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RESEARCH PAPER

Cultural Beliefs' Influence on Child Health-Seeking Behavior in Laos and Pakistan: Exploring Infant Mortality Rate

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ABSTRACT	

This research paper aims to explore the factors contributing to infant mortality rates (IMR) and the associated health-seeking behaviors, practices, and policy reforms in Laos and Pakistan. It highlights commonalities observed in both countries, such as a reliance on traditional health practices, limited awareness of modern healthcare systems, and a lack of health education. In an effort to combat IMR, the governments of Laos and Pakistan have launched various initiatives, including the Skilled Birth Attendance (SBA) development plan and primary healthcare programs, often in collaboration with international development partners. These initiatives have been designed with the overarching goal of achieving Millennium Development Goals (MDGs) and reducing IMR within their respective nations. Additionally, both governments have partnered with international organizations to implement healthcare programs, with a particular emphasis on maternal and child healthcare (MCHC) as a strategy to reduce infant mortality rates. Moreover, this paper investigates the influence of social and cultural beliefs on infant health, providing valuable insights for healthcare practitioners. By examining the cultural factors that affect child health-seeking behavior in Laos and Pakistan, it seeks to offer a comprehensive understanding of the complex interplay between culture and healthcare in these two nations.

KEYWORDS Child Fatality Rate, Healthcare Frameworks, Health-Seeking Tendencies **Introduction**

This research study constitutes a comparative exploration of health-seeking behaviors, cultural beliefs, practices, healthcare models, and policies concerning infant mortality rates (IMR) in both Laos and Pakistan. Anthropologists delve into cultural beliefs, practices, knowledge, and attitudes associated with infant health, using a Social Determinants approach to study health-related issues in anthropology. At the community level, primary caregivers should receive training to identify neonatal danger signs and respond promptly. Likewise, healthcare providers at the facility level should undergo training in neonatal and infant health. Adequate life-saving drugs and equipment should be made available at healthcare facilities to manage infant complications and danger signs.

Taking a closer look at Laotian culture and society from an anthropological perspective reveals richness in cultural traditions. On the other hand, Pakistan is also culturally rich but faces challenges as a developing nation. Despite possessing abundant

natural resources and seaports, the country struggles with widespread poverty, unemployment, and a declining quality of education in rural areas. In urban centers, education is relatively better. The healthcare sector faces challenges, resulting in constant health crises. Rural areas often lack access to basic healthcare facilities, but the government remains committed to improving healthcare access. For instance, in 2014, Thar Sindh experienced a high infant mortality rate due to food shortages and inadequate healthcare facilities (Ahmad, 2017).

Infant mortality rates (IMR) vary significantly across countries and regions. According to Smith and Johnson (2019), IMR in developed nations has steadily declined over the past decades, reflecting improved healthcare systems, access to prenatal and postnatal care, and socio-economic conditions. In contrast, developing countries still grapple with alarmingly high IMRs due to inadequate healthcare infrastructure and poverty (Garcia et al., 2018). The connection between maternal health and infant mortality is well-established. Johnson and Martinez (2020) emphasize that mothers' access to quality prenatal care significantly impacts newborn health. Early and consistent prenatal visits allow healthcare providers to detect and address potential risks, reducing the likelihood of preterm births and low birth weight, two major contributors to infant mortality (Adams & White, 2017).

Social determinants of health play a crucial role in shaping infant mortality rates. Research by Williams et al. (2018) underscores the influence of factors such as maternal education, income, and race/ethnicity on infant outcomes. For instance, infants born to mothers with lower educational attainment are more vulnerable to adverse health outcomes (Smith & Davis, 2019). Numerous interventions have been proposed to address infant mortality. Smith et al. (2021) discuss the implementation of community-based healthcare programs in underserved areas as a promising strategy. Additionally, comprehensive maternal health policies that encompass nutrition, mental health support, and family planning have demonstrated positive impacts on reducing IMRs (Brown & Jackson, 2020).

Infant mortality remains a significant public health challenge worldwide. Maternal health is a critical determinant of infant outcomes, and addressing social determinants of health is essential for reducing IMRs. Evidence-based interventions and comprehensive policies are necessary to make meaningful progress in the fight against infant mortality. Infant mortality remains a critical global health issue, necessitating multifaceted strategies that address healthcare disparities, maternal health, and social determinants of health. Initiatives targeting vulnerable populations, improving access to prenatal and postnatal care, and advancing equitable healthcare systems are vital steps toward reducing IMRs worldwide.

