

Delivery of Maternal, Neonatal, and Child Health Care Services Among Public Health Workers in Ilocos Sur

FE R. RODILLAS, MAN, Ed.D.

Researcher

Abstract: This study was conducted to determine the delivery of maternal, neonatal, and child health care services. It looked into the relationship between the delivery of health care services and the profile of the respondents and health facility-related factors.

The study employed descriptive, correlational research. Respondents were the 495 Public Health Workers (PHWs) and 500 clients. It made use of a questionnaire-checklist, augmented with individual interview for clients availing the services. Frequency and percentage, mean, and simple linear correlation analysis were the statistical tools used.

The study revealed that the public health workers are female, married, 30 years old and below, midwifery graduate, occupying midwife position, served for ten years and below; permanent status, with monthly income of 10,001-20,000, receive uniform allowance, no training/seminars. The health facilities are located at the national highway, with 200,000-250,000 budget, with health education materials, served 30,000 and above clients, with 100% functional equipment, have inadequate personnel, and belong to 4th class municipality. The extent of delivery of health care services is "Very High". Significant relationship exist between the delivery of health care services and respondents' position and status of appointment, health facility's location and municipalities' classification and total population served. The following recommendations are: government should fill-up permanent positions, strengthen their commitment to support MHOs, and assist recipients to improve practices to achieve healthy citizenry; PHWs should be encouraged to develop their capabilities through training programs and seminars and pursue post graduate study.

Key Words - Delivery, Health Care, Services, Satisfaction, Clients

INTRODUCTION

The delivery of health care services depends on various factors. The kind of health care system greatly affects the utilization of these services. The DOH holds a lot of responsibility and faces a great challenge in providing an efficient, effective and accessible, promotive, preventive, curative and rehabilitative health services. This is very essential for each and every one, for individuals and communities which depend much on the availability of health services. Everyone has the primary obligation to do all that is possible to assure the attainment and maintenance of health through appropriate behavior. Also, one must insist that social agencies be responsive to one's health needs and that they function within their capabilities and with the limitations established by law. Access to health can involve two specific components, the availability of services of acceptable quality to those who seek care and the affordability of those services.

Since the emergence of the World Health Organization (WHO) concept of the Primary Health Care in Alma Ata, Russia in 1978, of "placing health in the hands of the people," the emphasis to revolutionize the health system saw not the hospital personnel as key players but the frontline midwives, nurses and physicians in public health. The goal is to prevent the incidence, or at least control the spread of sporadic or endemic

communicable diseases. Vital to this is the need to capacitate the people on how to prevent the spread of illnesses through hygiene, nutrition, inoculation, environmental sanitation, to name a few.

The health of mothers and children poses multiple challenges for health professionals in the times of rapid socioeconomic, political, cultural, epidemiological and health system changes. The Philippines had one of the highest maternal mortality ratios in Southeast Asia. Women's health in the Philippines had not been improving at the same rate as in other countries in the region. According to government estimates, maternal mortality accounts for about 14 percent of all deaths of women at reproductive age (NOH, DOH 2011-2016).

Equally alarming is neonatal and infant deaths. Based on the State of the World's Children 2009 report of the United Nations Children's Fund (UNICEF), the Philippines is among the 68 countries, which contributed to 97 percent of maternal, neonatal, and child health deaths worldwide. Statistics also show that almost half of the deaths of Filipino children under five years old is within the 28 days of life. In response to this need, the Department of Health (DOH) has initiated key health reform for the rapid reduction of maternal and neonatal mortality through the DOH Administrative Order (AO) No. 2008-0029 on Implementing Health Reforms for Rapid Reduction of Maternal and Neonatal Mortality. This mandate the implementation of an Integrated Maternal, Neonatal and Child Health and Nutrition Strategy within the framework. It adopts a unified strategic framework for maternal and newborn health that is linked with child survival strategies, maximizing the delivery of service packages, and ensuring a continuum of care across the life cycle stages. Under this strategy, all pregnancies are considered at-risk. Likewise, it takes into consideration the three main pillars in reducing maternal mortality and morbidity, namely: emergency obstetric care, skilled birth attendants and family planning.

Due to these reasons, monitoring and evaluation system in health programs and the role of health care givers most especially to the public health workers play a crucial role in addressing the issue of maternal, newborn, child health to achieve the Millenium Development Goals.

As a professional, one must act as an advocate for clients by disseminating essential information and providing proper knowledge for them to correct misconceptions, to learn and practice health promotion towards independence and to promote quality life. These interventions would help in truly putting health in the hands of the people. Involving the community in every program or activity is an integral part of success. Public health workers would perform ocular visitation, conduct interviews, use survey forms and talk with the people about their needs. Upon collecting the data the public health care workers identify issues, prioritize and develop a plan to get the program started.

The study is deemed so important because of the rising public expectations that could lead to increased demand for essential health care services that public health workers can provide. The researcher, therefore, embarked on a study to determine the delivery of health care services particularly on maternal, neonatal and child care services of public health workers in Ilocos Sur, to find out how efficient and effective the delivery of health care services are being executed in each municipality of Ilocos Sur. Assessing the weaknesses and strenghts of the agency could have an impact on the improvement of

the delivery of these services. Furthermore, this study was conducted to develop awareness of the people in seeking health care services and for the MHO personnel to improve the delivery of health care services.

