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Socio-Economic Determinants Shaping Institutional Delivery in Gandaki Province, Nepal

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Abstract

Institutional delivery services are crucial for improving maternal and neonatal health. Their utilization is influenced by diverse socio-economic and geographical determinants, as seen in Gandaki Province, Nepal. The study assessed the determinants of institutional delivery using 206 observations drawn from primary sampling unit which has used NDHS, representing different demographics. Age, birth-order, religion, caste/ethnicity, education, residence, and the wealth index were among the factors that were analyzed by employing logistic regression to assess how they actually influenced institutional delivery rates. The results show that within-birth cohort differences were largely in social status, and wealth index considers using institutional delivery services, while younger (20-24 years) women showed lower odds of using institutional delivery (OR = 0.33432, p = 0.046). Access to educational attainment was the most associated factor positively affecting service utilization because women with higher education have significantly higher odds (OR = 12.92771, p = 0.021), thus signifying the incredible transformational effect of education. Socio-economic factors reflective through wealth index show that middle-income and richer households were more likely to use institutional delivery services. The difference among castes/ethnic groups was big, however. Brahmin/Chhetri (OR = 0.269745, p = 0.044) and Janajati women (OR = 0.170093, p = 0.02) were much less likely to deliver in an institution than other groups. While living in a rural area was not statistically significant in the impact, the geographical factor and poor health infrastructure were vital concerns. The study was directed towards the very focus of attending to socio-economic inequalities, quality health care, and the sensitization of institutional deliveries. It stresses the much-needed multi-dimensional approaches-reforms in policy, education, and infrastructure development that will facilitate the access of maternal healthcare into the Gandaki Province. This study also brings some understanding to the

helpful for specific involvements aimed at closing gaps between institutional delivery services and maternal and newborn results. Future research necessitates inquiries to assess the effectiveness of these strategies towards achieving equitable access health care across the boundaries of Nepal. The study implies that targeted policy reforms and multi-dimensional strategies addressing socio-economic disparities, educational access, and healthcare infrastructure are essential to improving institutional delivery rates and achieving equitable maternal and neonatal health outcomes in Gandaki Province, Nepal.

***Keywords*:** institutional delivery, socioeconomic determinants, maternal healthcare, educational attainment, wealth index

1. Introduction

Institutional delivery services are important in keeping the levels of maternal and infant mortality rates low. Despite having fairly good infrastructure in Nepal's drive for improved maternal health, much has been done to ensure there are no barriers to institutional delivery uptake. This study presents the barriers and facilitators from the demographic, socioeconomic, cultural, and infrastructural perspectives impacting institutional delivery levels: Institutional deliveries refer to the ways in which mothers give birth to babies under the supervision of trained health professionals in medical facilities. The introduction of institutional deliveries has therefore been envisaged to facilitate the elimination of complications and deaths related to childbirth. Nepal has made significant efforts in introducing programs and creating an environment favorable to institutional deliveries. Among these have been the safe motherhood programme and Aama Surakshya programme in which cash would be provided to seek services from health institutions (Ministry of Health and Population, 2021). However, the level of institutional birth varies along and between rural and remote areas such as Gandaki Province. Understanding those factors that explain this inter-population difference is said to be vital in programming interventions that would need to increase the flexibility of services towards increased utilizations.

The geographical diversity of Gandaki Province, with its mountainous terrains as well as remote settlements, renders access to healthcare facilities extremely difficult within this province. It shows that the long distances, unreliable transportation, and unevenly distributed health centers are the main barriers to institutional delivery. Devkota (2023) emphasized that infrastructure improvement is essential to face these challenges. Ghimire and Shrestha (2022), however, reported that access to healthcare facilities in times of emergencies is often delayed because of limited infrastructure. Socio-economic status (SES) is probably the most important determinant of institutional delivery. The majority of women in wealthier households reportedly easily access such services since they can pay for transportation, medical care, and other related costs associated with such an institutional delivery (Kafle et al., 2023). On the contrary, most women from poorer families may have had difficulty in accessing institutional care due to their financial constraints. Gautam and Adhikari (2023) emphasized that such economic barriers can be alleviated through the introduction of specific financial support programs like conditional cash transfers.

