

Effectiveness of Childbirth Services among Health Centers of Cagayan de Oro City

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ABSTRACT

This study aimed to determine the effectiveness of childbirth services at the health centers of Cagayan de Oro City. The respondents of the study were the mothers who had experienced giving birth at the health centers of Cagayan de Oro City. They were chosen purposively by the researchers based on the information they provided to the health centers while availing of the birth care services. This study aimed to determine the profile of the mothers in terms of maternal history on number of deliveries, and history of illnesses; and the level of effectiveness of childbirth services at the health center such as care during labor, delivery, and post partum. This study utilized the descriptive method, specifically the evaluative survey to determine the effectiveness of childbirth services at the health centers. The findings would serve as basis for decision making and policy format for the organization concerned and as an evaluation of the nature of the existing situation during the time of the study. This study was conducted on the whole month of February 2008. The data were analyzed using the descriptive statistics such as frequency, percentage, and weighted mean. The F-test was utilized to test the hypothesis for the difference in the level of effectiveness of childbirth services at the health Centers of Cagayan De Oro. The findings of this study revealed the following: Most of the respondents agreed with the effectiveness of care at the health centers. It was mostly considered not significant. Among the three categories in health care services, it was found that the health workers showed positive caring behavior to the mothers. Most of the respondents who availed of the services of the centers were those with low income and below poverty line monthly income. Mothers with previous illnesses were not that trusting to deliver in the health center since the risks were too high. Most of the factors did not have significant difference with the effectiveness of childbirth services rendered at the health centers.

Keywords : Childbirth, Health Centers

INTRODUCTION

The passing of life from parent to child is one of the greatest privileges that come to men and women. Seeing one's children grow and develop is one of life's great satisfactions. It is always a delight of parents to observe that her child is like themselves.

Becoming a mother and expecting a baby in the family is one of the challenges that a woman and her family faces. It leads to the fulfillment of her maternal desires. It gives her an opportunity to project her influence and her self into the next generation.

In previous centuries, a high percentage of mothers lost their lives at childbirth. "Childbed fever," then a tragic illness, often deprived the newborn infant of its mother, made half-orphans of the other children if there were such, and left a widowed husband. Even at the beginning of the present century maternal death and childbirth continued at a high rate, and many a mother told her children how she had passed through the "valley of death" in order to bring them into the world.

Fortunately, the progress of medical science has changed the situation. As late as 1930, 60 mothers died for every 10,000 children born alive. But by 1975 the ratio had been reduced to about 1 maternal death per 10,000 live births!

Even though the danger of childbirth has been reduced until it is comparable, in terms of risk, to that of a relatively minor illness, fear of childbirth still lingers. The only remaining basis for dreading childbirth today is that it does cause some pain and discomfort, usually more pronounced with the birth of the first child. But even here modern medicine has greatly improved the situation. Mothers generally agree that the discomfort is largely forgotten once the newborn baby is placed in their arms. (*Harold Shyrock, 2001*)

In the Philippine context and in Cagayan de Oro, child birthing has been something that people are fearful about. The uncertainty of saving two lives during child delivery is still felt by many pregnant women. For this reason, child delivery is usually entrusted to the expertise of hospital personnel who are believed to be knowledgeable about child delivery and care.

However, the Philippine government is also trying its best to adhere to the constitutional provision on the "accessibility of basic social services" that include quality health services. In its effort to provide better health services to the people, it equips itself with updated and better health centers so that it can respond more easily on the health-related issues that may rise.

Recently, the Department of Health embarked The Quality Health Program 2003-2007: Five – Year Strategic Plan through Administrative Order 17-B, series 2003 that launches the Sentrong Sigla that have 2 major strategies to attain quality improvement of its services. These two strategies are certification or recognition of public health facilities using DOH criteria and capability building to install knowledge, attitude and skills in the same public health facilities on continuous quality improvement.

