Research Article

Determinants of Institutional Delivery Among Reproductive-age Women in Lumbini, Nepal

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Abstract

In Nepal, maternal health is still a concern issue and institutional delivery is the most direct and immediate way to decrease maternal and neonatal mortality. Insufficiently, nationwide initiatives signify disparities persevering between the institutions across Lumbini Province, as well as socio-demographic and economic factors are also playing significant roles. Thus, this paper focuses on factors determining institutional delivery in women of reproductive age in the Lumbini Province, based on the 2022 Nepal Demographic and Health Survey (NDHS) data. The data were collected using a stratified two-stage sampling design, with 14,545 women faces-naturalizing age-specific experiences of 15-49, and a logistic regression was employed to identify key determinants associated with institutional delivery. The younger women, first-time mothers, educated women, urban dwellers, and wealthier socio-economic quintiles are more likely to have an institutional birth. Significant disparities are present among castes, other ethnicities, religious minorities, and wealth quintiles, so that further targeting viewpoints can be realized for specific intermediation. The economic status plays a significant role, therefore women from the wealthiest households are significantly more given to accessing delivery services. Findings also show that cultural beliefs, ANC visits, and geographical barriers are significantly dishevelled in the determination of healthcare use. Improving institutional delivery rates will mean consideration by policymakers of the financial inducements, growth and development of the healthcare infrastructure and maternal awareness creation as sensitive assistance for targeted groups. Those in developing strategies to maximize improved maternal health within Nepal benefit extremely from the facts that this study generates.

Keywords: Intuitional delivery, Lumbini Province, Determinants, Maternal Health, Utilization

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Introduction

Maternal health continues to be a vital issue in Nepal for institutional delivery to be the major intervention to reduce maternal and neonatal mortality (MoHP, 2017). Institutional delivery is expected to have a skilled birth attendant present at delivery, which will help to prevent majority of incidents that are harmful when labor is received from a local birth attendant (Karkee & Comfort, 2016). The significant disparities between the different regions and communities, despite national programs to increase facility-based deliveries, continue to be a challenge (Shakya, Kishore, Bird, & Barak, 2004). Lumbini Province is faced with several challenges in facility-based delivery services in the western part of Nepal,

greatly influenced by socio-economic, cultural, and infrastructural factors (Puri, Tamang, & Shah, 2011).

Nepal saw exceptional progress in maternal health outcomes over the past decades. However, the maternal mortality ratio (MMR) remains a pressing issue with significant regional variation (WHO, 2021). These MMR records have region-to-region differences placing the Lumbini Province below average national neonatal and maternal health indicators. The Nepal Demographic and Health Survey 2016 acknowledged that the neonatal mortality rate in the Lumbini region is as high as 30 deaths per 1,000 live births, higher than the national average of 21 deaths per 1,000 live births (MoHP, 2017), emphasizing the pressing need to address the determinants that are responsible for the low rate of institutional delivery in the province.

Various studies have investigated that the determinants of institutional delivery in Nepal. However, very few dedicated works have dissected this subject for the Lumbini Province. In the context of Nepal, the existing literature has mostly generalized the national scenario without understanding the socio-cultural and economic characteristics of the provinces (Puri et al., 2011). For example, research has uncovered that caste/ethnicity, place of residence, and wealth quintile are major predictors of institutional delivery at the national level (Thapa et al., 2018). How these pertain to the Lumbini Province on a regional level is a road not yet traveled. Non-apprehension of these localized determinants is a must for the implementation of targeted interventions that would effectively tackle the obstacles faced by women in the province.

Age is another factor that could play a role in influencing antenatal care attendance. Women aged between 20 and 29, as compared to those younger than 20 years, had a possibility of around 24% to 30% more and 9% to 12% less to have 1 to 3 and 4+ antenatal care attendances, respectively. Interestingly, such data was not significantly affected by religion and geographic region. Women who were older than 30 also had a higher possibility of ANC attendance than those below 20. There was also generally an increase in the number of ANC attendances with increasing age among women in Nepal. Districts in the east/north/eastern and mid/western parts of the country showed similar patterns.

