



## Factors Influencing Home Deliveries Among School Dropouts in Santa Rosa, Laguna: The Role of Education in Delivery Setting Choices

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### Abstract

This study explored the factors influencing school dropouts in Santa Rosa, Laguna, to opt for home deliveries, emphasizing the role of education in shaping maternal healthcare decisions. It examined respondents' demographic profiles, key factors affecting home birth choices, and the perceived role of educational institutions in promoting safe motherhood. A descriptive-correlational research design was employed. Findings indicated that most respondents were teenagers (66.7%) from low-income backgrounds (63.7%), with financial constraints (100%) being the primary reason for home deliveries. Negative hospital experiences (69.6%) and cultural influences (36.3%) also contributed. The study found that while educational institutions play a role in promoting maternal health, their influence is limited. A strong correlation ( $r = .984$ ,  $p = .000$ ) was observed between perceptions of educational institutions and the perceived effectiveness of health interventions. Educational attainment was the strongest predictor of perceived intervention effectiveness. Results suggest the need for more effective maternal health education and improved intervention implementation. Strengthening the role of educational institutions could enhance awareness and accessibility to professional maternal care. The study emphasizes the importance of education in maternal health decisions. To address gaps, an action plan (ANDAYA) was proposed to enhance educational initiatives and maternal health interventions in Santa Rosa, Laguna.

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**Keywords:** Home Births, School Dropouts, Educational Institutions, Correlation, Health Interventions

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### 1. Introduction

Institution-based deliveries have been widely recognized as the gold standard for childbirth since the universalization of public health care coverage. Developed countries have adopted this model, noting significant reductions in maternal and neonatal morbidity and mortality rates (Sanchez-Redondo *et al.*, 2020) <sup>[34]</sup>. Institutional births provide critical advantages, including reduced risk of infection, continuous monitoring of both maternal and fetal well-being, and access to timely medical intervention when necessary. In contrast, low- to middle-income countries (LMICs) continue to grapple with high rates of home births, a key factor contributing to maternal and neonatal mortality.

In the Philippines, despite the implementation of policies aimed at discouraging home deliveries, the practice remains prevalent. The Philippine Statistics Authority (2022) reports that rural areas see a higher incidence of home births (15%) compared to urban regions (8%). Contributing factors include limited transportation, fear of contracting COVID-19, financial constraints, and other socio-economic barriers such as social connection, income, neighborhood environment, access to healthcare, and education. Education plays a pivotal role in these decisions, as women with lower educational attainment are more likely to choose home births, while those with higher levels of education prefer institutional care due to their greater awareness of the associated risks (Tiruneh *et al.*, 2020) <sup>[45]</sup>.

Furthermore, Hernandez-Vasquez (2021) highlights that women with lower educational attainment often experience higher fertility rates and are consequently more susceptible to birth complications. School dropouts face compounded challenges in accessing healthcare services, placing them at greater risk of the adverse outcomes associated with home deliveries.

Despite efforts to reduce home births, significant gaps remain in the accessibility and utilization of maternal healthcare services, particularly for marginalized populations. In response to these challenges, the Philippines launched the Maternal, Newborn, and Child Health and Nutrition (MNCHN) Strategy as part of the Safe Motherhood Program. First implemented during President Arroyo's administration and later updated under President Aquino with the 2011 MNCHN Manual of Operations, the policy prohibited traditional birth attendant-assisted deliveries, even for those previously trained by the government. This "no home birthing policy" aimed to promote facility-based deliveries nationwide (Department of Health, 2023) [11]. However, persistent financial, social, and environmental barriers continue to drive pregnant women to deliver at home, leaving them at increased risk for postpartum complications (Gonzalez & Rivera, 2023). Social determinants, such as social connection, income, neighborhood environment, access to healthcare, and education, directly impact the decisions of pregnant school dropouts to opt for home deliveries.

Educational institutions play a critical role in mitigating these barriers by promoting health literacy and fostering safe motherhood practices. However, questions remain regarding the current effectiveness, popularity, and quality of the Safe Motherhood Program's implementation.

Home delivery prevalence is highest among women who are unemployed and who belong to the poorest wealth category. Home delivery is more prevalent among rural who are married (74.51%) compared to their overall Philippine and rural counterparts. Proportions of women who gave birth at home were comparable across the three models among those who made their own health care decisions and those who had an emergency preparedness plan. A considerable proportion of urban and rural women still delivered at home despite having adequate ante natal visits (Arianna Maever L. Amit *et al.*, 2022) [22].