The setting up of the Sentrong Sigla is aimed at certifying whether or not a health provider is meeting the quality set by the Department of Health. It also recommends the upgrading and improvement of the services of such provider if it does not meet the set criteria or standard.

One of the health service providers accessible to the common people is the health centers that were established by the Local Government Units and supervised by the Department of Health. As a public health care provider, they serve the poor people and are expected to render services for free or for very minimal payment. Child birth is one of the services offered by these health centers.

Childbirth care services are getting complicated as the number of women capable of delivering babies increases while childbirth services are getting expensive. Usually, the low income families resort to availing themselves of government-run health centers to assist them to minimize their expenses. However, some people may have different perception as to the effectiveness of the child birth care services provided in these health centers due to some deficiencies in training and in the supplies needed for these services.

This study was conducted to find out the effectiveness of the health centers of Cagayan de Oro in meeting the needs of women on child birth based on the reliable criteria set by the researchers.

OBJECTIVES OF THE STUDY

This study sought to determine the following:

1. The profile of the respondents in terms of number of deliveries, history of illness, and economic status;
2. The level of effectiveness of childbirth services at the health centers of Cagayan de Oro City in terms of care during labor, care during delivery, and postpartum care; and
3. The effectiveness of childbirth services at the health centers when the respondents are grouped according to their number of deliveries, history of illness, and economic status.

METHODS

This study utilized the descriptive method, specifically evaluative survey to determine the effectiveness of childbirth services at the health centers. Padua (1995) stated that descriptive evaluative study is used to judge the goodness of a criterion measured. The findings would serve as basis for decision making and policy format for the organization concerned. Further, descriptive evaluative research is an evaluation of

the nature of the existing situation during the time of the study. Interview was also conducted to validate the data.

The respondents of the study were the 30 mothers who experienced giving birth at the health centers of Barangay Carmen and Macanhan, Cagayan de Oro City. They were chosen purposively by the researchers based on the information they provided to the health centers while availing of the birth care services.

The main instrument used in gathering the data for this study was a two-part researcher-made questionnaire. The first part of the instrument contained items that gathered information about the personal profile of the respondents. Part II obtained data about the effectiveness of the childbirth services performed by the health workers in the barangay. The questionnaires were personally distributed by the researchers to the respondents and were immediately retrieved.

Since the questionnaire was researcher-made, it was subjected to a reliability and validity test. The test of reliability and validity was done by distributing the researcher-made questionnaire to 15 mothers who gave birth in the health centers of Barangay Macanhan and Carmen Cagayan de Oro City. These respondents were not included in the actual 30 respondents taken for the study.

The result of the pretest was computed for reliability test using Cronbach Coefficient Alpha. The test for the Indicator of child birth care during labor was found to be 1.00 considered as excellent (reliably excellent). The childbirth care during delivery was tested and resulted into 0.94 also considered as excellent. The post partum care questions resulted to a reliability coefficient of 0.94 alpha meaning that it was also reliable. (See Appendix C for reliability computations and Reliability equivalents). (George & Mallary, 2003)

The following statistical treatments were used in this study: Problem 1. Frequency count and percentage were used to describe the profile of the respondents, along with the weighted mean. Problem 2. Weighted mean was used to determine the level of effectiveness of the childbirth services provided by the health centers. Problem 3. F-test was used to determine the test of difference in the perception of respondents about the effectiveness of birth care services of the health centers of Cagayan de Oro City when the respondents were grouped according to the number of deliveries, type of deliveries, health history, and economic status.

RESULTS AND DISCUSSION

Table 1 shows the maternal history of the number of times the mother bore a child and gave birth under normal condition. As revealed 33.33 percent of the mothers delivered babies twice and all were alive, Moreover, 26.67 percent of them delivered

three times and all of them were safely delivered and alive; 16.67 percent delivered baby in the health center for the first time and all were alive; 10 percent delivered the baby thrice but only two were safely saved. And only 3.33 percent delivered four babies but only three were alive, one delivered the baby four , another delivered the baby six times and all were alive and one mother delivered for 6 times and all were alive, respectively.