Educational status partially impacts the use of these services- The higher the level of education, the higher the level of antenatal care attendance. Education is related to exposure to social factors that give an advantage for using ANC. The tendency towards ANC is even higher among the well-educated. Where 33.3% of Illiterate women did not follow 4 visits for antenatal checkup, 38.8% of women with primary education did, and 43.4% of women with secondary and higher education did. In comparison, 75% of educated women sought ANC about four times. The feasibility of women's participation in obstetric care is pivotal for family and community health. It is essential to broaden reproductive health care access to any savvy woman who can afford private health resources. Along with gaining health care skills, this possibility will likely call for enhanced family education at reproductive health. It is also possible to increase strict ANC attendance to protect MCH care.

Financial implications mostly dictate access to institutional childbirth services, being that women from better-off households are more inclined to use hospital delivery services as they have the financial ability to do so and have access to information. Poorer households have a dichotomy with this case due to financial constraints: Heaven forbids one to go to a healthcare institution! The NDHS 2016 put wealth quintile as a significant predictor of institutional delivery in Nepal, with those wealthy more likely to go for facility-based childbirth (MOH, 2017).

Going by the self-lucidity of it all, media exposure is the precursor to information supplied on maternal health services. Women with media exposure knob sit in some margin of economy to information. An analysis of MICS 2019 clearly brought to light that nearly 86% of women with good media exposure went for institutional delivery compared to 66% with restricted media exposure (Acharya et al., 2023). Innovatively, the media platforms shall

play its part in educating the women on safe delivery practices.

Cultural beliefs and practices chiefly decide to go against any pro-institutional decision making along the other side. In some societal aspect, simple childbirth, uneventful & natural, presumed to take routine undrugs for address, hence home birth (need to clearer). Besides, there are traditional beliefs, with certain sorts of family influence, mainly from elders; having home births in cases where it is not going to be nice to have hospital birth. This is also supported by a single qualitative study in rural Nepal in which cultural norms and traditional birth attendants are contributing to home deliveries because of reluctance to practice institutional delivery (Simkhada et al., 2015). To break these cultural barriers, community-based interventions may be conceived respecting local traditions that attest to and follow the advantages of institutional childbirths.

Geographical and infrastructural hindrances push back institutional childbirth in Nepal. Women in remote or mountainous areas have massive barriers to accessing health facilities. These barriers include long distances from health facilities, lack of transportation, and rugged roads. This limitation delays the help-seeking process to access themselves and hence move home for delivery. The NDHS 2016 found women in rural areas, particularly in regions like Karnali, known for fewer institutional birth rates, pointing to the need for investment in health infrastructure and transport services for such areas (MoH, Nepal et al., 2017).

Health insurance and stipends have positive relationships in favor of institutional births. Health Insurance beneficiaries are more likely to go for institutional delivery because financial constraints ICU to lesser barrier, but the situation is totally reversed when we consider uninsured women. According to MICS 2019 data, almost 95% of the insured participated in an institutional birth setting in-and-around July-April in comparison to 77.4% for the uninsured (Acharya et al., 2023). Patient incentives in the form of cash are a good governance mechanism to encourage women toward seeking skilled care while giving birth. But the program's efficacy has yet to be considered in terms of implementation and awareness across all levels of marginalized populations.

Based on this observation, HBM gives an account of how an individual's behavior concerning health is predicted. This specifies how, in the case of institutional delivery, the decision of a woman to avail herself of facility-based services is determined by the woman's estimation of the seriousness of the birthing risks and how she sees the probability of those complications occurring-doing well by reducing those risks- and also by whatever barrier may prevent her from accessing the facility such as the cost of service or the price of traveling, distance to the health care center, and also her own attitude to health care providers or the quality of the care provided (Karkee & Comfort, 2016).

This study blends these constructs with some socio-demographic and economic characteristics to get a more comprehensive understanding of what influences institutional childbirth in Province five. Culturally sensitive and locale-specific interventions for imbuing a culture of institutional birth will be facilitated within such scenario allowing the region to chop down maternal and neonatal mortality rates.

