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SKILLED BIRTH ATTENDANCE AND SAFE MOTHERHOOD: THE NEPALESE PERSPECTIVE

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Abstract

Skilled Birth Attendance, has been placed as an important feature of maternal healthcare, which shall facilitate a safe delivery of both mother and newborn. Although improvement has been observed in maternal health services, especially in Nepal, particularly in regard to the rural poor or women of ethnic minority communities, the differences with regard to the utilization of SBA. This study, using 2021 Nepal Demographic and Health Survey (NDHS) data, assesses the socio-demographic, economic and geographic determinants of SBA use through logistic regression. The analysis is based on 2,939 observations from 467 primary sampling units across 14 strata. More likely to use SBA services is age group of 25-29 (OR= 1.615, p=0.046) and more pronounced in the age group of 30-49 (OR=2.588, p=0.001), compared with younger women. Higher birth order was found to be negatively related to SBA use, more marked at third or greater births (OR = 0.183; p = 0.000). Education is another very contributory factor-

an individual with higher education less likely evasive on using SBA (OR = 2.915, p = 0.000). Geographical disparities were revealed, with Madhesh having the lowest SBA use (OR = 0.535, p = 0.010) and Sudurpashchim as the highest (OR = 2.623, p =0.001). Wealthier women are more likely to use it, the richest among them being most likely to use it (OR=13.312, p=0.000). Thus, the targeted efforts such as awareness raising, rural health access improvement, financial assistance, and culturally appropriate services would be needed for reduction of inequality and improved access to SBA. Endorsing the health policies and capacity building in the health sector will go a long way toward achieving equitable and sustainable access to SBA coverage in Nepal.

Keywords: Skilled Birth Attendance (SBA), maternal health, Nepal, socioeconomic disparities, healthcare accessibility, logistic regression

1. Introduction

Skilled Birth Attendance (SBA), which is defined as a delivery assisted by a trained healthcare professional such as a doctor, midwife, or nurse effectively performing maternal services, minimizes neonatal and maternal losses into preventable causes. On the global scale, SBA is perceived as a crucial intervention to meet Sustainable Development Goal (SDG) 2030. This determined program will ensure that maternal mortality will not exceed 70 per 100,000 live births (MoHP, 2023). The maternal healthcare sector in Nepal has significantly improved with the initiation of the health care sector in different national development initiatives and projects (Shrestha et al., 2022). A primary method in terms of the environmental issues to be considered is the implementation of development projects, which will contribute to the reduction of environmental pollution and lower environmental risks. Underutilization of SBAs leads to high maternal mortality incidence, an issue of critical public health in Nepal.

Maternal health in Nepal has largely improved since maternal mortality was initiated by a high level in 1996. In 2016, the Maternal Mortality Ratio (MMR) amounted to only 239 per 100,000 live births [Nepal Demographic and Health Survey (NDHS) 2016]. Yet close to 40 percent of Nepalese women still give birth at home with little medical help (Karki et al., 2022). Many factors, including socio-cultural, economic, and demographic issues, pose factors that impede the utilization of SBAs in Nepal. The gap between rural and urban areas, ethnic groups, and economic classes in SBA utilization remains wide, despite government attempts-covering free maternal services, and incentive systems (Basnet et al., 2023). It is essential to understand these

determinants of SBA utilization for designing realistic interventions to improve maternal and neonatal health.

Nepal has focused on healthcare access, socioeconomic determinants, and maternal health policy areas (Sharma et al., 2021). However, multiple determinants such as maternal age, birth order, ethnicity, education, religion, and geographic disparities in SBA access to practicality remain unaddressed. The main aim of the present study is to determine the factors responsible for SBA utilization among women of reproductive age in Nepal.