The result implies that most of these babies were safely delivered at the barangay health centers. This only indicates that it is safe to go to the health centers not just only to save the baby and the mothers but also to save expenses. These centers are really very beneficial to the mothers who cannot afford to go to hospitals, since they are also assured of safe delivery.

Table 1. Distribution of Respondent's Maternal History In terms of Number of Deliveries

Number of Deliveries	N	Percentage
G1P1	5	16.67
G2p2	10	33.33
G3P2	3	10.00
G3P3	8	26.67
G4P3	1	3.33
G4P4	1	3.33
G5P5	1	3.33
G6P6	1	3.33
TOTAL	30	100.0

Legend: G= Gravida P= Para

Table 2 shows that majority of the respondents did not have a record of illnesses (63.33 %) that would affect their pregnancy, while 16.67 were determined to have history of hypertension, and the remaining 10 percent had history of asthma and diabetes

This implies that most of the mothers did not have complicated illness to worry while having the pregnancy and at the time of delivery at the health centers. The centers also are very confident to assess such mothers.

Some mothers with problematic illness are not admitted in the centers but advised to proceed to hospitals for the safety of the mother, baby, and the center in-charge. Delivering a baby is a very risky task for the midwife, hilot, nurse or doctor in-charge. The confidence of having no complications are always the biggest consideration

to handle such work. Mothers also are assured of safe delivery if they do not have such complications in their body.

Table 2. Distribution of Respondent's Maternal History

Illnesses	N	Percentage
Hypertensive	5	16.67
Asthma	3	10.00
Diabetes	3	10.00
None	19	63.33
TOTAL	30	100.0

If a woman is healthy, at low risk for labor complications, wants more natural birth experience, and wants that the healthcare provider to be a nurse-midwife, a birth center may be the ideal choice. Birth centers offer a low-tech, personalized, and comfortable place for women to deliver their babies. There a mother can labor, deliver, and recover in the same room. Many women find this more peaceful than being moved from room to room — a common practice in hospitals. At birth centers, women also tend to be more active decision makers (Olarie & Chua, 2005).

Table 3. Distribution of Respondent's in terms of Economic Status

Economic Status	N	Percentage
Below P1000	12	40.00
P1000 – P5000	11	36.67
Above P5000	7	23.33
TOTAL	30	100.0

Table 3 describes the living condition of the respondents according to the monthly income of the family. As shown, 40 percent of them have a monthly income of below P1000; 36.67 percent have an income of above P1000 up to P5000 a month; and only 23.33 percent of them have an income of above P5000. The result implies that these mothers are reasonable enough to give birth at the health centers since the expenses in private hospitals and private lying-in centers are higher than the monthly income of the family. Such expenses can be defrayed at the barangay health centers for they had only to pay a minimal amount. This program of the government can really help those people whose monthly income is below the poverty line and even those who do not have significant income per month.

Effectiveness of Child Birth Services

Table 4 shows the respondents rating of the level of effectiveness of childbirth care services of the health centers as experienced by the mothers. The results showed that the mothers perceived the services as effective. This implies that health center staffs are very effective in teaching mothers about proper breathing and relaxation technique upon onset of pain during labor. Mothers are convinced with the health teachings provided by the health center staff. The health center staffs are much effective in instituting additional comfort such as changing position and rubbing the back of the mother's during labor (Simkin, 2007).

