

Determinants of Postnatal Care Utilization Among Young Filipino Mothers

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Abstract—Postnatal care is a critical component of maternal and child healthcare, providing support to mothers and infants after childbirth. In the Philippines, nearly one-third of mothers are aged 15 to 24 years old, highlighting the importance of examining the factors that influence young mothers' utilization of postnatal care services. This group often faces unique challenges—including limited financial resources, lack of support, and insufficient information—that may hinder access to essential care. Using data from the 2021 Young Adult Fertility and Sexuality Survey, this study employed a binary logistic regression model to identify determinants of postnatal care utilization among young Filipino mothers. Findings revealed that region of residence significantly affects postnatal care use, with lower odds observed in CALABARZON and Davao, and higher odds in Eastern Visayas. Moreover, higher paternal education, greater household wealth, prior antenatal care utilization, delivery in medical facilities, and the occurrence of birth complications were all positively associated with postnatal care use. Strong family support also emerged as a key factor, highlighting the crucial role of social encouragement in healthcare-seeking behavior. These results emphasize the need to strengthen healthcare infrastructure, intensify awareness campaigns, and actively involve families in maternal healthcare to improve postnatal care utilization and maternal health outcomes among young mothers in the Philippines.

Keywords—Binary logistic regression, maternal health, postnatal care, young mothers.

I. INTRODUCTION

According to the most recent report of the World Health Organization (2024), the global maternal mortality ratio (MMR) has been decreasing; however, progress has become stagnant in the recent years. A substantial proportion of maternal deaths occur during the postpartum period, highlighting the critical importance of postnatal care (PNC). PNC provides support to mothers and their newborn after childbirth. It helps detect and prevent complications such as postpartum hemorrhage, eclampsia, and infections, while promoting their recovery (Wudineh et al., 2018; Magley and Hinson, 2024). Despite the high risk of adverse outcomes during this period, postnatal care remains a neglected phase of maternal health. Hence, strengthening PNC utilization is vital in reducing maternal and neonatal mortality and addressing the stagnation in the global MMR.

Youth, defined as individuals aged 15 to 24 years old, experience high levels of socioeconomic disadvantages, including high unemployment rates and low educational attainment (United Nations, 2015). Included in this demographic are young mothers who face unique challenges in

navigating early motherhood due to limited knowledge, experience, and resources (Mangeli et al., 2017; Apolot et al., 2020). Many young mothers are unprepared for the demands of childcare may be unaware of essential maternal health services such as PNC. They are also at greater risk of experiencing severe complications and poor health outcomes due to physical immaturity, early childbirth, and limited access to healthcare (Olubodun et al., 2023). Early motherhood is also often accompanied by negative stereotypes and social stigma, which may discourage young mothers from seeking maternal health services, including PNC (Apolot et al., 2020).

Several local and global studies have identified key determinants of PNC utilization. In the Philippines, PNC use has been associated with educational level, exposure to media, and prior use of maternal health services (Zhao et al., 2023) while demographic factors like age, family size, and residence were also significant (Yamashita et al., 2014). Globally, various demographic factors, socio-economic, pregnancy-related, and healthcare access have all been linked to PNC use (Yimer et al., 2019; Ndugga et al., 2020; Nuryana et al., 2022; Aryal, 2024). While these studies provide valuable insights into postnatal care utilization, most focus broadly on all women of reproductive age or older mothers, leaving a critical gap in understanding PNC utilization among adolescents and young adults. Moreover, there are limited studies in the Philippine context that focus on young mothers.

In the Philippines, 33.8% of registered live births were reported to be from mothers aged 15 to 24 years old, highlighting that a significant portion of mothers belong to this vulnerable group (Philippine Statistics Authority, 2024). Despite their heightened vulnerability and the distinct challenges they face due to age and inexperience, young mothers remain underrepresented in research.