Skilled birth attendance is a proven selection of reducing maternal and neonatal mortality by ensuring safe delivery practices and immediate medical care during cases of complications (WHO, 2021). The studies have revealed that women under skilled attendance had lower chances of postpartum hemorrhage, sepsis, and neonatal asphyxiation (Khanal et al., 2022). However, socio-economic and geographic barriers have continued disparities in accessing skilled birth attendants in lower-income countries such as Nepal. Various studies document that education, income, and participation in income-earning activities prevail as strong predictors for SBA uptake (Acharya et al., 2023). Educated women are aware of the health risks associated with home births, and hence their institutional delivery rates and skilled care quality are excessively higher (Thapa et al., 2022). The wealth gap of a person also counts; those from wealthy houses would have higher SBA usage rates compared to low-income levels (Bhandari et al., 2021).

Several studies indicate that maternal age and birth order play a substantial role in influencing SBA utilization. Young age, especially for adolescents, poses more barriers due to severe stigmatization, no financial independence, and poor awareness (Regmi et al., 2022). Birth order also has implications for the use of SBA since women with many previous deliveries might opt for home deliveries on the basis of the experiences they have had (Ghimire & Pant, 2023). Various cultural norms of the society health-seeking behavior in Nepal (Karki et al., 2021). This diverse population, community-based interventions, as well as the need for culture-sensitive education on health issues, are necessary to influence SBA adoption. Many rural areas of Nepal are challenged with dramatic barriers to accessing healthcare, thanks primarily to poor infrastructure, transportation difficulties, and scant or inexistent health facilities (Dhakal et al., 2022). Women situated in hilly and difficult to reach areas are often deprived of timely access to skilled care. This susceptibility increases their chances of maternal and neonatal morbidity. The establishment of the Nepalese Safe Motherhood Program and the Aama Suraksha Program has intensified efforts to improve SBA access for women (MoHP, 2023). Despite its benefits, by policy-worker implementation, allocation of inadequately allocated resources, and pervasive community indifference. This is necessary still to build a strengthened healthcare

system to financially support and develop trained manpower of the skilled birth attendants in the pursuit of SBA universalization (Shrestha et al., 2022).

2. Data and methods

The primary criterion for inclusion in the study is the dataset's national representation. NDHS 2021 as Nepal's ninth countrywide health survey and fifth large-scale agricultural population and property survey. In the wider context of the global DHS project, it presents alleviating insights into the national authority, especially on maternal and child health areas of rural Nepal (Ministry of Health and Population [MOHP], 2021).
This study followed an observational evaluation method with a cross-sectional design. The data were collected from the 2021 NDHS, 283 primary sampling units (PSUs) were created in NDHS 2021. Households were then selected systematically from each PSU. The study population involves a woman aged between 15 to 49 years who had at least one live birth in the five years before the survey; as per the eligibility criteria, the study subjects were those who met services of maternal health services during the latest delivery (MOHP, 2021). The concentration of the study was on multivariate analysis. The categories were combined into different variables to measure the use of/by non-use of maternal health services. So, a woman was coded as 1 for antenatal care, if registered; if not, 0. A likewise code was attached for delivery and postnatal case. Logistic regression analyses evaluated the associations between the dichotomous dependent variable and one or more independent variables. Logistic regression is expressed as:

$$\text{logit } P(x) = \alpha + \Sigma\beta ixi$$

exp(βi) representing the odds ratio of a person with characteristic i or without, is the individual parameter. The β is the log(OR) some denote as parameter, and as a variable added to complete the evaluation, α is an additional constant. Not only p-values but also confidence intervals (CIs) provided most comprehensive information, eliminating a variety of hypotheses. Independent variables included age, birth or religious affiliations, ethnic groups, level of education, type of residence, and wealth index categories. The employed the chi-square statistics to determine whether the variables were independent or correlated. Non-stratified R2 analytical summaries allowed a comparison among many categorical independent variables. Simple logistic regression proceeded to assess the strength of associations between the independent variables and the outcome in an analysis of additive models:

$$\ln(pi/(1\text{-}pi)) = \mu + \alpha i$$

where pi denotes the probability of outcome occurrence, μ is a constant, and αi represents the effect of exposure. The adjusted probabilities of discontinuation were calculated using:

$$Pijk = 1/ (1+\exp (-(\mu+\alpha i+\beta j+...\gamma k)))$$

The Deviance (D), with lower values indicating better fit, while there are also those who employ pseudo-R2 values (which means the larger the value, the better the fit). For example, Troycheem (2006) discussed these values.

