

## TRENDS AND PATTERNS OF SUSPECTED INFANTICIDE CASES AUTOPSIED AT THE KACYIRU HOSPITAL, RWANDA: CASE REPORT

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### ABSTRACT

Infanticide is defined as the killing of a child within 12 months after birth. More specifically, when a child is killed within the first 24 hours after birth, it is termed as neonaticide. Despite the clear legislation on infanticide in Rwanda as enshrined in Article 143 of the Penal Code (2012), cases of infanticide are still remarked in large numbers. However, the actual incidence of infanticide in Rwanda and the whole world in general is not well known owing to the fact that the cases are not fully detected.

We present two cases of newborn baby deaths that were investigated at the Kacyiru Hospital mortuary during one of the yearly interdisciplinary Forensic Summer Schools held in Kigali- Rwanda. This Forensic Summer School, funded by the German Academic Exchange Service (DAAD), is held every year since 2012 through cooperation between the Institute of Legal Medicine/ University Medical Center Hamburg-Eppendorf and the University of Rwanda.

**Keywords:** Infanticide, Neonaticide, Forensic summer school, Rwanda

### INTRODUCTION

Infanticide is defined as the killing of a child within 12 months after birth. More specifically, when a child is killed within the first 24 hours after birth, it is termed as neonaticide. The actual incidence of child homicide worldwide is not well known, due to the fact that these cases of child homicide are either not fully detected or wrongly categorized [1]. It is however, estimated that 95,000 child homicides took place in 2012 alone translating into a rate of 8 per 100,000 with the highest rates reported in Latin America (12 per 100,000) and East and Central Africa (10 per 100,000) [2].

In Rwanda, legislation on infanticide is clear: Article 143 of the Rwanda Penal Code (2012) stipulates that "A person who kills his/her biological or adopted child shall commit infanticide and this shall be punishable by life imprisonment". Records from the legal medicine department of the Kacyiru Hospital, the only hospital mandated to carry out suspected infanticide-related post mortem examinations, indicate that 103 cases of suspected infanticide have been received and examined since 2010 translating into an estimated 15 cases of infanticide per year [3]. Nonetheless, it is thought that the number of these cases might be underestimated. In this report, we present two cases of newborn baby deaths that were investigated at the Kacyiru Hospital mortuary during one of the yearly interdisciplinary Forensic Summer Schools held in Kigali- Rwanda.

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### CASE PRESENTATION

#### Case 1

A male newborn was found dead in a box wrapped in a colored textile. The persons who found the box with the baby told the police that they had remarked one woman in the neighborhood who had been pregnant before but wasn't pregnant anymore and no one knew where her baby was. The suspected woman denied killing the baby and told the police that the baby was born dead. The police were then interested to know the nature of death, whether natural or unnatural.

#### External investigation:

A mature male newborn baby with a weight of 2785g and crown-heel length of 52cm. No malformations were objectivated. No signs of external force especially at the oral and nasal orifices as well as the neck were remarked. The umbilical cord was cut, with only 3cm length left. No galeal hematoma was found.



**Figure 1:** (L) External examination of the body and (R) the colored linen that covered the baby in a box. Photos by H. Mushumba and K. Pueschel



**Figure 2:** (L) Facial examination and (R) remaining part of the umbilical cord (about 3cm). Photos by H.Mushumba and K. Pueschel

#### *Autopsy findings:*

There was normal configuration of the internal organs including the cardiovascular system. Both lungs totally floated in water. The stomach floated in water with gas bubbles noticeable inside. No aeration was objectivated in the small intestine.



**Figure 3:** Inspection of the lungs. Note the areas with a pink coloration as well as smaller areas with a deep-blue color. The pink coloration is an indication for aeration. Photos by H.Mushumba and K.Pueschel



**Figure 4:** (L) "The Hydrostatic test" indicating floating lungs and (R) floating stomach. Photos by H.Mushumba and K.Pueschel

#### *Cause of death:*

Asphyxiation (with respect to the scene i.e. wrapped in a textile and placed in a box). The manner of death was attributed as unnatural.

#### *Case 2*

A young woman was suspected of either abortion or infanticide because one of her neighbors remarked that she was not pregnant anymore yet it was well known in the neighborhood that she was pregnant before. The neighbor then alerted the police who immediately launched an investigation. After an extensive searching,

they found a box containing the body of a baby in a nearby bush so close to the residence of the suspected mother. The police then wanted to establish if the baby was born alive or if it was stillborn; the estimated age of the baby (term or preterm) as well as any other factors that might have contributed to the delivery.



**Figure 5:** Baby in a box covered with linen. Photos by H.Mushumba and K.Pueschel

#### *External investigation:*

An immature, female newborn baby with body weight of 1640g and crown heel length of 35cm. No signs of external force were noted on the body. No malformations. A piece of the umbilical cord was cut while the remaining part was tied with a thin thread.



**Figure 6:** External examination of the body. Note the thin thread used to tie the remaining part of the umbilical cord. Photos by H.Mushumba and K.Pueschel

#### *Autopsy findings:*

The internal organs had normal configuration. There was much putrefactive gas in the whole small intestine as well as presence of gas in the stomach. Both lungs had a deep blue color and totally sank in water. However, small pieces of lung tissue swam on water supposedly as a result of putrefaction. Putrefaction and weakening of the inner organs was remarked.



**Figure 7:** Deep-blue coloration of the lungs. Photos by H.Mushumba and K.Pueschel

The conclusion was a stillbirth since no breathing was proven, supposedly following an abortion of unknown origin.

## DISCUSSION

As earlier stated, the true incidence of global infanticide cases is not well established due to the fact that either the data are incomplete or some of the cases are misclassified [2]. In developing countries, such as Rwanda, despite the efforts that have been put in place to aid pregnant women access hospital care before, during and after delivery, some deliveries still take place outside the health facilities thus making the correct estimation of child births difficult. Sometimes, these unmonitored deliveries and illegal abortions not only result into the death of the baby but also the mother [4].

Abandonment of young infants has been attributed as the most common antecedent to death with concealment of pregnancy also shown to be relatively common around the world [5]. The most common trend of suspected infanticide cases in Rwanda, as noted from the present reports, is asphyxiation resulting from babies being placed in boxes covered with linen and then either put in bushes or thrown in pits by suspected mothers, only for passers-by to realize the corpses and then alert the police. Various studies have indeed shown that suffocation and drowning are common methods of infanticide [6]. Sometimes difficulties arise when it has to be proved whether the baby was born alive or not. One study showed that amongst infants older than 26 weeks gestation, 28% (n = 31) were thought to have been born alive but differentiation wasn't achieved in 31% [7]. Another study examining homicides of children aged less than five years in South Africa indicated that most of the deaths (74.4%) were of infants less than one year old of whom 53.2% were neonates in their first 28 days of life [8]. This seems to be the trend in Rwanda too where early neonates make up the largest bulk of suspected infanticide cases.

Studies such as the one by Abrahams et al., attribute two-thirds of filicide (killing of one's own child) cases to mothers [8]. Another study by T. Porter et al., notes that women implicated in the homicide of older infants tend to be of older age usually occurring following abuse while women who commit neonaticide are young, unemployed, unmarried, or in school [6]. No conclusive association has been made linking infanticide with overt maternal mental illness [6].

In Rwanda, extensive studies have to be conducted to establish the factors that precipitate unplanned pregnancies, induced abortion and subsequent infanticide. Another approach could also be the introduction of the so-called "safe-havens" such as in the USA, where babies can be abandoned legally. Sex education as well as access to contraceptives can also be intensified so as to prevent unwanted pregnancies.

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