The results of this study could be used by health planners and local chief executives in formulating policies and allocating resources for the health sector, and the public health workers in improving their delivery of health care services. This would also be helpful to academicians in developing the skills of would-be health providers in the conduct of health care activities. Consequently, this could lead to more acceptable and sustained health status of clients as they are better equipped with the knowledge, approaches and practices on maternal, neonatal and child health.

Objectives of the Study

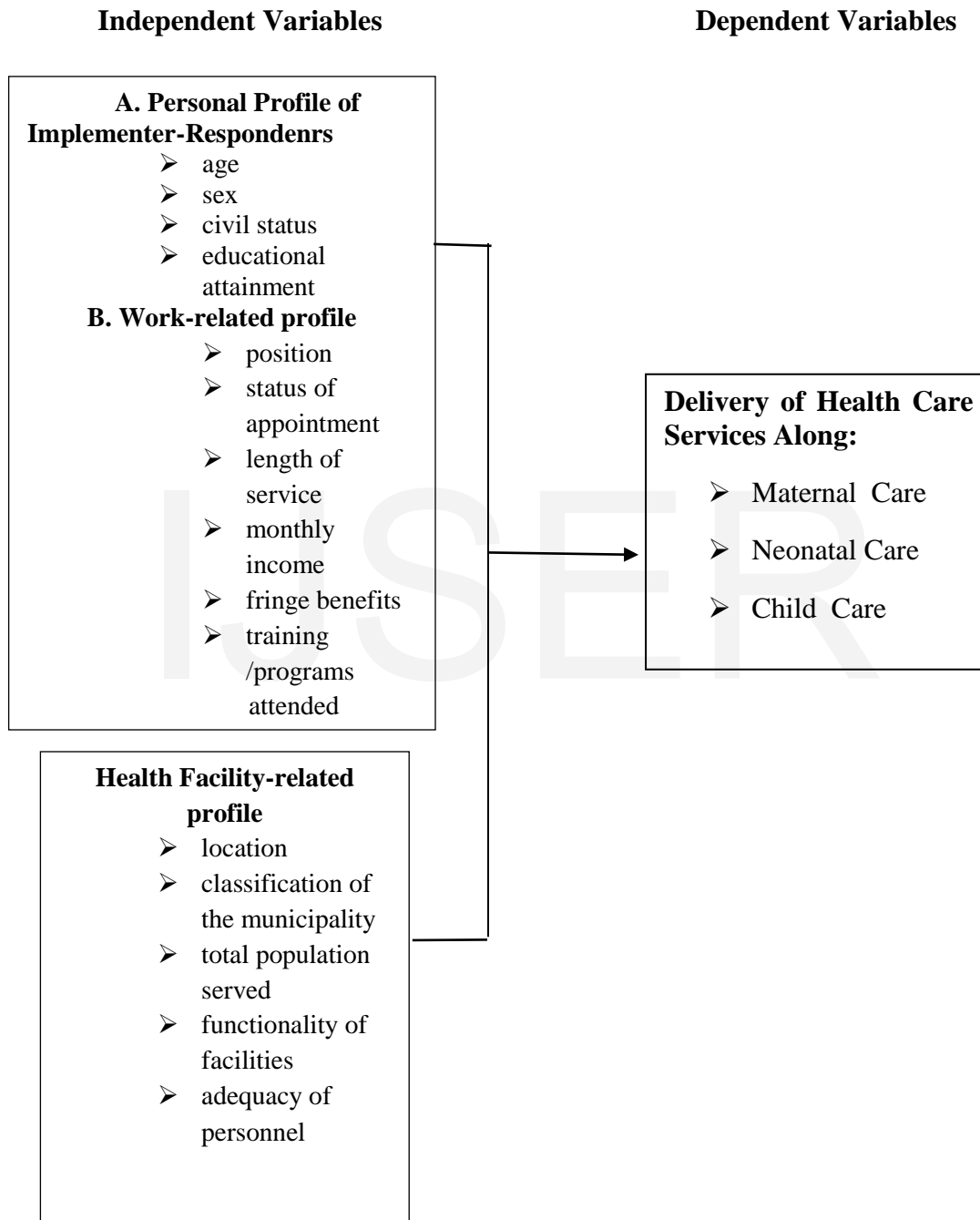
This study determined the delivery of health care services of public health workers in Ilocos Sur along maternal , neonatal, and child health care services during the Calendar Year 2013-2014.

Specifically, it tried to find out the relationship between the public health workers' personal and work-related factors and the profile of the health facility with the delivery of health care services along maternal, neonatal and child care.

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Conceptual Framework

The study revolved around the paradigm illustrated below:



The Research Paradigm

The model posits that the personal profile and work-related profile of the respondents and health facility-related profile are associated with the extent of delivery of health care services along maternal, neonatal and child care.

Methodology

The study employed the descriptive- correlational method of research. This study considered a total enumeration of the 496 public health workers in the different MHOs in Ilocos Sur, however, only 495 responded. The respondents were the Municipal Health Personnel from all the 34 MHOs/CHOs in Ilocos Sur which include the 37 Municipal Health Officers, 46 nurses PHN, 8 DOLE nurses, 103 Registered Nurses Health Enhancement And Local Services, 36 dentists and 1 dental aide, 182 midwives, 45 Rural Health Midwife Placement Program and the 37 sanitary inspectors and augmented with in depth interview with clients who availed of the health care services in the different MHOs in Ilocos Sur. A questionnaire-checklist was the key instrument formulated by the researcher based on the studies of Bernal Jr. (2011), Gacusan (2013) Oandasan (2012) and Pascua, (2013) and the hand book of the National Objectives for Health of the Department of Health for 2011-2016. It was content validated by a pool of experts.