3. Results

Skilled birth attendance delivery (SBA) is taken as a fundamental of maternal health care, risked in providing safe childbirth and weight with the objective of reducing maternal recognized fetal loss. Skilled birth attendances are trained health care Providers-Midwives, Nurses, and Doctors-and offer medical preventative care during labor and delivery. The well-documented benefits of SBAs, its utilization among Nepali women fundamentally remains uneasily varied due to various socio-demographic and cultural factors. One of the major determinants of SBA is the mother's age where an elderly mother having experienced multiple pregnancies may opt for home delivery due to ease of childbirth as they would have underestimated the obstetric risk associated with complication. Targeted interventions targeted at health education and enhanced access to services may further promote SBA among all age groups.

The birth order is another major factor for SBA utilization. Women who are mothers for the first time use skilled care because of fear of childbirth and because there is more medical advice to take up hospital delivery. On the contrary, multiparous women may feel less trusted in SBA. They often depend on traditional birthing practices and home confinement. Religious undertakings and cultural beliefs have a substantial impact on the use of SBAs. Region are the two most significant determinants of SBA access. The wealthier urban groups show significantly high rates of SBA use with better health facilities, high literacy levels, and greater monetary resources. Most women and families in rural or impoverished areas challenge the problems of poor transportation, poor health facilities, scant savings, and poverty. Improvement in health facilities, transportation support, and provision of subsidized maternal health services will bridge this gap.

An educated woman is more likely to know the benefits of SBA and can fight for good care during childbirth. Therefore, community-based education, and therefore literacy campaigns, can equip women with knowledge that is more intuitive toward guiding a healthier. The existence of complex barriers to SBA access raises a call for focusing on targeted healthcare policies, community work up, and health investments in Nepal. Providing equal access to SBA may not only lower maternal and child mortality but will further promote broader health and development objectives, thus making the future safer and healthier for all women and babies.

Table 1: Distribution of demographic and socio-economic variable

Variable	No		Yes		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
<20	50	8.6	189	8.3	239	8.4
20-24	207	35.7	851	37.6	1,059	37.2
25-29	190	32.8	695	30.7	885	31.1
30-49	133	22.9	530	23.4	662	23.3
Birth order						
First	115	19.8	1,034	45.7	1,149	40.4
Second	191	32.9	803	35.5	994	34.9
Third or higher	274	47.2	428	18.9	702	24.7
Level of education						
No Education	223	38.4	333	14.7	556	19.5
Basic Education	336	57.9	1,425	62.9	1,761	61.9
Higher Education	21	3.6	507	22.4	528	18.6
Religion						
Hindu	466	80.3	1,911	84.4	2,377	83.6
Other religion	114	19.7	354	15.6	468	16.4
Caste/ethnicity						
Brahmin/Chhetri	95	16.4	645	28.5	740	26.0
Dalit	137	23.6	366	16.2	503	17.7
Janjati	162	27.9	737	32.5	899	31.6
Other Terai	131	22.6	388	17.1	519	18.2
Muslim	55	9.5	127	5.6	182	6.4
Others	0	0.0	2	0.1	2	0.1
Province						
Koshi	100	17.2	404	17.8	504	17.7
Madhesh	237	40.9	497	21.9	734	25.8
Bagmati	64	11.0	404	17.8	468	16.4
Gandaki	22	3.8	158	7.0	180	6.3
Lumbini	67	11.6	414	18.3	481	16.9
Karnali	61	10.5	155	6.8	216	7.6
Sudurpashchim	29	5.0	233	10.3	262	9.2
Place of residence						
Urban	349	60.2	1,517	67.0	1,866	65.6
Rural	231	39.8	748	33.0	979	34.4
Wealth quintile						
Poorest	234	40.3	416	18.4	651	22.9
Poorer	160	27.6	445	19.6	604	21.2
Middle	109	18.8	480	21.2	589	20.7
Richer	65	11.2	485	21.4	551	19.4
Richest	12	2.1	439	19.4	450	15.8
Total	580	100.0	2,265	100.0	2,845	100.0