Data and Methods

The Nepal Demographic and Health Survey (NDHS) 2022 provides comprehensive data on maternal health services such as institutional delivery across the provinces of Nepal, Lumbini in particular. It was carried out from January 5 to June 22, 2022, using stratified two-stage sampling designs to ensure representation on both the national and provincial levels. In the first stage, 476 clusters (strata) were selected, and households were systematically picked from every cluster to get a total of 14,280. This hub of research strategy also resulted in the collection of data from 14,845 women aged 15–49 years, constituting a 97 percent response rate (Ministry of Health and Population [MoHP], 2022). NDHS 2022 data can reveal the variables related to the mother's age, education eligibility, parity, ANC attendance, socio-economic status, and

urban-rural residence, whereas caste light the whole windows of opportunity to delve into the determinants of use of delivery care by women of reproductive age in the context of the Lumbini region. The standardized methodologies of questionnaires developed and adapted to suit the Nepalese context also ensure data quality. By going into the province-specific data, researchers can now investigate the factors influencing various levels of institutional delivery in Lumbini Province. Statistical software will consolidate available data to implement the multivariate logistic regression methodology to measure how much these determinants are associated with the increased likelihood of institutional deliveries. The NDHS 2022 contains data that fully address maternal service usage patterns within Lumbini Province, hence making the basis for developing informed and targeted interventions to increase the region's institutional delivery rates.

Results

With increasing maternal awareness and expanded exposure to health services, younger women (15-24) are more inclined toward facility-based deliveries. On the other side, older age groups mothers, particularly those above 35, may opt for home births due to their remembrances of their previous childbirth hardship. Younger mothers may be more open to maternal health programs and other government activities.

In the above instance, the chances of institutional delivery are most likely to young women treating the existing younger parous women with relatively lower risks regarding their complications. Communally, these considerations pose a less upsetting effect on the reasons for choosing a home delivery over an institutional delivery one, especially in rural areas where accessing institutional care offers a rare opportunity.

Regarding the likelihood of institutional delivery, education is one of the biggest factors. Women who have had more years of education are more likely to seek maternal health services because of greater awareness of the need for institutional delivery and better access to healthcare services.

Exponents of traditional birth mates who uphold the religious belief may hinder the promotion of delivery through health facilities. In Nepal, Hindu women generally demonstrate greater preference for institutional delivery compared to the women from some Muslim, and the Adivasi (indigenous) religious communities, among whom home deliveries are more common due to cultural norms and limited access to maternal health services.

Caste and ethnicity are huge social determinants of healthcare utilization in Nepal. The marginalized communities, including Dalits and Janajatis, generally represent far lower institutional deliveries on a range of basis such as their economic and social inequity, and uneven access to health services. On the contrary, women from higher caste groups Brahmans and Chhetris, tend to have the higher institutional delivery, partly is because of the privilege for marriage and having higher education and financial resources.

Whether institutional delivery occurred or not was significantly related to rural-urban factors. Urban women were likely to deliver at a health facility due to the access to good health infrastructure and skilled attendants, and in contrast, rural women are likely to encounter lots of challenges, such as the presence of few health types of amenities, long distances to health facilities, and traditional birth ceremonies that keep rate of institutional delivery very low, especially in remote areas.

A person's financial status in which the sum totals of wealth quintiles advance with ease access to institutional delivery services. Women from the topmost wealth quintile have significant access to maternity care services in private hospitals as those in the poorest quintile miss because of financial difficulties. The NDHS 2022, over 90 percent of the richest women delivered within a health facility, in contrast to less than half in the poorest of women, therefore further endorsing the much-needed financial support to advocate for the increase in institutional deliveries amongst these economically backward women.

Table 1 *Distribution institutional delivery of the respondents*

Variable	Non-Institutional		Institutional		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
<20	1	1.3	25	6.3	26	5.5
20-24	25	32.8	153	38.0	179	37.1
25-29	29	36.8	132	32.7	161	33.4
30-49	29	37.3	121	29.8	149	31.0
Birth order						
First	15	18.7	197	48.8	212	44.0
Second	25	32.7	130	32.3	156	32.4
Third or higher	38	48.6	76	18.9	114	23.7
Level of education						
No Education	16	21.0	45	11.2	62	12.8
Basic Education	60	77.2	267	66.1	326	67.8
Higher Education	1	1.8	92	22.7	93	19.4
Religion						
Hindu	66	85.3	376	93.2	442	91.9
Other religion	11	14.7	28	6.8	39	8.1
Caste/Ethnicity						
Dalit	27	35.2	85	21.1	112	23.4
Muslim	12	15.0	14	3.5	26	5.4
Janjati	19	24.3	145	35.9	164	34.0
Other Terai	10	13.0	61	15.0	71	14.7
Brahmin/Chhetri	10	12.5	99	24.5	108	22.5
Place of Residence						
Urban	43	56.0	217	53.7	260	54.1
Rural	34	44.0	187	46.3	221	45.9
Wealth quintile						
Poorest	23	30.1	63	15.7	87	18.0
Poorer	18	22.8	79	19.5	97	20.1
Middle	18	23.3	92	22.8	110	22.9
Richer	16	20.6	94	23.4	110	22.9
Richest	3	3.3	75	18.6	78	16.1
Total	**77**	**100.0**	**404**	**100.0**	**481**	**100.0**