Results and Discussions:

On the Profile of the Public Health Worker Respondents

A numerous number (198 or 40.0%) of the public health worker respondents are 30 years old and below, great majority (364 or 73.5%) are female and married (305 or 61.6%), great number (187 or 37.8) are midwifery graduates, majority (182 or 36.8%) are Midwives, have been in the service for ten years and below (288 or 58.2%), on permanent status (309 or 62.3%) and have a monthly income of 10,001-20,000 (56 or 51.7%) and (301 or 60.8%) claimed that they received uniform allowance.

A substantial percentage of the public health worker respondents (244 or 49.3%) do not have training/ seminars on pre-natal, natal and post- natal care, majority (249 or 50.3%) have attended training/seminars on family planning and (313 or 63.2%) claimed that they do not attend on newborn screening and (271 or 54.8%) had attended 1-5 on immunization

On training /seminars about nutrition, a majority (264 or 53.2%) had not attended training/ seminars, and a great majority of the public health worker respondents (395 or 79.8%) do not have training/seminars on dental care.

On the Profile of the Health Facilities

The majority of the health facilities (20 or 58.82%) are located along the national highway, belong to 4th class municipalities (12 or 35.29%), with 200,000-250,000 and served more than 30,000 clients.

On Functionality of Equipment and Supplies

Instrument table, BP apparatus, pick-up forceps, stainless bowl (kidney shape), 70% isopropyl alcohol, patient's clinical record, referral forms, and patient education materials on family planning are 100 percent functional in all of the health facilities in Ilocos Sur. Furthermore, according to the International Labor Organization

(ILO), having commendable facilities is essential because health workers are stimulated and supported to provide high quality care in their own communities (DOH, Healthbeat Issue No. 76 May-June, 2013).

On Adequacy of Health Personnel

Based on the standard ratio of public health workers from the Department of Health, the health facility of Alilem does not have a Municipal Health Officer (MHO) during the conduct of the study; Municipal Health Office of Cabugao has inadequate number of MHO and Public Health Nurse (PHN)); Narvacan has inadequate MHO, PHN, Dentist, and Midwives; Quirino has no Dentist; Sta. Maria has short-staff of MHO, PHN, and Midwives; Sta. Cruz has inadequate MHO, PHN and Dentist; Sugpon has no Dentist; and, Tagudin has limited number of MHO.

Table 1 presents the level of delivery of maternal health care services of public health worker -respondents along prenatal care.

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Table 1
Item Mean Rating Showing the Level of Delivery of Health Care Services of Public Health Worker Respondents Along Maternal Care Regarding Prenatal Care

	Mean	DR
Prenatal		
1. Performs routine examination	3.84	O
a.Prenatal examination	3.92	O
b.History taking	3.92	O
c.Weight taking	3.96	O
d.BP- Taking	4.40	A
e. Abdominal palpation,	4.18	O
f. Abdominal girth measurement,	3.94	O
g. Leopold's maneuver,	3.73	O
h. Urinalysis, and hgb determination	3.67	O
I. Give TT vaccines	4.00	O
3. Provides information on tetanus toxoid vaccine to pregnant mothers as needed	4.32	A
4. Provides information on the importance of taking iron supplement during pregnancy	4.52	A
5. Educates mothers on the side effects of tobacco and too much consumption of alcohol in the body and during pregnancy.	4.17	O
6. Advice mothers not to take over-the-counter drugs and herbal medicines unless prescribed by the physician	4.33	A
7. Provides health teachings to mothers according to individual needs such as personal hygiene, nutrition, exercise, care of the nipple and preparation for delivery, breastfeeding and family planning.	4.50	A
Overall	4.09	H

On Prenatal Care

As a whole, there is a "High" level of delivery of health care services by the public health worker respondents in terms of pre-natal care with a mean rating of 4.09.

The finding is supported with the answers of clients from Salcedo and Lidlidda: "Mayat met serbisyo da, nalaing da ta umay da iti barangay ket no mapan ka diay center ket naasikaso da aglalo kadagiti masakog. (The public health workers ae good and compassionate most especially for pregnant mothers and they usually go to the barangay to deliver their services).

Table 2 presents the level of delivery of maternal health care services along natal care.

Table 2
Item Mean Ratings Showing the Level of Delivery of Maternal HealthCare Services
of Public Health Worker Respondents Along Natal Care

	Mean	DR
Natal Care		
1.Do a quick check upon admission for emergency signs	4.37	A
2.Establishes rapport with the client	4.43	A
3.Assesses the woman in labor	4.41	A
4. Determines the stage of labor	4.13	O
5. Assesses and decide for a safe delivery	4.41	A
6. gives supportive care during labor		
a. encourages to take a bath at the onset of labor or wash from her waist down	3.99	O
b. encourages to drink but not to eat	4.12	O
c. encourages to empty bladder and bowel	3.88	O
d. encourages to do breathing technique	3.88	O
7. monitors and manages labor	4.21	A
8. monitors closely within one hour after delivery and give supported care	4.17	O
9. continues care after one hour post partum	4.36	A
10. educates and counsels on family planning and provide the family planning method if available	4.17	O
Overall	4.19	H

On Natal Care

As a whole, there is a “High” level of delivery of maternal health care services along natal care with a mean rating of 4.19 .

