The Need for Transient Midwifery Clinics to Serve the Women of Nomadic People Groups in Ensuring the Continuity of Care Throughout Their Pregnancy, Birth, and Postpartum Periods

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1. Introduction

The odds are stacked against nomadic women when it comes to their pregnancy, birth, and postpartum care. As birth clinics and hospitals are built to accommodate the needs of women, even in low income countries, solutions are rarely implemented to accommodate the needs of the woman in nomadic people groups around the world. One reason for this is that even if clinics are constructed in regions where nomadic people groups live, it's unlikely that they will be able to serve to women during their whole antepartum, intrapartum and postpartum periods due to the nomadic nature of their lifestyle. This environment is one where stationary obstetric clinics are completely impractical, as they cannot maintain continuity of care for these mothers; chances are, sometime throughout the course of their pregnancy and postpartum, the mother will relocate, causing her to switch to a new care provider. After all, even if obstetricians could be found who want to follow a nomadic tribe on horseback, their supplies (which they are, as doctors, trained to use) will not be transportable. This leads to a lack of continuous care (if any) by skilled care providers/birth attendants and is damaging not only to the mother's mental wellbeing, but also to the outcome of her pregnancy.

2. The Importance of Continuity of Care

Continuity of care is an extremely important factor when it comes to both maternal and infant outcomes of pregnancy, however, it is one that is often neglected in the context of nomadic women. Continuity of care (specifically by midwives) has been found to be extremely successful in improving mortality and morbidity for both mother and infant as opposed to obstetrician or even midwife led non-continuous models of care. This model has been found effective in improving maternal outcomes: increasing the chance of a vaginal birth, reducing the

rate of caesarean sections, lowering the rates of instrumental vaginal delivery, and increasing maternal satisfaction (thus reducing the rate of postpartum depression[1]). Additionally, it's also been found effective in improving infant outcomes: reducing the risk of preterm birth and reducing perinatal mortality (defined in the review as fetal loss after 24 weeks of gestation and neonatal death).

Although effects on decreasing the incidence of low birth weight have not been recorded, following the evidence, its assumed that the midwifery continuity of care model will also help in improving this statistic. This is important in that low birth weight is the dominating risk factor for infant morbidity and mortality, contributing to 36% of all mortality in children less than five years of age (constituting about 4 million deaths per year)[2]. Since nutrition education has been found successful in reducing maternal malnutrition, which is a dominating risk factor for low birth weight[3], a midwife (who, according the ICM's standards, should be trained in maternal

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[1] Pauliina Hiltunen. "*MATERNAL POSTNATAL DEPRESSION, CAUSES AND CONSEQUENCES.*"

[2] Singh, G et al. "*Maternal Factors for Low Birth Weight Babies*."

[3] da Silva, LK et al. "*Effects of nutrition interventions during pregnancy on low birth weight: an overview of systematic reviews*."

health counselling and education[4]) who is also educated in the nutritional foods of that culture and who sees a woman continuously throughout the course of her pregnancy, should have the tools needed to educate that woman about the importance of her nutrition; this will lower the chances that her baby will be born with low birth weight and suffer from the associated complications of such. These complications include neonatal respiratory distress syndrome, intraventricular hemorrhage, patent ductus arteriosus (failure to close one of the ducts of the fetal circulatory system), necrotizing enterocolitis (the demise of organs in the digestive tract), retinopathy of prematurity (a disorder that affects the eyes), jaundice (excess bilirubin in the blood), as well as increased susceptibility to infections.[5] Low birth weight due to maternal undernutrition is also a huge risk factor for stunting[5] which carries its own set of health problems and long-term complications, including mortality[6]. An additional consideration is that continuity of care by a known midwife is especially beneficial for nomadic people groups due to the complexity of their social situation (which will be detailed below). "Studies have found that

[4] International Confederation of Midwives. "*International Definition of a Midwife, Scope of Practice."*

[5] Aryastami, Ni Ketut et al. "*Low birth weight was the most dominant predictor associated with stunting among children aged 12–23 months in Indonesia.*";

Black, RE et al. "*Maternal and child undernutrition and overweight in low-income and middle-income countries.*"

[6] Prendergast, Andrew J, and Jean H Humphrey. "*The stunting syndrome in developing countries."*

women who carry social complexity and find services hard to access, particularly value midwifery continuity of care."[7]

[5] WHO Reproductive Health Library. "*WHO recommendation on midwife-led continuity of care during pregnancy*."