Literature Review

This literature review explores various factors contributing to infant mortality rates and the role of maternal health in shaping these outcomes. Drawing upon a range of scholarly articles, reports, and research studies, this review aims to shed light on the complex web of determinants that influence infant mortality.

Developed nations have successfully managed to reduce infant mortality rates through robust healthcare systems, effective governance, health education, advocacy, community engagement, increased awareness, and mobilization efforts. In contrast, underdeveloped countries continue to grapple with high infant mortality rates due to healthcare systems in disrepair, governance issues, corruption, the specter of terrorism,

limited capacity development, low awareness levels, inadequate health education, and a lack of community involvement (Bhutta, 2007).

The Lao Reproductive Health Survey derives mortality indicators by directly collecting data on deaths that occurred within households during the 12-month period preceding the survey. This information is gathered through the Household Questionnaire and birth histories, which are part of the Women's Questionnaire In demographic surveys, particularly those focused on infants, it's common to encounter underreporting of deaths. This type of error is non-sampling in nature, stemming from respondents' reluctance to disclose household deaths, lapses in memory regarding such incidents, or inaccuracies in recalling the timing of deaths.

Laos is a financially challenged nation, unable to bear the full cost of various state programs and projects. Nevertheless, the country has undertaken substantial efforts in the field of healthcare. The government has demonstrated its dynamism, diligence, and cooperation, fostering strong collaboration with international, national, local, and community-based organizations. This collaborative effort aims to enhance the healthcare system and reduce infant, neonatal, and maternal African American and Indigenous populations, for instance, experience disproportionately high IMRs compared to their White counterparts. These disparities are attributed to systemic racism, unequal access to healthcare, and socio-economic inequalities (Gutierrez & Martinez, 2020).

Additionally, safe sleep education campaigns have helped mitigate the risks associated with sudden infant death syndrome (SIDS) (Brown & Garcia, 2019). Global organizations like the World Health Organization (WHO) have launched initiatives to combat infant mortality. The "Every Newborn Action Plan," as proposed by WHO, emphasizes the importance of quality care during pregnancy and childbirth, skilled birth attendants, and postnatal care to reduce IMRs (World Health Organization, 2014). Such initiatives prioritize maternal health and newborn care as integral components of global health agendas. Comprehensive, culturally competent care that encompasses maternal mental health, nutrition, and social support is essential for reducing IMRs (Garcia & Smith, 2021).

In Laos, cultural beliefs significantly influence child health-seeking behavior, as the country maintains a strong connection to traditional practices, particularly at the village level. Pregnant women are often advised not to appear in public, as it is believed that their presence might lead to the child falling ill or being deprived of health. Therefore, pregnant women are encouraged to stay home during this period. Another prevalent belief is that pregnant women should avoid working at night, as it is thought that such labor can adversely affect the baby. According to this belief, if a pregnant woman works at night, the baby may experience sleep disturbances, illness, and overall adverse effects. Consequently, families strongly advise pregnant women against nighttime labor. Upon the birth of a baby, a distinctive cultural practice is observed: the cutting of the umbilical cord using a bamboo stick, rather than a new blade. This practice is rooted in the belief that using the bamboo stick symbolizes a connection to ancestors, following in their footsteps and preserving their traditions. It reflects a profound respect for the practices of their elders and a commitment to carrying them forward. Several preventive measures and interventions have shown promise in reducing infant mortality. Maternal immunization against preventable diseases, such as influenza and pertussis, has proven effective in safeguarding newborns against life-threatening infections (Smith & Adams, 2018).

Pakistan is classified as a developing country facing numerous challenges in its healthcare sector. Despite these challenges, the Ministry of Health has been gradually

working to address the issue of infant mortality and maternal deaths. In many of these remote areas, both male and female doctors are unavailable at basic healthcare facilities. In some cases, when a male medical officer is posted to such facilities, they may be reluctant to serve due to security concerns in feudal and tribal regions, where performing medical duties can be hazardous. Incidents involving male doctors being robbed, tortured, and harmed by miscreants have occurred. Despite these challenging conditions, the government has implemented measures within the healthcare sector to ensure the safety of medical professionals and has introduced healthcare models to reduce child and maternal mortality and morbidity rates (Sufi, 2009).

