



## How to protect your new-born from neonatal death: Infant feeding and medical practices in the Gambia



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### ABSTRACT

Since the 1990s, the reduction of under-five child-mortality has been a priority for the WHO (Millennium Development Goal 4). In the last two decades, the greatest reduction has occurred in children older than 1 month, while neonatal mortality (the first 28 days of life) has declined more slowly. Neonatal deaths, estimated at approximately 4 million annually, now account for more than 40% of deaths worldwide. Bacterial infections are the leading cause of neonatal deaths. Although risk factors for community and hospital based infections potentially leading to neonatal sepsis are well researched, local people's childcare practices in the neonatal phase are poorly understood by clinicians and biomedical researchers. This paper is based on ethnographic research on neonatal caring practices in rural Gambia. We show that many practices centre on protecting the newborn from sicknesses that are believed to be caused by spirits and other supernatural inflictions. Other caring and nourishing practices are performed to enhance the baby's physical, cognitive and moral development making him/her a full member of the community.

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According to recent figures, 44% of all under-five deaths globally occur during the neonatal period (Gaffey, Das, and Bhutta, 2015; UNICEF, 2014). Although risk factors for community and hospital-based infections potentially leading to neonatal sepsis in Sub Saharan Africa are well researched, the majority of neonatal deaths occur at home and, from a biomedical perspective, there is an insufficient understanding of what happened, what pathogens the neonate was exposed to, how it came to infection and how the family handled the situation. With little regard for clinical aetiologies, anthropological research has provided insights into childcare practices during the neonatal phase, including beliefs around personhood and why some new-borns do not stay in this world with their parents (Gottlieb, 2004). Prominent themes in the literature are the relationship between the progenitors and the child (Malinowski, 1922; Conklin and Morgan, 1996), kinship networks, sex and gender (Astuti, 1998; Carsten, 2004; Strathern, 1988), sociality and liminal stages in the development of personhood within the community (Malinowski, 1922; Astuti, 1998; Gottlieb, 2004; Gottlieb, 2010). It is in this context of defining the point at which 'life' begins and ends in different societies that social anthropology is interested in death and mortality (Franklin and Lock, 2003) and the point at which the body is defined as a person (Lambek and Strathern, 1998; Strathern, 1988; Butler, 1990) or as a

full member of society (Turner, 1967; Van Gennep, 1960) and at what stage this is perhaps no longer the case.

The authors of this manuscript stand at the crossroads between anthropology and public health. The data were collected in the context of providing biomedical researchers and epidemiologists with concrete information on perinatal practices that may provide clues as to which 'behaviour patterns' might be related to infections that could develop into neonatal sepsis and mortality at the 'community level'. The study was designed to give insight into the grey zone of 'poorly understood' cases of neonatal mortality that are unaccounted for because the neonate was never examined and treated at the health centre – born, died and buried in the realms of what is unknown to biomedical research. The ethnographic data on neonatal childcare practices presented here result from a study undertaken in 2013 and 2014 by the Unit of Anthropology, Institute of Tropical Medicine, Antwerp, Belgium in collaboration with the Theme of Child Survival at the Medical Research Council, the Gambia. The research was carried out in selected rural settings in the Upper River Region, the Central River Region and the North Bank. Informants represented all ethnicities in the Gambia, namely Fula (Fulbe), Mandinka, Serahule, Wolof. Participants from all social strata were interviewed and no distinction was made between individuals on the basis of social structure and hierarchy or perceived expertise.

In this article, we want to convey how women and men in the Gambia understand sickness during the neonatal phase, what the perceived aetiologies are and how they try to prevent neonatal sickness and death through different infant feeding and nourishing practices.

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Throughout the analysis we are interested in what nourishing practices say about the construction of personhood, but more importantly, we aim to reflect on our informants' understanding of misfortune and how, in the context of high neonatal morbidity and mortality, they pragmatically cope with or aim to prevent these outcomes. We suggest that in the very early stages of life, some nourishing practices are considered protective against the threat of sickness and death through spiritual affliction and thus, are principally ways of dealing with uncertainty and risk rather than the making of 'personhood'. Other practices mark the beginning of the baby's individuality in the community.

### Political economy and household structure

The Mandinka are the largest ethnic group in the Gambia, comprising 42% of the population, followed by the Fula (18%), the Wolof (16%) and the Jola (10%) and the Serahule (9%). Islam is the pre-dominant religion (90%), 8% are Christian and 2% other. Having migrated from the Empire of Mali (13th and 14th century), the Mandinka established themselves as farmers in Senegambia in the fourteenth century, cultivating sorghum, millet and vegetables. By the fifteenth century, the Mandinka became known as successful traders dominating the local political and social institutions (Carney and Watts, 1991). Historical records show that nomadic and sedentary Fula co-habited with the Mandinka around the river Gambia (Knight, 1982). Relations were sometimes peaceful, sometimes not: certain Fula leaders allied themselves in the cause of Islam to fight pagan Mandinka. Others fought for land (Knight, 1982).