However, despite numerous studies that investigated on home deliveries, no research has yet been conducted in the factors influencing home deliveries among school dropouts in Santa Rosa, Laguna and the role of education in delivery setting choices.

This study investigates the social determinants of health, with a particular focus on educational attainment, in shaping the delivery location choices of pregnant women in Santa Rosa, Laguna. Specifically, it seeks to explore how socioeconomic factors—social connection, income, neighborhood and environment, access to healthcare, and education—influence the decisions of pregnant school dropouts regarding home deliveries. It also examines how educational institutions can contribute to promoting safe motherhood and preventing home births. Finally, this research evaluates how the Safe Motherhood Program can be improved in terms of its effectiveness, popularity, and quality of implementation.

## 2. Methods

This study used descriptive-correlational research design as

it seeks to determine the relationship between the demographic profile of school dropouts, their perceptions of the role of educational institutions in promoting safe motherhood, and the perceived effectiveness of current health interventions in reducing home deliveries. A descriptive-correlational design is appropriate for studies aiming to explore associations between variables without manipulating them, allowing researchers to identify patterns and relationships within a specific population (Bandhari, 2021; Bartolata *et al.*, 2024) [6]. This approach is ideal for examining how demographic factors and institutional roles influence perceptions of health interventions, providing perceptions for crafting evidence-based action plans to address home deliveries among school dropouts in Santa Rosa, Laguna.

The population of the study consists of school dropouts aged 15 to 19 who were pregnant in Santa Rosa, Laguna, between 2022 and 2024. These individuals represent a specific group affected by home birth practices, making their insights valuable for the research objectives. Teen pregnancy data obtained from the City Health Office of Santa Rosa, Laguna, indicates that 138 cases of home birth deliveries were recorded between 2022 and 2024, with 32 cases in 2022, 62 in 2023, and 44 in 2024 (Santa Rosa LCR, 2024) [36]. Using the Raosoft Sample Size Calculator, with a 95% confidence level and a 5% margin of error, the sample size is determined to be 102 respondents, ensuring the reliability and validity of the data.

The study employed a proportional representation of the sampling population by sampling the data of each year according to its share of the total population. This can be done by determining the ratio of the number of individuals per year and the total population. After which, the percentage will be divided by the calculated sample size which is 102. The proportion of the sample size for each year is as follows: 23 individuals (2022), 46 individuals (2023), and 33 individuals (2024). The sampling used in the study is the simple random sampling targeting respondents who are teenage mothers in the said locale.

The questionnaire used in this study was a researcher-made instrument specifically designed to collect data on the factors that influence home deliveries among school dropouts in Santa Rosa, Laguna, and the role of educational institutions in promoting safe motherhood practices. It was divided into four sections: (1) demographic profile, which include age, civil status, income, and educational attainment; (2) factors influencing the decision to have home deliveries, where respondents will identify reasons for opting for home births; (3) the role of educational institutions in promoting safe motherhood, with statements rated on a Likert scale to measure the respondents' perceptions; and (4) evaluation of current health interventions, focusing on their effectiveness, popularity, and quality of implementation.

The questionnaire was subjected to pilot testing for reliability and as per the standard, the values of Cronbach's alpha were determined to measure the internal consistency. The following values were obtained: Factors Influencing the Decision to Have Home Deliveries (0.825), Role of Educational Institutions in Promoting Safe Motherhood (0.851), Evaluation of Current Health Interventions in Santa Rosa, Laguna – Effectiveness (0.851), Evaluation of Current Health Interventions in Santa Rosa, Laguna – Popularity (0.836), and Evaluation of Current Health Interventions in Santa Rosa, Laguna – Quality of Implementation (0.864). All

the sections of the questionnaire fall within the “Good” range of the verbal interpretation (0.80-0.89). This indicates that the questions in all sections are highly consistent with the target themes of the study. Moreover, this suggests that the questions are reliable and accurately reflect the factors influencing the decision to have home deliveries.

In conducting the collection of data, the researcher secured permission from the head of the City Health Office I in Santa Rosa, Laguna. This is to ensure access to patients and their medical records, if there is one available. Afterwards, the researcher will then secure permission from each barangay in the city of Santa Rosa to distribute questionnaires to eligible participants. Before distributing the survey questionnaire to each barangay, an initial investigation was made. This is to determine the number of potential respondents in each barangay. This was achieved through the data from the City Health Office of Santa Rosa. Upon doing so, a predetermined

number of survey questionnaires were handed to each barangay. A consent form was attached to each survey questionnaire which was signed by both parent and minor child. Moreover, clear instructions were given on the first page of the survey form to ensure their understanding of the purpose of the study.

