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Research Article

# Compliance of Prenatal Care and Delivery Outcome of Obstetrics Patients at Bicol Medical Center

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## Abstract

Prenatal care is the health care that both the woman and baby receive before giving birth. The main purpose of the study is to determine the relationship between compliance to prenatal care and its delivery outcome among OB patients admitted. This study were conducted from June 1 2020 to June 14, 2020 and used the descriptive-correlational design and sampling technique through purposive sampling method in obtaining data. Researcher utilized a questionnaire and interviewed mothers belonging to the inclusion criteria. Data were collated, submitted to the expert, and categorical regressions were used for analysis. The result showed that among the 388 mothers, majority of them belong to the age ranges from 20-35, single, unemployed, primigravida, and coming from the 3rd district of Camarines Sur. The compliance of prenatal care among mothers are on high standard and its delivery outcome is good. The characteristics are significant predictors to pre natal care however pre natal care is not significantly correlated with the delivery outcome. With this result, researcher still recommends to have at least 4 pre natal care as recommended by World Health Organization which is classified as moderate standard of care. Researchers does however suggests that future researchers can proceed to high-risk pregnant mothers as their respondents to compliance on pre natal care and its delivery outcome being the next step on this study.

## Keywords

Compliance, Prenatal Care, Delivery Outcome

## 1. Introduction

Pregnancy is a unique, exciting and often joyous time in a women's life, as it highlights the woman's amazing creative and nurturing power. The growing fetus depends entirely on its mother's healthy body for all needs. Consequently, the pregnant women must take steps to remain as healthy and well nourished as they possibly can. All women need care and attention during pregnancy. This care is called prenatal care.

Prenatal care according to Department of Health (DOH) [2] is the health care that both the woman and baby receive before giving birth. It is not only to observe gestational development to look for any risks or complications, it also seeks to improve the overall health and wellness of the mother, and this directly influencing the health and development of the baby. The goals of prenatal care are, lowering the risk of any pregnancy complication, lowering the risk of complication for the fetus and future infant, taking prenatal vitamins to ensure proper nutrients for the woman and developing baby, make sure the woman is taking medication that is unsafe during pregnancy.

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(whitewomenscenter.org)

High quality prenatal care includes identifying a high-risk condition among pregnant women and educating them about potential symptoms that are indicative of serious conditions so that early intervention can be instituted.

This study will be conducted to know if all pregnant mothers are complying with the pre natal care especially in the existence of Pandemic. This is also the chance of knowing the effectiveness of service delivery network program of each local government unit whether they are active in implementing their program or not.

The result will benefit all the community in Camarines Sur especially pregnant mother who forget to comply because of too many responsibilities at home or doesn't want to engage on the importance of prenatal care. The significance of this study will measure the capability of a pregnant mother in compliance to prenatal care and come up into recommendations on what could a community do or the hospital do to improve the care and how to reach out and catch all pregnant mothers in the community. Having a standard quality pre natal care in the community will hopefully yield to good delivery outcome in the hospital and other lying in facilities.

The Department Of Health [3] has created the National Safe Motherhood Program with the vision that Filipino women have full access to health services towards making their pregnancy and deliver safer. It is guided by the Department of Health FOURmula One Plus Thrust and Universal Health Care Frame. This program is committed to provide rational and responsive policy direction to its local government partners in the delivery of quality maternal and newborn health services with integrity and accountability using proven and innovative approaches. This supports the Local Government Units in establishing and mobilizing the service delivery network of public and private providers to enable them to deliver the integrated maternal newborn service package.

The Concept of Service Delivery network to DOH health program is to attain the health related sustainable development goal. The goal is improve service provision by proving equitable access to health services; efficient provision of continuity of care and service provision that is responsive to client's health needs or preference. Thus, all prenatal care is accessible to the community. Service Delivery Network refers to the network of health facilities and providers within the province, offering core packages of health care services. This is significant in the study because it is used in delivering certain services that are crucial in pregnant women.

Being a tertiary hospital, Bicol Medical Center is ideally the end-referral center for all complicated OB GYNE cases. However, because of the absence of the regional Hospital in Camarines Sur, Bicol Medical Center is mainly, the hospital of choice including those admitted as low risk OB patients. Moreover, the researchers would want to conduct this study to determine the compliance to prenatal care among OB patients and find out their delivery outcome.

In reference to the number of patients admitted in Bicol Medical Center year 2019, 34.32% of patients are Obstetric case and got the 1st rank as the highest number of admission among other cases. The researcher would then want to focus more on the low risk patients and see the relevance of prenatal and its delivery outcome.