The clients from San Vicente and Cabugao during the interview claimed that “Makatulong da kadakami no mapan kami agpa-agas center aglalo no mangitaray kami iti masakog ket asikassuen da met a sigida lalo no agpaspasikalen. Agited da met ti libre nga agas. (The PHW’s can help us most especially when we rush pregnant mother on labor and during check –p they provide us free medicines).

These imply that public health workers perform their duties according to the mandate of DOH to uphold health of pregnant mothers and the newborn and to decrease problem and the worst situation which is maternal and neonatal mortality (NOH, 2011-2016).

Table 3 presents the level of maternal health care services of public health worker respondents along post –natal

Table 3
Item Mean Ratings Showing the Level of Delivery of Health Care Services of Public Health Worker Respondents Along Maternal Care Regarding Post -Natal

Items	Mean	DR
Post - Natal		
1. Does quick check for emergency signs	4.35	A
2. Makes the woman comfortable	4.35	A
3. Assesses the postpartum woman and her baby	4.49	A
4. Checks for pallor/hypertension/bleeding	4.47	A
5. Provides iron/folate supplementation	4.43	A
6. Provides Vit. A	4.44	A
7. Counsels on family planning and provide appropriate family planning method if available and decision was completed	4.23	A
8. Informs, teaches, counsels the woman on:		
a. birth registration	4.18	A
b. the importance of breastfeeding	4.49	A
c. newborn care	4.55	A

d. nutrition	4.31	A
e. Self-care during postpartum	4.28	A
f. when and where to seek care	4.39	A
g. the role of a father in a postpartum and newborn care	4.16	O
h. need for return visits	4.30	A
Overall	4.36	VH

On Post -Natal Care

There is a “Very High” level of delivery of maternal health care services of the public health workers along pre-natal care ($\bar{x}=4.36$). This is in consonance with the claim of clients from Sta. Lucia, San Vicente and San Juan that “Mayat serbisyo da nga ipapa-ay da kadakami ta uray no naganak kam hospital umay dakami bisitaen balbalay mi tapno kitaen da kondisyon mi. Agbakkakuna da pay annak mi. (The PHW’s provide them good and compassionate service and visit them in their houses even if they delivered in the hospital and administer their newborn with their vaccination).

Table 4 presents the level of delivery of maternal health care services of public health worker - respondents along family planning.

Table 4
Item Mean Ratings Showing the Level of Delivery of Maternal Health Care Services of
Public Health
Worker Respondents Along Family Planning

Items	Mean	DR
Family Planning		
1. Performs case finding to clients desiring to avail family planning methods	4.31	A
2. Educates and convinces mothers on the use of family planning methods	4.11	O
a. Discusses the advantages and disadvantages of family planning	3.87	O
b. Discusses about the side effects and complications and what to do if problems develop	3.96	O
c. Informs effectiveness of family planning methods	3.93	O
3. Distributes contraceptives such as condom, DMPA, pills to the acceptors of the family planning program	4.09	O
4. Monitors and evaluate new acceptors of the family planning program	3.96	O
5. Conducts counseling regarding chosen method of family planning	3.91	O
6. Conducts pre-marriage counseling to all couples	4.13	O
7. Conducts seminars and training about population development	3.64	O
8. Conducts family planning information dissemination and seminar	3.75	O
9. Provides packages of health services among reproductive age group:		
a. Family Planning	3.64	O
b. Management of reproductive tract infections including HIV/AIDS	3.49	O
c. Violence against women	3.48	O
10. Makes family planning supplies available	3.80	O
11. Conducts follow-up visits to drop outs	3.53	O
Overall	3.85	H

On Family Planning

There is “High” level of delivery of delivery of services on maternal care along family planning (\bar{x} =3.85).The finding agrees with the responses of the clients from Narvacan and Santa “Mayat serbisyo da ditoy center mi agit-ited da agas mi mam ken adda met mait-ited kanya mi a pills”. (The clients claimed that PHW’s provide good services and give them free medicines and pills.)

Table 5 reflects the level of delivery of neonatal care services of public healthworker responden along neonatal care.

Table 5
Item Mean Ratings Showing the Level of Delivery of Neonatal Health Care Services of Public HealthWorker Responden Along Neonatal Care

Items	Mean	DR
Provision of immediate Newborn Care(the first 90 minutes)		
1. Dries and provides warmth to the baby	3.96	O
2. Does skin to skin contact	3.85	O
3. Does delayed or non-immediate cord clamping	3.99	O
4.Provides support for initiation of breastfeeding	4.53	A
5. Provides additional care for small baby or twin	4.15	O
6. Reposition, suction and ventilate (if 30 secs of thorough drying, newborn are not breathing or are gasping.	4.18	O
7. Maintains non-separation of the newborn for early initiation of breastfeeding	4.39	A
Provision of Essential Newborn Care (from 90 mins to 6 hours)		
1. Vitamin K prophylaxis	4.55	A
2. Injects Hepatitis B and BCG vaccinations at birth	4.51	A
3. Examines the baby	4.51	A
4. Check for birth injuries, malformations or defects	4.32	A
5. Properly timed cord clamping and cutting	4.45	A
6. Provides additional care for small babies	4.51	A
Care Before Discharge (but after the first 90 mins)		
1. Support unrestricted, per demand breastfeeding, day and night	4.54	A
2. Ensures warmth of the baby	4.22	A
3. Washing and bathing (hygiene)	4.52	A
4. Look for jaundice and local infection	4.53	A
5. Provides instructions on discharge	4.40	A
6. Performs newborn screening (blood spot) and newborn hearing screening (if available in the facility or known service delivery network)	4.13	O
Initiation of early and exclusive breastfeeding for six months	4.25	A
Do Newborn Screening or referral	3.79	O
Does Birth Registration	4.00	O
Do follow-up visit and care	4.15	O
Overall Mean	4.11	H

The public health workers' delivery of health care services along neonatal care as "High" ($\bar{x}=4.11$). Clients from San Vicente, Quirino and San Emilio claimed that "Nasayaat met serbisyo nga ipapa-ay dagiti adda center mi ket nalaing da mangisuro no kasano mangtaripato annak mi. Agit -ited da agas ken bakuna iti ubbing. (The PHWs' render them good services and they teach them how to take care of their babies. They also give them medicines and provide immunization to their children).