This study aims to identify key determinants of postnatal care utilization among young Filipino mothers. By focusing specifically on this age group, the study seeks to uncover barriers that hinder the utilization of maternal health services, particularly postnatal care, and provide evidence that can guide policies and programs responsive to their needs. The study contributes to ongoing efforts to reduce maternal and neonatal morbidity and mortality, consistent with the United Nations Sustainable Development Goal 3.1, which aims to reduce the global MMR to less than 70 per 100,000 live births by 2030.

II. MATERIALS AND METHODS

A. Data Source

This study used the data from the 2021 Young Adult Fertility and Sexuality Survey or YAFS 5, conducted by the University of the Philippines Population Institute (UPPI) in collaboration with the Demographic Research and Development Foundation (DRDF). YAFS 5 is a nationally representative survey that focus on Filipino youth aged 15 to 24 years old that provides comprehensive data on the behaviors, attitudes, and experiences of young people across the country. It employed a two-stage stratified sampling design covering all 17 regions of the country to ensure national representativeness. For this study, only female respondents who has experienced a live birth were included, and records with missing or invalid values in key variables were excluded.

B. Data Analysis

Data was processed and analyzed using RStudio, with all statistical tests performed at a 5% level of significance. PNC utilization was characterized using responses to the question, “How many days or weeks after the delivery did the first check-up take place?” from the fertility and contraception section of the individual questionnaire. Responses were recorded in days or weeks and recoded into a binary outcome: “Had PNC” for those who received a postnatal check-up, and “No PNC” for those who did not. Based on the literature, 31 household, socio-economic, demographic, pregnancy, and support factors were considered as potential determinants of PNC utilization.

Descriptive statistics were generated to characterize the respondents and the distribution of potential predictors. Initial tests of independence between PNC utilization and predictor variables were assessed using the Rao-Scott chi-square test to account for the survey’s complex sampling design. Strengths of associations were quantified using Cramer’s V for qualitative predictors and point-biserial for quantitative predictors. This step served as preliminary screening to identify possible explanatory variables for the model.

A binary logistic regression model was fitted to estimate the likelihood of receiving PNC versus not receiving PNC, computed as (Agresti, 2007):

$$\pi(Y = 1) = \frac{e^{\alpha + \beta^T X}}{1 + e^{\beta^T X}} \quad (1)$$

where Y can either be “0” for no PNC and “1” for received PNC, α is the intercept for PNC utilization, β^T is the vector of

coefficients, and X is the vector of explanatory variables. Backward elimination was performed to ensure that the most relevant predictors were retained in the model. Multicollinearity among predictors was checked using variance of inflation (VIF) and tolerance values. The odds ratio (OR) of the coefficients was interpreted to quantify the influence of each factor on the using PNC:

$$Odds(Y = 1) = \frac{\pi(Y = 1)}{1 - \pi(Y = 1)} = e^{\alpha + \beta^T X} \quad (2)$$

Model performance was evaluated using diagnostics such as the Likelihood Ratio test, Hosmer-Lemeshow test, McFadden’s R-squared, classification accuracy, and the Receiver Operating Characteristic (ROC) curve. Ten-fold cross-validation was performed to evaluate the generalizability of the fitted model, and the average accuracy and Cohen’s Kappa were obtained to assess its overall predictive performance.

III. RESULTS

A. Profile of Young Mothers

Key background characteristics of young mothers are summarized in Table I. Most respondents were in their twenties (84%) with a smaller proportion being teenagers (16%). A huge portion of young mothers were from rural areas (70%), with majority belonging to the lower household wealth groups. Most belong to the lowest wealth group (32%), followed by the second group (21%). Fewer young mothers are in the middle (14%), fourth (17%), and highest (15%) group.

TABLE I. Background Characteristics of Young Filipino Mothers

Characteristic	Category	Weighted Percent (%)
Age Group	15-19	15.73
	20-24	84.27
Residence	Urban	29.74
	Rural	70.25
Wealth Index	Lowest	31.92
	Second	20.92
	Middle	14.45
	Fourth	17.46
	Highest	15.25

B. Postnatal Care Utilization of Young Mothers

Overall, seven out of 10 young mothers (70%) were reported to have received postnatal care services. Among the potential predictors, 14 variables were found to be associated with PNC, including two household characteristics, four socio-economic characteristics, six pregnancy characteristics, and two support characteristics (Table II).