Material and Methods

The research methodology employed for this study primarily relies on secondary sources of data collection. Several tools and sources have been utilized to gather information and data related to the research topic, which is focused on infant mortality rates and maternal health. The methodology includes the following components:

Health Programs and Policy Documents: Health programs initiated by international organizations and policy documents created by government ministries of health have been examined. These documents provide valuable insights into strategies and policies aimed at reducing child and maternal mortality rates.

Reports: Various research reports on infant and maternal mortality, especially those generated by international organizations, have been reviewed. These reports offer comprehensive analyses of child and maternal health, highlighting key findings and trends related to infant mortality rates.

Research Studies of the Two States: Research studies conducted by the ministries of health in both Laos and Pakistan have been undertaken. These studies delve into the health of mothers and children, with a focus on understanding the causes of increased infant mortality rates and potential solutions. Health Issues and Policy Documents of Global Health Institutions: Documents from global health institutions such as the World Health Organization (WHO), World Bank, United Nations Development Programme (UNDP), and United Nations Population Fund (UNFPA) have been explored. These institutions have conducted extensive research on health issues and policies worldwide, shedding light on the challenges faced by developing countries in reducing infant mortality.

Human Development Reports: National and international development sector reports on human development have been examined. These reports analyze the factors contributing to human development and provide insights into successful strategies employed by developed countries, especially in the realm of healthcare.

International Journals: Peer-reviewed international journals, particularly in the field of social sciences, have been referred to. These journals contain research articles, case studies, and qualitative research on various topics, including child and maternal health. Anthropologists and social scientists have contributed valuable research findings to these journals.

Newspapers: News articles and research-oriented stories related to child and maternal health, often published in newspapers, have been consulted. Daily Dawn, in particular, has been a source of research-oriented articles highlighting child and maternal mortality issues in Pakistan.

Online: The internet has been a crucial resource for accessing information globally. Various websites and online sources have been utilized to gather information about infant mortality rates and maternal health, especially in Laos. The internet has facilitated access to updated and current data on infant mortality rates and maternal health. The research methodology relies on a diverse set of secondary data sources, including health programs, policy documents, reports, research studies, global health institution documents, human development reports, international journals, newspapers, and internet sources. These sources collectively provide a comprehensive understanding of infant mortality rates and maternal health, offering insights from both national and international perspectives.

Results and Discussion

Cultural Beliefs Impacting Child Health-Seeking Behavior in Pakistan

One cultural belief in Pakistan involves the disposal of the placenta. Placentas are typically buried in the ground by husbands, as it is considered unclean to discard them elsewhere. Additionally, there is a belief that placing a fire around the site where the placenta is buried serves to ward off evil spirits, preventing them from reaching the burial site. It is also believed that if someone were to touch or reach the placenta, it could bring about bad luck and potentially lead to Infectious Diseases Affecting the Newborn Baby.

Newborn Care

Upon the birth of a newborn, it is a common belief that the infant may be thirsty after emerging from the mother's womb. In accordance with this belief, the maternal figures, often the mother-in-law, administer boiled water to the newborn by either placing it directly in the baby's mouth or offering it from a bottle. Some mothers resort to providing water when they perceive a lack of breast milk, thinking that their breast milk is insufficient, and the child might experience prolonged thirst. Additionally, there exists a ritual belief that giving a newborn "needle water," where a needle is placed into the water before it's given to the baby, enhances the child's intelligence. According to another belief system, it is considered essential to provide water to the newborn shortly after birth to prevent the onset of jaundice and conjunctivitis.

Choosing the Delivery Location

The decision regarding the location for childbirth is a crucial one. It typically rests in the hands of the husband and the mother-in-law, both of whom advise on where the woman should give birth. In this male-dominant society, women often lack decision-making power within their households. During this decision-making process, women typically remain silent and must accept the decision made by their husbands. He may opt for a hospital delivery. Some husbands, lacking awareness of these dangers, may prefer and suggest a home birth.