3. The State of Maternal Child Health in Nomadic People Groups Around the World

Continuity of care, however, is not an approach that has been attempted in serving nomadic people groups around the world. Often, these groups are given little if any care at all, since they are considered to be outsiders in the society in which they live due to their transient lifestyle. Especially when their routes take them across political borders, nations do not know what the best way is to serve women who may not even stay in their country throughout their pregnancy, birth and postpartum. Even when groups do stay within political borders, efforts at improving maternal child health are normally directed at highly populated urban areas, while nomads generally inhabit sparsely populated rural areas. An overall lack of understanding of the nomadic lifestyle by political entities leads to a lack of understanding of how to provide nomads with good resources to improve their maternal child health outcomes. Solutions that are put into place for non-nomadic groups are not appropriate within the context of a nomadic way of life, and, when implemented, are culturally inappropriate and lead to the disintegration of the family structure as well as uncertain or poor outcomes for both mother and infant.

[7] Sandall, Jane. "*The contribution of continuity of midwifery care to high quality maternity care.*"

To depict how difficult it is for women in nomadic people groups to obtain continuity of care during pregnancy, this essay will examine the state of maternal and child healthcare in two nomadic people groups on two different continents: the Roma, and the Mongolian herds people, as well as the obstacles they face in maintaining the continuity of care throughout their pregnancy and postpartum periods. While solutions have been attempted to improve maternal child health among the Mongolian herds people, intervention for the Roma has been scarce, and for both, solutions providing culturally appropriate care that improves outcomes in prenatal, intranatal and postpartum periods are lacking. Both of these people groups fall under the Merriam-Webster dictionary's definition of nomad which is ": a member of a people who have no fixed residence but move from place to place usually seasonally and within a well-defined territory**.**".[8i] Both of them also have a significantly lower rate of maternal child health than that of the overall country that they reside in, which shows that the issue runs deeper than simply the fact that they traditionally inhabit developing nations. The rates of maternal mortality, infant mortality, postpartum depression and, when accessible, low birth weight and maternal morbidity are, for the context of this paper, considered to be good indicators of the overall maternal child health of a people group.

4. The Roma

The first people group that will be examined are the Roma, or Irish travelers people group. Traditionally discriminated against, they originated in Northern India but now reside

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[8] "Nomad." *The Merriam-Webster.com Dictionary*

primarily in European countries. All nomadic Roma migrate at least seasonally along patterned routes that ignore national boundaries and travel in bands made up of families of up to 200 people[9]; conclusive results across all of these countries have not been obtained, although results have been obtained for Roma populations living the United Kingdom, Spain, Ireland, France, Bulgaria, and Slovenia. The statistics will thus be listed across these several countries since while finding the concise statistics for a population living within certain political borders is relatively simple, finding them for specific ethnic groups is much more complex. The access to non-discriminatory health care facilities is an additional challenge in assessing the effect that the lack of continuous care has on the maternal child health outcomes of this people group.

Although research is lacking on this topic, maternal outcomes among the Roma are assumed to be extremely poor; a study done in the late 1990s in the UK found that the Roma have "possibly the highest maternal death rate among all ethnic groups"[11]. Maternal morbidity is not recorded, nor is rate of postpartum depression, although both can be assumed to be very high. The former is due to the extreme poverty that most Roma live in, as well as the lack of good prenatal and intrapartum care. The latter is due to the high rate of pre-pregnancy stress,

[9] The Editors of Encyclopedia Britannica. "*Roma.*"

loneliness, and depression [1011] found in the countries of Slovenia and the UK, which is assumed to be due to normalized domestic and gender-based violence in Roma culture, outside discrimination and lack of mental health services[12]. A high rate of stillbirth and miscarriage increases the risk for mothers to develop severe postpartum depression. Women who have had a pregnancy loss, be it stillbirth or miscarriage, are more likely to be diagnosed with major depression than women without a history of loss and women with multiple losses were more likely to be diagnosed with major depression and/or post-traumatic stress disorder than women with a history of one pregnancy loss[15].