TABLE II. Association of PNC Utilization and Potential Predictors

Characteristics	Variable	Rao-Scott Test Statistic	Coefficient	p-value
Household	Region ^a	3.7302	0.3019	<0.0001*
	Urbanity ^a	3.2065	0.0871	0.0737
	Number of Household Members ^b	0.8367	-0.0032	0.6185
	Household Head Sex ^a	0.2810	0.0260	0.5962
	Household Head Age ^b	1.6775	0.0614	0.0021*
	Household Head Marital Status ^a	0.4899	0.0811	0.7428
Socio-economic	Highest Grade Completed ^a	3.1889	0.1915	0.0245*
	Father’s Highest Grade Completed ^a	6.7007	0.1538	0.0013*
	Mother’s Highest Grade Completed ^a	6.7255	0.1207	0.0006*
	Father’s Employment ^a	0.9133	0.0802	0.5670
	Mother’s Employment ^a	2.7954	0.1504	0.0273*
	Wealth Index ^a	1.0349	0.0513	0.3844
	Owens TV ^a	1.1292	0.0188	0.2882

Demographic	Owens Radio ^a	0.8437	0.0367	0.3586
	Age Group ^a	0.0044	0.9469	0.0031
	Employment Status ^a	1.4093	0.2238	0.0754
	Ethnicity ^a	2.0032	0.0941	0.1347
	Religion ^a	0.4717	0.8151	0.0985
Pregnancy	Marital Status ^a	0.4540	0.6952	0.0309
	Age at First Pregnancy ^b	2.2293	0.0363	0.0163*
	Pregnancy Intent ^a	2.0043	0.1054	0.1352
	Pregnancy Type ^a	3.4202	0.0766	0.0647
	Antenatal Care Utilization ^a	13.294	0.1241	0.0003*
	Month Received Antenatal Care ^b	1.4243	0.1624	0.1762
	Number of Antenatal Care Visits ^b	3.0759	0.0948	0.0012*
	Presence of Doctor ^a	7.4684	0.0697	0.0064*
	Presence of Nurse ^a	3.4731	0.1336	0.0627
	Place of Delivery ^a	6.1581	0.1462	0.0022*
Support	Caesarian Delivery ^a	1.5405	0.0026	0.2149
	Birth Complications ^a	5.4138	0.1401	0.0202*
	Level of Family Support ^a	5.2228	0.1294	0.0381*
	Friends ^a	7.4882	0.1121	0.0063*

*significant at p -value < 0.05

^a Cramer's V was used for the measure of association

^b Point-Biserial r_{pb} was used for the measure of association

Household Characteristics. PNC utilization varied across regions (Fig. 1). Region of residence had a very strong associated with PNC use ($p < 0.00001$, Cramer's $V = 0.3019$). Highest PNC utilization was in Eastern Visayas (88.67%), followed closely by the Cordillera Administrative Region (86.57%), Bicol (86.27%), National Capital Region (85.78%), and Ilocos (85.63%). On the other hand, PNC utilization was observed to be lower in CALABARZON (50.1%) and Davao (49.90%), although these percentages are still relatively high overall.

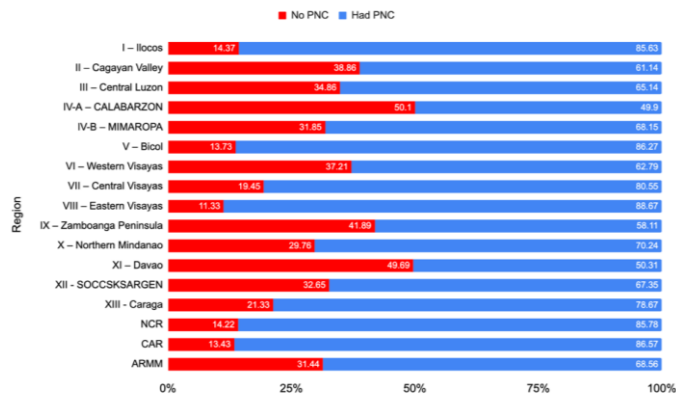


Fig. 1. PNC Utilization of Young Mothers by Region

Household head age was also significant, showing a very weak positive association with PNC use ($p = 0.0021$, $r_{pb} = 0.0614$). Summary statistics in Table III show that the mean age of household heads for those who used PNC was 40.28 years old, slightly higher than 38.29 years old for non-users. Median and mode values were similarly slightly higher among PNC users.