Borja as cited in de Peralta (2009), in her speech during the 2007 Provincial Nurses' Convention, pointed out the importance of breastfeeding in achieving the Millennium Development Goals. According to her, breastfeeding can eliminate extreme poverty and hunger, significantly reduce child mortality, improve maternal health, prevent key diseases, and achieving universal primary education, thus ensuring cognitive development.

Table 6 presents the level of delivery of child care services of public health worker -respondents along immunization.

Table 6
Item Mean Ratings Showing the Level of Delivery of Child Care Services of Public Health Worker Respondents Along Immunization

Items	\bar{x}	DR
Immunization		
1. Conducts information dissemination	4.11	H
2. Provides counseling to mothers	4.51	VH
3. Ensures the vaccines are available	4.35	VH
4. Health personnel are always available to give vaccines	4.35	VH
5. Explains the procedure and expected outcome/side effect before giving the vaccine	3.93	H
6. Provides antipyretic drugs to mothers after the child receives vaccine	3.96	H
7. conducts home visits to defaulters	3.57	H
Overall Mean	4.11	H

On Immunization

The public health worker respondents level of delivery of health care services along immunization is "High" ($\bar{x}=4.11$). Clients from San Vicente, Quirino and San Emilio claimed that "Nasayaat met serbisyo nga ipapa-ay dagiti adda center mi ket nalaing da mangisuro no kasano mangtaripato annak mi. Agit -ited da agas ken bakuna

iti ubbing. (The PHWs' render them good services and they teach them how to take care of their babies. They also give them medicines and provide immunization to their children).

Table 7 reflects the level of delivery of child care health services along nutrition among public health worker -respondents

Table 7
Item Mean Rating Showing the Level of Delivery of Child Care Health Services Along Child Care Regarding Nutrition Among Public Health Worker Respondents

Items	\bar{x}	DR
Nutrition		
1. Provides counseling to mothers on proper nutrition	4.33	A
2. Conducts micronutrient supplementation (Vitamin A, Iron, and Folate) to children under five years old	4.43	A
2.Discuss/demonstrates proper preparation of nutritious foods	3.94	O
3.Provides information on the different sources of essential nutrients to mothers	3.89	O
4. Provides information about the caloric needs of their children	3.85	O
5. Discuss/ shows the food pyramid guide to mothers	3.57	O
6. Conducts operation timbang and growth monitoring to under five children	4.12	O
7. conducts feeding supplementation to underweight children (6-59 mos.)	3.82	O
8. conducts deworming to under five children every six months	4.06	O
9.Teaches mothers the correct preparation of oresol rehydration	3.90	O
10.Teaches mothers on right preparation of Oresol preparation	3.93	O
11. Documents and reports result of Oresol treatment	3.64	O
12. Promote use of iodized in every household	4.22	A
13. Provides breastfeeding and supplement feeding counseling to mothers	3.92	O
14. Promote usage of fortified products	3.77	O
15. Conducts and participate in the celebration of Nutrition Month	3.49	O
16. Coordinate with local executives for the development of program along nutrition.	3.76	O
Overall	3.92	H

On Nutrition

The public health worker respondents' level of delivery of health care services along child care regarding nutrition is "High" (\bar{x} =3.92). There are two items rated "Very High." Based on the interview conducted from clients in Burgos and Vigan they claimed that "mayat serbisyo da, mangted da iti libre nga agas. Umay da met barangay ket

agpasyar da, adda dagitay bitamina no kua nga ited da ub- ubbing ken para met maintenance mi no adda panangato presyon mi, isuro da kami ubraen mi”. (The PHWs’ serve them very well, visit them in their barangays and there are times they give vitamins to children and medications most especially to those with hypertension).

Table 8 presents the level of delivery of child health care services of public health worker- respondents along dental care

Table 8
Item Mean Rating Showing the Level of Delivery of Child Health Care Services of Public Health Worker- Respondents Along Dental Care

Items	Mean	DR
Dental		
1.Conducts information dissemination on dental health	3.63	O
2.Provides information to mothers on where to avail dental services	3.65	O
3.Provides information to mothers the importance of tooth brushing and oral care after each feeding	3.83	O
4.Does tooth extraction to unsavable tooth	4.07	O
5.Does dental filling to savable tooth	3.65	O
6.Does gum treatment	3.46	O
7.Gives health instruction and advice after dental extraction and treatment	4.05	O
8.Provides treatment to post-extraction complications	3.24	S
9.Gives free medicine after tooth extraction	3.95	O
10.Conducts dental monitoring among mothers, preschoolers, and school children	3.57	O
11.Conducts free medical-dental mission	3.36	O
12.Provides proper counseling to mothers	3.80	O
13.Refers dental cases	3.87	O
Overall	3.70	H

On Dental Care

The overall mean rating of 3.70 indicating a “High“($\bar{x}=3.70$) level of delivery of health care services along with dental care.