Institution births are preferred by many home births, which are often influenced by customs and tradition. According to Devkota (2023), people mostly rely on traditional birth attendants (TBAs) because of culture-oriented practices and distrust towards institutional care. Additionally, practices differ based on family and community influences. Home births are preferred to institutional ones, as dictated by cultural norms and the traditional belief system. These further practices extend to family and community influences. Thapa and Sharma (2023), encouraging institutional deliveries through culturally sensitive health education could include local leaders and TBAs in the engagement of women. Education is indeed a transformational factor for maternal health. Educated women are likely to know the importance of skilled birth attendance as well as the dangers posed during home deliveries. Bhandari and Dhakal (2023) expressed that higher levels of education among women increase the chances of these women to have institutional births; however, access to education in rural Gandaki Province is limited, which hinders women's ability to make sound decisions concerning health.

Caste and ethnicity are the strong determinants of accessibility to health in Nepal. Of the women who deliver in facilities, those who are Dalits, Janjati or other marginalized groups make less than half the use compared to Brahmins and Chhetris (Devkota, 2023). All these differences are brought by systematic discrimination and poverty as well as cultural practices. Gautam and Adhikari (2023) mention that the existing policies on health inclusiveness and health services fail to address such features. The choice of institutional delivery services by women is in great measure determined by their perception of quality healthcare. Many women avoid institutional delivery because of overcrowding, lengthy waiting times, and negligence of health professionals (Sharma et al., 2023). Improving infrastructure, staff training, and patient-centered care are necessary to ensure quality service results and improve utilization levels.

It has been reported that Nepal has made a lot of progress in increasing access to institutional delivery through maternal health policies like the Aama Programme, but their real efficacy is tampered with by unfettered implementations. Administrative inefficiencies and the lack of knowledge in the targeted population usually stand as barriers to those initiatives (Karki et al., 2022). As a result, it has become critical to fortify governance and accountability mechanisms for translating equitable delivery to services. While the body of literature on institutional deliveries in Nepal is long, only a handful of these studies touch on all relevant variables within the particular context of Gandaki Province. Moreover, many are insufficient, not referencing rapid changes in healthcare infrastructures and evolving policies. This is how the study tries to fill the gaps resulting from the above reasons by analyzing barriers and facilitators of institutional delivery in Gandaki Province to policymakers and stakeholders in the health sector.

The distance from health facilities has been the biggest barrier for institutional delivery in Gandaki Province. The uneven geography of the place and remote settlements in the area worsened delays in accessing care when in labor, especially during emergencies. Addressing these problems requires a lot of resources for roads, transportation facilities, and strategically located health facilities. This is, however, not without economic constraints. The major deterrent to close institutional delivery was found to be the direct cost structures such as hospital charges and transportation costs, along with indirect costs such as loss of wages.

Expanding mechanisms of financial support, such as subsidies and conditional cash transfers, has the potential for reducing such barriers and increasing service utilization among low-income families.

Cultural beliefs are such that they promote home births rather than institutional deliveries. Incorporating traditional birth attendants and community leaders as advocates for institutional care will help in bringing the communities to accept modern health practices without compromising their cultural beliefs. Health campaigns that are culturally sensitive but promote the benefits of institutional deliveries will also contribute to this. Education has a major bearing on health-seeking behavior among women. Promoting literacy and health education among women empower them in making choices they see fit regarding childbirth. Schools, community centers, and local health workers could act as channels of disseminating some of that information on the importance of qualified birth attendance. Poor quality of health care has discouraged many women from converting to institutional deliveries. Building trust among communities by delivering consistently and of high quality would go a long way toward improving the uptake.

It would be worth employing traditional birth attendants and the community leaders as advocates for institutional care to make it easier for people to adopt the ostensible modern health practices without having to compromise their values. Most importantly, culturally sensitive health campaigns such as institutionally endorsed birth benefits must also be correct. Education-as much in-induces health-seeking behavior among women. Increased female literacy inclusion and sponsorship of health education can empower women to take charge and make informed decisions regarding child delivery. Schools, community centers, and local health workers could be platforms for channeling important information on qualified attendance at birth. Poor quality of health care discourages many women from institution shifting. Investment in health facilities infrastructure, continuing training of personnel, and the patient-centered health care model are needed for this. Building a trustable community through consistently high-quality services is one of the major means to improving utilization.