The groundnuts and rice introduced by the Portuguese in the sixteenth century were grown for domestic consumption for several centuries before being produced as cash crops in the nineteenth century (Brooks, 1975). The commoditization of agrarian production resulted in changes in the organization of agrarian production, which also affected the household and gender relations, as well as the local economy. Regional literature discusses the intensification of women's and girls' labour as a result of mechanized irrigation for rice production and horticultural production in the second part of the 20th century; and how female farmers have been disciplined into particular work regimes as part of an agrarian global economy (Carney and Watts, 1991). Kea (2013) suggests that, as a result of Women in Development Initiatives encouraging female farmers to grow vegetable on a wider scale to generate increased income, female labour – paid and unpaid – has intensified.

In terms of household structure, it is characteristic for all ethnic groups of the Gambia that the extended family members are settled together in one large compound in a village or town (*kabilo*). The size of the compounds varies between five and up to 50 people. Residents can fluctuate depending on the domestic cycle but frequently include: a husband and his wives, his married sons and their families, his unmarried daughters, widows, divorced sisters and other extended family members and visitors (also see Kea, 2013). While living arrangements can vary between ethnic groups, generally every wife has her own house or room within the larger compound where she stays with her children while they are still small. Once the children are bigger, they often sleep separately with other members of the family of the same sex.

### Neonatal mortality: local interpretations and biomedical aetiologies

In Senegambia it is commonly said that newborns are the ones closest to God. Human beings are perceived to be in their purest state immediately after their birth, before they have heard, repeated and learned anything evil and before they have been spoiled by worldly matters, bad influences and desires. In Fula, this idea is captured in a saying that babies are '*muumantewon Allah*' – which means "God's mute little witness" (i.e. someone who has not yet said wicked things). In Mandinka neonates are called *malaikas* – 'angels' and it is said that if they die, parents should not be sad because they will go straight to heaven. However, this purity also makes babies vulnerable to evil afflictions, which is why they need to be well protected, particularly in the early neonatal phase. Before

exploring when and how infants are 'protected' through different practices we look at what is perceived to threaten their well-being.

Ethnographic accounts of motherhood and infant care reflect the figures presented in epidemiological research on neonatal mortality in Africa: for most women the loss of children is common and many women can count more pregnancies than those of their living children (Riesman, 1998; Riesman, 1992; Gottlieb, 2004). With Millennium Development Goal 4, the reduction of under-five child-mortality has been a priority for the World Health Organization (MDG Report, 2010) since the 1990s. While under-five child mortality has declined globally by more than half, dropping from 90 to 43 deaths per 1000 live births between 1990 and 2015, neonatal mortality has remained persistently high, particularly in Sub-Saharan Africa and Southern Asia (Gaffey et al., 2015; United Nations, 2015). The Millennium Development Goals report 2015 shows that in 2013, 36% of neonatal deaths occurred within the first 24 h of the newborn's life and 73% of neonatal deaths occur within the first 7 days. As for the Gambia, the most recent figures indicate a neonatal mortality of 29.9 per 1000 live births (in contrast to 2.4 per 1000 in the UK) and an under 5 mortality rate of 68.9 per 1000 live births (in contrast to 4.2 in the UK) (WHO, 2016). 40% of under 5 deaths in the Gambia occur in the neonatal period (0–28 days), 30% in between the age of 1–11 months and 31% between 1 and 4 years of age (UNICEF, WHO, The World Bank, and UN Pop, 2012). The major causes of neonatal deaths in the Gambia are preterm birth (35%), birth asphyxia and birth trauma (29%), pneumonia (14%), sepsis and other infectious conditions (12%) (UNICEF, WHO, The World Bank and UN Pop., 2012).

The epidemiologists concerned with child survival at the MRC in the Gambia, during the time of our study, were keen to understand the behaviour and 'traditional practices' of rural and semi-urban Gambians in the perinatal phase. Special topics of interest were:

- (1) Risk factors for neonatal infections during birth, particularly during home births: Where and how do women give birth? How clean is the place? What utensils are used? What hygiene practices do Traditional Birth Attendants (TBAs) observe during labour? (I.e. washing hands with soap).
- (2) Are babies exposed to dirt and infection on a day-to-day basis?
- (3) How are babies washed? How is the umbilical cord taken care of?
- (4) Infant feeding: how are newborn babies fed? Are they exclusively breast-fed or what else do neonates ingest during the first days of life?