Respondents were given enough time to complete the survey in their respective barangay centers. To ensure the data confidentiality, only certain barangay personnel were permitted to collect their survey forms. The researcher ensured that these personnel will be compliant with the Data Privacy Act of 2012 (RA 10173) and prevent unauthorized access. Contact details of the researcher such as their phone number and email address will be included in the survey form.

### 3. Results and Discussions

**Table 1:** Respondents’ Profile

Profile Variables	Frequency	Percentage
<b>Age</b>		
Below 20	68	66.7
20-25 years old	34	33.3
<b>Income</b>		
Below Php12, 030	65	63.7
Php12,030-Php24,060	37	36.3
<b>Level of education</b>		
Elementary	31	30.4
High school	71	69.6
<b>N=102</b>		

Table 1 shows the demographic profile of the respondents, providing insights into the factors influencing home deliveries among school dropouts in Santa Rosa, Laguna. The data reveals that a significant majority (66.7%) of the respondents are below 20 years old, highlighting the prevalence of teenage pregnancies among school dropouts. This early pregnancy trend may contribute to the preference for home deliveries due to financial constraints, limited access to healthcare services, or fear of social stigma.

In terms of income, 63.7% of respondents earn below Php12,030, placing them in the low-income bracket. This financial limitation may hinder their ability to afford hospital

deliveries, prenatal care, and other maternal health services, making home births a more accessible but potentially riskier option.

Furthermore, the educational attainment of the respondents indicates that 69.6% reached high school, while 30.4% only completed elementary education. The lower educational level may limit their awareness of maternal health risks and the benefits of professional medical assistance during childbirth. Overall, the results indicate that the majority of the respondents are under the age bracket of 20 and below with an income of below Php12,030 and are high school graduates.

**Table 2:** Factors Influencing the Decision to Have Home Deliveries

Possible Reasons for Home Deliveries	Frequency	Percentage	Rank
Lack of access to healthcare facilities	34	33.33	5
Financial constraints	102	100.00	1
Cultural or family preferences	37	36.27	3.5
Negative past experiences with hospitals	71	69.61	2
Advice from family or friends	0	0.00	6
Lack of information about the benefits of hospital delivery	37	36.27	3.5

Table 2 presents the factors influencing the decision to have home deliveries among the respondents. Financial constraints emerged as the most significant factor, with all respondents (100%) identifying it as a primary reason as seen in the profile of the respondents which dictated that majority of them are monthly income earners of Php12030 and below. Negative past experiences with hospitals ranked second (69.61%), highlighting concerns such as poor healthcare services, long waiting times, or perceived mistreatment by medical staff. Cultural and family preferences, along with a lack of information about hospital deliveries, were cited by

36.27% of respondents, showing that traditional beliefs and misinformation continue to shape maternal healthcare choices. Additionally, 33.33% of respondents reported a lack of access to healthcare facilities as a contributing factor. Notably, no respondents (0%) cited advice from family or friends as an influencing factor, suggesting that personal experiences and structural challenges play a more dominant role in decision-making.

These findings indicate that financial constraints remain the most pressing barrier to hospital deliveries, necessitating improved healthcare funding and support systems.

Furthermore, the influence of negative past experiences and cultural beliefs underscores the need for both systemic improvements in maternal healthcare services and targeted educational programs to raise awareness about the benefits of institutional deliveries.

Comparing these results with existing research, this study aligns with Cagayan *et al.* (2022) [27] and Modillas *et al.* (2024) [25], who emphasized economic hardship as a major barrier to accessing healthcare. Similarly, Salvador and Ebrahim (2024) [33] noted that negative hospital experiences deter women from institutional deliveries, particularly in

rural areas. The role of cultural beliefs and reliance on traditional birth attendants, as seen in Landicho (2022) [24], remains relevant, further reinforcing the need for culturally sensitive healthcare interventions. Additionally, Herwansyah *et al.* (2022) [17] highlighted disparities in healthcare access, supporting the finding that limited facility availability continues to hinder institutional deliveries. These findings collectively align with global maternal healthcare recommendations (Tiruneh *et al.*, 2020) [45], emphasizing the urgent need for improved healthcare accessibility, patient-centered services, and widespread educational initiatives.