Table 4. Respondents Rating on the Level of Effectiveness of Childbirth Care Services at the Health Centers During Labor

Indicators	Mean Rating	VD
1. Assess client's pain including type, location & intensity by a 10 pts rating scale	4.33	VE
2. Teaches the mother about proper breathing & relaxation technique upon onset of pain.	4.53	VE
3. Institute additional comfort measure such as changing position, using lavage and rubbing back of the mother.	3.73	ME
4. Provide Information about the delivery process and teach the mother on how and when to bear down during delivery.	3.77	ME
5. Always ready to transfer the mother to a birthing table when the cervix has fully dilated.	4.10	ME
Over - all	4.09	ME

Table 5 presents the distribution of respondents' rating on the level of effectiveness on childbirth care services at the health centers. The highest rating is on childbirth services rendered by health workers. As shown on the table, demonstrating panting techniques upon bearing down on the mother (4.53) was rated as very effective by the respondents. The lowest rating was on knowing when and how to give analgesic to the mother (3.93) described as much effective only. During the delivery, the over – all rating was 4.09, verbally described as much effective.

The results imply that the services provided by the health centers were considered a much satisfying experience by the mothers who gave birth on the centers.

The rating also indicates that mothers were satisfied in the way they were taken cared of even if it is a government program. The trust of those who have the experienced is very reliable than to those who only criticize (Bautista, 2006).

Table 5. Respondent's Rating of the Level of Effectiveness on Childbirth Care Services at the Health Centers During Delivery

Indicators	Mean	VD
1. Demonstrate panting technique upon bearing down of the mother.	4.53	VE
2. Gives positive feedback upon the progress of bearing down.	4.07	ME
3. Allows the mother to hold his/her hand upon bearing down.	3.97	ME
4. Calls the mother by name when giving instruction.	3.97	ME
5. Knows when and how to give analgesic to the mother.	3.93	ME
Over - all	4.09	ME

Table 6 shows that teaching the mother about proper diet like increase protein intake, milk products, fruits and vegetables, and food rich in vitamin A and C obtained the highest rating (4.33) in post partum care services rendered by the health workers.. The lowest was in demonstrating postpartal exercises such as Kegels (Pelvic Floor Exercises), stretch, straight, curl-up and sit ups at (4.07) as much effective. The over-all rating in post partum is 4.25 meaning that the services are very effective.

The rating implies that the health centers in barangay Carmen and Macanhan rendered much effective services. The experienced of these mothers are the best testimony that the program implemented by the Department of Health is very much beneficial to all who enjoy such program (Sentrong Sigla, 2001).

Table 6. Respondent's Rating on the Level of Effectiveness on Childbirth Care Services at the Health Centers in terms of Post partum care

Indicators	Mean	VD
1. Teaches mother about proper diet like increase protein intake, milk products, fruits and vegetables and food rich in vitamin A and C.	4.43	VE
2. Demonstrates postpartum exercises such as :Kegels (Pelvic Floor Exercises), Arm and Upper Back, Stretch,Straight, Curl-Up and Sit-ups	4.07	ME
3. Instructs proper and enough rest periods.	4.27	ME
4. Instructs proper compliance of medications such as pain reliever and iron supplements	4.33	VE
5. Teaches and demonstrate proper perineal care	4.13	ME
Over - all	4.25	ME

Comparison of Child Birth Services

Table 7 displays the test of significant difference on level of effectiveness of childbirth services at the health center in terms of number of deliveries, health history, and economic status

During labor the F result is negative 0.282 which is lesser than the critical value of 2.7587. This means that there is no significant difference between the effectiveness of the services rendered by the health workers and the number of deliveries, hence the null hypothesis is accepted

In terms of health history, the F result is positive 0.623 which is lesser than the critical value of 2.7587 meaning the null hypothesis is accepted. The result shows that there is no significant difference between the effectiveness of the services rendered by the health workers and the experienced by the mothers during their labor.

During the delivery, F result is negative 0.449 which is lesser than the critical value of 2.7587 meaning the null hypothesis is accepted. There is a significant difference between the effectiveness of the services rendered by the health workers and the experienced by the mothers during their delivery.

In terms of health history, F result is positive 3.364 which is greater than the critical value of 2.7587 meaning the null hypothesis is rejected. There is a significant difference between the effectiveness of the services rendered by the health workers and the experience of the mothers during their delivery.