These questions derive from the transmission dynamics of infections that can lead to neonatal sepsis and pneumonia and that are understood in the following way:

Sepsis - acquired at home or in the community in the neonatal period in sub-Saharan Africa, including in The Gambia - is most commonly caused by the bacteria *Staphylococcus aureus*, *Streptococcus pneumoniae* and *Escherichia coli*. Group B streptococcus and a wide range of gram negative bacteria are responsible for a significant additional proportion of these infections (Waters et al., 2011; Mulholland et al., 1999). The bacteria are transmitted during delivery or shortly after birth directly from the mother or, in some cases, from other close family members or other people living in the same household or compound. The umbilical cord is one potential portal of entry for infection including for tetanus when unhygienic practices related to the cutting and sealing of the cord are used. *Staphylococcus aureus* is carried by approximately 30% of people as well as by animals, and is transmitted to newborns extremely rapidly following delivery. *Escherichia coli* and other gram negative bacteria are found in the gut and are transmitted to the infant at the time of delivery. Although this transmission is universal, the nature of the bacteria transmitted and hence the risk of sepsis may be affected by hygiene practices and hand-washing. *Streptococcus pneumoniae* carriage in the back of the nose is very high in the Gambia. Up to 90% of infants will become colonized with *Streptococcus pneumoniae* over the first month or two of life (Hill et al., 2010; Cheung et al., 2006). The bacteria are transmitted through

droplets in saliva (e.g. coughing, kissing, spitting, masticated food) and transmission is associated with crowding and close family living. Group B streptococci are frequently transmitted in the birth canal or directly from the mother following delivery. Nearly one million deaths occur worldwide due to these and other infections in the first month of life and around two-thirds of all deaths in children under five occur as a result of infections. Pneumonia, which may be caused by any of the bacteria transmitted to newborns, is responsible for a significant proportion of these deaths (Liu et al., 2012). For this reason, from a biomedical perspective, understanding beliefs and practices related to the early newborn period is an important component to designing implementable strategies to reduce preventable infection and death in early life.

Delay in the initiation of breastfeeding, and exclusive breastfeeding, are key to reducing infant mortality. The WHO, and other international organizations including UNICEF, recommends exclusive breast-feeding for the first six months of life followed by the introduction of complementary feeding with ongoing breast-feeding until two years. In this context, exclusive breast-feeding is defined as no other food or drink, not even water, except breast milk (including expressed breast milk or from wet nurses); although it does allow for the provision of oral rehydration solution, vitamins, minerals and other medications. When considering complementary feeds, the importance of hygienically stored and prepared food of sufficient nutritional content is also highlighted (WHO, 2002).

A study pooling data from 3 randomized trials in Ghana, India and Tanzania showed that neonatal mortality was higher in infants initiating breast-feeding at 2–23 h (adjusted relative risk 1.41 [95% CI 1.24–1.62],  $p < 0.0001$ ), and in those initiating at 24–96 h (1.79 [1.39–2.30],  $p < 0.0001$ ) (Neovita Study Group, 2016), when compared with those infants who begun breastfeeding within the first hour of life. Exclusive breastfeeding was also associated with the lower mortality during the first 6 months of life (1–3 months mortality: exclusive versus partial breastfeeding at 1 month 1.83 [1.45–2.32],  $p < 0.0001$ , and exclusive breastfeeding versus no breastfeeding at 1 month 10.88 [8.27–14.31],  $p < 0.0001$ ) (Neovita Study Group, 2016).

### Sickness and death according to Gambian cosmology

The ways in which significant events such as death and misfortune are handled in different societies has extensively been researched by anthropologists since the inception of the discipline (Malinowski, 1948; Bloch and Parry, 1982; Huntington and Metcalf, 1979; Goody and Jack, 1962; Evans-Pritchard, 1976; P. Geschiere, 2008; Ciekawy and Geschiere, 1998; Peter Geschiere, 1998; Frazer, 1890; Rivers, 2001). Given the increasing presence of 'western' medicine and information campaigns related to infectious disease control in Sub-Saharan Africa, there are often various levels of causality explaining the severe consequences of disease or mortality. Although people often are aware of biomedical causes/agents of transmission and infection (e.g. mosquitoes in malaria; microbacteria in Buruli Ulcer disease, viral transmission in HIV), such aetiologies are often complemented with additional causes that provide answers to more existential questions, such as why certain people fall victim to illness and misfortune while others do not. Common explanations are supernatural forces, witchcraft or God's will (Hausmann Muela, Muela Ribera, and Tanner, 1998; Hausmann Muela, Muela Ribera, Mushi, and Tanner, 2002; Hausmann Muela, Muela Ribera, Toomer, and Peeters Grietens, 2012). This leads to the alternation or combination of treatment-seeking in both the biomedical and traditional fields (Peeters Grietens et al., 2012).

