A Holistic Approach to the Occurrence of Switched Baby in Hospitals

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Abstract. The case of the switched baby is a very regrettable incident that has been discussed in medical studies. Babies who have been switched begin with a newborn misidentification at the hospital. All newborns in hospitals are at risk of being switched owing to misidentification. Determining the biological parents of a switched baby in a hospital is a complex legal issue that must be carefully considered. The purpose of this study is to discover methods to manage and prevent baby switching. This paper is a literature review regarding the problem of switched baby in hospitals relating to parental/family aspects, newborn misidentification in hospitals, DNA examination to determine biological parents, and legal issues. The hospital can usually resolve most switched babies internally within a few days of the switch. However, in some instances of baby switching, it goes unnoticed for a long time before the family members become suspicious and make an inquiry. Scientists can distinguish relationships with higher than 99 percent accuracy by obtaining DNA samples from hair, urine, blood, feces, or other body tissue. The hospital is legally liable for all losses incurred as a result of medical staff negligence. This is also stated in Article 190 of Health Law No. 36/2009. Families have the authority to hold the hospital responsible as a service provider for any damage done to the family. Prevention is the most effective strategy for dealing with switched baby.

Keywords: Switched baby, misidentification, hospital, holistic approach

1 Introduction

Switched babies in hospitals are babies who are switched at birth and raised by non-biological parents. The case of switched baby is a very regrettable incident that has been discussed in medical studies [1]. Babies who have been switched begin with a newborn misidentification at the hospital, which results in the newborn being given to the wrong mother, cared for by the wrong mother, and taken home by the wrong family. This is a traumatic experience in the lives of parents and children, but it is rarely reported in the literature since the switched baby goes unrecognized or is rapidly resolved by hospitals once it is discovered [2]. On the other hand, the occurrence of baby switching can cause emotional stress for the mother and family, leading to lawsuits against the hospital as the service provider.

Every year, an estimated 20,000 babies are switched due to various misidentifications of newborns [3]. Meanwhile, according to Gaille B. (2017), nearly 28,000 babies are switched out of 4 million total births each year [4]. A one-year study conducted at Boston's Beth Israel Deaconess Medical Center discovered that an average of 26% of neonates in the neonatal intensive care unit (NICU) were at risk of misidentification due to similar identifiers [5].

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According to health professionals from 54 hospitals in the Vermont Oxford Network, 11% of newborns over two years were misidentified [6]. Although Gaille B. (2017) asserts that many of these issues may be settled before the family leaves the hospital, there are still objective risks to baby switching that must be addressed [4].

All newborns in hospitals are at risk of being switched owing to misidentification. Misidentifying babies in hospitals is challenging due to similar birth dates, medical record numbers, twins, or often the same surname. NICU care is a very complex service so that newborns, especially premature babies, are very vulnerable to misidentification. Hospitals that lack a good system for recording identity are prone to baby switching. Switched babies in hospitals have a negative impact on patients and families, who frequently wind up in court to determine the baby's biological parents. The hospital may suffer financial damage as well as a loss of reputation.

Determining the biological parents of a switched baby in a hospital is a complicated legal issue that must be carefully considered. The case of switched baby involves legal aspects, medical ethics, and human rights. Safe newborn care begins with accurately identifying the baby, to provide good and correct care. Accurate identification of newborns is critical for diagnosis, therapy, and avoiding incidents of baby switching. As a result, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has established proper patient identification as the primary priority in terms of patient safety [7]. The point of this study is to discuss a comprehensive approach to switched babies in hospitals from the parent/family aspect, the hospital's role as a service provider, determining biological parents, and legal issues.

2 Methods

This paper is a literature review regarding the problem of switched baby in hospitals relating to parental/family aspects, hospital aspects, DNA examination to determine biological parents, and legal issues. The aim is to find out how to manage and prevent baby switching. The data and information were acquired from written sources such as books, journals, and articles related to the topic of switched baby in domestic and overseas countries. This article is a descriptive narrative made up of relevant information. This will better explain how to take a holistic approach in managing switched baby in hospitals.

3 Results and discussion

3.1 Aspects of biological parents/family

Baby switching can happen in a variety of ways. First, for social reasons, a newborn girl is switched with a newborn boy in certain families/communities to preserve the marriage union. Second, during natural disasters, babies may be accidentally separated from their families and cared for by other families. In this instance, the family may be able to claim the child based on physical similarity. Third, due to the negligence of health workers, the baby was given to the wrong parent after delivery. This often occurs due to the incorrect identification of newborns. The hospital can usually resolve most switched babies internally within a few days of the switch. However, in some cases of baby

switching, it goes unnoticed for a long time before the family develops suspicion and initiates an investigation [2].