*Statement of the Problem*

The main purpose of the study is to determine the relationship between compliance to prenatal care and its Delivery Outcome among OB patients admitted at Bicol Medical Center from to June 1, 2020 to June 14, 2020. Specifically, it will seek answers to the following question.

1) What are the characteristics of OB patients in terms of
   a. Age
   b. Civil status
   c. No of gravidity
   d. Employment status
   e. Place of residence by district
2) What is the degree of compliance to prenatal care of OB patients?
3) What is the delivery outcome of OB patients?
4) Are the characteristics significant predictors of the compliance to prenatal care of OB patients?
5) Is the delivery outcome of OB patients significantly correlated with their compliance to Prenatal care?
6) What are the proposed recommendations as a result of the study?

*Significance of the Study*

Prenatal care is an indicator of access and use of health care during pregnancy. It constitutes screening for health and socioeconomic conditions likely to increase the possibility of specific adverse pregnancy outcomes, providing therapeutic interventions known to be effective; and educating pregnant women about planning for safe birth, emergencies during pregnancy and how to deal with them (WHO, 2008) [7]. This study would be of great importance to the following.

The Community, by raising their awareness regarding the importance of prenatal care and the outcome of delivery associated with it.

The patient, who would benefit most from the study, by encouraging them to be more active in their prenatal checkup and educating them the importance of compliance and effect of it to the outcome of delivery.

The researcher and physicians, may this study empower us to succeed in our bid for a healthy pregnant mothers and safe delivery through early collaboration and cooperation among health professionals, professional societies and government agencies.

To future researchers, this study will serve as baseline for future studies and focusing on high risk state of pregnancies.

To The Bicol Medical Center, may the outcome of this study will serve as a tool to improve and strengthen the maternal and child program of this institution.

*Review of Related Literatures and Studies*

Sister Callista Roy's Adaptation Model (RAM) is a repre-

sentative of a grand nursing theory whose conceptual framework is focused on the interconnected, holistic individual and her interaction with the environment. According to Roy, adaptation is the outcome observe when responses to environmental changes are positively experience. Roy's model is based on the assertion that a person's ability to adapt is a positive response for life development and maturity related to physical needs and quality of life.

Malabanan [1] conducted study which showed that birth center personnel are moderately compliant on the indicators under admission but are compliant on the indicators under active labor, fully dilated and effaced stage, postpartum and newborn care, and referral.

Donabedian's [5] (2005) three components approach for evaluating the quality of care underpins measurement for improvement. The three components are structure, process and outcomes. Measurement for improvement has an additional component - balancing measures.

According to conducted study of Malabanan et al, [6] one of the predisposing factors of malnutrition of underfive children in Camarines Sur is lack of maternal education of mothers. Is support to this study, Roy's Adaptation Model can be used as a guide in understanding the OB patients on how they adapt during their pregnancy for nine months and better understand each individual as they experience changes in their body as against their daily activity. While Donabedian's [5] theory have 3 components in its approach that will justify the compliance of prenatal care versus delivery outcomes.

*Definition of Terms*

Pre natal Care - also called as ante natal care, is an indicator of access and use of health care during pregnancy. It constitutes screening for health and socioeconomic conditions likely to increase the possibility of specific adverse pregnancy outcomes, educating pregnant women about planning for safe birth, emergencies during pregnancy and how to deal with them (WHO; indicator definitions and metadata 2008) [7].

Minor participant - a respondents that age belongs to the group of less than 18 years old and categorically identified as low risk old and gave birth at Bicol Medical Center.

Compliance - the act or process of complying to a desire, demand, proposal, or regimen or to coercion (Merriam Webster Dictionary).

Service Delivery Network - a network of health facilities and providers within the province or city -wide health systems, offering a core package of health care services in an integrated and coordinated manner similar to the district health system.

Delivery Outcome - final result of care from admission to the hospital to of mode of delivery to until the doctor's order for discharge.

Low Risk Pregnancy - no active complications and that there are no maternal or fetal factors that place pregnancy at increased risk for complications.

High Risk Pregnancy - is a pregnancy complicated by a disease or disorder that may endanger the life, or affect the health of the mother, the fetus or newborn [4].

## 2. Methodology

*Research Design*

The study will use the descriptive-correlational design. The descriptive methodology will be used in determining the characteristics of low risk mother according to their age, civil status, no of gravidity, employment status and place of residence by districts. It will also discover the degree of compliance to pre-natal care and delivery outcome of OB patients.