Source: Nepal Demographic and Health Survey, 2022

Table 1 shows that the distribution with the average intuitional delivery (ID) by respondents according to significant socio-demographic aspects of the same socioeconomic characteristics; the discussion also focused on institutional and households of respondents. Literature mentions marked differences in ID visits due to various socio-demographic characteristics, including age, birth order, education, religion, caste/ethnicity, place of residence, and the wealth quintiles.

Age and institutional delivery: Findings reveal that younger women showed more inclination toward institutional delivery (6,3%) over non-institutional delivery (1.3%). Women aged 20-24 years had the highest institutional delivery (38%) proportion among the four age groups, followed by 25-29 years (32.7%) and 30-49 years (29.8%). This suggests that younger women are likely to resort to institutional delivery through more exposure to the maternal health program and awareness.

Birth order and institutional delivery: The first-time mothers will have significantly higher institutional delivery (48.8%) than the second-time mothers, who were at least moderately inclined (32.3%). It has been observed by us again that institutional delivery shows a decline among women giving birth to the third or later child (18.9%), indicating further that women with higher numbers of children probably prefer home delivery, but mainly on the grounds of their past birth experiences and the view of the risk as low.

Education and institutional delivery: The educational level influences institutional delivery significantly. Those women among advanced education showed the sensibly higher institutional delivery rates (15.1%) in comparison sets of non-educated (11.2%) and basic-educated (66.1%) women. Higher educated women registered only 1.8 percent of the total institutional delivery, underlining the importance of education for the utilization of maternal health services.

Religion and institutional delivery: Hindu women have an institutional delivery rate of 93.2 percent compared to other religious faiths (6.8%). It follows from this notable difference that their health-seeking behaviors, based on cultural beliefs and socio-economic circumstances, must also be quite different.

Caste/Ethnicity and institutional delivery: The caste/ethnicity of the mother is a major determinant of the choice of institutional delivery. Brahmin and Chhetri women (24.5%) and Janajati women (35.9%) have higher rates of institutional delivery compared to Dalits (21.1%) and Muslim women (3.5%). Few Dalits and Muslims attend these facilities, suggesting risk for economic and other barriers such as discrimination and cultural norms.

Place of residence and institutional delivery: The higher rate of institutional delivery by the urban population as compared to the rural areas is not substantial, indicating broad similarity that explains peripheral preference for institutional deliveries in the cities for good reason.

Wealth quintile and institutional delivery: The economic status variable is a significant predictor for the higher likelihood of receiving institutional deliveries. Overall, however, there was a high rate of institutional delivery among women belonging to the richest wealth quintile, standing at 18.6 percent. This rate was even more substantiated among the most impoverished population, which had shown a significantly lower rate of 15.7 percent. These needy women, on the other hand, demonstrate the highest percentage of non-institutional deliveries, accounting for 30.1 percent, largely constituting a description of how financial concerns can act as a major barrier to facility-based childbirth.

Relationship between demographic and socioeconomic variables: The survey data were analyzed using logistical regression to determine the determinants of institutional delivery among reproductive-age women. The dataset represented 408 observations with a population size of around 480.23. The analysis controlled for survey design considerations, such as strata and primary-sampling unit (PSU) gain, to ensure a high-grade set of coordinators. The design degrees of freedom (df) = 67 detailed the extent to which 67 independent entities were contributing to the estimation. The F-statistics ($F(19,49) = 5.18$) are significant, suggesting that the overall model is statistically significant ($Prob > F = 0.0000$), supporting the significant influence of at least one predictor variable on the dependent variable of institutional delivery. These logistical regression model suggests that the powerful role of key socio-demographic and economic factors in shaping maternal healthcare decision-making providing directions for policy interventions to

further enhance institutional delivery rates in this population.

