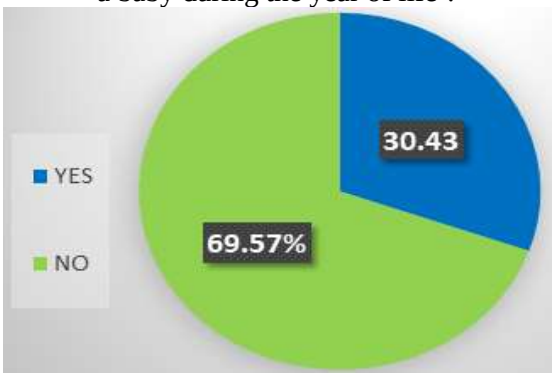

FIGURE 5: Have you ever heard about term shaken baby syndrome ?

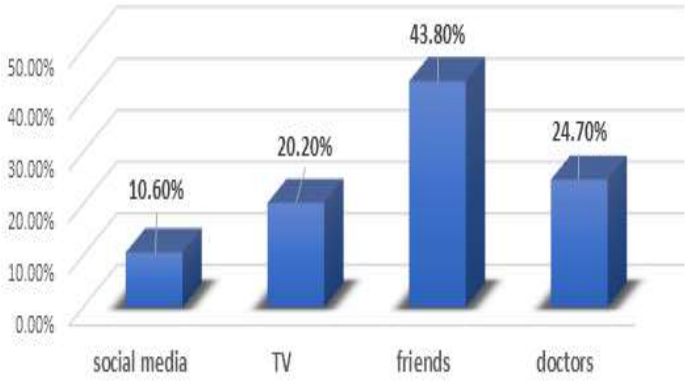

FIGURE 6: From where the mothers know about SBS?

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DISCUSSION

Rapid urbanization occurred in Iraq in the second part of the twentieth century. Seventy percent or so of Iraqis call cities home. Thus, we set out to investigate the level of familiarity with and perspective on SBS held by those living in less densely populated areas. Even among medically-trained parents, who should be expected to be the most knowledgeable about the SBS phenomena, there appears to be a significant knowledge gap ". The parents' level of SBS awareness was low, as expected; most of them had never ever heard of the service. Only 32% of those polled had any idea that shaking a baby can cause serious health problems, especially in the infant's first year of life [9].

The findings revealed an absence of foresight regarding potential outcomes. Shaken Baby Syndrome educational and preventative programs are especially important in underserved communities because they can change people's perceptions, knowledge, and attitudes about the disorder. The growing epidemic of shaken babies may be attributable to a lack of public knowledge about the issue and of programs designed to educate new mothers. Mothers are often the primary caregivers for their children, therefore it stands to reason that if they were made more aware of the risks associated with SBS, both the number and severity of SBS cases would reduce. From that point on, the researchers aimed to plan and execute this study to better understand how SBS risk education materials affected mothers' understanding of the risks posed by SBS. The study's findings supported the prediction that mothers would gain a deeper grasp of the dangers of shaking their infants after being exposed to educational materials about the condition[10-11-12].

According to the results of this survey, the majority of moms (63% overall) were in their 20s or 30s when they gave birth. Considering these findings, we can say that "Evaluation of Iraqi parents' knowledge of shaken baby syndrome. , which revealed that 68.48% of the moms were between the ages of 30 and 60, and that just 31.52% were in the 20-29 age range. As a consequence, we have this. The results of this study showed that about seven in ten moms (69.57%) had never heard of SBS, while just around one in three mothers (30.43%) had encountered this program. Most mothers who had heard about SBS did not hear about it through their doctors (only 24.7% had), and those who had heard of it learnt about it from someone other than medical professionals.

Friends, neighbors, and the Internet were among these resources.

Friends and family were the most prevalent source of information. The majority of respondents (43.8%) and almost one in ten (10.6%) learned something from social media. These findings highlighted a significant knowledge gap regarding SBS among moms. Since women play a crucial role in preventing SBS, this is an important consideration for designing and implementing programs to protect their children from the disease[13,14]. There was a significant difference between the mean and standard deviation of mothers' perceptions of SBS's etiology, symptoms, and problems before and after intervention. There are also extremely significant differences between pre- and post-intervention [15,16] in terms of mothers' average scores on assessments of their knowledge of SBS. During pre-intervention, mothers' scores are lower on average[17].

CONCLUSION

Most moms have never seen an episode of SBS. Only 32% of respondents had any idea that shaking a baby could pose serious health problems, especially in the first year of life.

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