On the other hand, the correlational method will be used in determining the significant correlation between the compliance to prenatal care and its delivery outcome. Categorical regression will be used to determine if the characteristics of pregnant mothers are significant predictors on the compliance of prenatal care.

*Participants of the Study*

The researcher will obtain the data, by using full enumeration of all low risk patients base on the present census admitted at the OB Department (OB Ward, OB Annex, & OB Extension), categorically identified as low risk patients becoming the respondents during the 2 weeks period of the study.

Research participants will be selected base on the Inclusion and Exclusion Criteria. Inclusion Criteria was those mother admitted and gave birth at OB Department of Bicol Medical Center categorized as low risk by the attending physician; mother who gave birth at Bicol Medical Center (regardless of age, address, Parity, Gravidity); mother who gave birth under Philhealth Paying status, Philhealth service and service patients which were classified by the social service and mother who gave consent to participate in the study, while for the exclusion criteria will be those mother who are admitted but did not gave birth within the Bicol Medical Center premises; mother with diagnosed Medical condition prior to pregnancy / mother on high risk pregnancy; mother who had an abortion and stillborn babies; Gynecological cases are not included and mother admitted but did not give consent to participate in the interview.

After the Pilot testing, the researcher will set the subject of the study and will schedule June 1, 2020 to June 14, 2020, a period of 2 weeks as the actual date of research interview. The participants of this study will be those OB patients admitted at the OB Department of Bicol Medical Center specifically and were categorized as low risk patients.

*Research Instrument*

The study will utilize the researcher-made instrument or tool that were basically adapted from the mother's booklet given to pregnant women during their prenatal care. This tool comprises 3 main sections. The first section, (part I), determines the profile of the respondents; this includes their address, age, civil status, employment status, and number of pregnancies. The second section, (part II), focuses on the compliance of patient prenatal care, parameters such as location of prenatal care, frequency, medications taken and diagnostic procedures done.

The third section, (part III) of the questionnaire determines the delivery outcome with the parameters on type of procedure, management post delivery and clinically improved as assessed by the attending physician. The researcher accomplished this section by reviewing the patient's chart.

The researcher-made instrument tool was consulted and approved by OB Consultant. It was initially used during the pilot study, made some revisions and finalized prior to application of tool.

A week prior to the conduction of the study, researcher will conduct pilot study, having an average daily census of 50 patients at the OB annex, the researcher will then select 50 mothers who gave birth and presently admitted at OB Annex ward categorized as low risk patients. After data gathering, the researcher will review the patients' chart to confirm and check the diagnosis and its delivery outcome. When the researchers were able to identify the same characteristics and fall under the same category, they will use the questionnaire as the research tool to conduct interview to those participants who gave consent. After two (2) days of data gathering, they will analyze the research tool, and will make revision until it was final.

*Data Gathering Procedure*

The first step of the researcher is to submit a request to conduct a study at BMC to office of the MCC thru the Professional Education Training and Research Unit (PETRU). A letter to a data privacy officer asking for an approval to review the charts of the selected respondents while still admitted at the hospital. Issuance of a Certification indicating approval from the Technical Review Committee and Issuance of Protocol Evaluation Form were also given by research Ethics committee. After the approval, the researcher will secure a list of OB case patients from IHOMP admitted on the date of the study and identified the name of respondents based on the inclusion criteria. Those who qualified, as respondents will be visited on the room introducing themselves as an employee of Bicol Medical Center and a researcher. They will be explained on the purpose of the study and what was stated in the informed consent, and will guarantee that it will only take a maximum of 15 minutes to answer the tool, When the respondents understood and signed the informed consent, the researcher will ask for the convenient time and place of respondents to conduct an interview and answer the questionnaire. The researcher will also give the respondents an option that in the event that the respondents prefer privacy while answering the questionnaire, a patient screen will be provided or interview will be done on the supervisors' office. In accomplishing the tool, the researcher will interpret those hard to understand questions in a dialect that the respondents can fully understand, and will request not to leave any part of the questionnaire unanswered. The researcher will also pledge to the respondents that confidentiality of the data shall be safe and secured.

In consideration with the new normal guidelines, the researcher ensured and followed the standard protocol such as wearing facemask and face shield both by the respondents and researchers. One-meter distance was also observed.

The researcher also emphasized that in any circumstances that the respondents change their mind and refuse to be interviewed, they will respect their decision and rest assured that it will not affect the relationship between the patient and the staff as well as the services due them.