Systemic discrimination issues can be addressed by incorporating supplementary policies and specialized outreach programs for marginalized communities. The multi-pronged approaches to resolving the barriers to institutional delivery in Gandaki Province include, among others: road networks be expanded, and healthcare facilities be established in remote areas; amount and processing of the financial assistance program should be improved and simplified to reduce economic barriers; working with community leaders and TBAs to promote institutional deliveries; health literacy campaigns directly targeting rural women; infrastructure investment, staff training, patient-centered care models. The strengthen governance and accountability mechanisms to ensure equitable resource distribution and effective implementation of maternal health programs.

While institutional delivery services serve as great milestones in improving maternal and neonatal health results of Gandaki Province, geographic inaccessibility, socio-economic inequities, cultural norms and perceptions of very poor-quality care have remained barriers to service utilization. Such challenges demand a multi-pronged strategy for infrastructure development, financial support, education, and policy reforms. This study informs to ensure that with such a holistic approach, institutional delivery services remain accessible to all, thus

improving maternal health results and preventing deaths. Future research efforts should instead consider testing the effectiveness of targeted involvements and innovatively finding ways to access more healthcare in Gandaki Province.

2. Materials and Methods

For this purpose, the specific research methodology applied the data from the Nepal Demographic Health Survey 2021 to analyze and visualize maternal health care utilization in Gandaki Province. The ninth survey indulges particularly all the relevant pieces of information for the female sex aged 15-49, who had ever live birthed during the last five years before survey. The study, therefore, seeks to include women in Gandaki Province who meet the preconditions for the survey. It aims to assess them based on how frequently they utilized maternal health services during their most recent delivery. Data analysis incorporated both bivariate and multivariate techniques. Bivariate analysis utilized Pearson's chi-squared tests to assess relationships between categorical variables; while bivariate analysis that of logistic regression to analyze the effect of age, education, and socio-economic status in the awareness of mothers to maternal health care. The used logistic model estimated the odds ratios alongside their confidence intervals and gives important insights on the significant predictors of health care-utilizing behavior. The study was concerned with delete it difficult data analysis on factors influencing maternal health services uptook among women living in the Gandaki Province and identifying specific issues that might be targeted for improving services in maternal healthcare. There was no consensus on standard for assessing model fit. Some prefer deviance (D), whose smaller values indicate a better fit; while others base their analysis on pseudo-R2 values, where higher values indicate a better model fit.

3. Results

3.1 Age

The data shows different age groups when being asked either mostly negative responses among the younger co-occurring groups, or they were more likely to respond affirmatively with older people. The analysis shows how age shaped attitudes and behavior, with really clear shifts in perspectives as people travelled through the life stages.

Table 1: *Distribution of Respondents by Age*

Age	No (%)	Yes (%)	Total (%)	Total (N)
<20	6.7	14.2	13.2	24
20-24	39.3	26.1	27.8	50
25-29	34.0	35.1	34.9	63
30-49	10.1	24.7	24.1	43
Total(N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 1 shows that under 20, 20- 24 years, 25 -29 years, and 30 -49 years were subjects aged below 20 years comprise 13.2 percent of them: 6.7 percent here claimed "No," while 14.2 percent mentioned "Yes" to a specific query. The total comprising the age group

20 - 24 years recorded 27.8 percent; for such age bracket, the proportions of "No" and "Yes" answers were 39.3 and 26.1 percent, respectively. For the 25 -29 years age group, the proportion of respondents was the highest at 34.9 percent. 34.09 percent of respondents in this group answered "No," while 35.09 percent answered "Yes." The last age group, 30-49, formed 24.1 percent here: 10.1 and 24.7 percent gave responses to a question as 'No' and 'Yes,' respectively.

3.2 Religion

Religion forms an entire system of beliefs, practices, and rituals, devoted to the ideology of the higher power or divine being. It shapes identities individual and collective - defines moral and ethical behaviors, and provides the configuration by which some deeper meaning and connection can be interpretatively understood in various communities.