Table 2: Factors association of demographic and socio –economic variable

Variable	Odds Ratio	Std. Err.	t	P>|t|	95% Conf. Interval	Sig
Age						
20-24	0.1579015	0.1442763	-2.02	0.047	0.0254878-0.9782307	**
25-29	0.2340469	0.2381893	-1.43	0.158	0.0306976-1.784435	
30-49	0.2007008	0.2298608	-1.4	0.165	0.0204055-1.974017	
Birth order						
Second	0.3952038	0.1892351	-1.94	0.057	0.1519657-1.027772	*
Third or higher	0.1639105	0.0882255	-3.36	0.001	0.0559781-0.4799494	***
Religion						
Other religion	2.780252	2.981806	0.95	0.344	0.3268783-23.64733	
Caste/Ethnicity						
Muslim	0.1069041	0.1390638	-1.72	0.09	0.0079683-1.434246	
Janjati	2.053184	1.068762	1.38	0.172	0.7264332-5.803099	
Other Terai	1.455517	0.9426624	0.58	0.564	0.3995768-5.301934	
Brahmin/Chhetri	2.728414	1.251284	2.19	0.032	1.092344-6.814921	**
Educational attainment						
Basic Education	0.5813201	0.3097605	-1.02	0.312	0.2006806-1.683935	
Higher Education	3.462416	3.038573	1.42	0.162	0.6006723-19.95818	
Residence						
Rural	1.775994	0.8210103	1.24	0.218	0.7058454-4.468618	
Wealth quintile						
Poorer	2.363738	0.9098282	2.23	0.029	1.09632-5.096374	**
Middle	2.178279	0.9750441	1.74	0.087	0.8914367-5.322755	*
Richer	3.335209	2.134348	1.88	0.064	0.9297878-11.96361	*
Richest	7.543655	7.65987	1.99	0.051	0.9939668-57.25214	*
_cons	18.57932	19.72439	2.75	0.008	2.232281-154.636	***

Table 2 shows that logistic regression analysis was performed to predict factors associated with institutional delivery amongst women of reproductive age. Most influencing the decision-making process of institutional delivery were and economic factors. The odds ratio (OR), along with its significance (Sig), was used to identify the most contributory predictors of institutional delivery. Age below 20 years significantly impacts institutional delivery decision making. Eventual increment in age from 20-24 has been linked with a lowered likelihood of institutional delivery (OR = 0.157, p = 0.047), which demonstrates that the corresponding median odds ratio suggests that they are at an advantage in insisting use of institutional delivery to infants who are aged less than 20 years. Nonetheless, the odds of the two respective age groupings of 25-29 and 30-49 years do not show any significant relationship implying that some other factors may have got control over their healthcare-seeking behaviours.

The increasing birth order finds a negative association with institutional delivery. Women with second-order births are significantly less likely to have an institutional delivery (OR = 0.395, p = 0.057), whereas those with deliveries at third- and

higher-order births decrease the odds of largely having an institutional delivery (OR = 0.164, p = 0.001). This implies that women with more numbers of children may prefer home delivery because of their past experiences and cultural norms.

The effect of religion shows no significant impact on chances of institutional delivery with the odds ratio of non-Hindu women being considerable and yet non-significant (OR = 2.78, p = 0.344). Caste/Ethnicity thus appears to composition a vital role, taking Brahmin/Chhetri women as being statistically much more likely to go for institution-based delivery (OR = 2.73, p = 0.032). Yet other ethnicities appear to have a negative relationship. The approval is evident through the event of lower odds ratios, however, not highly significant in the unoriginal sense.

Higher levels of education show a favourable relationship with institutional delivery (OR = 3.46), but the associations are not as yet statistically significant (p = 0.162). Lower levels of education including basic literacy also do not seem to exhibit strong correlation (p = 0.312) making it uncertain as to whether standing alone, education would be all competent for the choice of institutional delivery, especially without additional economic and health access factors.

Living in a rural area presents a higher likelihood for institutional delivery (OR = 1.77, p = 0.218); nonetheless, the relationship has no statistical pattern. This suggests that location, in its aloneness, doesn't have a great deciding influence on health care utilization; the including social and economic factors hugely interact with residence to decide rates of institutional delivery.