*Statistical Tool*

After date of study ended, the researcher collated all the data and gathered all the list of admission from the IHOMP, They counted the total admission of OB cases from June 1 to June 14, 2021, and there were 520 number of patients admitted; 399 mothers falls under the category of low risk patients however, 11 of them refused or did not give consent which made the total no of respondents become 388. The data were collected, and the answers were tallied using the prepared rubrics, (annexes B & C), that was previously referred and consulted to the Obstetrician together with the approved questionnaire. The researcher checked the data for completeness and tabulated the answers according to the approved rubrics using the Microsoft excel to answer the question that was included in the statement of the problem. The collated data were also be submitted to the expert for statistical analysis. Regression were also used for categorical data and came up with the analysis and recommendations.

*Ethical Considerations*

To complete research with appropriate research guidelines, research ethics is very important. Considering ethical aspect of research, 15 minutes is given to the respondents of the study and researcher were assisted and elaborated more the questions and fully understood what was being asked in research questions. Enough time were given if the respondents felt inconvenience in answering the questionnaire. Consent from the respondents were taken, emphasized that the study was voluntary and refusal to the study will not affect their relationship between patient and staff and the services due them. The researchers also emphasized that in cases that the respondents has no capacity to read or understand, or are minors whose ages is less than 18 years old, consent will be taken to both the patients and the parents or legal guardian, allowing them to both sign the consent. Nevertheless, if the respondents may experience inconveniencies in answering the questionnaire, enough time will be given beyond the 15 minutes allotted for them or may withdraw from the study anytime. Moreover, Researcher informed the respondents that the data gathered will be used solely for the purpose of this study and researchers are the ones who will have only access to the said data. Confidentiality of the respondents will be maintained strictly to ensure privacy of their data it will be kept in the office of the OB supervisor within the locked steel cabinet, once the study is completed, the instrument tool shall be destroyed 3-5 years after the study were published. In the absence of the shredder, the collected instrument tool will be teared by hands before throwing in the biodegradable bag. The researchers will ensure the confidentiality of the gathered

data and guided by RA 1073 or Data Privacy Act of 2012. Personal information of participants will not be published in the study and only the researchers will have access to the information.

This study is conducted to know if all pregnant mothers are complying with the pre natal care especially in the existence of Pandemic. This is also the chance of knowing the effectiveness of service delivery network program of each local government unit whether they are active in implementing their program or not.

Upon presentation of results, the researcher will acknowledge those districts that show good compliance to prenatal care. Once the study is published, the researcher will coordinate with the Public Health Unit to communicate with different municipalities and will present the study conducted to testify how prenatal care give impact to the delivery outcome.

The researchers whose name are listed in this study guarantees that they have no affiliation with nor involvement in any organization or entity with any financial interest, such as honoraria or educational grants, or non financial interest such as personal or professional relationship or affiliations in the subject matter.

This research proposal has been carefully reviewed and approved by the BMC Ethics committee such as the Review Ethics Committee and Research Technical Review Committee, which is a working group whose task is to ensure that research participants will be safe while participating in the research.

References and author quoted in the study will be recognized through citations. Hence, the ethical aspect of research will be followed very strictly in this research. For any inquiries, clarifications, and suggestion Review Ethics Committee are available during office hours from Monday to Friday located at the 5th floor New ER Building of Bicol Medical Center Concepcion Pequena Naga CIty, or can be called via landline to Phone number 4726125 local # 1153.

## 3. Results and Discussion

The result of the study shows that out of 520 mothers admitted from June 1 to June 14, 2020, 120 of those are gyne cases, and high risk mothers who fell under the exclusion criteria. There were 399 mothers qualified however 11 of them did not sign the consent which made them 388 mothers and became the subjects of the study.

This part provides the necessary measures obtained to interpret and analyze the data gathered.

*Characteristics of OB- patients (N = 388)*

***Table 1.*** *Distribution according to characteristics.*

| Variables | Characteristics | No. of Patients | Percentage |
|---|---|---|---|
| Age | 20-35 years old | 253 | 65.20% |
| | 19 years and below | 69 | 17.78% |
| | 36 years and above | 66 | 17.01% |
| Civil status | Single | 250 | 64.4% |
| | Married | 138 | 35.6% |
| Employment status | Unemployed | 259 | 66.75% |
| | Employed | 129 | 33.25% |
| Gravidity | one | 172 | 44.33% |
| | two | 80 | 20.62% |
| | More than three | 136 | 35.05% |

Table 1 shows that the characteristics of OB patients are mothers having the age that ranges from 20-35 years old or 253 (65.20%). Most of them are single with a 250 (64.4%); unemployed with 259 (66.75%) and first time mother (primigravida) with 172 (44.33%) respondents.