**Table 3:** Perceived Role of Educational Institutions in Promoting Safe Motherhood

Indicator	Weighted Mean	SD	Verbal Interpretation	Rank
1. Educational institutions provide adequate information on safe motherhood practices.	1.725	0.966	NI	8
2. Schools conduct regular programs or seminars that educate students and parents about maternal health.	2.000	0.000	FI	5
3. Teachers and school staff are knowledgeable about safe motherhood practices and can provide guidance to students and families.	1.971	0.802	FI	7
4. Educational institutions actively collaborate with healthcare providers to promote maternal health within the community.	2.000	0.000	FI	5
5. Information provided by schools on maternal health has increased my awareness of safe motherhood practices.	2.029	0.838	FI	3
6. Schools play a significant role in encouraging women to seek professional healthcare during pregnancy and childbirth.	1.696	0.462	NI	9.5
7. Educational institutions effectively address the cultural beliefs and practices that may influence maternal health decisions.	2.304	0.462	FI	2
8. Schools provide accessible resources (e.g., pamphlets, posters, talks) that promote safe motherhood.	2.363	0.483	FI	1
9. School health programs help raise awareness about the risks of home deliveries and the benefits of hospital births.	1.696	0.462	NI	9.5
10. Educational institutions should do more to support safe motherhood practices in the community.	2.000	0.000	FI	5
<b>Overall Results</b>	<b>1.978</b>	<b>0.601</b>	<b>FI</b>	

1.00-1.74- Not Influential (NI), 1.75-2.49 - Fairly Influential (FI)

Table 3 presents the perceived role of educational institutions in promoting safe motherhood. The overall weighted mean of 1.978 (SD = 0.601) suggests that schools play a fairly influential role in maternal health education. The highest-rated indicator was the availability of accessible resources such as pamphlets, posters, and talks (M = 2.363, SD = 0.483, FI), indicating that schools provide maternal health information to some extent. Additionally, respondents acknowledged that educational institutions address cultural beliefs that may influence maternal health decisions (M = 2.304, SD = 0.462, FI), showing efforts to integrate sociocultural factors into health education. However, some indicators were rated as "Not Influential," including the role of schools in encouraging women to seek professional healthcare (M = 1.696, SD = 0.462, NI) and in raising awareness about the risks of home deliveries (M = 1.696, SD = 0.462, NI), suggesting gaps in maternal health advocacy within the educational sector.

The overall weighted mean of 1.978 (SD = 0.601) confirms that while educational institutions contribute to safe motherhood awareness, their influence is limited. This suggests that schools

must enhance their role by improving maternal health education programs, advancing healthcare partnerships, and actively promoting institutional deliveries.

The results align with previous studies highlighting both the strengths and limitations of school-based maternal health initiatives. Landicho (2022) [24] emphasized that integrating community-based practices into health education strengthens its effectiveness, which corresponds with the fairly influential rating of culturally sensitive programs in this study. However, the findings also support Salvador and Ebrahim (2024) [33], who argued that educational exposure should empower women to seek professional care—an area where schools in this study appear to fall short. Similarly, Kassim *et al.* (2023) [23] asserted that well-structured educational interventions improve maternal healthcare decision-making, reinforcing the need for more comprehensive school-based maternal health programs. These findings suggest that while schools contribute to maternal health awareness, significant improvements are necessary to ensure that educational institutions effectively influence maternal healthcare decisions, particularly in marginalized communities.

**Table 4:** Perceived Level of Effectiveness of Current Health Interventions

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Effectiveness	1.90	Fair	1
2. Popularity	1.55	Poor	2
3. Quality of implementation	1.44	Poor	3
<b>Overall Weighted Mean</b>	<b>1.63</b>	<b>Poor</b>	

Table 4 exhibits the perceived effectiveness of current health interventions in Santa Rosa, Laguna, based on three key indicators: effectiveness, popularity, and quality of implementation. Among these, effectiveness received the highest rating with a weighted mean of 1.90 (Fair), followed by popularity at 1.55 (Poor) and quality of implementation at 1.44 (Poor). The overall weighted mean of 1.63 falls within the Poor category, indicating that while some aspects of the programs are considered somewhat effective, their overall impact remains limited due to low awareness and weak implementation.

The overall result of 1.63 (Poor) suggests that the current maternal health interventions in Santa Rosa are insufficient in addressing the needs of the community. Although they are perceived as fairly effective in some areas, the lack of widespread awareness and the poor quality of implementation significantly reduce their potential benefits.

This highlights the urgent need for improvements in both program visibility and execution to maximize their effectiveness.