Clients from Burgos, Lidlidda, San Juan and Narvacan claimed that “sagpaminsan nga adda tay dentista mi, no umay a ket adu met umay agpakita ngipen na kangrunaan na dagitay agparot ngipen. (Our dentist visit the center once a week and there are a lot of people going to the center for check-up most especially those for tooth extraction).

Table 9 presents the level of delivery of child health care services of public health worker-respondents along other child health programs.

Table 9
Item Mean Rating Showing the Level of Delivery of Child Health Care Services of Public Health Worker- Respondents Along Other Child Health Programs

Items	Mean	DR
Other Child Health Care Program		
Able to identify and discuss signs and symptoms of childhood illnesses.	3.94	H
Immediate referral and follow-up check-up	3.90	H
Early diagnosis and management of common childhood diseases.	3.90	H
Emergency care of childhood injury.	4.01	H
Diarrhea cases are given Oral Rehydration Salts (0-59 mos.)	4.01	H
Health education on child health management.	3.82	H
Overall	3.93	H

On Other Child Health Care Program

The public health workers were rated “High” ($\bar{x}=3.94$) on the level of delivery of health care services along with other child care programs.

Table 10 depicts the summary of the level of delivery of health services of public health workers in Ilocos Sur .

Table 10
Summary of the Level of Delivery of Health Care Services of Public Health Workers in Ilocos Sur

Municipal Health Office	Maternal Care		Neonatal Care		Child Care		As a Whole	
	\bar{X}	DR	\bar{X}	DR	\bar{X}	DR	Mean	DR
Alilem	4.05	H	4.24	H	3.93	H	4.07	H
Banayoyo	3.83	H	3.93	H	3.88	H	3.88	H
Bantay	4.22	VH	4.42	VH	4.15	H	4.26	VH
Burgos	4.22	VH	4.29	VH	4.03	H	4.18	H
Cabugao	4.23	VH	4.34	VH	4.22	VH	4.26	VH
Caoayan	4.49	VH	4.62	VH	4.57	VH	4.56	VH
Cervantes	4.57	VH	4.92	VH	4.36	VH	4.62	VH

Galimuyod	3.55	H	3.60	H	3.51	H	3.69	H
G.del Pilar	3.98	H	4.30	VH	3.94	H	4.07	H
Lidlidda	4.10	H	4.20	H	3.99	H	4.06	H
Magsingal	4.16	H	4.40	VH	4.06	H	4.10	H
Nagbukel	4.24	VH	4.38	VH	4.06	H	4.23	VH
Narvacan	4.10	H	4.14	H	3.97	H	4.07	H
Quirino	4.21	VH	4.44	VH	4.00	H	4.22	VH
Salcedo	3.88	H	3.97	H	3.73	H	3.86	H
Sn. Emilio	4.53	VH	4.69	H	4.51	VH	4.58	VH
Sn. Esteban	4.16	H	4.39	VH	4.14	H	4.23	H
Sn. Ildefonso	4.38	VH	4.59	VH	4.36	VH	4.44	VH
Sn. Juan	4.42	VH	4.56	VH	4.36	VH	4.45	VH
Sn. Vicente	4.44	VH	4.63	VH	4.37	VH	4.48	VH
Santa	4.49	VH	4.65	VH	4.40	VH	4.32	VH
Sta. Catalina	4.00	H	4.13	H	3.71	H	3.95	H
Sta. Cruz	4.06	H	4.22	VH	3.77	H	4.01	H
Sta. Lucia	4.26	VH	4.33	VH	4.18	H	4.26	VH
Sta. Maria	4.39	VH	4.55	VH	4.20	H	4.38	VH
Santiago	4.09	H	4.28	VH	3.95	H	4.11	H
Sto. Domingo	4.65	VH	4.74	VH	4.32	VH	4.57	VH
Sigay	4.40	VH	4.49	VH	4.31	VH	4.40	VH
Sinait	4.55	VH	4.82	VH	4.42	VH	4.60	VH
Sugpon	4.50	VH	4.69	VH	4.03	H	4.45	VH
Suyo	3.73	H	3.95	H	3.67	H	3.78	H
Tagudin	4.76	VH	4.92	VH	4.42	VH	4.70	VH
City of Candon	4.35	VH	4.48	VH	4.11	H	4.31	VH
City of Vigan	4.19	H	4.45	H	4.12	H	4.25	VH
Grand Mean	4.24	VH	4.40	VH	4.08	H	4.24	VH

. Summary of the Level of Delivery of Health Care Services of Public Health workers In Ilocos Sur

There is a “Very High” level of delivery of health care services of public health workers in Ilocos Sur as evidenced by the grand mean of 4.24. Per services, the of delivery of neonatal care and maternal care is “Very High” as evidenced of the grand mean rating of 4.40 and 4.24, respectively while there is a “High” level for child care (\bar{x} =4.08).

The above findings imply that the public health workers perform their functions and duties at their maximum level in the delivery of different health care services in the province.

Table 11 presents the correlation coefficients between the delivery of health care services among public health worker-respondents and the personal profile.

