# Knowledge of Practices During and After Childbirth in the Tutunendo Indigenous Community, Chocó, Colombia

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**Abstract**

**Objective:** To evaluate the knowledge about the practices performed during and after childbirth in the indigenous community Tutunendo, Chocó - Colombia.

**Methodology:** Descriptive observational study that included indigenous community leaders. The population was selected through the Asociación de Cabildos de Autoridades Tradicionales Indígenas Embera Dóbida, Katío, Chamí y Tule in conjunction with the Asociación de Pueblos Indígenas Dobida, Eyabida y Katio del Chocó. The information was collected from the primary source by means of an instrument adapted by the researchers. The analysis was carried out by means of relative and absolute frequencies for qualitative variables and median and interquartile ranges for quantitative variables according to their distribution.

**Results:** 23 indigenous community leaders were included, with a median age of 38 years and a predominance of males (69.6%, 16). Of the indigenous leaders, 47.8% (11) considered that midwives should have formal education and certification to perform this type of practice; however, 17.4% (4) thought that it was sufficient to have ancestral knowledge and experiential experience.

**Conclusion:** although Colombia already has clearer concepts about the importance of midwives in different parts of the country, it is essential to promote education and the sharing of knowledge in order to safeguard maternal and child health and improve maternal and child morbidity and mortality rates.

**Key words**: Midwifery, rural areas, labor obstetric, pregnancy, new born

**Introduction**

Midwives are women who assist other women during pregnancy, childbirth, and the postpartum period, carrying out this role mainly in rural communities or in areas with limited access to medical services. According to data from the National Administrative Department of Statistics (DANE), between 2020 and 2021, approximately 12,111 births in Colombia were attended by midwives (3).

The role of midwives is essential in departments such as Chocó, Amazonas, and Cauca, where a significant proportion of deliveries are attended by them. Their participation responds both to the limited access to health services and to the preservation of cultural practices within these communities. For these women, pregnancy, childbirth, and the postpartum period are natural life processes that form part of their daily practice, learned through experience and the oral transmission of knowledge (1,2).

In the context of the Sustainable Development Goals (SDGs), Colombia recognizes the need to ensure that all pregnant women and their newborns

receive timely and quality care. However, multiple barriers persist in remote communities, where access to health services is limited. In these settings, the work of midwives is essential, as it directly contributes to reducing maternal and perinatal morbidity and mortality, in alignment with the SDG targets (3).

The limited availability of technical or academic training for midwives, together with the lack of integration with the health system, restricts their ability to provide comprehensive care. This highlights the need to develop strategies that strengthen their knowledge, combining ancestral wisdom with tools from contemporary medicine, in order to improve maternal and child health outcomes (3–7).

The health care model establishes an complete route for the care of pregnant women and their newborns, addressing not only physical well-being but also the psychological, spiritual, and social dimensions of women's health. This model includes services such as prenatal follow-up, childbirth and postpartum care, and health education (8).

Currently, maternity services are the third most common specialized service in hospitals nationwide. The leading cause of hospitalization is single spontaneous childbirth, representing 4.2% in the public sector and 2.4% in the private sector (5).

Nevertheless, Colombia is facing a maternal-perinatal care crisis due to the progressive closure of obstetric services in different regions. This situation has reduced the guarantees for adequate care throughout the entire gestational process, from preconception care to delivery. Timely follow-up is crucial for the early identification of potential pregnancy complications. In this context, it is necessary to seek solutions to ensure continuity of care and to prevent an increase in maternal and infant morbidity and mortality rates (5).

**Materials and Methods**

An observational, descriptive study was conducted, including indigenous community leaders from the municipality of Tutunendo, Chocó, Colombia. The study population was selected through collaboration with the Asociación de Cabildos de Autoridades Tradicionales Indígenas Embera Dóbida, Katío, Chamí y Tule (ASOREWA), and the Asociación de Pueblos Indígenas Dobida, Eyabida y Katío del Chocó (APIDEKCH).

Data were collected from primary sources using an instrument designed and adapted by the research team. A field visit to the community was carried out, during which indigenous community leaders were convened to directly complete the questionnaire.

The data obtained were entered into a Microsoft Excel® database, implementing data entry control criteria to minimize transcription errors. All forms were thoroughly reviewed by the research team to ensure completeness and data quality, particularly regarding community knowledge about labor and maternal-infant care.

Statistical analysis was descriptive. Absolute and relative frequencies were calculated for qualitative variables. Quantitative variables were analyzed using medians and interquartile ranges, according to their distribution.

The project was approved by the Ethics Committee of the corresponding institution and classified as a minimal-risk study, in accordance with Resolution 008430 of 1993 of the Colombian Ministry of Health. All participants signed informed consent prior to their participation in the study.

**Results**

A total of 23 indigenous community leaders from the municipality of Tutunendo, Chocó, were included, with a median age of 38 years (range: 16 to 85 years). Males predominated, representing 69.6% (n = 16) of participants.

Regarding marital status, 95.6% (n = 22) reported having a common-law partner, and 91.3% (n = 21) reported living in rural areas.