Table 2: *Distribution of Respondents by Religion*

Religion	**No (%)**	**Yes (%)**	**Total (%)**	**Total (N)**
Hindu	93.1	96.2	95.3	206
Other religion	6.9	3.8	4.7	10
Total(N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 2 shows that most of them, 95.3 percent, said that they were Hindus. In fact, these groups of people responded to a particular question by saying "No" at 93.1 percent and "Yes" at 96.2 percent to another. Those belonging to other religions only totaled the balance of 4.7 percent, of which 6.9 percent gave a "No" answer and 3.8 percent gave "Yes."

3.3 Birth order

Birth order is the order in which children are born into a family. Most often studied for its effects on personality, behavior, and experiences in development. The first-born, middle-born, last-born and only children have different characters, which are conditioned by their birth position. Firstborns are said to be responsible and driven, middle ones to be peacemakers, last-born to be outgoing and social, and only children to be mature and hardworking.

Table 3: *Distribution of Respondents by Birth Order*

Birth order	**No (%)**	**Yes (%)**	**Total (%)**	**Total (N)**
First	37.3	53.0	51.0	92
Second	29.7	35.4	34.7	62
Third or higher	33.1	11.6	14.3	26
Total(N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 3 shows that within three categories: first-born, second-born, and third-or-higher born. For those first-born respondents, the percentage who answered "No" is 37.3 and "Yes" is 53.0, making a total of 51.0. Among second-born, 29.7 responded "No" and 35.4 answered "Yes," making it a total of 34.7. For this third-born or higher, the "No" is 33.1, which yields 11.6 "Yes" and shows only 14.3.

3.4 Caste/ethnicity

The Hindu society is hereditary because its social structure functions too often in categories of birth. Caste affects way of life, status, and interactions. Ethnicity, on the other hand, helps understand a common culture and what constitutes the defining characteristic of a particular group. Such individually and in a community are invoked in both of them.

Table 4: *Distribution of Respondents by Caste / Ethnicity*

Caste/ethnicity	No (%)	Yes (%)	Total (%)	Total (N)
Dalit	10.5	25.4	23.5	42
Muslim	0.0	0.8	0.7	1
Janjati	70.0	45.2	48.4	87
Other Terai	5.6	0.7	1.3	2
Brahmin/Chhetri	13.9	27.9	26.2	47
Total(N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 4 shows the proportion of respondents by different castes/ethnicities and their corresponding percentages and total numbers. Dalits totaled 10.5 percent for "No" responses, while "Yes" responses included 25.4 percent, making it an overall proportion of 23.5 percent response. Between the Muslim group and respondent "No" as well as with that of 0.8 answering "Yes", it formed 0.7 percent. Here, the Janjati group of respondents comprised the largest among all, who agree 70.0 percent "No" and 45.2 percent "Yes," making the cumulated proportion equal to 48.4 percent. Of the Other Terai thusly had 5.6 percent "No" and existence of 0.7 percent "Yes," representing 1.3 percent. Brahmin/Chhetri included 13.9 percent "No", 27.9 percent "Yes", forming 26.2 percent.

3.5 Education attainment

Educational attainment refers to the highest level of education completed by an individual; it may include formal education functions such as primary, secondary, or tertiary degrees. It is usually of great importance as it determines the careers and incomes to different social status and personal progress, thus determining the future of both the individual and society.

Table 5: *Distribution of Respondents by Education Attainment*

Education attainment	No (%)	Yes (%)	Total (%)	Total (N)
No Education	25.2	1.6	4.6	8

Basic Education	61.5	64.0	63.7	115
Higher Education	13.3	34.4	31.7	57
Total(N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 5 shows that received no form of education, 25.2 percent answered with "No," while 1.6 percent answered with "Yes," creating a total of 4.6 percent of respondents. Basic educational qualifications accounted for the maximum percentage of individual which responded "No" by 61.5 percent and "Yes" by 64.0 percent, contributing to a total of 63.7 percent. Among respondents with higher education qualifications, the "No" value was represented by 13.3 percent and that of "Yes" by 34.4 percent for a total of 31.7 percent.

3.6 Place of delivery

Standard birth places normally include hospitals, maternity centers, or homes. However, such may be due to any clinical conditions, personal preferences, cultural beliefs, accessibility, or unavailability of professional medical support. These places will have different amounts of advantages and disadvantages, depending on the delivery experience and result.