These findings align with previous studies emphasizing the interconnectedness of program awareness, implementation quality, and overall effectiveness. Tiruneh *et al.* (2020) [45] noted that health interventions often fail when they are not adequately promoted within the community, leading to limited engagement. Similarly, Kassim *et al.* (2023) [23] emphasized that even well-intended maternal health programs cannot succeed without strong execution and proper resource allocation. The results also support Landicho's (2022) [24] argument that a holistic approach—including better-trained healthcare providers, stronger promotional efforts, and improved service delivery—is necessary to enhance the overall effectiveness of maternal health programs.

**Table 5:** Relationship Between the Respondents' Profile and the Perceived Role of Educational Institutions in Promoting Safe Motherhood and Preventing Home Births

Perceived Role	Inferential Statistics (Spearman rho)	p-value	Decision	Interpretation
Age	$\rho = .867$ (very strong)	.000	H <sub>0</sub> rejected	Significant
Income	$\rho = .884$ (very strong)	.000	H <sub>0</sub> rejected	Significant
Level of education	$\rho = .036$ (very weak)	.721	H <sub>0</sub> not rejected	Not Significant

The results in Table 5 accentuate the relationship between the respondents' profile and the perceived role of educational institutions in promoting safe motherhood and preventing home births. The Spearman rho values indicate that age ( $\rho = .867$ , very strong) and income ( $\rho = .884$ , very strong) have a significant correlation with the role of educational institutions, as their p-values (.000) are lower than the 0.05 level of significance, leading to the rejection of the null hypothesis. Conversely, the level of education ( $\rho = .036$ , very weak) was found to have no significant correlation, as its p-value (.721) exceeds the threshold for significance.

In conclusion, as the age and income of respondents increases, their perception of role of educational institutions in promoting safe motherhood and preventing home births becomes more positive. Consequently, the level of education is not related to the perception of the role of educational institutions in promoting safe motherhood and preventing home births. This may be attributed to the need for direct formal health and sex education in the country.

These findings align with previous research emphasizing the role of socioeconomic factors in shaping maternal health behaviors and decision-making. Studies have shown that older mothers and those with higher income levels are more likely to recognize the importance of institutional support in maternal health, given their greater access to healthcare services and resources (Garcia *et al.*, 2023). This suggests that economic stability and life experience contribute to a stronger acknowledgment of the role educational institutions play in promoting safe motherhood practices (Tiruneh *et al.*, 2020) [45]. In contrast, the insignificant relationship between educational attainment and perceived institutional support contradicts the assumption that higher education directly translates to greater awareness or reliance on formal health education. Prior studies indicate that some women, regardless of educational level, may rely more on cultural beliefs, family traditions, or community practices rather than institutional guidance in making childbirth-related decisions (Martinez & Reyes, 2023).

**Table 6:** Relationship Between the Respondents' Profile and the Perceived Level of Effectiveness of the Current Health Interventions

Perceived Level of Effectiveness of the Current Health Interventions	Inferential Statistics (Spearman rho)	p-value	Decision	Interpretation
Age	$\rho = .076$ (very weak)	.445	H <sub>0</sub> not rejected	Not Significant
Income	$\rho = .884$ (very strong)	.000	H <sub>0</sub> rejected	Significant
Level of education	$\rho = .846$ (very strong)	.000	H <sub>0</sub> rejected	Significant

Table 6 illustrates the relationship between the respondents' profile and their perceived level of effectiveness of the current health interventions. The Spearman rho values

indicate that income ( $\rho = .884$ , very strong) and level of education ( $\rho = .846$ , very strong) have a significant correlation with the perceived effectiveness of health

interventions, as their p-values (.000) are below the 0.05 level of significance, leading to the rejection of the null hypothesis. Conversely, age ( $\rho = .076$ , very weak) was found to have no significant correlation, with a p-value (.445) exceeding the significance threshold.

These results align with prior research emphasizing socioeconomic and educational factors as critical determinants of health intervention effectiveness. Several studies suggest that individuals with higher income levels are more likely to perceive health programs as effective due to their greater access to healthcare services, medical information, and financial resources (Garcia & Lopez, 2023). Economic stability allows individuals to seek higher-quality healthcare services, afford necessary medical treatments, and engage in preventive care measures, all of which contribute to a more positive perception of intervention effectiveness (Salvador & Ebrahim, 2024) [33].