TABLE III. Summary Statistics of Household Head Age by PNC Use

PNC Use	Mean	Median	Mode	Minimum	Maximum	Std. Dev
No PNC	38.29	38.00	24.00	18.00	78.00	14.63
Had PNC	40.28	39.00	25.00	19.00	79.00	15.48

Socio-economic Characteristics. The highest grade completed by the young mother had the strongest relationship with PNC use ($p = 0.0245$, Cramer's $V = 0.1915$). Paternal and maternal education were also significant with strong and moderate associations, respectively (Cramer's $V = 0.1538$; 0.1207). Maternal employment was also significant ($p = 0.0273$, Cramer's $V = 0.1504$). Among those who received PNC, 41.29% had employed mothers. Meanwhile, Table IV shows that PNC utilization was lowest among young mothers whose mothers were unemployed (0.36%).

TABLE IV. Weighted Distribution of PNC Utilization and Socio-economic Characteristics

Variable	No PNC (%)	Had PNC (%)
Highest Grade Completed		
No Education/Elementary	17.61	10.52
Grades 7-10	51.67	46.45
Grades 11-12	14.86	18.25
Some College or Higher	15.86	24.78
Father's Highest Grade Completed		
No Education/Elementary	69.10	53.89
High School	25.43	32.21
Some College or Higher	5.47	13.90
Mother's Highest Grade Completed		
No Education/Elementary	58.66	45.72
High School	37.61	41.99
Some College or Higher	3.73	12.19
Mother's Employment		
No Work/Not Seeking for Work	7.02	3.52
Unemployed	1.30	0.36
Housework	56.83	50.19
Unpaid Family Worker	3.15	4.65
Employed	31.70	41.29

Pregnancy Characteristics. Age at first pregnancy had a significant and very weak association with PNC use ($p = 0.0163$, $r_{pb} = 0.0363$). Mean age at first pregnancy of young mother who received PNC was 18.22 years, which is slightly higher than that of the mean for non-use of PNC which was 18.00 years (Table V). Minimum age at first pregnancy for young mothers who did not receive PNC was 13 years, compared to the minimum age at first pregnancy of 14 years for those who used PNC.

Prior use of antenatal care showed a moderate association ($p = 0.0003$, Cramer’s $V = 0.1241$). Number of antenatal care visits, presence of doctor during birth, place of delivery, and birth complications were also significant. Among young mothers who used PNC, 92.87% of them also used PNC (Table VI). PNC utilization was also the lowest for those who gave birth at home (8.76%) compared to those who gave birth at a private medical facility (19.08%) or public medical facility (72.16%).

TABLE V. Summary Statistics of Age at First Pregnancy by PNC Use

PNC Use	Mean	Median	Mode	Minimum	Maximum	Std. Dev.
No PNC	18.00	18.00	16.00	13.00	24.00	2.25
Had PNC	18.22	18.00	18.00	14.00	24.00	2.02

TABLE VI. Weighted Distribution of PNC Utilization and Pregnancy Characteristics

Variable	No PNC (%)	Had PNC (%)
Antenatal Care Utilization		
No	18.35	7.13
Yes	81.65	92.87
Presence of Doctor During Birth		
No	56.1	43.14
Yes	43.9	56.86
Place of Delivery		
Home	19.35	8.76
Private Medical Facility	15.44	19.08
Public Medical Facility	65.22	72.16
Birth Complications		
No	94.51	87.27
Yes	5.49	12.73

Support Characteristics. Both level of family support ($p = 0.0381$, Cramer’s $V = 0.1294$) and having a close friend to confide in ($p = 0.0063$, Cramer’s $V = 0.1121$) were associated with PNC use. PNC utilization varies across different levels of family support (Fig. 2). Young mothers whose families are never supportive received a relatively high rate of PNC use (82.98%) as well as those who almost always had a supportive family (79.25%). Those in the middle categories of family support level had lower prevalences of PNC utilization.