Table 7: *Distribution of Respondents by Place of Delivery*

Place of delivery	No (%)	Yes (%)	Total (%)	Total (N)
Urban	37.4	69.9	65.8	118
Rural	62.7	30.1	34.2	61
Total(N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 6 shows that making 65.8 percent answering, answered "No"-37.4 percent and "Yes"-69.9 percent. On the contrary, the rural respondents had 62.7 percent answering "No" and 30.1 percent answering "Yes," constituting 34.2 percent.

3.7 Wealth quantile

Many comparable populations are divided into equal segments according to the wealth. Hence, poverty was very well analyzed. A wealth quintile refers to the population in the lowest quintile having the least amount of wealth, while the fittest quintile has most wealth. This will be useful in measuring economic inequality, targeting social programs, and understanding the economic dynamics in society. Income quantiles serve as significant tools for measuring and analyzing wealth disparities in social science, economics, and policy making.

Table 7: *Distribution of Respondents by Wealth Quantile*

Wealth quantile	No (%)	Yes (%)	Total (%)	Total (N)
Poorest	9.4	12.8	16.4	29
Poorer	22.2	14.5	15.5	28

Middle	14.4	25.2	23.8	43
Richer	14.9	27.9	26.3	47
Richest	7.2	19.6	18.0	32
Total (N)	**22**	**158**		**180**
Total (%)	**100.0**	**100.0**	**100.0**	

Source: *Nepal Demographic and Health Survey 2021*

Table 7 shows the per cent and total number of respondents who fell under the different economic categories. Among the poorer respondents, 9.4 percent answered "No," and 12.8 percent answered "Yes," making a total of 16.4 percent. Among the poorer quantile, 22.2 percent answered "No," while 14.5 percent answered "Yes," making up 15.5 percent. Of the middle quantile, 14.4 percent said "No," while 25.2 percent replied "Yes," comprising 23.8 percent. Among richer respondents, 14.9 percent said "No," while 27.9 percent said "Yes," totaling 26.3 percent. Finally, the richest group contained 7.2 percent "No" and 19.6 percent "Yes," summing up to 18.0 percent with 32 respondents.

3.8 Institutional delivery in maternal health services

The 206 observations have made up the database for this study. Each observation will represent a unique data point collected across 58 primary sampling units (PSUs), which may involve geographic areas, groups of individuals, or entities, thus ensuring to a great extent effective representational accuracy and complexity management of the data. The study aims to give an idea of a population of about 165.856, which is an amount that could be scaled to thousands or millions with the intent of generalizing the results across a much larger population. The survey design considers 56 degrees of freedom to accommodate the variability associated with its sampling structure, such as stratification or clustering.

Table 8: *Distribution of Factors Associated Institutional Delivery*

Institution delivery	**Odds ratio**	**Std. err.**	**T**	**P>|t|**	**[95 Conf. Interval]**	
Age						
20-24	0.33432	0.17951	-2.04	0.046	0.1140316	0.9801636
25-29	0.482121	0.400635	-0.88	0.384	0.0912439	2.547469
30-49	0.903392	1.363204	-0.07	0.947	0.0439608	18.56466
Birth order						
Second	0.891571	0.599305	-0.17	0.865	0.2319282	3.427352
Third or Higher	0.230183	0.220668	-1.53	0.131	0.033732	1.570747
Religion						
Other religion	2.708834	1.615122	1.67	0.1	0.8204525	8.943578
Caste/ethnicity						
Brahmin/Chhetri	0.269745	0.171636	-2.06	0.044	0.0754023	0.9649877
Janjati	0.170093	0.125372	-2.4	0.02	0.0388538	0.7446314
Other Terai	0.034126	0.04665	-2.47	0.017	0.0022071	0.5276603
Education attainment						
Basic education	7.284305	5.869084	2.46	0.017	1.450166	36.58967
Higher education	12.92771	13.91215	2.38	0.021	1.497187	111.6265

Residence						
Rural	0.877819	0.619056	-0.18	0.854	0.2137298	3.605326
Wealth index						
Poorer	1.249744	0.821236	0.34	0.736	0.3350627	4.661394
Middle	4.691195	3.144433	2.31	0.025	1.225008	17.96504
Richer	6.0878	6.344055	1.73	0.089	0.7548195	49.09957
Richest	3.539246	4.329298	1.03	0.306	0.3052872	41.03108
Constant	3.785466	4.375403	1.15	0.254	0.3737148	38.34408