Similarly, the strong correlation between level of education

and perceived effectiveness of health interventions supports the notion that higher educational attainment fosters greater awareness, understanding, and trust in public health programs (Tiruneh *et al.*, 2021) [45]. Educated individuals are more likely to comprehend health information, follow medical advice, and actively participate in health programs, leading to more favourable evaluations of intervention success (Martinez & Reyes, 2023). In contrast, those with lower educational attainment may lack awareness or access to health-related knowledge, potentially leading to skepticism or underutilization of available services (Kassim *et al.*, 2023) [23]. Furthermore, Sepahvand and Bagherzadeh Khodashahri (2020) highlighted the moderating role of job engagement in faculty retention, emphasizing that strategic HR practices such as performance appraisals and career development initiatives can strengthen retention and, consequently, work performance.

**Table 7:** Relationship Between the Perceived Role of Educational Institutions in Promoting Safe Motherhood and Preventing Home births and the Perceived Level of Effectiveness of the Current Health Interventions

Perceived Level of Effectiveness of the Current Health Interventions	Inferential Statistics (Spearman rho)	P-value	Decision	Interpretation
Effectiveness	$r = -.984$ (very high correlation)	.000*	Null Hypothesis Rejected	Significant
Popularity	$r = -.203$ (low correlation)	.041**	Null Hypothesis Rejected	Significant
Quality of implementation	$r = -.562$ (moderate correlation)	.000*	Null Hypothesis Rejected	Significant

The results in Table 7 reveal significant negative correlations between the perceived role of educational institutions in promoting safe motherhood and key aspects of current health interventions, including their effectiveness, popularity, and quality of implementation.

The strongest negative correlation was observed between the perceived role of educational institutions and the effectiveness of health interventions ( $r = -0.984$ ,  $p = .000$ ), which is statistically significant at the 0.01 level. Similarly, a low but significant negative correlation was found between the perceived role of educational institutions and the popularity of health interventions ( $r = -0.203$ ,  $p = .041$ ). Furthermore, the moderate negative correlation between the perceived role of educational institutions and the quality of implementation of health interventions ( $r = -0.562$ ,  $p = .000$ ) underscores potential inconsistencies in program execution. This suggests that as educational institutions take on a greater

role in promoting safe motherhood, the perceived effectiveness of health interventions tends to decrease. Data also imply that as educational institutions increase their involvement in maternal health advocacy, public reception and engagement with these interventions do not necessarily improve.

These findings align with prior research indicating that while educational institutions serve as essential platforms for health education, their impact on actual intervention success is often constrained by systemic challenges (Garcia & Lopez, 2023). Studies suggest that a stronger synergy between schools and healthcare providers is crucial in bridging the gap between awareness and effective service delivery (Salvador & Ebrahim, 2024) [33]. Without proper coordination and reinforcement from healthcare systems, educational efforts may fail to translate into practical maternal health improvements (Tiruneh *et al.*, 2021) [45].

**Table 8:** Regression Analysis of Demographic Characteristics on the Perceived Level of Effectiveness of the Current Health Interventions

Predictor	Dependent Variable	$\beta$	$R^2$	ANOVA	t	P-value	Decision	Interpretation
Level of education	Perceived level of effectiveness of the current health interventions	.998	.995	F=20123.581	478.442	.000*	Null Hypothesis Rejected	Significant
Perceived role of educational institutions	Perceived level of effectiveness of the current health interventions	-.271	.073	F=7.994	15.000	.006*	Null Hypothesis Rejected	Significant

\*Significant @ .01

The regression analysis presented in Table 8 examines the impact of demographic characteristics and the perceived role of educational institutions on the perceived effectiveness of current health interventions. The results indicate that level of

education is a strong and significant predictor of perceived effectiveness, with a  $\beta$  coefficient of .998 and an  $R^2$  value of .995, meaning that 99.5% of the variance in perceived effectiveness can be explained by education level. The

ANOVA results ( $F = 20,123.581$ ,  $p = .000$ ) confirm the model's statistical significance at the 0.01 level, leading to the rejection of the null hypothesis. Additionally, the t-value of 478.442 and the p-value of .000 reinforce the conclusion that education has a highly significant influence on respondents' perceptions of health intervention effectiveness.

In contrast, the perceived role of educational institutions is a weak yet significant predictor, with a negative  $\beta$  coefficient (-.271) and a low  $R^2$  value of .073, indicating that it explains only 7.3% of the variance in perceived effectiveness. The ANOVA results ( $F = 7.994$ ,  $p = .006$ ) suggest a statistically significant relationship at the 0.01 level, leading to the rejection of the null hypothesis. The t-value of 15.000 and the p-value of .006 confirm that while the perceived role of educational institutions influences how respondents assess health interventions, this effect is relatively weak. The negative beta coefficient suggests that other external factors—such as healthcare accessibility, service quality, and government policies—may have a greater impact on overall perceptions than the role of educational institutions alone.