*Characteristics of OB Patients according to Location*

Table 2 shows that 151 mothers (38.92%) came from the 3rd District of Camarines Sur, which is composed of 7 municipalities including Naga City. And the lowest are on the others with 4 mothers or 1.03% admitted yet residing outside Camarines Sur.

*Table 2. Distribution of patient according place of residence. (N = 388).*

| Characteristics in Location | No of Patients | Percentage |
|---|---|---|
| 1st District | 25 | 6.44% |
| 2nd District | 80 | 20.62% |
| 3rd District | 151 | 38.92% |
| 4th District | 57 | 14.69% |
| 5th District | 71 | 18.30% |
| Others | 4 | 1.03% |
| Total | 388 | 100% |

*Compliance to Pre-natal care of OB patients*

The compliance of prenatal care of OB patients are divided into 5 variables and was referred on the rubrics to come up with final scoring, thus identify them as poor, moderate and high standard prenatal care. Pre natal visit refers to the facility and person who attended the care, 2nd is the frequency of check up by trimester, the 4th orientation attended by mothers, next is medication and the last is the diagnostic procedure.

*Table 3. Distribution According to Standard of Care (N=388).*

| Variables | Indicators | Poor | | Moderate | | High | |
|---|---|---|---|---|---|---|---|
| Prenatal visit according facility | Attended by health worker | 5 | 1.29% | 163 | 42.01% | 220 | 56.70% |
| | First Trimester | 119 | 30.67% | 100 | 25.77% | 132 | 34.02% |
| Frequency | Second Trimester | 134 | 34.54% | 215 | 55.41% | 170 | 43.81% |
| | Third Trimester | 135 | 34.79% | 73 | 18.82% | 86 | 22.17% |
| Mothers class | Orientation attended | 90 | 23.20% | 131 | 33.76% | 167 | 43.04% |
| Medication | | 10 | 2.58% | 40 | 10.31% | 338 | 87.11% |
| Diagnostic | | 76 | 19.59% | 117 | 30.15% | 195 | 50.26% |
| | Total Average | 81.29 | 20.95% | 119.86 | 30.89% | 186.86 | 48.16% |

Table 3 shows that 220 (56.70%) mother had their prenatal care done either at the RHU; Clinics; or hospital where doctors and nurses are the ones who attends to the care and considered as high standard pre natal care. The frequency were high during the 2nd trimester however it is well understood that the 3rd trimester fell on the poor standard because this was the time that the pandemic (COVID-19) and enhance community quarantine started. As to mothers class, medication and diagnostic, it is impressive that mothers got the majority on high compliance. It only shows that service delivery network program under section 2. Mapping available healthcare providers and 2.2.1.b. To have the list of specific healthcare services for antennal care / pre natal consultation. Nurses/midwives under this program provide good orientation during mother's class, free medications were given in bulk per trimester upon consultation. The diagnostic was not indicated if it is available and free in the services however, mothers got 50.26% compliant which is very important in the decision making of the doctors during the time of admission.

*Delivery Outcomes of OB patients*

The delivery outcome were based on the procedure, course in the ward and prognosis. To assess the delivery outcome score whether good or bad were referred on the approved rubrics.

*Table 4. Distribution of patient based on the outcome of delivery.*

| Indicators | Poor | | Good | |
|---|---|---|---|---|
| Procedure | 120 | 30.92% | 268 | 69.07% |
| Course in the ward | 130 | 33.52% | 258 | 66.49% |

| Indicators | Poor | | Good | |
|---|---|---|---|---|
| Prognosis | 139 | 35.82% | 249 | 64.17% |
| Total Average | 129.67 | 33.42% | 258.33 | 66.58% |

This Table 4 shows that 120 mothers had post-op complications after undergoing a NSD and CS procedure, 130 mothers needs additional medications and transfusion post-op and 139 mothers had longer hospital stay which constitute poor delivery outcome. Majority of the mothers had good delivery outcome, no post-op complications, less medication and shorter hospital stay.