Table shows that, the model had an F-statistic of 4.24 with a degree of freedom denoting model error terms of 16 and 41, respectively. Besides having a really low p-value of 0.0001, the study findings indicate that the factors examined had significant effects on the dependent variables. Table 8 provides details about the odds ratios, standard errors, t-values, p-values, and confidence intervals concerning the factors of institutional delivery across diverse demographic and socio-economic groups. Among the various age categories, the cohort of persons between the ages of 20 and 24 was found to be the least likely to use an institutional facility for delivery, with an odds ratio of 0.33432 and a p-value indicating marginal significance. The 25-29 years' group demonstrated a weaker association that was insignificant statistically while the 30-49 years' group is virtually different (p=0.947). In birth order, there is no significant difference in the institutional delivery rates for second-born or third-born and higher-born children. However, for religion and mainly other religions, the argument suggested that they have higher odds of using institutional services, though not significant.

Much disparity among caste/ethnic groups can be seen. For instance, both Brahmin/Chhetri and Janajati show significantly less odds of institutional delivery, with Other Terai even lower, pointing toward a great deal of disparity. Educational qualifications also indicate a strong positive correlation with institutional delivery: both basic and higher educational levels increase likelihood considerably, higher education showing an odds ratio of 12.92771. Living in the countryside hardly has any significant influence on the likelihood of institutional delivery. But the wealth index indicates that as economic status improves from middle to richer categories, odds of opting for institutional delivery greatly increase, proving the influence or economic factors. Disparities in rates of institutional delivery in respect to the most important characteristic of age, caste, and also wealth, are significant. Such diversities can be referred to as reflections of broader socio-economic and cultural influences on health services utilization.

4. Discussion

The institutional delivery services are the key that can ensure the safety of childbirth and reduce the mortality rates of both mothers and newborns. Thus, a state such as Gandaki Province, with its numerous socio-economic, cultural and geographical diversities, gives a unique situation in analyzing the barriers and facilitators to the uptake of institutional delivery. This talk summarizes the findings from recent studies on the determinants, including accessibility issues, socio-economic, cultural, educational, and health care for

quality and policy implementation in maternal health results with a special focus on Gandaki Province.

The topographical diversity in Gandaki Province with its mountainous terrains and remote rural areas usually creates barriers in access to institutional delivery services. It has shown in previous studies that distance to health facilities discourages many pregnant women from seeking institutional care (Devkota, 2023). In addition, during emergencies, poor transport accessibility in many areas compounds the problem. For women in rural areas, reaching the nearest health facility may entail traveling such long distances that it would be quite tiresome during labor (Ghimire & Shrestha, 2022).

Overcoming these barriers requires improvement in road infrastructure and facilities for health in neglected areas in addition to mobile health clinics with telemedicine support, which could plug the gap for remote communities. Socio-economic status is still a major predictor of using institutional delivery services. Women from low-income households visit institutional facilities less frequently to avoid incurring further direct and indirect costs and opportunity costs of lost wages (Kafle et al., 2023). The Aama Surakshya Programme, in the form of cash incentives for institutional delivery, offers some hope, but ineffective implementation and unawareness spoil a lot of opportunities.

Policymakers, therefore, have to place social safety nets higher in the priority list as well as making access to financial safety nets equal among all populations. Directly applicable interventions for marginalized communities, such as cash subsidies and conditional cash transfers, could also increase institutional delivery services. Maternal health practices in Gandaki province are mostly dictated by culture and tradition. Recommended by traditional birth attendants (TBAs), childbirth is considered so natural that women should not call for the services of a doctor or a nurse during prenatal and postnatal periods (Devkota et al., 2023).

The sensitive health education campaigns should emphasize advantages while attaching equal significance to traditional values on institutional care. Education increases the odds that a woman can utilize institutional delivery services. Educated women have good chances of understanding the advantage of skilled birth attendance and recognizing the dangers of home deliveries (Bhandari & Dhakal, 2023). Nevertheless, a large section of the women population in rural Gandaki Province is scarcely endowed with formal education, which affects their health-seeking behavior.