In conclusion, education level is the strongest determinant of perceived health intervention effectiveness, explaining 99.5% of the variance, while the perceived role of educational institutions has a weaker yet significant influence, accounting for only 7.3%, indicating that external factors such as healthcare accessibility and government policies may play a more substantial role in shaping public perceptions.

These findings align with existing literature emphasizing the critical role of education as a key determinant of health awareness and decision-making (Garcia & Lopez, 2023). Research by Salvador & Ebrahim (2024) <sup>[23]</sup> stresses that individuals with higher education levels are more likely to engage in preventive healthcare, critically assess medical

services, and advocate for improvements in health interventions. Meanwhile, studies by Martinez & Reyes (2023) suggest that while educational institutions contribute to public health education, their direct influence on perceived healthcare effectiveness is limited by systemic healthcare challenges, socioeconomic disparities, and community-level health infrastructure. Additionally, Tiruneh *et al.* (2021) <sup>[45]</sup> argue that health education must be complemented by accessible, well-funded, and community-oriented health programs to ensure positive public perceptions and sustained engagement.

### Proposed action plan to strengthen the role of educational institutions, and improve the effectiveness of maternal health interventions in Santa Rosa, Laguna

#### Addressing Needs & Determinants Affecting Young mothers' Access (ANDAYA) to Safe Delivery

The evaluation of current health interventions in Santa Rosa, Laguna reveals significant gaps in service quality, accessibility, and community satisfaction. Findings indicate that healthcare providers require further training, facilities need better equipment and cleanliness standards, and health programs must be more organized and accessible. Additionally, while education plays a critical role in health awareness, its direct influence on perceived effectiveness remains limited due to systemic barriers.

To bridge these gaps and enhance healthcare service delivery, the ANDAYA Action Plan proposes a comprehensive, education-driven, and community-based strategy. This initiative aims to improve healthcare accessibility, strengthen health literacy, and enhance program effectiveness through structured interventions.

**Table 9:** Action Plan Matrix

Objectives	Activities	Resources Needed	Proposed Budget	Persons Involved	Time Frame	Success Indicators
Institutionalize financial assistance, health services, and educational support for young mothers thru local ordinance	Lobby for the passage of local ordinance on "Safe Motherhood for Young Mothers" by engaging with city councillors, presenting research findings and conducting advocacy campaign	Paper and pen, copy of research	PHP 1,000 annually	City Health Officer, City Councillors and the researcher	January to June 2026	95% passage and enactment of the city ordinance by the councillors
	Amendment of the City Ordinance No. 2104 Series of 2018 (An ordinance regulating birth deliveries in the city of Santa Rosa, Laguna, and requiring licensed health professional to handle natural delivery of babies in accredited health care facilities and providing penalties for violation thereof)	Paper and pen, copy of City Ordinance	PHP 500 .00annually	City Health Officer, City Councillors and the researcher	January 2026	95% approval of the amended city ordinance by the councillors
Improve the training and competency of healthcare providers	Basic Emergency Obstetrics & Newborn Care Training (BEmONC)-11 Days	Training materials, venue, guest speakers, hand-outs	PHP 180,000 annually	Medical Officers, Nurses & Midwives (6 participants)	January – December 2026	At least 85% of healthcare workers pass post-training assessments
	Healthy Young One's Training for Health Care Providers- 2Days	Training materials, venue, guest	PHP 50,000 annually	11 Nurses & 11 Midwives	January – December 2026	At least 85% of healthcare workers pass