In rural Gambia, sicknesses are categorized as having two kinds of origins. *Kuraj keso* (in Mandinka) are diseases or ailments that are thought to be caused by an agent or micro-organism inside the body, which is detectable by biomedicine. The second broad category of diseases are called *ming kesa sande*, which means 'something that makes you sick' and refers to illnesses caused by agents 'outside the body'. These agents are thought to be undetectable through biomedical diagnosis. Generally, when Gambians talk of *ming kesa sande* they have illnesses inflicted by

supernatural forces in mind. These illnesses are said to be transmitted through wind, particularly 'foul wind' or 'bad wind' in English (*fonyo jawo* in Mandinka or *henndu bonndu* in Fula) (also see O'Neill et al., 2015). It is therefore considered crucial to protect vulnerable people and parts of the body from 'wind' by covering it up. The supernatural forces inflicting the sickness can be *Jinne* spirits, witchcraft or other spirit creatures such as dwarfs (*Kondoron* or *Ngote*). *Jinne* are non-human spirit creatures that are believed to inhabit the world alongside humans. They are said to be invisible to humans under 'normal' circumstances and do no harm. However, some 'bad' *Jinne* can afflict human beings, causing aggressive behaviour, 'madness' and mental illness, sickness or death by 'attacking' a person through 'wind' and especially when they are in 'unsafe' places in the bush. *Jinne* are commonly believed to dwell in trees in the bush and attack specifically vulnerable people, e.g. pregnant women walking through their territory.

Another creature that was said to harm unborn babies was the *Kondoron* or *Ngote*, which was translated into English as dwarf. Dwarves are spirit creatures that are said to be small and have long beards and one foot twisted backwards. They are believed to live in family clusters in the bush, where they are said to be spotted most frequently during the hottest hours of the day. Stories of whether these dwarves were good or bad differed. Some said that dwarves can make a person incredibly wealthy, if one is lucky enough to spot them. However, they can also bring devastation to a person and their family if they are disrespected. Most informants seemed to agree that dwarves offer you things such as a calabash full of milk or a pot of gold if you encounter them in the bush. But you have to be cautious because if the gift is taken without hesitation the dwarf will curse you. It is important to show modesty and wait until the offer has been made more than three times, then you can take it and the dwarf will bring fortune to your family. Nevertheless, dwarves also get up to mischief. Some informants reported that dwarves had stolen their children for a few weeks and returned them circumcised. They are known to cause a common eye disease by flicking their finger nails in one's eyes and they can also turn an unborn child in its mother's womb into a non-human creature. The descriptions of these *Kondoron* or *Ngote* in the Gambia resemble Gottlieb's accounts of bush spirits responsible for stealing children (Gottlieb, 2004: 241).

The following case illustrates beliefs about what can happen if a pregnant woman is afflicted by supernatural entities:

Sarah: Are there things that a pregnant woman should not eat, places she should not go, or things she should not do?

Salamata: Sometimes a pregnant woman would not eat the *chereh*<sup>2</sup> until she delivers because she does not have a taste for it. But there is no taboo that says that a pregnant woman should not eat these types of foods. For us, we only go to the rice fields, and not to the bush. We believe that there are evil creatures or *Jinne* in the bush. When a pregnant woman steps on the paths of these evil creatures it can turn your baby in your womb and make it become abnormal. If that happens you would have to go to the hospital. If they cannot cure your baby, then you go to the marabouts or traditional healers who would help and cure your baby.

Sarah: When babies are not normal is that always the curse of a *Jinne* or *Kondoron* (dwarf)?

Salemata: When a baby is born and is abnormal it has been cursed by a *Jinne* or some other creatures in the forest. If you see reptiles like

<sup>2</sup> Chereh is a staple food consumed almost daily in the Gambia. It consists of pounded millet and is prepared in various ways, commonly with green leaf sauce or simply with milk.

chameleons or snakes they can easily change your baby. That is why pregnant women are strictly advised not to be going to the bush during pregnancy.

This interview took place in a Fula village on the north bank of the river Gambia. Access to this village was very difficult. All houses were made of mudbrick and covered with dried palm tree leaves. The compound we stayed in was the only compound with a pit latrine that had recently been dug out and built for an MRC fieldworker who was to stay in Sare Seedy for 2 years for a malaria clinical trial.

Salamata was 22 years old and was nursing a one month old baby at the time of the interview. The baby had been born on a horse cart between two villages on the way to the health centre. Salamata did not get off the cart but knelt on it using her wrapper (skirt) to protect her baby from 'foul wind': When the baby was delivered, they wrapped up the baby and the afterbirth in a cloth one of the women who accompanied the mother had been wearing and returned home instead of continuing on to the health centre because it was getting dark and she was feeling no pain. As soon as they arrived home, a woman came to cut the cord and wash the baby. It was not until all of this was accomplished and Salamata had taken a bath herself, that the newborn received its first feed. Salamata said that she had lost 3 children in the past. Two of them had passed away at the age of around 5–6 years, and the third, while he was still a baby.