The indigenous leaders indicated that the median number of midwives per community was 2 (minimum 0, maximum 5). Concerning the training of midwives, most participants reported that there is no formal training available in the community. Only 4.3% (n = 1) mentioned that midwifery is practiced empirically. None of the individuals engaged in midwifery had academic certification, and their knowledge is acquired through experience and oral transmission, both for maternal and neonatal care.

When assessing perceptions of the quality of care provided by midwives, 4.3% (n = 1) rated it as adequate, highlighting that care is delivered in specific spaces designated for this purpose within the community.

Concerning the access conditions, it was found that pregnant women must travel long distances to receive care, with an average travel time of 1.8 hours.

Regarding the supplies required for childbirth care, as well as those available in health centers, respondents reported limited knowledge of both the material resources and the personnel involved in care delivery.

Among the cultural and ancestral practices related to childbirth, some participants mentioned the performance of prayers to Ãkhoré, the creator

according to the Emberá worldview. Dietary recommendations were also reported, such as avoiding avocado consumption, not eating the "crust" of rice, and maintaining an upright posture after meals.

When asked about the fundamental characteristics a midwife should possess, ethics stood out as the most important value, mentioned by 34.7% (n = 8) of participants (see Table 1).

**Table 1.** Characteristics that a midwife should have

| Characteristics | % (23) |
|---|---|
| Ethics | 34,8 (8) |
| Social Values | 26,1 (6) |
| Education and training on the subject | 21,7 (5) |
| Ancestral knowledge | 17,4 (4) |

Regarding the perception of the need for formal training, 47.8% (n = 11) considered that midwives should have education and certification to carry out their work, while 17.4% (n = 4) believed that ancestral knowledge and empirical experience are sufficient. On the other hand, 34.8% (n = 8) did not respond to this question.

## Discussion

Traditional midwives carry out their work during childbirth and the postpartum period based on ancestral knowledge transmitted from generation to generation. Their role remains essential in communities with limited access to health services, such as Tutunendo, Chocó, where their presence ensures maternal care in rural and hard-to-reach contexts.

This finding is consistent with Eslava, who describes that the training of traditional midwives occurs through observation, oral transmission, and accumulated experience within their communities (6). The knowledge acquired in midwifery practice develops within the community, primarily through oral transmission and observation of more experienced midwives (12). Although there is a global accreditation system in midwifery regulated by the International Confederation of Midwives, this is not accessible to traditional midwives, who, for the most part, do not participate in formal certification processes. Likewise, the implementation of continuing education programs on obstetrics-related topics is scarce or nonexistent in these settings, reflecting a significant gap between conventional health systems and ancestral knowledge (7).

Regarding the perception of community leaders on the need for formal training, 47.8% considered that midwives should have education and

certification. This finding is consistent with international studies highlighting the importance of strengthening the capacities of traditional midwives through training processes that respect their knowledge while integrating elements of Western medicine, in order to reduce complications during pregnancy, childbirth, and the postpartum period (2,10,11).

Cultural practices associated with pregnancy and childbirth, such as prayers to Ãkhoré and the reported dietary restrictions (avoiding avocado, sitting upright after eating, or not consuming the "crust" of rice), reflect the worldview of the Emberá community. These practices are consistent with those reported in other studies conducted in indigenous communities of Chocó, where symbolic conceptions of food, behavior, and spirituality during pregnancy are recognized (8,9).

In the analysis of the recent health context, it is important to note that during 2020 and 2021, the COVID-19 pandemic had a significant impact on healthcare delivery in Colombia. It is presumed that the global health crisis reduced attendance at health centers, which may have contributed to increased maternal mortality rates, particularly in departments such as Vichada, with a maternal mortality ratio (MMR) of 198.2 per 100,000 live births, followed by La Guajira (190.1) and Chocó (187.7) (5). This scenario underscores the fundamental role of midwives as an essential resource in rural communities during health emergencies and crises in access to the formal health system.

Furthermore, access to health services is limited not only by geographic and economic barriers but also by the cultural clash between traditional medicine and biomedicine (13). This situation has been documented both in Colombia and in other countries of the region, such as Honduras, where similar difficulties are described in relation to cost, the location of health centers, and transportation (14).

In this context, the need to establish bridges of dialogue between traditional and institutional medicine is reinforced, in order to ensure the safety of the mother–child dyad and reduce maternal and infant morbidity and mortality rates. This dialogue must recognize and value ancestral knowledge, while also incorporating technical expertise and tools to provide safe management of possible obstetric complications.

**Conclusion**

Traditional midwives represent a cornerstone of maternal and child care in rural and indigenous communities, both for their cultural significance and

because they are, in many cases, the only resource available for the care of the mother–child dyad.

In the indigenous community of Tutunendo, Chocó, midwifery is learned primarily through oral tradition and consolidated through accumulated practical experience. This form of knowledge transmission has enabled the continuity of ancestral practices that ensure childbirth care in contexts where access to health services is limited.

Although progress has been made in Colombia toward recognizing the role of midwives within the health system, there remains a need to strengthen training opportunities, capacity building, and knowledge-sharing spaces that allow the integration of traditional medicine with the principles of Western medicine. Such integration is essential to safeguard maternal and child health and to contribute to reducing maternal and infant morbidity and mortality in remote communities.

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