Economic status is seen to be a central factor having an influence on institutional delivery. Economically backward women in the lower quintiles (OR = 2.36, p = 0.029) and middle quintiles (OR = 2.18, p = 0.087) fare significantly better concerning institutional delivery when compared to those from the poorest quintile. Richer women (OR = 3.33, p = 0.064) and richest quintiles (OR = 7.54, p = 0.051) also show that positive collective relationship with institutional delivery. This trend appropriately suggests that the economic well-being increases the chances of opting for an institutional delivery. This may stand in the better affordability and accessibility of healthcare.

Discussion

Logistic regression analysis can provide important understandings into the influence of socio-demographic and economic factors that affect institutional delivery among women of reproductive age in Nepal. This understanding is crucial to the involvement makers in designing solid strategies for enhancement of safe motherhood and neonatal mortality in the future.

The results show that the chances of institutional delivery were lesser for women in the age group of 20-24, in comparison with their younger counterparts who were 20 years or younger at the time of childbirth. This was inconsistent to past studies that consistently argue that early mothers are more likely to go to a facility for delivery as a result of their perceived high risks attached to early pregnancy (Acharya et al., 2023). Cultural factors form part of the cause, or the group (20-24 years) may be found less aware of what institutional delivery offers and requires more in-depth studies to elicit the real factors for this pattern.

Order of birth of the child and reduced odds of institutional delivery show a significant inverse link. Women with a second-order birth had less chance of using institutional delivery as was more pronounced in those with three or more children. This trend corresponds with results of rural Nepal because of entrenched cultural practices (Shah et al., 2015). Upon this observation, it seems necessary that culturally sensitive educational involvement emphasis is laid on delivery in the presence of trained health personnel, irrespective of that woman's parity, to improve institutional delivery.

Although religion has not made any significant impact on childbirth-choosing behavior, women feel that caste and ethnicity, these being extremely influential ones.

Brahmin/Chhetri women more likely chose institutional care, whereas Muslim women again logged somewhat lower odds, albeit not significant. The observation reflects studies suggesting that other marginalized groups, such as some ethnic minorities, have limited access to health facilities and social-economic barriers from seeking institutional care (Neupane & Doku, 2013). Hence, they become immensely targeted by interventions to address such systemic inequalities and promote equitable participation in health care.

Women with more education (primary and above) were more likely to seek an institutional delivery, though this was not significant. This differences sharply with other definitions in the literature that suggest otherwise: An educated woman is likely to make good use of maternal health services by way of good awareness and autonomy (Acharya et al., 2023). The absence of statistical significance in our study could be because of the limited sample size1. Promoting educational opportunities must, however, remain a key strategy for improving maternal outcomes.

Contrary to exceptions, rural women face higher odds of institutional births, though not statistically significant. This observation is a serious challenge to conventional thinking that the urban dweller has superior access to health services. This suggests that the recent efforts put in place to enhance the rural health facilities are now starting to show impact. However, continuous monitoring is essential to keep up with the benefits so gained and to further alleviate the concern.

Economic status is a significant determinant for institutional births. Given that the rich group includes more in the way of economic resources, they are prone to utilization of institutional health services. However, this has always been a point debated in literature where wealthier women have better knowledge, access to resources and are able to accumulate costs (Neupane & Doku, 2013). To erase economic access disparities, engagement in policies concerning subsidized healthcare services and financial incentives for the needy is required.

Conclusion

The socio-demographic, economic, cultural, and infrastructural factors are responsible for institutional childbirth in Lumbini, Nepal. Differential choices for the same are based on age, past childbirth experience regular means of education, urban residence, and/or the higher socioeconomic status. Contrastingly low access or absence of institutional care shows large as a barrier for individuals belonging to different caste/ethnic groups or wealth segmentation. Evidence-based interferences are consequently imperative to address these outstanding inequalities including economic assistance, health education, and rural oddness in which to nest well-functioning health infrastructure. Birth order, caste/ethnicity, and income will heavily influence sanitary decisions, necessitating culturally sensitive and economically appropriate strategies. Thus, some of the involvements would include cultural sensitization favoring institutional deliveries, educational programs to up maternal health awareness, cash incentives to problem over financial weaknesses, and infrastructure development to reduce access inequalities, particularly rurally. Addressing these determinants will increase maternal and neonatal health outcomes in Lumbini and elsewhere.

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