Salamata's case is not unusual. During interviews and informal conversation across rural Gambia we established that infants that are born in unusual circumstances, such as in the field while working or on the way to the health-centre, are not fed until a number of other procedures are performed. The interview with Salamata conveys the sense well that if a newborn is sick or abnormal in some kind of way, spiritual causes rather than biomedical aetiologies are believed to be the reason for this. Rather than feeding as soon as possible after the birth, people are careful to observe traditional and religious recommendations regarding the spiritual protection of the newborn. The following account taken from an interview with a Traditional Birth Attendant exemplifies in a different way what is believed to happen if something goes wrong and the baby suffers from a spiritual attack:

Sarah: do women fear *Jinne* affecting babies or women during labour?

TBA: Fear of *Jinne*? No not here. Once there was a baby I delivered that later on turned out to be a *Jinne*. It changed appearance after a while. In the first week after the delivery the baby was so beautiful but then I was contacted and told that the baby's colour had changed and become yellowish. So I thought it was yellow fever and I administered some medications but to no avail. So I took them [mother and child] to Farafenni major hospital where they did their best for more than a month but there was no improvement, so they were discharged. In the end, this child turned out to be a bush creature.

Kebba: it turned into a *Jinne* or?

TBA: yes this child lived with the mother for two years but she couldn't manage anything at all. You know that one was not a human being (Kebba laughs) yes then God took it from the mother one day. *Wallahi* (God bears me witness)

Sarah: was it the way it looked that made you think it was a bush creature?

TBA: yes the way it looked, that's it. Because it didn't show any signs of being a human-being. That's why people thought it's turned to a bush animal or beast. [Laughs]

The interviewee was a Bambara Traditional Birth Attendant who lived in a large village on the North Bank of the Gambia and had attended a six-week TBA training course. The examples illustrate that

children that seemed somehow abnormal or different upon birth or babies that were born with disabilities, are those that have been afflicted by a supernatural creature either in their mother's womb or during the neonatal phase.

### Neonatal morbidity caused by humans

Human beings with spiritual powers and witches are also believed to 'eat', exchange or harm unborn babies in ways that lead to neonatal death or developmental disabilities. Whereas *Jinne* are non-human creatures, '*buwaa*' or '*sukuñaabe*' are humans that metaphorically 'eat' other human beings. In English, Gambians mostly call them 'witches' and the description of witches curiously resembles Evans Prichard's famous description of witchcraft among the Azande (Evans-Pritchard, 1976). The '*buwaa*' possess a quality that makes them addicted to spiritually consuming other human beings – 'sucking out' their life force until they get very sick and die. As Sarró (2005) describes among the Baga in Guinea, most of our informants said they did not know exactly how witches operate and how they eat people.

Babies are also perceived to be particularly vulnerable to the 'evil eye' or sorcery (*moriya* in Mandinka/*korte* in Fula). Sorcery is believed to be inflicted by marabouts upon the request of a person who does not wish the child or the parents well or is jealous. It is also believed that unborn children can be spiritually exchanged for wealth in a family. People say that in most thriving and populated compounds composed of wealthy families you will find a disabled child that is nevertheless very well looked after. It is believed that the child's health has been exchanged for the well-being and success of the compound.

The protection of the unborn child and the neonate is thus of utmost importance and a number of practices are observed to prevent and protect from spiritual attacks.

### Protecting a child during pregnancy

It was perceived to be dangerous for pregnant women to expose parts of their body, such as stomach, arms, legs, head, when they are outside, in the part of the courtyard visible to everyone. If they do so, they are vulnerable to potential attacks by supernatural creatures or ill-meaning human beings that could harm the unborn baby. This is why dressing well and making sure that the body is covered at all times in public was considered a form of protection. Following the rules and recommendations of the Koran is also thought to protect women from evil inflictions that may harm unborn children. Daily prayer is believed to give a person God's protection and amulets (*grigri* or *juju*) made by local marabouts are carried on the body. Some of these amulets are Koranic but others are based on the knowledge of indigenous spiritual protections, i.e. local marabouts who use forces given to them by spirits.

In addition to these 'traditional' forms of protection, many women emphasized the importance of regular antenatal check-ups at the health centre. Aside from spiritual attacks making unborn children sick, many women also knew that there were certain symptoms, some identified through biomedical tests as risky conditions, that may compromise the pregnancy. Commonly recognized danger signs during pregnancy were diabetes, unpleasant-smelling discharge and high blood pressure, which many people in the Gambia call 'high blood' – implying that a person has too much blood (also see Leach and Fairhead, 2007). None of these conditions are particularly associated with spirit attacks but are recognized as physical conditions that may lead to miscarriage or other complications. Bleeding during pregnancy, however, was perceived to be a more ambiguous danger sign that may lead to the loss of pregnancy caused by a spiritual attack.