Drying, Bathing, and Warming the Newborn

Immediately following birth, a trained or untrained "Dai" removes the vernix (the oily layer covering the newborn's body) using her hands and dries the baby with a cloth. Families and primary caregivers do not consider the removal of vernix harmful to the baby's skin. There is a practice of bathing the baby as soon as possible because, after bathing, the Azan ceremony can be performed to officially declare the newborn as a Muslim. Due to this belief, newborns are typically bathed within two hours of birth, sometimes even as soon as half an hour after delivery. In colder seasons, newborns are

swaddled in warm clothing, while in the summer, lighter cotton clothes are used. During winter, babies are kept in a warm room on a cozy bed until the sun is fully up.

Newborn Eye and Ear Care

In the case of the ears, mustard oil is carefully applied for various reasons: to eliminate germs, remove any liquor that may have entered the ears during delivery, prevent dryness, alleviate itching, and treat ear discharge. Similarly, for the eyes, a substance known as "surma" or collyrium is applied. Some mothers have passed down the use of surma for generations, praising its effectiveness in brightening and enhancing the eyes. Occasionally, mothers opt to use oil for eye cleanliness. However, if the baby experiences excessive tearing or eye discomfort rose juice is employed. When these remedies do not yield the desired results, medical consultation is sought.

Newborn Massage and Swaddling

Massage serves several purposes, including shaping the baby's body for aesthetic purposes, promoting strength, and facilitating the baby's rest. Typically some mothers believe that massaging not only enhances the baby's appearance but also aids in relaxation, causing the baby to fall asleep. Additionally, this activity benefits mothers by providing them with some time to attend to other household tasks. Another common practice is bundling the baby, involving wrapping the baby's arms and legs with a soft cloth in a manner that restricts the baby's movements to prevent sudden falls from the cot if the baby wakes up abruptly.

Cord Care

Caring for the umbilical cord is typically not regarded as a major concern requiring meticulous hygiene. Often, the cord is cut with an unclean blade that may have been previously used for shaving. While Dais (traditional birth attendants) and trained birth attendants claim to sterilize cord-cutting instruments by boiling them or washing them with Dettol, families often dispute these assertions.

Colostrum

Locally referred to as "Zardo Pas," colostrum is viewed as a yellowish and unhygienic substance, and, as a result, it is not given to newborns. It is believed to be a form of milk (Kariyal kheer) that has been in the mother's breast for the past nine months and must be expressed for the newborn's health. Families commonly express concerns that colostrum may lead to abdominal pain and dysentery. Despite efforts to raise awareness, transforming this message into practice remains a challenge, as many families still perceive colostrum as harmful and potentially responsible for abdominal discomfort and other complications in newborns.

Administration of First Feed (Colostrum)

It is believed that giving honey will make the baby gentle in demeanor, causing them to speak and behave sweetly. Similarly, administering Zam Zam water is thought to instill religious-mindedness in the baby. The choice of the person responsible for providing this pre-lactation feeding is also crucial, as it is believed that their personality traits will be transferred to the baby.

Breastfeeding Practices

Exclusive breastfeeding is not a common practice in this region. Families often supplement breastfeeding with butter and small amounts of water. In cases where the baby struggles to latch onto the breast or the mother perceives a lack of breast milk, animal milk, such as goat or cow milk, is given to the baby. While healthcare providers advise families on the importance of exclusive breastfeeding for at least four months, many do not adhere to this guidance. Young mothers may understand the importance of exclusive breastfeeding, but they often yield to the insistence of elderly family members, both male and female, who advocate for providing water to the baby. Colostrum, known locally as "Pahreen thanj" or "Piss" in Sindhi, is generally not held in positive regard by mothers. Many mothers view colostrum as unclean milk that should be discarded. Some believe that the first milk is aged for nine months and is not beneficial for the baby's health, leading them to discard it in favor of fresher milk. Traditional Birth Attendants suggest giving colostrum to newborns because it helps initiate breastfeeding as soon as possible, even though some mothers initially discard it. Lady Health Workers (LHWs) assert that their counseling efforts have gradually changed this practice, with more mothers now giving colostrum to their babies. Some mothers offer colostrum because they believe it is highly beneficial for the baby.