In terms of post partum care, the F result is negative 0.805 which is lesser than the critical value of 2.7587 meaning the null hypothesis is accepted. There is no significant difference between the effectiveness of the services rendered by the health workers and the experienced by the mothers after their labor.

In terms of economic status, the F result is negative 2.390 which is lesser than the critical value of 2.7587 meaning the null hypothesis is accepted. There is no significant difference between the effectiveness of the services rendered by the health workers and the experienced by the mothers after their labor.

Table 7. Test of Significant Difference on the Level of Effectiveness of the Childbirth Services at the Health Centers according to the Number of Deliveries, Health History and Economic Status

Care of Health Centers	Computed Value	Decision of Ho	Significance
During Labor:			
Number of Deliveries	F = 0.282	Accept Ho	No Difference
Health History	F = 0.623	Accept Ho	No Difference
Economic Status	F = 0.282	Accept Ho	No Difference
During the Delivery			
Number of Deliveries	F = 0.449	Accept Ho	No Difference
Health History	F = 3.364	Reject Ho	With Difference
Economic Status	F = 0.449	Accept Ho	No Difference
Post Partum Care:			
Number of Deliveries	F = 2.390	Accept Ho	No Difference
Health History	F = 0.805	Accept Ho	No Difference
Economic Status	F = 2.390	Accept Ho	No Difference

Critical Value at $\alpha = 0.05$ $f = 2.7587$

This study aimed to determine the effectiveness of childbirth services at the health centers of Cagayan de Oro City. The respondents of the study were the mothers who had experienced giving birth at the health centers of Cagayan de Oro City. They were chosen purposively by the researchers based on the information they provided to the health centers while availing of the birth care services.

This study utilized the descriptive method, specifically evaluative survey to determine the effectiveness of childbirth services at the health centers. The findings would serve as basis for decision making and policy format for the organization concerned and as an evaluation of the nature of the existing situation during the time of the study. This study was conducted on the whole month of January 2008. The data were analyzed using the descriptive statistics such as frequency, percentages, weighted mean to describe the variables. F-test was utilized to test the hypothesis for the difference in the level of effectiveness of childbirth services at the health centers of Cagayan de Oro.

The following were the findings drawn from the results of this study:

1. The most number of deliveries are G2P2 by 33.33%.
2. Majority of the respondents claimed they have no hereditary/familial disease.
3. Most of the mothers had low or below poverty line monthly income
4. Overall, the mothers rated the childbirth birth services provided by health centers as much effective
5. Most of the factors have no significant difference with the effectiveness of childbirth services provided during labor, delivery, and post partum.

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn.

It can be said that majority of the mothers agreed with the effectiveness of childbirth services rendered at the health centers. Most of the respondents who availed of the services were those with low income. Mothers who had history of illnesses chose not to deliver their babies in the health centers since the risks are too high. Only those without illness can take the risks of availing the services of the health centers. Most of the factors have no significant difference with the effectiveness of childbirth services during labor, delivery, and after the delivery.

It can be concluded therefore that childbirth services rendered by the health centers are safe and effective.

RECOMMENDATIONS

Based on the findings and conclusion of the study the researchers recommend the following:

1. The Department of Health (DOH) should continue to monitor health centers to maintain the effectiveness of its child birth services.

2. The health staffs should continue to provide health teachings to the mothers on the preparation on labor, delivery and post partum care.
3. The health care staffs should continue to join seminars, workshops and trainings to update about the latest trends in childbirth services.
4. The City Health Office should continue to promote to the public that health centers child birth services are safe and effective.
5. The DOH should achieve re-integration of hospital and primary health care for a holistic delivery of health services and minimize redundancy or duplication of services.
6. The DOH should institutionalize local health systems within the context of local autonomy
7. The DOH should guarantee and sustain quality of care in health services.

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