## The neonatal phase

The newborn arrives in this world with a scream and, according to local interpretation, this is because he or she arrives as a stranger to an unknown place. This new environment is frightening and unsettling, which is why the ladies assisting the mother during the birth welcome the newcomer with gentle lullabies, nursing and rocking the baby to calm it down and get it used to its environment. A number of procedures then need to be performed before the first feed of the newborn. Immediately after the cord is cut the child and the mother need to be washed. The cutting of the cord follows no particular ritual or traditional procedure and all the traditional birth attendants interviewed said that they no longer put cow or sheep-dung on the cord but emphasized the importance of cutting the cord with a clean razor blade, ideally boiled before use. Some Traditional Birth Attendants (TBA) showed us the rolls of string they had been given at TBA training courses to be used for tying the cord before cutting. However they said that they often ran out. Some TBAs made the cord themselves out of cotton. If no cord was available, a common replacement was pieces of ripped cloth from old gowns. The choice of cloth-string depended on what was available at the time and to some extent on how clean or dirty it was perceived to be.

## Cleansing the newcomer

After the cord is cut the baby needs to be washed. The first wash (*lootongal folo* in Fula and *ku folo* in Mandinka) symbolises renewal. The baby has just arrived from another life and is still covered in the substances that accompanied it. The washing symbolises the beginning of the new life as it removes all the left-overs of where the baby was before. The left-overs of blood and vernix are considered to be impure and, just as all women have to practice ablutions after the last day of their period to cleanse themselves, these too need to be washed off. In Fouta Toro (Senegal), for example, the practice of ablutions to cleanse a person from sexually excreted liquids is perceived to be essential for appropriate socialisation and people feel uncomfortable if they are not in a position to cleanse themselves after sexual intercourse (O'Neill, 2013). Further, women are often relieved from their cooking duties and from washing the dishes when they have their periods. This is true up to the last day of bleeding and until they have cleansed themselves through ablutions. In the same way a newborn needs to be cleaned from its mother's blood and other liquids excreted from her reproductive tract. Similar to Riesman's (1992) description of how infants were washed the baby is placed on the shins of the person washing the baby and splashed with tepid water and sometimes scrubbed with soap and rubbed with a cloth. Then the baby is wrapped in a clean cloth and ready to receive its protections.

The renewal and (re-) socialisation that is involved as part of this process are of far greater importance than perceptions of the mother's or child's impurity, associated with the blood. As mentioned before, newborns are perceived to be the purest creatures in this world, closest to God. There is nothing inherently impure about them, nor about their mothers.

## Protecting the newcomer

Neonates are given a number of things to ingest before their first feed which are thought to prevent developmental problems from occurring later on in life. A number of informants told us that babies were given a Koranic potion before the first breast feed to dispel spirits. These potions were done like other protections: a religious scholar writes a Koranic verse on a blackboard or on a piece of paper. The writing is then wiped off the blackboard with a piece of cloth and the cloth put in water. If the verse was written on a piece of paper, it is the paper that is put into the water. This potion is then given to the newborn

before the first feed. The following interview extract illustrates the sequence of events after birth and their purpose:

**Mother:** When the child is born, the umbilical cord is cut. The child is then washed, wrapped with a cloth and given the [koranic] potion. It is then put on to the breast.

**Sarah:** What if the marabout's potion is not ready?

**Mother:** When the marabout is not there, then the one next to the marabout would do this - there are always other people to write these verses from the Quran.

**Sarah:** How much is given to the baby?

**Mother:** It is not much. The baby needs to take it only twice on the day of his birth.

**Sarah:** Do they put anything in the baby's mouth?

**Mother:** Yes they do wash the baby's mouth with kola nut juice to remove the under-tongue of the baby. If this is not done, it is believed that when he/she grows up, he/she would not be able to speak.

Some women reported that babies' lips and tongue are rubbed with masticated white Kola nut before the first breast-feed. Kola nut is a well-known stimulant chewed at special occasions across West Africa. The juices of this bitter nut are said to make people talkative and Kola nuts are a symbolic gift used during marriage ceremonies. These nuts are also given to figures of respect, such as village chiefs or the elders, when visiting a village. Rubbing Kola nut on the newborn's lips before the first feed is believed to help the child's speech later on in life and prevent it from becoming mute or developing speech problems. This practice is also described among Mandinkas in Casamance, Senegal (Whittemore and Beverly, 1996). Whittemore and Beverly (1996) describe how the grandmother swaddles the newborn and quietly, almost inaudibly talks to the infant, chewing a portion of kola nut (*kuruo*) as she speaks these first words, preparing *kuruo nono* or "kola milk" (1996:51). By dribbling this red paste into the infant's mouth, she gives the child its first "taste" of the nut that is an essential offering of respect and trust (Whittemore & Beverly, 1996:51). In the Gambia we were told that the Kola nut is rubbed inside the infant's mouth to help the baby become a good orator, since speech is considered key to being appreciated by others in life.