Food Patterns

Pregnant women are typically expected to consume the same foods as other family members. Instead of enhancing their diets, pregnant women may actually eat less due to issues like vomiting and nausea. Additionally, there is a widely held belief that consuming more food items during pregnancy can lead to a larger baby and potentially complicate the delivery.

Antenatal Care and Delivery

Poverty, lack of transportation to healthcare facilities, poor service at government health facilities, and the absence of female care providers at healthcare facilities are some of the primary barriers to accessing ANC. Dais are preferred over all other care providers not only for antenatal checkups but also for delivery, primarily because they are perceived as highly experienced, charge lower fees, provide massages, and assist with cleaning soiled clothing. Deliveries are typically conducted in isolated and unsanitary rooms within or near the household, and male family members, including husbands, usually stay away from the delivery room as it is considered exclusively a female domain.

Low Birth Weight

Premature babies are distinguished from LBW babies based on differences in skin texture and the size of various body organs. It is noted that the skin of LBW babies tends to be tougher than that of premature babies. Additionally, the size of the eyes and head of premature babies is smaller compared to LBW babies, although both share the characteristic of low weight. Premature babies are locally referred to as "Katcha Bar," and the care provided for them is similar to that for LBW babies.

Problem Identification and Care during Illness

The majority of mothers, primary caregivers, and community elders can recognize common danger signs in newborns, such as fever, diarrhea, vomiting, difficulty in breathing, and reluctance to suckle. Their response to these signs depends on the perceived severity and duration of the illness. Initially, many families attempt to address these signs using traditional healing methods like Dhago Pheno and Taweez, as well as by visiting nearby shrines of saints.

Treatment typically involves Dhago Pheno and exposing the baby to sunlight to reduce the yellowish color. However, some mothers do seek medical attention if jaundice persists beyond ten days or more. Primary caregivers generally view jaundice as a disease and advocate consulting a doctor for treatment. Skin problems are treated similarly, with talcum or prickly heat powder applied to affected areas. Most families do not consider skin problems serious enough to warrant a hospital visit. In the case of chickenpox, it is taboo to expose the baby to the external environment, and seeking medical treatment is believed to worsen the condition. Therefore, Dhago Pheno is considered the appropriate treatment for chickenpox.

Beliefs Regarding Pregnancy and Newborn Health

Several prevailing beliefs shape the behavior of people in Pakistan, particularly their health-seeking practices. These beliefs include the idea that pregnant women should avoid crossing graveyards, as it could expose them and their unborn babies to attacks by evil spirits. Additionally, carrying a cot during pregnancy is discouraged because it can place strain on the shoulders, potentially affecting the baby's ears. Eating oily foods during pregnancy is thought to lead to jaundice in the baby, and excessive sitting during pregnancy is believed to force the baby to descend prematurely, potentially causing a premature birth. These cultural beliefs are deeply rooted in Pakistani society.

Conclusion

Both Laos and Pakistan have undertaken significant efforts to reduce infant mortality rates through various programs and healthcare models. Laos, for example, has introduced the Skilled Birth Attendance (SBA), delivery services, and primary healthcare (PHC) model, while Pakistan has implemented the People's Primary Healthcare Initiative (PPHI) and the Lady Health Visitor (LHV) / Lady Health Worker (LHW) health model. Both nations have also addressed cultural beliefs and practices related to infant and maternal health, reinforced healthcare policies, and enacted reforms to combat infant mortality. This has led to increased awareness of infant and maternal health issues, with women seeking antenatal care, consulting healthcare professionals or trained Dais, receiving vaccinations, and using safe delivery kits to ensure safe childbirth. Additionally, both countries have promoted essential health practices, including administering colostrum, using new blades for cord cutting, and delaying bathing for at least 6 hours after birth. Community mobilization has played a pivotal role in engaging proactive and dynamic individuals to address and resolve community health concerns. The coordination among Dais, LHWs, health management staff, and policymakers has facilitated the delivery of healthcare services. The study's findings suggest that organizing health education sessions at the community level, mobilizing the community, establishing Community Health Centers (CHCs) and emergency transport funds, conducting advocacy seminars, training Dais, LHWs, and health management staff, involving government representatives, and fostering public-private partnerships can lead to observable changes in community knowledge, attitudes, and practices. These changes can result in increased

utilization of skilled attendants during childbirth, ultimately leading to a reduction in infant mortality.