Source: Nepal Demographic and Health Survey, 2022

Table 1 shows that distribution of demographic and socioeconomic variables vis-a-vis skilled birth attendance (SBA) among reproductive-aged women. The table takes note of key variables like age, birth order, education, religion, caste/ethnicity, province, residence, and wealth quintile to verify if there was an SBA delivery ("Yes") or not ("No").

Age: Women are categorized in four age groups: less than 20 years, 20-24 years, 25-29 years, and 30-49 years. Highest percentage of SBA users falls in the age group 20-24 years (37.6%), followed by the age group 25-29 years (30.7%), and lastly the age group 30-49 years, making up 23.4 percent of SBA users. Women under 20 years have the least utilization in SBA (8.3%), indicating adolescent hindrances in accessing skilled maternal care.

Birth order: Birth order significantly affects SBA utilization. The women accounted for 45.7 percent of all the SBA users. SBA then declines among SBA users as the birth order increases, with the third or higher rank only contributing to 18.9 percent of the SBA users. This finding may suggest that parous women tend to depend on past experiences or traditional practices rather than SBA services.

Education: The education level was clearly identified as a major determinant in the utilization of skilled birth attending. When that did not use SBA, 38.4 percent had no formal education, as only 14.7 percent of SBA users were illiterate. In comparison, 62.9 percent of SBA users only had basic education, with a mere 22.4 percent educated further. It can be seen that significantly higher proportions of SBA users have considerable higher education (22.4%), thus indicating the role of education in averting maternal health and skilled delivery.

Religion: The majority of respondents followed the Hindu faith (83.6%), with the extent of Hinduism being 84.4 percent for the SBA users and 80.3 percent for those who did not use the service. Other religious group members (Buddhist, Muslims, and Christians) accounted for 16.4 percent of the total respondents, with SBA or no use. This indicated religion might not be a major factor in SBA utilization.

Caste/Ethnicity: The SBA utilization in different castes/ethnic groups merits fuller disclosure: Varna caste/Brahmin/Chhetri women have the highest rates of SBA utilization (28.5%). Janajati, high numbers of SBA users were accounting for SBA usage by 32.5 percent of respondents, thus pointing toward higher acceptance of care. Dalit women, as a group facing social and economic disadvantages, had a poor SBA utilization rate of 16.2 percent. The Muslim women, inclined toward the lowest column, had an SBA utilization rate of 5.6 percent, signifying a potentially strong barrier set by religion. The insights gained from this study underline the importance of social grading and SBA finding relevant schemes and cultural healthcare programs for maternal health.

Despite the significantly varying use of SBA, specifically at the provincial level in Nepal, the Madhesh province presents the lowest utilization rate (21.9%), with almost half (40.9%) of its women not utilizing SBA. The lowest utilization rate may suggest that cultural, economic, or accessibility barriers are holding back potential SBA users in Madhesh. In contrast, the Bagmati and Lumbini provinces record relatively high utilization rates of 17.8 percent and 18.3 percent, respectively. Sudurpashchim province partook of considerable public-health initiatives to increase access despite a meager 10.3 percent utilization rate. These refined differences amongst provinces shine significance on the need for region-specific maternal health policies, especially for underperforming areas like those found in Madhesh.