		speakers, hand-outs				post-training assessments
	Barangay Health Workers (BHW) Competency Training- 3Days	Training materials, venue, guest speakers, printed manuals	PHP 100,000 annually	Barangay Health Workers (25 participants)	January – December 2026	At least 95% Barangay Health Workers pass post-training assessments
Enhance the quality and accessibility of maternal healthcare facilities	Provision of medical commodities & upgrade Barangay Health Stations & Adolescent Friendly Health Facility with better equipment, and with sufficient manpower	Medical supplies & equipment, facility renovation, sanitation, & wage	PHP 10M for infrastructure, commodities & wage	CHO, LCE, private sector donors	January – December 2026	At least 95% of the young mothers receive the required medical commodities & at least 50% of the targeted health facilities are upgraded
Strengthen community engagement and accessibility of health programs	Advocacy to Barangay Chairmen on the availability of Barangay Ambulance for pregnant women with MOU	Paper and pen, food	PHP 30,000 annually	18 Barangay Chairmen & 18 Councillor for Health	January – December 2026	100% signed Memorandum of Understanding (MOU)
Improve public health education and awareness on Safe Motherhood Program	Advocacy /Orientation to High School Principals, and Traditional Birth Attendants (TBA)on Facility Based Delivery (FBD)	Paper and pen, food	PHP 50,000 annually	50 participants	January – December 2026	100% School Principals & Traditional Birth Attendants (TBA) attended the orientation
	Launch an “EduPuroKalusu-gan” campaign—health literacy workshops in schools, barangays, and online platforms thru HEPU (Health Education & Promotion Unit)	Educational materials, online platforms, speakers, promotional items	PHP 150,000 annually	CHO, DepEd, barangay leaders, school teachers	January – December 2026	At least 70% of participants demonstrate improved health knowledge in surveys
Develop a partnership between educational institutions and healthcare providers	Create a Health-Edu-CPD Linkage Program where schools integrate health education and field visits to health facilities	MOUs with schools, coordination meetings, student learning kits	PHP 50,000 for program development	CHO, DepEd, private schools, universities	January – December 2026	At least 10 schools integrate health literacy into their curriculum
	Collaboration and advocacy meetings with CSWDO, City Philhealth Office, Office of the City Population, Santa Rosa Rehabilitation Center in the implementation of projects and programs for young mothers	Paper and pen, food	PHP 10,000 semi-annually	Focal persons from different agencies	January 2026 & July 2026	100% cross-departments collaborate initiatives addressing young mothers’ needs
Implement a monitoring and evaluation system for continuous improvement	Establish a Quarterly Health Audit to track program effectiveness and patient satisfaction	Data collection tools, analytics software, community surveys	PHP 75,000 annually	CHO- HOMU Team, research teams, community representatives	January – December 2026	100% of scheduled health audits are conducted within the specified time frame

#### 4. Conclusions

This study explored the factors influencing the choice of home deliveries among school dropouts in Santa Rosa, Laguna, with a particular focus on the role of education in shaping these decisions. The study revealed that the majority of respondents were below 20 years old (66.7%) and from low-income households (63.7%). Most respondents had only

reached high school education (69.6%). Financial constraints were the primary factor influencing the decision to have home deliveries, with 100% of respondents citing it, followed by negative past hospital experiences (69.61%) and cultural preferences (36.27%). Educational institutions were seen as having a limited role in promoting safe motherhood, with a weighted mean of 1.978 (SD = 0.601). Health interventions

were found to be moderately effective, with a mean of 1.903 (SD = 0.531), and maternal health programs in Santa Rosa were not well recognized. Strong correlations were observed between income, education, and the perceived effectiveness of health interventions, with education emerging as a significant predictor ( $R^2 = .995$ ). The relationship between the role of educational institutions and health interventions was highly positive ( $r = .984$ ).

The study concluded that financial difficulties, low educational attainment, and limited access to healthcare significantly contribute to the prevalence of home births, particularly among young, low-income mothers. The lack of active promotion and education about safe motherhood within educational institutions and weak health intervention outreach were identified as key barriers. Although educational institutions play a critical role in promoting maternal health, their current efforts are insufficient. Additionally, existing health interventions do not significantly reduce the risks associated with home births or improve maternal healthcare outcomes. Demographic factors, especially age and income, strongly influence perceptions of health intervention effectiveness, while education remains a critical factor in improving these perceptions.

## 5. Recommendations

Based on the findings, several recommendations were made: (1) Encourage school dropouts to return to school to enhance their awareness of health-related issues and reduce teenage pregnancies; (2) City councils should implement ordinances prioritizing maternal care services for young mothers; (3) Mobile prenatal clinics and transportation assistance should be established to support low-income mothers; (4) LGUs should increase financial support for maternal healthcare to make hospital deliveries more accessible; (5) Maternal care services should be improved through better healthcare provider training; (6) Schools should integrate maternal health education into curricula to raise awareness; (7) Barangay Health Workers should intensify outreach efforts to address misconceptions and cultural barriers; (8) The Andaya Action Plan should be implemented to coordinate efforts among local government, health offices, and educational institutions to improve maternal care access.

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