C. Determinants of Postnatal Care Utilization

Logistic regression was fitted to identify the key determinants of postnatal care utilization among young mothers, using only the variables that were significantly associated with PNC in the preliminary tests of association. The final model included seven predictors: region of residence, father’s highest grade completed, household wealth index, level of family support, antenatal care utilization, place of delivery, and experience of birth complications. The coefficients and odds ratio of the model are summarized in Table VII.

TABLE VII. Coefficients and Odd Ratios of the Fitted Model

Predictor	Coefficient	Std. Error	p-value	Odds Ratio (OR)
(Intercept)	-2.7339	0.58079	<0.0001*	0.0650
Region [X - Northern Mindanao]				
Region I – Ilocos	1.0004	0.6516	0.1247	2.7193
Region II – Cagayan Valley	-0.2676	0.5409	0.6208	0.7652
Region III – Central Luzon	0.2382	0.4715	0.6133	1.2690
Region IV-A – CALABARZON	-1.0080	0.4246	0.0176*	0.3650
Region IV-B – MIMAROPA	-0.3305	0.6694	0.6452	0.7186

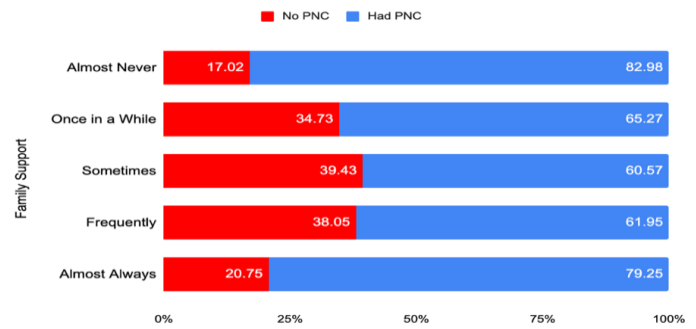


Fig. 2. PNC Utilization of Young Mothers by Level of Family Support

Young mothers residing in CALABARZON and Davao were 63.5% and 65.3% less likely, respectively, to utilize PNC compared to those living in Northern Mindanao (OR = 0.37 and OR = 0.35, respectively). Northern Mindanao was selected as the reference region since it exhibited a moderate level of PNC use relative to other regions, making it an appropriate baseline for comparison. In contrast, young mothers in Eastern Visayas were about four times more likely to receive PNC than those in Northern Mindanao (OR = 3.71).

For paternal education, young mothers whose fathers completed at least high school were twice as likely to receive PNC compared to those whose fathers had no or elementary education (OR = 2.06). The odds increased to more than three times for those whose fathers had some college or higher education (OR = 3.36).

Household wealth was also a strong determinant. Young mothers from the fourth wealth category were twice as likely to use PNC compared to the poorest group (OR = 2.01), while those from the highest wealth category were nearly five times as likely to use PNC (OR = 4.65).

Level of family support influenced PNC utilization, with young mothers receiving almost constant support (“almost always”) being more than twice as likely to use PNC than those with moderate support (OR = 2.31). The support level “sometimes” was used as the reference category due to an observed non-linear pattern in PNC utilization across different levels.

Receiving antenatal care increased the odds of postnatal care use nearly threefold (OR = 2.96), while giving birth in a private or public medical facility significantly raised the likelihood of PNC utilization compared to home deliveries (OR = 4.90 and OR = 3.71, respectively). Lastly, young mothers who experienced birth complications were about two times more likely to seek PNC than those without complications (OR = 2.49).