Place of residence: Around 67.0 percent of urban women opt for SBA, while the rural counterparts do so in a mere 33.0 percent of all births, suggesting wide disparities in the provision and distribution of health services available in urban areas and their possible use by skilled birth attendants. This contrast takes the form of 39.8 percent of the non-users in the rural regions, thereby implying geographical barriers to remain a major obstacle for maternal health care access.

Wealth quintile: The wealthiest women (Richest quintile) amounted to some 19.4 percent in reported SBA services. As a further touch, the poorer and poorest women significantly utilized SBA 18.4 percent and 18.4 percent, respectively. In the case of non-users, 40.3 percent came from the poorest wealth quintile; this implies financial constraints largely control the SBA access.

The SBA improved birth logistics with respect to age group, birth order, religion, caste/ethnicity, educational attainment, province, place of birth, and wealth quintile. The statistics for a df of 453, the following stand with a significant F-value of 8.85 ($p = 0.0$). The standard error for the odds ratios, the estimates and the S.E. The different area gives data of how well the model fits. Associates are critical numeric results obtained in the separate regression analysis, meaning the objective in the abstract discharge into a determination of the strength.

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

Variable	Odds ratio	Std. Err.	T	P>|t|	[95% Conf. interval]		Sig
Age group							
15-19 (Ref.)							
20-24	1.368475	.2935449	1.46	0.144	.8977604	2.08599	
25-29	1.615602	.3880632	2.00	0.046	1.007698	2.59023	**
30-49	2.588575	.7478547	3.29	0.001	1.467184	4.56706	***
Birth order							
Frist (Ref.)							
Second	.412748	.0696328	-5.25	0.000	.296277	.5750055	***
Third/hig.	.183577	.033072	-9.41	0.000	.128843	.261562	***
Religion							
Hindu(Ref.)							
Other religion	1.064643	.2377064	0.28	0.779	.6865057	1.65106	
Caste							
Dalit (Ref.)							
Muslim	.7713826	.2602238	-0.77	0.442	.3975119	1.49688	
Janj ati	.7108835	.1531748	-1.58	0.114	.4654765	1.08567	
Other Terai	1.012599	.2078396	0.06	0.951	.6764832	1.51571	
Brahmin/Chhetri	.9731751	.1929112	-0.14	0.891	.6591836	1.43673	
Educational attendance							
No education (Ref.)							
Basic Education	1.320983	.1818361	2.02	0.044	1.007892	1.73133	**
Higher Education	2.915125	.8237829	3.79	0.000	1.672909	5.07974	***
Province							
Koshi (Ref.)							
Madhesh	.535213	.129857	-2.58	0.010	.3322377	.862195	**
Bagmati	.999308	.276616	-0.00	0.998	.5800277	1.72167	
Gandaki	1.33747	.410321	0.95	0.344	.7318936	2.44412	
Lumbini	1.36349	.409953	1.03	0.303	.7551687	2.46186	
Karnali	1.02682	.261030	0.10	0.917	.6230619	1.69223	
Sudurpashchim	2.62351	.749067	3.38	0.001	1.496913	4.59801	***
Residence							
Urban (Ref.)							
Rural	1.04135	.150808	0.28	0.780	.7834256	1.38420	
Wealth index							
Poor (Ref.)							
Poorer	1.91877	.305759	4.09	0.000	1.402877	2.62438	***
Middle	2.89860	.551497	5.59	0.000	1.994354	4.21283	***
Richer	4.06180	1.02176	5.57	0.000	2.477551	6.65909	***
Richest	13.3125	5.66918	6.08	0.000	5.765052	30.7410	***
_cons	2.25002	.6611306	2.76	0.006	1.26301	4.008373	***