[11] Lewis G, Drife J. "*Why mothers die 1997–1999: the confidential enquiries into maternal deaths in the United Kingdom.*" 41

[10] FRANET. "*Slovenia National Focal Point Social Thematic Study the Situation of Roma.*"

[11] FRANET. "*United Kingdom National Focal Point Social Thematic Study The situation of Roma*."

[12] Smolinska-Poffley, G., Ingmire, S. "*Roma Mental Health Advocacy Project Evaluation Report*."

Poor infant outcomes are common among the Roma: in France, their rate of stillbirth is 6.3%[13]. Overall, between the high rates of both miscarriage and stillbirth, only half of all Roma pregnancies in France result in a living infant[16]. Additional statistics in Bulgaria found that 64.58% of Roma women had suffered from a miscarriage, as opposed to only 24.52% of nonRoma Bulgarians[14]. In Ireland, the Roma have a 14.1% infant mortality rate, compared to the settled population at 3.9%, making the infant mortality rate 3.6 times higher among Roma than among the general population[15]. Those infants that are born alive are often born with a low birth weight for their gestational age, due to factors such as poverty and maternal malnutrition; the average Roma infant in Hungary was found to be 288.7 grams smaller than the average nonRoma infant in Hungary[16].

[15] Giannandrea, Stephanie A.M et al. "*Increased Risk for Postpartum Psychiatric Disorders Among Women with Past Pregnancy Loss.*"

Factors that contribute to these statistically poor outcomes are lack of continuity of care, and with that the inability to resolve poor nutrition and STDs (which studies have shown the

[13] European Commission. *"Roma Health Report, Health status of the Roma population, Data collection in the Member States of the European Union*."

[14] Kitova, Tanya. "*Birth and Abortion Rates among Roma and Bulgarian Ethnic groups in Bulgaria*."

[15] Department of Justice and Equality (Ireland). "*National Traveller and Roma Inclusion Strategy 2017 – 2021*."

[16] Balazs, Peter & Rakoczi et al. "*Birth-weight differences of Roma and non-Roma neonates - public health implications from a population-based study in Hungary*."

Roma suffer from at a higher rate than the general population[17]) before they can harm the outcomes for both the mother and the fetus. In France, it was found that in 2011, 50% of pregnant Roma women received no continuous prenatal care. Even those 8.3% of pregnant women who do "benefit from being treated in public health care facilities can seldom complete prenatal care as a result of evictions forcing them to move further away from the health care facility where they were being treated."[16] In Ireland, 24% of Roma women had not accessed health services while pregnant and their first time to see a medical provider was at the time of their delivery[18]and 36% of households women had difficulty accessing maternity services[19]. No statistics for postpartum care in this people group are available, however, it can be assumed that the same obstacles in receiving prenatal care exist in seeking care postpartum.

An additional reason for lack of continuity of care besides for a nomadic lifestyle is ostracization. Roma women often lack support due to the racism that is rampant against them in Europe; many women, even if they did have access to a clinic and money to pay for it, are hesitant to go due to fears of persecution. "They are often viewed by both councils and settled residents as not being part of local communities and consequently not entitled to many of the

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[17] Bjekić, Milan et al. "*Characteristics of gonorrhea and syphilis cases among the Roma ethnic group in Belgrade, Serbia*."

[18] Pavee Point Traveller and Roma Centre & Department of Justice and Equality. "*Roma in Ireland – A National Needs Assessment*."

[19] Pavee Point Traveller and Roma Centre & Department of Justice and Equality. "*The National Roma Needs Assessment: WOMEN'S RIGHTS BRIEFING*."

basic services that facilitate good health outcomes"[20]. This increases the need for midwifery services that are specifically designed to initiate good, continuous maternal child health care among this people group.

5. The Mongolian Herds People

The second people group that will be examined are the Mongolian herds people. Traditionally, the full population of Mongolia was nomadic, while today only about one quarter still live this lifestyle[21]. Research to find statistics specifically regarding people who are labeled as "nomadic" is nonexistent in Mongolia; however, as most of the rural population has stayed rural by living this traditional way of life, whereas city dwellers are not, rural statistics will be regarded as majority nomadic statistics within the context of this essay. Efforts have been made to increase the number of clinics that are accessible to nomadic women, however, this still does not address the issue of continuity of care. The goal in this has been to ensure that all women stay in a hospital during the late part of their pregnancy until they have given birth, even if that means their nomadic family travels on without them. Although these solutions have been put into place to improve maternal child health outcomes of the nomads in Mongolia, the antepartum and intrapartum results seem relatively promising while the postpartum ones are less so.