Midwife Ceesaykunda

**Sarah:** do you traditionally give the baby food like, kola nut or sugar? Because I read some people used to put kola nut on their mouth or something like that? Is there anything else that you used to do?

**Midwife:** yes at first they used to do that to remove the under cord of the tongue by chewing a white kola nut and applying that juice by rubbing it there [under the tongue]. It is intended for the child's clarity of speech later on life.

**Sarah:** is that done right after the birth?

**Midwife:** yes after the birth.

Some women also mentioned smearing salt under a neonate's tongue before the very first feed to make sure that the baby will not

be tongue-tied. We also heard that among some Fula in the Gambia, the old woman who washes the baby recites an incantation into the baby's ear and washes the ears with a tincture of leaves from the bush. Although this practice may resemble the South Asian Islamic practice of Azan (Qureshi et al., 2016) the recitation is not a call for prayers but said to be a traditional incantation (*cefol*) passed on to humans by *Jinne* (also see Dilley, 2005; O'Neill, 2013). Like in other parts of Senegambia and Mauritania, some babies were given goat's milk or sheep's milk before the first breast-feed. Diallo, for instance, describes how the Fulas in Mauritania feed newborns with fermented goats-milk because they are perceived to be fragile and are still getting used to feeding from their mother's breast (Diallo, 2004). In the Gambia women used to feed newborns with goats-milk to provide the baby with additional nourishment over the first couple of days, especially because the mother was not producing much milk immediately after the birth. The colostrum was often not perceived to be nutritious enough and women squeezed it out (also see Whittemore and Beverly, 1996). Some people worried that the baby would take on the characteristics of the animal whose milk it had been fed. As goats make a lot of noise, some preferred cow-milk or sheep-milk. However, feeding infants animal milk is becoming rarer due to public health messages that recommend that babies should be given nothing but breast-milk for the first 6 months.

In contrast to biomedical recommendations that stress the importance of breast-feeding and skin-to-skin contact immediately after birth, contact is often delayed in the Gambia because other things are believed to be more important, namely washing the baby, washing the mother, giving the Koranic potion and rubbing the under-tongue with salt or kola nut. One woman we interviewed in an urban area reported not having breast-fed her baby for its first 12 h, because she first had a bath and when she was ready the baby was sleeping and then she herself slept. As among the Warekena (Rahman 2016) Neonates are not woken up to feed immediately after the birth, if they seem tired and want to sleep they are left to sleep until they seem hungry.

### The naming ceremony *Kuliloo* (Mandinka) or *Pembungal* (Fula)

Babies are kept strictly inside the house for seven days until the naming ceremony has been conducted because they are believed to be particularly vulnerable to spirits and foul wind before that moment. The baby is perceived to be a person from the day of its birth – in the sense that it is already part of the family and the community, as son or daughter of its parents (also see Sarro, 2005 on Baga conceptions of personhood as 'someone's child' or *wan ka fum*). Although Islamic practices are not performed until the seventh day, the newborn is buried like any other Muslim if it dies before the naming ceremony. However, it is not perceived to be an individual until it has received a name on the seventh day after its birth. Children are generally named after someone who is very dear to the parents and the child is perceived to develop seven of the qualities of the person they were named after. The symbolic gesture of naming your child after someone honours the person and creates a strong bond of loyalty between the families.

The way in which the naming ceremony is performed differs among different ethnic groups in Senegambia but is said to follow Islamic practice. On the day, the father's sisters arrive in the morning and shave the baby's head. This custom represents renewal – stripping off the leftovers of what the baby was born with and marking the beginning of the baby's individuality within the community. Some families have the tradition of weighing the hair and giving the same amount of gold to the baby to be turned into a bracelet or giving it to the cousin. This exchange signifies that he cannot live without others and without being part of exchange groups.

At some point on this day, the *Imam* comes to the house and the parents quietly tell him what Koranic name they want to give the child. Most children receive a name from each parent. If none of the names are Islamic names of the book but local names, the *Imam* chooses an

additional name from the Book. The imam whispers the name of God and his Prophet into the ears of the newborn and starts reciting the *Shahada* 'There is no God but God and Mohamed is his Prophet'. Although some may also recite the call for prayers, which is called *wadanno* in Mandinka or *noddinaandu* in Pulaar in Senegambia, this is not an obligation at this stage and the Islamic requirement is performed once the *Imam* has recited the *Shahada*. The *Imam* then tells the griot (Praise singers in West Africa) the name from the Book. If the parents' names are different, a non-Islamic local name for example, the parents also tell the other names to the griot; for example the mother calls him *Dullo* and the father *Mamadou*.