**** p<.01, ** p<.05, * p<.1*

Logistic regression results also provide an indication of the factors that influence SBA (Skilled Birth Attendant) assistance. Odds ratios indicate the likelihood of SBA assistance compared to the reference category for each independent variable. Age-wise, women aged 30-49 a significantly higher chance (OR=2.59, p=0.001) of getting SBA support as compared to the 15-19 ages. The age groups of women, although small, still show a significant increase. Birth order has a negative relationship, where the second and higher birth orders, as compared to the first, show significantly lower odds of SBA assistance. It is important to note that there are no significant differences in religion and caste, as the confidence interval generally includes education becomes an important factor, with women having higher education being nearly

three times more likely to avail SBA assistance (OR=2.92, p=0.000). Provincial disparities are present, with the Madheshi showing significantly lower odds (OR=0.54, p=0.010), while Sudurpashchim has a drastic increase in odds (OR=2.62, p=0.001). The wealth index holds a vital point here, with wealth increasing likely resulting in significantly higher odds of SBA assistance, peaking within the richest category (OR=13.31, p=0.000). The constant term also establishes significance, which gives the base probability of SBA assistance even when the predictors are at their reference levels.

4. Discussion

Trend of older ages filling higher odds of utilizing SBA concedes the significance of age in predicting SBA. The 15-19 grouping, women aged 25-29 (OR = 1.615; p = 0.046) and 30-49 (OR = 2.588; p = 0.001) sustained substantially higher odds of employing SBA. This was supported by previous studies focusing on increased awareness on how older women in developed countries tend to access SBA more frequently when compared to the younger age group stemming from prior birth experiences and financial independent income (Adhikari et al., 2022; Shrestha et al., 2021). This vulnerability combined generally with stigma, poor financial situations by an older generation exhibiting lower SBA utilization among younger adolescent mothers (Basnet et al., 2023). It is hypothesized that policy interventions like efficient health facilities for adolescent mothers, public health campaigns in local communities, and funding for the health of adolescents could boost the frequency of SBA utilization among this section of the population (Karkee et al., 2022).

The birth order was associated negatively with SBA utilization indicating that women who were multi-prevailed tend not to attend SBA. Women with the birth order of two are (OR = 0.412, p = 0.000) and at high parity (OR = 0.183, p = 0.000) significantly less likely to utilize SBA over women with the lowest parity. This difference improvements strength from the fact that women with higher parity do not prefer skilled attendants, rather they rely on results from previous childbirth and traditional practices (Bhandari et al., 2021; Regmi et al., 2022). This practices increase the risk of childbirth difficulties which could have been averted with the presence of SBA. These women would benefit from health education programs aimed at providing accurate information about the importance of skilled birth care, irrespective of past obstetric history.

The influence of religion on SBA service utilization in Nepal is thought to be negligible, given that the odds ratio for "other religion" (OR=1.064, p=0.779) is not very convincing from these results. This religion from being an existing foremost disablement of maternal healthcare acceptance in Nepal, in comparison with socioeconomic and geographical barriers (Ghimire &

Pant, 2023). Nevertheless, certain religious groups might still prefer traditional birth attendants and therefore may require health interventions that are socially sensitive to their customs (Thapa et al., 2022).

The logistic regression results are unable to establish a significant relationship between caste/ethnicity and SBA utilization because the OR of all the individual caste group models (Muslim, Janjati, Other Terai, Brahmin/Chhetri) is closer to 1, plus the p-values are also 0.05. It could just indicate that there has been consistent caste-based discrimination when healthcare is accessed (Dhakal et al. 2022). This policy-making will succeed in terms of abolishing this very caste-based healthcare inequality, by a large government policy. Nonetheless, there is this final implication in qualitative studies that Caste/Dalit and indigenous women face cultural as well as systemic constructs in their pursuit of SBA care (Karki et al., 2021).

Education, consequent upon one's education attainment, ensures a significant utilization of SBA, as suggested by the positive odds ratios of influential magnitude for basic education (OR=1.320, p=0.044), higher education (OR=2.915, p=0.000). When women attain higher educational levels, increased awareness of maternal health risks and health services leads them toward making informed decisions concerning their maternal health (Sharma et al., 2021). This is reliable with past research, claiming maternal education as helpful in facilitating health-seeking behavior and the subsequent use of skilled birth attendants (Khanal et al., 2022). Female education needs priority in the policy agenda; reproductive health education at schools and awareness campaigns.