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[20] Waters, Julia. "*Gypsy and Roma Travellers JSNA Needs Assessment*."

[21] Tali, Didem "*How Mongolia Revolutionized Reproductive Health for Nomadic Women.*"

While prenatal care is at a rate of 87.7% and delivery by skilled birth attendants at 99.8%, due to the establishment of the "maternal waiting homes", [22]prenatal care is often non-continuous with prenatal care being listed as sufficient by UNICEF due to the attendance of one prenatal appointment (which contradicts the recommended standards by WHO[5] on continuity of maternal care). No statistics are listed on the amount of postpartum care after two days, or even continuous prenatal care that the average woman in rural Mongolia generally receives.[23] However, with the nomadic lifestyle they lead in order to sustain their livestock causing families to travel at least four times, and even up to thirty times a year[24], it can be assumed that continuous prenatal care is not being received.

Because of this, while maternal mortality rates, as well as infant mortality rates are both relatively low, issues that occur postpartum are rarely addressed. Lack of continuity in both prenatal, but especially postpartum care has affected the overall health outcomes for both the mothers and their infants. While nomadic (rural) incidence rate of low infant birth weight for gestational age is 6%, and the rate of stunting is 30%. Removal from the support of the family structure during the late prenatal, intranatal, and the beginning of the postpartum period, leaves these women at a greater risk for developing postpartum depression [25] than if they could receive

[22] WHO Representation Office Mongolia. "*Maternal Health*."
[23] UNICEF. *"Mongolia Maternal, Newborn and Child Survival*."

[24] Turtle, Michael. "*Nomadic Life in Mongolia.*"

[25] Mikulak, Anna and Wolpert, Stuart. "*Pregnant mothers with strong family support less likely to have postpartum depression."*

good maternity care while still being able to stay within their family structure. Additionally, one study done on Mongolian women three years after childbirth found that 4.4 % experienced domestic abuse and 36.2 % reported urinary incontinence in the past month.[26] Although statistics

on the effects of the current system on the maternal child health of nomads in Mongolia are few and far between, looking at the reports by WHO there is no arguing that continuity is vital in ensuring good maternal and infant outcomes. Additionally, in order to preserve their nomadic way of life and improve, specifically postpartum, birth outcomes and the family structure, solutions must be found that allow for continuity of care to ensure good mental, physical, and emotional health of both mothers and their families living in rural Mongolia.

6. Obstacles Preventing Nomadic People Groups Around the World from Ensuring Good Maternal Child Healthcare

While the situations of the two people groups mentioned above are very different, they illustrate the unique needs of nomadic groups around the world in receiving continuous care throughout their pregnancy, birth, and postpartum periods. While the Roma travel in bands made up of families, and Mongolian nomads travel in tribes, the result is the same: a relatively large group of people travelling together along specific routes throughout the course of a year. As such, for both the Roma and the Mongolian nomads, as well as other nomadic people groups, stationary midwifery clinics are not ensuring for good continuity, and with that quality, of care within their lifestyles. For the Roma, little work has been done to bring them any care at all,

[26] K, Takehara et al. "*Maternal and Child Health in Mongolia at 3 Years After Childbirth: A Population-Based Cross-Sectional Descriptive Study*."

leading to high rates of maternal mortality, infant mortality, and postpartum depression. In the context of the Mongolian nomads, the statistics are more complex; solutions have been put into place and they are successfully reducing the maternal and infant mortality. However, these solutions are not providing the best care as they do not ensure continuity throughout the prenatal, intranatal, and postpartum periods. The results of this are mostly apparent postpartum: a high risk for postpartum depression, maternal morbidity, and the stunting of young children, who, while mostly born with an appropriate birth weight fail to obtain the needed nutrients in their early years, making the need for culturally appropriate education apparent.