Table 11
Correlation Coefficient Between the Level of Delivery of Health Care Services of Public Health Worker Respondents and Their Personal Profile

Delivery of Health Care Services				
Components	Maternal Care	Neonatal Care	Child Care	Overall
Personal factors				
Age	-.125*	-.125**	-.107*	-.092*
Civil Status	-.156*	-.150**	-.132**	-.120**
Sex	.010	-.002	.002	.004
Educational Attainment	-.310*	-.331*	-.300**	-.290**

Relationship Between Public Health Worker Respondents' Level of Delivery of Health Care Services and Their Personal Profile

On Delivery of Health Care Services and Personal Profile

On Age

There is an inverse significant relationship between the level of delivery of health care services of the public health worker -respondents and their age as evidenced by the overall r -value of $-.092$. When taken singly, age has a significant inverse relationship with the delivery of health care services along maternal ($r=-.125$), neonatal care ($r=-.125$), and child care ($r=-.107$). The findings imply that the younger the public health worker, the better she can deliver these health care services to the clients. Younger ones are more aggressive, active, enthusiastic, realistic, and eager to learn; they tend to showcase their performance to their superior, and based on the result of this study, there are more public health workers who are 30 years old and below.

This opposes the findings of Gacusan (2013) that the older health personnel tend to implement the MNCHN services better than younger ones. He added that this could be attributed to the degree of maturity to carry out the certain task.

On Civil Status

The overall r -value of $-.120$ signifies that there is an inverse significant correlation between the level of delivery of health care services of the public health worker respondents and their civil status.

Likewise, when taken singly, civil status has a significant inverse relationship with the delivery of services along maternal care ($r=-.156$), neonatal care ($r=-.150$), child care ($r=-.132$), medical care ($r=-.128$) and environmental health sanitation ($r=.114$). This implies that unmarried

public health workers tend to perform better in the delivery of these services than the married public health worker which means that those married have more responsibility to perform most especially attending to the needs of their families.

On Sex

As a whole and individually, there is no significant relationship between the level of delivery of health care services and sex of the public health worker respondents as evidenced by the r -value of .010 on maternal care, -.002 on neonatal care, -.002 and on child care. This implies that whether the public health worker is male or female, the delivery of health care services is more or less the same.

On Educational Attainment

As a whole, an inverse significant correlation yielded between the level of delivery of health care services of the public health worker respondents and their educational attainment ($r=-.240$). In the same manner, when taken singly, educational attainment yielded an inverse significant correlation with the level of delivery of health care services on maternal care ($r=-.310$), neonatal care ($r=-.331$), child care ($r=-.300$), medical care ($r=-.289$), environmental health and sanitation ($r=-.237$) and health education ($r=-.236$). This shows that even if most of the public health workers belong to the certificate level of educational attainment, they are knowledgeable, well-informed and perform well in their job. The findings is in contrast with the statement of Mison et al. as cited by Claudio (2010) that workers do not maximize their potentials in their work because of their feelings that they are not good as the others who have higher educational attainment.

Relationship Between Public Health Worker- Respondents' Level of Delivery of Health Care Services and Their Work-Related Profile

Table 12 presents the relationship between the level delivery of health care services of public health worker -respondents and work-related profile

Table 12
Correlation Coefficient Between the Level of Delivery of Health Care Services of Public Health Worker Respondents and Work-Related Profile

Delivery of Health Care Services							
Components	Maternal Care	Neonatal Care	Child Care	Medical Care	Environmental Health and Sanitation	Health Education	Overall
Work-related profile							
Position	.526**	.554**	.539**	.497**	.398**	-.264**	.501**
Status of Appointment	.170**	.162**	.146**	.140**	.081	.430**	.127**
Length of Service	-.036	.031	-.019	-.030	.000	.113*	.014
Monthly Income	-.136**	-.165**	-.153**	-.164**	-.151**	-.011	-.151**
Fringe Benefit	-.105*	-.108*	-.101*	-.094*	-.072	-.146**	-.089*
Training/seminars	.017	.010	.014	-.017	-.003	-.071	.010

On Delivery of Health Care Services and Work-Related Profile

On Position

The overall r – value of .501 manifests a significant correlation between the level of delivery of health care services and the public health worker respondents' position. Taken singly, the position is significantly related to the provision of services along maternal care ($r=.526$), neonatal care ($r=.554$), child care ($r=.539$), medical care ($r=.497$), environmental health sanitation ($r=.398$), and health education has a significant inverse relationship with position ($r=-.264$). This implies that when a public health workers occupy a higher position, they do their job efficiently.

The result of the study negates the findings of Bermio (2015) that the implementer-repondents' position inversely related to the extent of implementation of the maternal and child care services. She pointed out that the implementer-respondents with lower positions tend to implement the MNCHN strategy better since they are after the performance rating given by their immediate supervisor. She further added that implementer-respondents with low position/designation tend to implement or deliver the maternal and child care programs at a higher extent since they do not occupy administrative positions hence can focus well with their job as frontline workers.

On Status of Appointment

Overall, a significant correlation yielded between the level of delivery of health care services and the public health worker respondents' status of appointment. Individually, the status of appointment is significantly related to the delivery of amenities along maternal ($r=.170$), neonatal care ($r=.162$), and child care ($r=.146$). This findings could mean that permanent employees have better performance in the delivery of services to their clients

On Length of Service.

As a whole, there exists no significant correlation between the level of delivery of health care services and the public health worker respondents' length of service ($r=.014$). However, taken individually, the length of service is significantly related to the level of health education services of the public health worker respondents ($r=.113$). The findings could mean that the longer the stay of the public health worker at the MHO, the better the delivery of health education services probably because they are already acquainted with their clients, making it easier to approach them.