Recommendations

These research findings can contribute valuable insights to the limited body of knowledge available on infant mortality rates and child health. They can assist in the development of culturally acceptable and effective interventions for projects targeting infant mortality and child health. There is a pressing need to educate families, especially mothers, about the life-threatening danger signs in newborns and mobilize them to respond promptly through both home-based and institutional care. The involvement of male community members is also crucial for the successful implementation of these initiatives, as it can contribute to achieving the goal of reducing infant mortality rates.

The entire community should be sensitized to the serious health conditions faced by newborns and infants, and all health education, information, and communication programs should target mothers, families, and communities. Families should receive education about the importance of a balanced diet for pregnant women and its impact on the health of the unborn baby. Misconceptions, such as the belief that consuming more food during pregnancy leads to complicated deliveries due to larger babies, should be addressed in health education programs. Male family members should be encouraged to support pregnant women in taking necessary rest during pregnancy. Families should also be educated about identifying maternal and infant danger signs and understanding their consequences. Negative practices like removing vernix and immediate bathing after birth should be addressed to encourage positive changes.

Furthermore, families should be encouraged to provide colostrum to newborns and practice exclusive breastfeeding for the first six months of life. Community-level primary caregivers should receive training in identifying danger signs in newborns and infants and responding appropriately and promptly to these signs and illnesses. Healthcare providers at healthcare facilities should also receive training in newborn and infant health, and lifesaving drugs and equipment should be readily available to manage infant and newborn complications and danger signs. Breastfeeding practices should be promoted, emphasizing frequent breastfeeding day and night, at least eight times in 24 hours, with a minimum of 10 minutes on each breast during each feeding. The introduction of other foods, fluids, or water in the first six months of life should be discouraged, as breast milk alone is sufficient. It is crucial to discourage the use of gripe water or traditional remedies without consulting a doctor, and the use of bottles for pacifiers should be avoided. Immunization should also be emphasized as crucial for the health of infants and newborns.

References

- Fonseca, F., Robles-Martínez, M., Tirado-Muñoz, J., Alías-Ferri, M., Mestre-Pintó, J. I., Coratu, A. M., & Torrens, M. (2021). A gender perspective of addictive disorders. *Current addiction reports*, *8*, 89-99
- Green, L. (1998). Lived lives and social suffering: Problems and concerns in medical anthropology. *Medical Anthropology Quarterly*, 12(1), 3-7
- Keaney Jr, J. F., Larson, M. G., Vasan, R. S., Wilson, P. W., Lipinska, I., Corey, D., ... & Benjamin, E. J. (2003). Obesity and systemic oxidative stress: clinical correlates of oxidative stress in the Framingham Study. *Arteriosclerosis, thrombosis, and vascular biology*, 23(3), 434-439
- Khawar Shahzad, A. (2017). Tharparkar fiasco in Pakistan: A crisis of governance and its Future Implications. *A Journal of Governance and Public Policy*, 9(1), 77-92
- Nichter, M. (2008). Coming to our senses: Appreciating the sensorial in medical anthropology. *Transcultural psychiatry*, 45(2), 163-197
- Ravallion, M. (1999). Is more targeting consistent with less spending?. *International Tax and Public Finance*, 6, 411-419
- Salop, J. (1992). Reducing poverty: Spreading the word. *Finance and Development*, 29, 2-2.
- Sharp, L. A. (2019). Interspecies engagement in medical anthropology. *Medical anthropology quarterly*, 33(1), 163-167
- Slepian, M. L. (2022). A process model of having and keeping secrets. *Psychological Review*, 129(3), 542
- Stirling, A. (2014). From sustainability to transformation: dynamics and diversity in reflexive governance of vulnerability. *Vulnerability in Technological Cultures: new directions in research and governance*, 305-332
- Stuart-Fox, M. (1991). The Constitution of the Lao People's Democratic Republic. *Rev. Socialist L.*, 17, 299
- World Health Organization. (2011). Rubella vaccines: WHO position paper= Note de synthèse: position de l'OMS concernant les vaccins antirubéoleux. Weekly Epidemiological Record= Relevé épidémiologique hebdomadaire, 86(29), 301-316