Most of the time, the birth of a child is among the most joyful moments in a parent's life. A pregnant woman who will give birth in a hospital, on the other hand, is concerned about the baby being switched while in the hospital. According to Davis JD. et al. (2001), media coverage in the United States regarding incidents of switched baby in hospitals has become an anxiety for a number of patients, and 10% of mothers reported anxiety over cases of switched baby in hospitals in an experimental study. This anxiety is quite understandable because switching baby would be a very detrimental experience for a family. The trauma has a lasting impact on the family's lives, even if the truth is later disclosed [8].

When the baby switch is disclosed years later, the family will struggle to adjust to the new situation. Separation from a child raised as one's own is related to bereavement. In fact, it is the connection and attachment to the child, not the biological relationship, that make a man and a woman parent. The bond between parents and their adopted children is as strong as the bond between parents and their biological children [9]. As a result, separation following the development of attachment results in deep sadness. After the shock of facing this situation, adults are able to develop solutions to overcome the problem. On the contrary, for children, there may be more difficulties, and it may take more time to adapt to a new circumstance.

3.2 Newborn misidentification in the hospital

Safe patient care begins with accurately identifying the patient so that healthcare providers can provide care to the right person. Failure to properly identify patients and match their identities for intended clinical evaluation or intervention, or for administrative purposes, may endanger patient safety [10]. Misidentification of babies can be caused by surgical procedures on newborns, hospital nurses giving newborns to the wrong mother, and the use of formula instead of breast milk [11]. An internet search revealed 18 cases of “switched births” worldwide between 1931 and 2015, where misidentification of babies was caused by newborns being placed in the wrong crib [12]. The worst outcome of newborn misidentification in hospitals is that babies are switched, the baby is given to the wrong mother, possibly cared for, and taken home by the wrong family.

Hospitalized newborns are a challenge to identify correctly, especially in the NICU population, which is high-risk and has a long length of stay. Patients are identified by health professional numerous times each day for nearly every service. If any of the steps in this process are not carried out correctly, medical misidentification can ensue. Population similarities in newborns, such as family name, medical record number, and date of birth, contribute significantly to the risk of misidentification. Similar-looking medical record numbers are the most common source of misidentification, followed by identical or similar-sounding names [13]. In healthcare, accurate and consistent usage of patient identification (ID) bands is utilized to minimize errors associated with patient misidentification. In fact, if the identification band is not tied to the patient but to the equipment or supplies needed to care for the patient, the ID band has a possibility of becoming detached from the patient, making it useless for correct patient ID and at risk of causing misidentification of other patients. Chassin MR. and Becher EC. (2002) stated that various factors play a role in misidentification of newborns, including the workflow

of newborn services, the materials used in the identification process, and the way health workers carry out the identification procedure [6].

Strategies to prevent misidentification of neonates include changing ambiguous naming principles (e.g., baby, boy) to naming that differs by the mother's name and the gender of the newborn (e.g., By. Ny. Sari, boy); color-coding names that sound similar; standardizing the use of identification bands; and using barcode technology for patient identification [13]. The Royal College of Pediatrics and Child Health recommends that an identification band be placed on the baby immediately after birth and that, during care, it be ensured that the identification band is not pulled or removed. Particular care should be taken in the identification of twins, where both babies are cared for, either in the post-natal ward or, especially, in the NICU [10].

Currently, all births are deemed urgent. If the baby starts crying instantly, he/she is placed on his mother's chest to allow bonding; otherwise, the baby is placed in an infant warmer for resuscitation. When the baby is stable, it is covered and given to the mother. The baby is cared for in the delivery room until the mother's condition stabilizes and she recovers normally postpartum. An ankle band with identification writing is placed on the baby's ankle before being transported from the delivery room. This band includes the baby's gender, mother's surname, and date of birth when inscribed in pen. In general, babies are placed next to their mother's bed, except when the mother is away temporarily; they are given to the nurse on duty. With this procedure, it is hoped that switching babies can be prevented in hospitals [12].

3.3 DNA testing and scientific evidence

Deoxyribonucleic acid (DNA) is a molecule that contains genetic information necessary for organisms' development and function. DNA testing is frequently used to confirm a parent-child biological relationship. Scientists looked at stretches of DNA, which is genetic material that reads like the letters in a sentence. Most sentences seem to persist the same from individual to individual within the same species and often even between species. But certain parts of DNA, called markers, tend to look very different from one animal or person to another. Each person's DNA is made up of a combination of genes from their mother and father. Your markings will match your parents' markings but will be different from the markings of most of your friends. By taking DNA samples from hair, urine, blood, feces, or other body tissue, scientists can use markers to distinguish relationships with greater than 99 percent accuracy. Thus, the results of the DNA test become strong evidence in cases of determining biological parents and can be used in court to validate the relationship [14].