7. Proposed Solution: Transient Midwifery Clinics

The solutions that are being proposed in this essay are much the same for both of these people groups, and other nomadic groups around the world within the context of their own cultures: this is to set up transient midwifery clinics equipped with several midwives (depending on the size of the group being served) and the same basic tools that are used within the average homebirth practice in the United States. This would make them culturally appropriate for the people they are serving and would allow for the continuity of care throughout nomadic women's prenatal, intranatal, and postpartum periods as well as beyond that. Midwives would be able to form relationships within the nomadic community and develop sustainable solutions to issues such as maternal malnutrition, postpartum depression, etc. through their cultural competency and understanding of the specific needs of the ethnic group they are serving.

This solution would ensure continuous prenatal care, as even labs could be drawn by the midwives and sent to stationary healthcare clinics that are not culturally appropriate for nomads for the purpose of testing, and then sent back to the midwives. This would ensure that nomadic

women are continuously seeing and interacting with the same care provider, even if they have moved locations between the times when labs need to be drawn, as well as keeping the bridge of communication between the midwives and stationary healthcare clinics open in order to make transfer as easy as possible for all involved. Additionally, a portable ultrasound could be used to detect any anomalies or conditions that may arise throughout the course of pregnancy, lessening the need for nomadic women to travel to a separate clinic.

When additional care is required, the midwives would be able to detect this due to their holistic understanding of their patients from doing continuous prenatal care, and thus know when to transfer her to an alternative clinic. This is a situation where Mongolia's "maternal waiting homes", for example, would be both sustainable and a good approach to improving maternal child health so that midwives could transfer to a facility with additional services, when needed. Essentially, this solution is simply WHO's Midwifery Led Continuity of Care model made transient:

> A known and trusted midwife (caseload midwifery), or small group of known midwives (team midwifery), supports a woman throughout the antenatal, intrapartum, and postnatal period, to facilitate a healthy pregnancy and childbirth, and healthy parenting practices. The MLCC model includes: continuity of care; monitoring the physical, psychological, spiritual and social well-being of the woman and family throughout the childbearing cycle; providing the woman with individualized education, counselling and ANC; attendance during labor, birth and the immediate postpartum period by a known midwife; ongoing support during the postnatal period; minimizing unnecessary technological interventions; and identifying, referring and coordinating care for women who require obstetric or other specialist attention.

Because a midwife's tools, and especially those of a midwife trained in homebirth, are quite simple as opposed to that of a full clinic, there is no reason why a midwife could not set up a midwifery ger (a portable, round tent covered with skins or felt [the typical Mongolian nomad's dwelling]) on the Mongolian steppe to serve women while they are at that location, and then follow the tribe when they move. Similarly, there is no reason why a midwife could not set up a transient clinic within a Roma community's housing context, be it tents or temporary housing, in order to serve women while they are at that location, and then follow the band when they move. Then, all the benefits of receiving continuous prenatal care would be obtained as far as the outcomes for both maternal and infant mortality and morbidity. Deliveries would be attended by a skilled birth attendant, also improving maternal and infant outcomes. Good prenatal care by a skilled midwife with an understanding of what nutritional sources are available within that context could help prevent low birth weight and minimize the risk of stunting by providing education on postpartum maternal nutrition and breastfeeding. Additionally, when complications did arise, the midwife would ensure that the women receive non-discriminatory care at the facility they are transferred to and remain watchful for the effects of postpartum depression when the woman returns to her community after the delivery of her child.

8. Conclusion

Even the general absence of statistics on most nomadic people groups' maternal child health displays the lack of understanding and therefore lack of creative solutions surrounding this topic. However, by examining two different people groups it is clear that solutions need to be implemented, and these need to be culturally appropriate and not a one-size-fits-all approach in meeting the needs of an entire nation's population. Nomadic people groups need individualized care that does not force them to make a choice between their cultural lifestyle and good health

outcomes for their mothers and infants. Extensive, ethnic group specific research needs to be done in order for the implementation of appropriate solutions to improve the quality of care for women in nomadic people groups around the world. With an understanding of the obstacles they face, the importance of continuity, and the cultural context of that specific group, solutions can be implemented that are culturally appropriate and serve the women in nomadic people groups around the world during their prenatal, intranatal and postpartum periods for the improvement of both maternal and infant outcomes.

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