Improving literacy among females and scaling-targeted programs related to health education could empower them to make choices regarding childbirth. Maternal health services information dissemination platform could be established through schools and community centers. Perceived quality of healthcare service is yet another critical factor among the determinants of institutional deliveries. Women have confirmed complaining of limited facilities, delays, and perceived indifference by health service providers in Gandaki Province (Sharma et al., 2023).

Such perceptions inhibit their proclivity toward visiting hospitals or clinics for care. To improve maternal health status, it is necessary to improve the quality of care in healthcare facilities. This could be done by investing a lot more in infrastructure, staff training, and patient-centered care models, plus regularly monitoring and evaluating health services to identify failures and make corrections. Practices have been put forward in Nepal to increase

the institutional deliveries but still, implementation poses challenges. For example-free maternal health services under the Aama Programme coupled with cash incentives have little impact due to poor administrative issues and little awareness on the part of targeted populations with issues like performance, knowledge and attitudes dealing with maternal health (Karki et al., 2022). In addition, policy implementation varies in the districts within the province of Gandaki, which impacts the equitable access of services. Strengthening governance and accountability mechanisms is key to the effective implementation of the policies governing maternal health.

Family dynamics and social support systems are important factors that determine whether a woman seeks care from an institution or not. In some cases, it is possible for men or elder family members to dictate the rite at this point and delay a visit for care or opt for home deliveries (Devkota, 2023). Support from husband and family tends to motivate a woman to use institutional means for delivery. Achieving gender equity and male involvement in maternal healthcare, increased result benefits. Community programs convening men and families can create promising conversations in the institution-based delivery of maternal health issues. The need for multiple intervention strategies comes out clearly from the findings, which also indicate the characteristics of barriers that cut across Gandaki Province for institutional delivery services. Economic Empowerments: More and easier to access the financial incentives for institutional memory have to be provided to reach marginalized communities. Involvement of local leaders and TBAs among the community in promoting institutional delivery will help address cultural barriers. The institutional delivery services are, in fact, according to general thinking, the best for maternal as well as neonatal health results in Gandaki Province. All those efforts to unravel the complex barriers discussed above will really bring value to policy and health care practice in improving the adoption of such services and making safe childbirth experience possible; better results for women and children. There are institutional delivery care services for mothers and children provided in Gandaki Province.

5. Conclusion

Institutional delivery services have always been a very pivotal aspect of maternal and neonatal healthcare services. They are instrumental in preventing complications and deaths during childbirth. In Gandaki Province of Nepal, however, the utilization of these services has been affected by several interrelated socio-economic, cultural, educational, and infrastructural factors. This study identifies these determinants and reveals barriers and facilitators that play a role in institutional delivery rates. The other major determinant emerging is socio-economic status. It is thus observed that women in wealthier households' access more institutional delivery services than poor women do. They are already intertwined with cultural practices and traditional beliefs. Most women and households still prefer home births attended by traditional birth attendants because most of the traditions become entrenched, more enforced by families and community influences. A gap can be bridged by using health education campaigns that are sensitive to the culture and traditional values but emphasize the benefits of institutional delivery.

Education's value as a transformative instrument to maternal health is evident in the fact that women are more likely to seek institutional delivery services with increasing levels of education. Knowledge in the importance of skilled attendance during birth is complemented by personal empowerment in having an informed decision that brings out investments in long-term female education with targeted health literacy interventions, especially in rural environments. Perceived quality of care in health care facilities, however, has an ostensible influence on the utilization of these services. Long-winded waiting lines seem to be ineffective in popularity, which results in women not opting for institutional deliveries. Any solution to this should have included improved investment in infrastructure, training for staff, and patient-centered approaches. Regular monitoring and evaluation should also be conducted to know the areas that require improvement and to elicit the community's trust. Thus, the development of institutional delivery services in Gandaki Province will depend on diverse types of factors: geographical, socio-economic, cultural, and systemic barriers. Constructing and developing facilities, providing education, and infusing cultural sensitization and healthcare quality with strong policy implementation would bring an effective result not only to improve maternal health but also to make good progress toward the health well-being of women and children in this area. Further research should provide more innovative approaches and evaluations of involvement impacts to develop a sustainable and resilient health system.

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