There exist considerable geographic dissimilarities in SBA utilization across Nepal. Compared to Koshi province (reference category), Madhesh province has diminished odds of SBA utilization (OR = 0.535, p = 0.010), whereas Sudurpashchim province has elevated odds (OR = 2.623, p = 0.001). The decline in SBA utilization in Madhesh province corresponds with conclusions from other studies that socio-cultural practices, gender norms, and female literacy rates act as limiting factors in accessing maternal healthcare (Basnet et al., 2023). On the other hand, the increased SBA utilization in Sudurpashchim province may reflect better healthcare outreach and maternal health programs and deprived rural regions of western Nepal. Hence, bridging disparities among regions would require heavy investment in health infrastructure, enhanced road connectivity, targeted programs to ensure maternal healthcare for regions with low health service coverage.

Whether one lives in an urban or rural region does not significantly impact SBA utilization (OR = 1.041, p = 0.780). While urban areas do typically have better healthcare access, the results also converge with findings that recent healthcare extensions into rural Nepal may have

been instrumental in narrowing the urban-rural gap in SBA utilization (MoHP, 2023). However, the rural population still come across transport difficulties, financial limitations, and cultural norms that deadlock their access to SBAs. Consequently, in an ideal scenario, approaching strategies would accentuate the concept of mobile health clinics, emergency transportation, and incentive programs for maternal health among the rural population.

Moreover, economic status is positively associated with SBA utilization giving strong indication. Women coming from wealthier quintiles were always more inclined to use an SBA vis-à-vis that of the poorer being the reference category: Poor (OR = 1.918, p = 0.000), Middle (OR = 2.898, p = 0.000), Rich (OR = 4.061, p = 0.000), Fund price (OR = 13.312, p = 0.000). The finding corresponds to numerous similar global and national studies that exhibit the fact economic status highly amplifies the mothers' possibilities to access maternal care (Acharya et al., 2023). As such, maternal health insurance, cost incentive to SBA, and free childbirth care to the poorest would help close this gap.

5. Conclusion

This reveals that demographic and socio-economic determinants of the utilization of skilled birth attendants among women of reproductive age in Nepal. Therefore, age, birth order, educational status, region, and wealth quintile influence SBA utilization. Within an age range of 25 -29 years or 30-49 years, the odds of SBA use are significantly higher than for an age range under 20 years, while higher birth order (second/third and above) leads to reduced utilization of SBA. Obviously, education is pivotal in this respect, for the odds of SBA service uptake are significantly greater for women having more years of education. At different times, the variance between regions shows lower SBA utilization in Madhesh province and higher utilization in Sudurpashchim province. The wealth index maintains the relationship, with wealthier women more likely to utilize services and economically disadvantaged more likely to experience significant.

An improvement has been made in the maternal healthcare scenario of Nepal, but disparities, mainly socio-economic, cultural, and geographic, still restrict the universal access to SBAs. Accordingly, it seems that structured focused involvements are needed to build bridges through maternal health promotion programs that will inform the poor about the advantages of SBAs while educating the rural public health framework and improving the mobility of health services. Financial reasons to low-skilled women and other such subsidies aimed at SBA utilization enhancement constitute further interventions. There has to be another effort to build culturally sensitive maternal health services targeting socially marginalized ethnic groups and religious sects. Policymaking and professional development will make for a long-term

sustainable work on these areas for the improvement of SBA coverage. Policy-driven involvements will allow SBA access, which will significantly lower the rates of maternal and neonatal deaths and improve Maternal Health often neglects these areas. Nevertheless, these results stress the need for multi-sector interventions in order to make childbirth safe for all women regardless of socio-economic boundaries.

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