Region V – Bicol	0.5754	0.5974	0.3355	1.7779
Region VI – Western Visayas	-0.5560	0.5038	0.2697	0.5735
Region VII – Central Visayas	0.3255	0.4832	0.5006	1.3847
Region VIII – Eastern Visayas	1.3111	0.6391	0.0402*	3.7105
Region IX – Zamboanga Peninsula	-0.6199	0.5652	0.2728	0.5380
Region XI – Davao	-1.0596	0.4302	0.0138*	0.3466
Region XII - SOCCSKSARGEN	-0.6245	0.4679	0.1820	0.5355
Region XIII - Caraga	0.3082	0.6694	0.6452	1.3610
NCR	0.7710	0.4729	0.1030	2.1621
CAR	0.7128	0.8591	0.4067	2.0398
ARMM	0.5750	0.4914	0.2420	1.7771
Father's Highest Grade Completed				
[No Education/Elementary]				
High School	0.7243	0.2058	0.0004*	2.0632
Some College or Higher	1.2130	0.3326	0.0003*	3.3637
Wealth Index [Lowest]				
Second	0.5048	0.3003	0.0928	1.6566
Middle	0.5286	0.3199	0.0984	1.6966
Fourth	0.6970	0.3216	0.0302*	2.0078
Highest	1.5368	0.3312	<0.0001*	4.6495
Level of Family Support [Sometimes]				
Almost Never	1.8213	0.8494	0.0320	6.1796
Once in a While	0.0892	0.3128	0.7756	1.0933
Frequently	-0.1141	0.2344	0.6265	0.8922
Almost Always	0.8381	0.2210	0.0001*	2.3119
Antenatal Care Utilization [Yes]	1.0842	0.2992	0.0003*	2.9571
Place of Delivery [Home Delivery]				
Private Medical Facility	1.5884	0.3541	<0.0001*	4.8961
Public Medical Facility	1.3119	0.2944	<0.0001*	3.7134
Birth Complications [Yes]	0.9106	0.3212	0.0045*	2.4859

Model Fit: Likelihood Ratio Test: $p < 0.0001$, Hosmer-Lemeshow Test: $p = 0.6350$, McFadden's $R^2 = 0.2118$
Predictive Performance: Sensitivity = 70.99%, Specificity = 65.65%, Accuracy = 69.41%, AUC = 74.20%
Ten-fold Validation: Average Accuracy = 72.58%; Average Kappa = 0.2642

*significant at p -value < 0.05

The model showed good overall fit (Likelihood Ratio Test: $p < 0.0001$, Hosmer-Lemeshow Test: $p = 0.6350$) and acceptable explanatory power (McFadden's $R^2 = 0.2118$). Table VIII shows that all VIFs were below the threshold of 10, indicating no concerns of multicollinearity.

TABLE VIII. VIF and Tolerance Values of Predictors

Predictor	VIF	Tolerance
Region	1.0449	0.9570
Father's Highest Grade Completed	1.0788	0.9270
Wealth Index	1.1216	0.8916
Level of Family Support	1.0353	0.9659
Antenatal Care Utilization	1.2268	0.8151
Place of Delivery	1.1571	0.8642
Birth Complications	1.0257	0.9749

ROC Curve

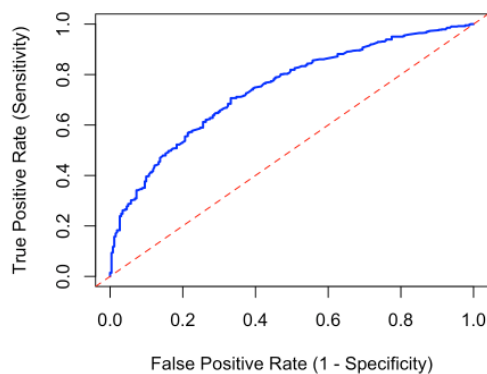


Fig. 3. ROC Curve for the Fitted Model

Classification metrics and the ROC curve seen in Fig. 3 suggest reasonable discriminative ability, while ten-fold cross-validating confirmed stable predictive performance.