*Characteristics as significant predictors on Compliance to Prenatal Care*

***Table 5.*** *Correlations of the characteristics as the most important predictors on Compliance to Prenatal care.*

| | Correlations | | | Importance | Interpretation |
|---|---|---|---|---|---|
| | Zero-Order | Partial | Part | | |
| age | 0.129 | .033 | .032 | .125 | Important predictors |
| CS | 0.166 | .106 | .104 | .516 | Important predictors |
| Districts | 0.021 | .033 | .033 | .017 | Not important |
| Employment status | .134 | .100 | .099 | .341 | Important predictors |

Table 5 shows that the result of catreg (categorical regression) yielded significant positive relationship for the variables; Age, civil status, and employment status, the districts is not relatively important predictors. For the part of correlation, only the influence of the control variables on the independent is taken into account. In terms of importance these variables (age; civil status and employment status) together account for 98.28% the most important predictors.

Delivery Outcomes of OB Patients significantly correlated with their compliance to prenatal care.

***Table 6.*** *Correlations between prenatal care and delivery outcome.*

| Variables | Pearson | Sig | Interpretation |
|---|---|---|---|
| Compliance / Outcome<br>N = 388, Sig <0.05 | -.047 | 0.358 | Relatively Not Significant |

Table 6 shows that there is a very weak or negative relationship between compliance and delivery outcome. But the relationship is not statistically significant with sig =0.358.

## 4. Conclusion

In this study majority of the subjects belongs to the 25 and 35 age group, single and employed. Most of them came from the 3rd district of Camarines Sur. Most of the mothers are on their first pregnancy with 172 gravida case indicating a good delivery outcome. Prenatal consultation are mostly done in RHU, clinics and in private and government hospitals (220 respondents).

The compliance to pre natal care of OB patients was relatively high standard. During the first trimester of pregnancy 132 mothers belongs to the high standard category with >3 pre-natal checkup but a significant number belongs to the poor standard during the same period. On the 2nd trimester majority belongs to the moderate category having at least 3 check up during the period. Due to urgent restrictions related to COVID-19 pandemic, the respondents were unfortunately covered with the enhance community quarantine and general community quarantine on their 3rd trimester of pregnancy that yields sudden rise in the number of pregnant mothers (135) had poor prenatal checkup up to the time of delivery. In terms of mother's class, medications and diagnostics indicators itemized in the rubrics, a good number showed on high standard compliant, with overall average rating of 186.86 or 48.16% belonging to the high standard pre natal care.

This study also presented that, majority of the mothers admitted have a good delivery outcome having a total average of 258.33 (66.58%) on procedure, course in the ward and prognosis that favors most of the study subjects and translate to no post-op complications, less medication and shorter hospital stay.

The characteristics of OB patients admitted at Bicol Medical Center are significantly predictors on compliance to pre natal care, namely, age, civil status and employment status. Mothers addressed by districts is relatively not a good predictors however, the researcher would like to acknowledge those health worker belonging to districts 1 and 5 showing a good performance specially on the frequency to pre natal care.

The delivery outcome of OB patients is significantly not correlated with the compliance to pre natal care. WHO recommended that a woman without complication should have at least four pre natal care visits the first should take place during the first trimester (WHO 2014). This would mean that if mothers are low risk, a moderate standard pre natal care is accepted.

Upon studying the pre natal care and delivery outcome of Bicol Medical Center, the researcher recommends that pre natal care is still important for pregnant mothers even though results says that pre natal care is not significantly important to delivery outcome. Within placed service delivery network program this study shows that the characteristics of pregnant mothers as to age, civil status and employment status can be predicted as compliant. The researcher suggests that a health care worker in the community can identify and give more focus on pregnant mothers that are not likely compliant to pre natal care. As for the Bicol Medical Center, researcher will also propose to revise an existing policy particularly those in the to the low risk pregnant mother to improve more of the services rendered.

The researchers focused on the Low risk pregnancy thus would like to challenge future researcher to continue this study to high-risk pregnant mothers as their respondents on compliance to pre natal care and its delivery outcome.

## Abbreviations

| | |
|---|---|
| DOH | Department of Health |
| OB | Obstetrics |
| WHO | World Health Organization |

## Author Contributions

**Leticia II Angeles Collado:** Conceptualization, Writing - original draft

**Maritess Balcueva Savilla:** Conceptualization, Writing - original draft

**Karen Pinoy Formalejo:** Conceptualization, Writing - review & editing

**Sarah Albao Nisolada:** Conceptualization, Writing - original draft

**Jennelyn Acero Vicente:** Conceptualization, Writing - original draft

## Conflicts of Interest

The authors declare no conflicts of interest.

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