Depending on what the family can afford, a goat, sheep or chickens are slaughtered in honour of the baby and the women prepare a meal for the guests. The baby feeds on breastmilk on this day as on any other; it is not traditionally given anything else to ingest on the day of the naming ceremony. Among the Jola, depending on the family's background and available means, the naming ceremony is a very large and joyful event involving lots of dancing and singing. The reception of an Islamic name, the prayers and the chasing away of spirits through women's singing and dancing, are believed to prevent supernatural creatures from taking away its life. Now at last, the baby is ready for the outside world and no longer needs to be protected inside the house.

The following interview extract illustrates the importance of the naming ceremony in terms of how it is perceived to 'protect' the baby from dangerous afflictions:

**Sarah:** Can you take the baby outside before seven days?

**Respondent:** Normally after the delivery, the baby cannot be taken out for the first days. But the mother can go out if she wishes to. The baby can come out after one week. I think you saw my in-law the day before yesterday. She delivered on the way to the hospital around Sare Alpha, I wrapped the baby up and when we arrived at the hospital the doctors took care of the child and once it was all done the mother and the baby returned home safely.

**Sarah:** Why is the baby confined in the house? Is it because of the *sukuñaabe* (witches) or witchcraft or what?

**Respondent:** the reason the baby is confined to the room is for its own safety. I don't know why bad air comes but you have to cover the baby to protect it from the bad air.

The post-natal practices described above are considered to be important during the neonate's most vulnerable phase – the first week after the birth. Although there may be exceptions where parents choose not to practice certain elements of these customs, many of these practices are generally performed on most babies in Senegambia. Such caring practices in the early neonatal phase set babies on their way towards the development of personhood, and towards becoming full members of society. Since the inception of the discipline, anthropologists have looked at particular events in individuals' lives that mark transitional phases from one life-stage to another. Turner (1967, 1969), along with Van Gennep (1960), argued that rites of passage are transitional moments in which individuals change status within the community and are important markers of identity that positively create personhood within a community. We suggest that these very first caring practices are an attempt to preserve the neonate's life and protect him/her from sickness and death. However, these life-preserving customs are also the first rituals that make personhood within the community – they are rites of passage that accompany a newborn from its most vulnerable phase until it is perceived to be like any other baby and does not need any more spiritual or ritual protection than any other small child. Besides ending the phase of seclusion and protection from the outside world and potential evil afflictions, the naming ceremony is an event

that links the neonate to other members of the community that are cherished by the parents. By naming the baby after another valued member of the community, parents are believed to endow their baby with valued qualities of the person they are named after.

## Conclusion

In the context of the Millennium Development Goals biomedical researchers are trying to find ways of reducing child mortality. As in other Sub-Saharan African countries, in the Gambia more than half of under 5 deaths are caused by infections. Childhood mortality is strongly related to nutritional vulnerability as malnutrition exacerbates potential risk for infections. We have shown that feeding and well-being do not only relate to the required optimal food intake from a biological perspective but that parents engage in a number of nourishing practices that are believed to protect neonates from illnesses caused by supernatural afflictions (i.e. *ming kesa sande*). Furthermore, some feeding and nourishing practices that take place in the first seven days of the baby's life are believed to render it an individual and give him/her a place within the community.

After cutting the cord and wrapping the baby in a cloth to protect it from spirits, the first wash is crucial for the baby's socialisation and marks its arrival in this world by stripping off the leftovers of its previous life in its mother's womb. The baby is not supposed to receive its first feed until it has been washed. Some nourishing practices within the first week of the baby's life are believed to enable it to develop speech and communication skills as well as engaging in relations of reciprocity and respect towards kin (Koranic scripture, salt, kola nut). The baby is considered too vulnerable and not sufficiently robust to leave the room and accompany its carers during their daily routines until after the naming ceremony, seven days after the birth.

Many of the child-caring practices described are declining due to social change. A number of informants reported no longer practising some interventions that were thought to be of benefit to neonates in the past, i.e. putting cow or sheep-dung on the umbilical cord; and many young parents refused to give their neonates koranic potions or Kola nut before the first feed. The reasoning behind abandoning these 'customs' was said to be that 'it was not recommended' – clearly a sign that people are not only aware of, but also responsive to, public health messages that recommend the exclusive feeding of breast milk for the first 6 months of life.

During fieldwork we were surprised by how willing people were to talk to us about their perinatal and neonatal childcare practices. Most interviews with traditional birth attendants and mothers lasted two hours and the respondents talked about everything in great detail and intimacy. Neonatal health was a priority for them too and there was a keen desire for more knowledge and suggestions as to how to improve their infants' chances of survival. Women and men who had lost numerous children under the age of five were clearly fraught with pain and seeking solutions.

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