On Monthly Income

The overall r – value of -.151 signifies a significant inverse relationship between the level of delivery of health care services and the public health worker respondents' monthly income. Taken singly, monthly income of the public health workers has inverse significant relationship with the level of health care services on maternal care ($r=-.136$), neonatal care ($r=-.165$), child care ($r=-.153$), medical care ($r=-.164$), environmental health sanitation ($r=-.151$) except for health education that manifests no significant correlation. Even the public health workers receive a lower salary, they deliver health care services better than those who are receiving higher remuneration. It further implies that the health workers are not only after the monetary aspect but are devoted to and love their work for the welfare of their clients.

On Fringe Benefits

As a whole, a significant inverse relationship exists between the level of delivery of health care services and the public health worker respondents' fringe benefits ($r = -.089$).

Taken singly, an inverse significant relationship exists between fringe benefit and maternal care ($r = -.105$), neonatal care ($r = -.108$), and child care ($r = -.101$) which yielded no significant relationship with fringe benefits of public health worker respondents. These findings imply that even the public health workers receive less fringe benefit, they tend to deliver these health care services better than those who receive more. Further, this could be due to their desire to serve and help people in their locality. The finding is in contrast with that of Oandasan (2012) that no significant relationship existed between fringe benefit and health education capability of health workers.

On Training/Seminars

Both as a whole and singly, training/seminars attended by health workers do not have the significant relationship with the level of delivery health care services at the MHOs as indicated by the overall r – value of .010. It implies that whether they have training/ seminars, they can deliver well the health care services needed by the clients. This could be partly attributed to the educational preparation they have.

Relationship Between Public Health Worker Respondents' Level of Delivery of Health Care Services and Health Facility–Related Profile

Table 13 presents the result of relationship between the level of delivery of health care services of public health worker -respondents and health facility-related profile.

Table 13
Correlation Coefficient Between the Level of Delivery of Health Care Services of Public Health Worker Respondents and Health Facility-Related Profile

Components	Maternal Care	Neonatal Care	Child Care	Overall
Health Facility-related profile				
Location	.184**	.155**	.149**	.118**
Classification of Municipality	.152**	.134**	.121**	.110*
Adequacy & availability of Supply	-.028	-.010	-.010	.004
Total Population Served	.125*	.123**	.148**	.148**

On Delivery of Health Care Services and Health Facility-Related Profile

On Location

The value of .118 suggests a significant relationship between the level of delivery of health care services of public health worker respondents and location of the facility. When taken

individually, location is significantly related to the level of delivery of health care services along maternal care ($r=.184$), neonatal care ($r=.155$) and child care ($r=.149$). These imply that public health workers in the health facilities located along the national road are always available to perform their duties. This finding could also be due to the accessibility of the MHO's for their clients.

On Classification of Municipality

Overall, a significant correlation exists between the level of delivery of health care services of the public health worker respondents and classification of municipality as evidenced by the r -value of .110. The finding shows a significant relationship with the level of delivery of services along maternal care ($r=.152$), neonatal care ($r=.134$) and child care ($r=.121$). The findings imply that the higher the classification of the municipality, the better it can deliver these services because of the more budget and support may be coming from the local government.

On Adequacy and Availability of Supplies

Taken singly and as a whole, no significant relationship exists between the adequacy and availability of supplies and the level of delivery of health care services among the public health worker respondents as suggested by the overall r -value of .004 which did not attain significance at .05 level of probability. The finding implies that whether or not the supplies at the MHO are adequate and available, still the public health workers can deliver these health care services. It connotes the flexibility of the public health workers.

On Total Population Served

It can be seen from the table that total population served, as a whole, is significantly associated to the level of delivery of health care services ($r=.148$). Individually, there exists a significant correlation between the total population served and the level of delivery of health care services, namely: maternal care ($r=.125$), neonatal care ($r=.123$) and child care ($r=.148$) with an overall r -value of .148. These imply that even if the MHOs have big population, the health facility and public health workers render good services to the people.

The Philippines today, according to the 2011 State of the World Population Report, is the 12th most populous country in the world with about 94 million people and Asia remains home to 60 percent of the world's population. In many parts of the developing world where population growth rate is outpacing economic growth, the unmet need for reproductive health, focused mainly on family planning, remains enormous.

CONCLUSION

The "Very High" extent of delivery of health care services are affected by various factors such as the profile of the public health worker-respondents, socio-demographic and work-related profile of the respondents, and the health-facility related profile.

RECOMMENDATIONS

Based on the conclusions drawn, the following recommendations are given for consideration:

1. The government should create and fill-up permanent position especially for the MHOs the inadequate personnel.

2. Public health workers should be encouraged to develop their skills, knowledge, enhance their behavior, and attitude through attendance in related training/ seminars along the different services offered at their Municipal Health Offices.
3. The “Very High” level of the delivery of health care services should be maintained by the public health workers by:
 - a. Striving and continuously being committed to the conduct of health activities along the different services available at their MHOs.
 - b. Undertaking training/ seminars on new health programs or services provided by the Department of Health for free in order to be restructured with the new trends in response to emerging conditions in the society.
 - c. The public health workers should be encouraged to pursue their post graduate studies to gain additional knowledge to be useful during health education services.
 - d. The public health workers should assist recipients on how to improve health practices most especially those necessary for achieving the goal of the government, that of having a healthy citizenry.
4. The school should integrate and emphasize the importance of health education among the students.
5. The local government units must strengthen their commitment to continuously support their MHOs for the provision of more diverse and much better services.

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