IV. DISCUSSION

Regional variation in postnatal care utilization was evident. The lower odds in CALABARZON and Davao may reflect contextual challenges such as limited familial support and lack of awareness of pregnancy-related risks, which Gultia (2017) identified as barriers to maternal care in these areas. Higher odds for those residing in Eastern Visayas may be attributed to stronger health infrastructure and local government initiative, as reflected in recent regional developments. These findings highlight the importance of making maternal health services accessible to increase utilization.

Socioeconomic status, particularly household wealth, remains a strong predictor of PNC utilization, aligning with global studies from Indonesia, Africa, and Uganda (Iacoella and Tirivayi, 2019; Ndugga et al., 2020; Istifa et al., 2021;). Wealthier households have better financial capacity to afford transportation, access private facilities, and manage postnatal complications. Moreover, paternal education was also significantly associated with PNC use which could be because young mothers are a demographic that is still supported and highly influenced by their parents. Several studies have highlighted the importance of education in PNC utilization (Yimer et al., 2019; Tefera et al., 2021). This suggests that educational background of parental figures can influence a

young mothers' health-seeking behavior. This supports the study of Kühn et al (2022) that asserts that higher education is often associated with greater awareness about various health services, including PNC.

Family support emerged as a crucial social determinant of maternal healthcare utilization, highlighting the influence of familial involvement in young mothers' health decisions. Shahabuddin et. al (2017) found that adolescent girls' use of maternal health services was influenced by multiple family members such as partners, parents, and in-laws. Similarly, Javadi et al. (2023) emphasized that adolescent girls often heavily rely on familial support during the postnatal period since they are unprepared for the responsibilities of parenthood. This finding highlights the role of consistent and strong family involvement in influencing health-seeking behavior among young mothers.

This study reaffirms the positive association of ANC utilization with PNC utilization, consistent with the findings of Tessema et al. (2020). Since the young mother already had early contact with healthcare services during pregnancy, it increases the chance of also seeking follow-up postnatal care. Institutional delivery and experience of birth complications increased the likelihood of PNC use, reinforcing conclusions from Tiruneh et al. (2020). Young mothers who gave birth in medical facilities had easier access to other maternal services, like PNC, since they were already within the medical institution. Those who gave birth at home could have a lesser chance of receiving PNC due to limited presence of healthcare professionals near their residence. This highlights the need for community-based outreach programs to capture and support these individuals postpartum.

Finally, the model itself demonstrated good fit, excellent discriminative ability, and consistent predictive performance across validation folds, with no issues of multicollinearity. These results affirm the robustness of the identified predictors in explaining PNC utilization among young mothers. Nonetheless, the modest predictive strength of the model suggests that other unmeasured factors may also shape postnatal care use, which could be explored by future research.

V. CONCLUSION

This study identifies the key determinants of postnatal care utilization among young mothers in the Philippines using binary logistic regression. Region of residence, paternal education, household wealth, prior antenatal care use, place of delivery, experience of birth complications, and level of family support significantly influence the likelihood of receiving PNC.

Young mothers in CALABARZON and Davao are less likely to use PNC, while those in Eastern Visayas show the highest odds, possibly due to stronger local government efforts to improve healthcare access. Higher paternal education and greater household wealth increase the likelihood of PNC, as well as young mothers who had prior engagement to the healthcare system through antenatal care utilization or facility-based delivery. Experiencing birth complications further increases the likelihood of PNC utilization, as young mothers sought continued care to manage risks. However, this also suggests that those without complications may undervalue

PNC, highlighting the need to raise awareness of its benefits regardless of their PNC status. High level of family support also increases the chance to use PNC compared to those with only moderate support, emphasizing the influence of familial encouragement.

Based on these findings, the study recommends that local authorities and healthcare policymakers address regional disparities by strengthening and expanding initiatives that bring maternal health services closer to communities through mobile clinics, super health centers, and transportation support. Health workers should also promote postnatal care during antenatal care visits to ensure that young mothers are well informed about such services early on. Moreover, targeted campaigns should educate not only mothers but also their families about the value of PNC since it is important to involve all members of the family to better support informed decision-making and ensure proper care.

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