DNA testing is commonly utilized in child custody, child support, and immigration cases. More than 382,000 DNA tests have been performed in the United States to determine biological parentage [15]. Tug A. and Ozguven HD. (2011) reported a case study of switched babies in Türkiye. A husband and wife from Turkey visited the forensic DNA research laboratory at the Ankara University Faculty of Medicine in May 2007 to have their DNA tested. They believe that they are not the biological parents of their child, who was delivered in a Saudi Arabian hospital in 2003. The family and environment frequently question why the child does not resemble them. To deal with the psychological pressure, they agreed to have a DNA test. The results of the DNA test revealed that the child was not their biological child. The family decided to return to the Saudi Arabian hospital to look for their own child. The Turkish Ministry of Health, the Turkish Embassy

in Saudi Arabia, the Saudi Arabian Ministry of Health, and the Governor of the city of Najran were involved, as well as receiving extensive press coverage [2]. This case report illustrates that the case of switched babies is a very complicated problem that affects not just parents, families, environments, races, and countries.

3.4 Legal issues

A person expects to receive competent medical care when visiting a healthcare facility. Health care professionals are responsible for damages if the services they provide are unskilled or careless [15]. A hospital is a public service provider organization that is accountable to the public for all public health services it delivers. The public responsibility of hospitals is to provide quality and affordable healthcare services based on the principles of safety, comprehensiveness, non-discrimination, participation, and protection of the community as users of healthcare services as well as healthcare providers, in order to reach the maximum level of health [16]. The hospital is legally liable for all losses incurred due to carelessness committed by health care professionals [16], [17].

Although the hospital's legal liability towards patients in the implementation of health services arises from civil legal relations, the implementation of health services also has implications for administrative law and criminal law. The hospital's legal liability in providing healthcare services to patients can be seen from the aspects of professional ethics, administrative law, namely sanctions for removal from office for authorized officials, civil law with the payment of compensation as a form of responsibility for the hospital to carry out court decisions, and/or criminal law by sentence [18]. This is also included in Article 190 of Health Law No. 36/2009 [19]. The juridical implications of errors or negligence by health workers in providing health services can be viewed from two sides, namely the ethical aspect and the legal aspect [20]. In the case of switched babies, the elements of the criminal offense have been fulfilled. The element of error or negligence committed by health workers is not carrying out Standard Operating Procedures (SOP), which is an element of intent, because health workers are actually aware that in carrying out health services they must be in accordance with SOP.

Hospital health workers who accidentally switch babies in the hospital will certainly have a huge impact. Legally, hospitals can be held accountable under a variety of theories, including negligence, respondent superior, and emotional distress. Advocating one or more of these theories may result in the hospital awarding the prosecutor significant monetary damages. In cases of baby switching, the family is the party that suffers the greatest disadvantage. When cases of switched baby is discovered and changes in custody are made, the court is forced to face the difficult situation of awarding custody to the biological parents and foster parents. Apart from that, after deciding on child custody, the next problem is the transition of child care [18]. In addition to the serious damage to the family, the hospital itself may suffer financial losses and reputational damage.

The United States has handled several cases of switched baby in decades, so it can help in dealing with these cases. However, it should be noted that the United States has a legal and socio-economic system that is very different from the conditions in Indonesia. Apart from the United States, there are several countries that have published case studies on the handling of switched baby, such as Turkey, Saudi Arabia, South Africa, and

others, so that they can be used as comparisons for better handling of switched baby. Crane TR. (2000) published a case of a switched baby in Virginia, United States, where a government hospital had to spend four million dollars on a case of switched baby [18]. Tug A. and Ozguven HD. (2011) also reported a case study about switched babies in Saudi Arabia, where the family sued the hospital for 13 million US dollars [2]. Thus, considering the complexity of the problem of switching babies and the large material and immaterial losses experienced by all parties, prevention efforts are the only option. First, updated security measures for newborns in hospitals. Second, it proposes a law that regulates procedures for the identification of newborns and also imposes sanctions on hospitals that do not comply [18].

4 Conclusions

Switched baby in hospitals is very rare, but switching babies will result in very complex problems and solutions. Babies who have been switched begin with a newborn misidentification at the hospital. If a family feels that their child has been switched, the child should get a DNA test as soon as feasible. Families have the right to hold the hospital responsible as a service provider for damage to the family. Prevention is the most effective way to manage switched babies by increasing the security of the identity of newborn babies and the regulations regarding identification procedures that must be complied with by all health workers as part of patient safety.

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