Strategic Implementation of Maternal, Neonatal, Child Health and Nutrition Health Programs in Ilocos Sur, Philippines

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ABSTRACT

The Department of Health is committed to achieve the Millennium Development Goals of reducing child mortality and improving maternal health by 2015. The study aimed to determine the relationship between the extent of implementation of the maternal, neonatal, child health, nutrition strategy, and the socio-demographic, work-related and health facility-related factors. The study employed the descriptive-correlational method. The respondents were all the 244 municipal health office personnel of Ilocos Sur, Philippines. The DOH guideline was partially adapted specifically on natal and post- natal part of the questionnaire. The extent of implementation of the MNCHN Strategy is "Very High"; the implementer-respondents' civil status yielded positive significant relationship while the implementer-respondents' educational attainment yielded an inverse significant relationship with the extent of implementation of the MNCHN Strategy. Moreover, the number of health personnel, consultation, and delivery room equipment are significantly related to the implementation of the MNCHN Strategy. The local government unit of Ilocos Sur, Philippines is on the process of finalizing the ordinance in support to the MNCHN Strategy and the

Department of Health is also working on Health Facility Enhancement Program (HEP) so that the Municipal Health Offices could upgrade their equipment in providing higher quality of health services to the community.

Keywords – Health Education, maternal, neonatal, child, health nutrition, descriptive-correlational method, Ilocos Sur, Philippines.

INTRODUCTION

The risk of women who die due to pregnancy and/or childbirth is evident (one in six) in the poorest parts of the world compared with about one in 30, 000 in Northern Europe. Such discrepancy poses a huge challenge in attaining the 5th Millennium Development Goal to lessen the maternal mortality rate by 75% between 1990 and 2015. Some developed and transitional countries have managed to decrease their maternal mortality rate during the past 25 years. Few of them, however, began with the increasing rates that are now estimated in the poorest countries in which further progress is due to weak health systems, continuing high fertility, and poor availability of data. Maternal deaths are clustered around labor, delivery, and the immediate postpartum period, with obstetric hemorrhage being the primary medical cause of mortality. Disparities in the risk of maternal deaths are found everywhere and there is a need to plan for interventions to achieve substantial progress by 2015 (Ronsmans, Graham & Lancet, 2006).

In the international advocacy aiming to reduce the burden of maternal mortality in developing countries, strategies that affect this burden have shown to be among the most successful efforts to address a specific cluster of causes of death, with developed and some developing countries having reduced the risk of maternal deaths by 90–99%. The 1000 deaths per 100 000 live births or greater risk of maternal mortality seen in the past in developed countries (and now in the poorest developing countries) have been reduced to as low as 10 per 100 000. Although falling short of eradication of maternal death, these impressive reductions are similar to the effectiveness of such undisputed public health interventions as polio immunization (95%) or oral contraception (97%). However, the substantial barriers in poor countries to the achievement of the maternal mortality target of Millennium Development Goal (MDG) 5 are well acknowledged and some assessments deem progress to have stalled (Matthews, Van Lerberghe, Manuel & Cathy, 2005; Sachs & Mc Arthur, 2005; Weil &

Fernandez, 1999).

Tulali (2010) mentioned that 3.4 million pregnancies happen every year in the Philippines of which half are unintended, while one-third ended up in abortions. An estimated of 11 mothers die due to pregnancy-related diseases every day. Most of these deaths could have been avoided if proper health care delivery system exists. It is estimated that for every maternal death, there is at least 20 to 30 other women who suffer from serious complications, some of which are life-long. Maternal health conditions are the leading causes of burden of disease among women. 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% of maternal, neonatal, and child deaths worldwide.

In addition, Tubeza (2013) mentioned that more Filipino mothers are dying during childbirth, underscoring their "unmet need" for modern family planning services. In addition, the Department of Health Secretary Enrique Ona (2012), in a press briefing, said that mortality rate for Filipino mothers has increased to 221 per 100,000 live births in 2011 from 162 per 100,000 live births in 2009. He further mentioned that the Philippines must reduce the maternal mortality rate to 52 per 100,000 live births. He labelled the latest statistics as "alarming," given that maternal health is an important indicator of the government's performance in improving the health of its citizens. He also said that the entire health system will improve if the maternal mortality rate is also reduced. Poor delivery of health services is one of the main causes of death. Maternal death is highly preventable if women have access to sufficient reproductive healthcare services. Reducing maternal deaths and meeting the MDGs require critical legislation to address structural barriers to universal healthcare.

According to the Bulletin of the World Health Organization (2000), the Integrated Management of Childhood Illnesses Strategy responds to the fact that 70% of the 11 million childhood deaths that occur each year in the developing world are due to five conditions: pneumonia, diarrhea, measles, malaria and malnutrition.

One million children under five years old die each year in less developed countries; just five diseases (pneumonia, diarrhea, malaria, measles and dengue hemorrhagic fever) account for nearly 50% of these deaths, and malnutrition is often the principal cause. Effective and affordable interventions to address this issue exist, but they do not reach yet the population who are most in need—the young and impoverish.

The health sector in the country led by the Department of Health (DOH) implements various maternal, child health and nutrition programs. Numerous activities and programs are being carried out and implemented to promote child and maternal health and to address the different health problems which may affect their physiological conditions.

Findings of the study could provide information to the entire province of Ilocos Sur, the health sector, the MHOs and other community facilities regarding the current trends on the different maternal, child health and nutrition programs being implemented. Such information may serve as springboard for the provincial officials to provide and support comprehensively the maternal, child health and nutrition programs to the underprivileged sectors of the province. The healthcare team will be able to adjust for improvements in the implementation enabling them to prepare specific health strategies which are deemed relevant to the needs of the populace: the mothers and children in particular. More proficient implementation means better healthcare services rendered to the community. Also, the result of the study would help the academe design a more extensive curriculum to fit into the needs of the clientele. In addition, students would be able to appreciate the programs and services of the MNCHN Strategy.

OBJECTIVES OF THE STUDY

The study aimed to determine the maternal, neonatal, Child Health and Nutrition (MNCHN) Strategy of the DOH in Ilocos Sur, Philippines. Specifically, it sought to determine the extent of implementation of the MNCHN Strategy of the DOH in terms of the following services: a) Maternal Care (prenatal, natal, post-natal, expanded program on immunization, micronutrient supplementation, and family planning); and b) Child Care (information dissemination on child programs, immediate newborn care, provision of essential newborn care, expanded program on immunization, micronutrient supplementation, deworming, and integrated management of childhood illnesses). Lastly, it aimed to determine the significant relationship between the extent of implementation of the MNCHN Strategy and the following: a) Socio-demographic factors, b) Work-related factors, and c) Health facility- related factors.

METHODOLOGY

The study employed descriptive-correlational method of research. The extent of implementation of the MNCHN Strategy of the DOH was assessed by the implementer-respondents and their superiors. Correlation was done between the extent of implementation of the MNCHN Strategy and the profile of the implementer-respondents. The respondents were all the 244 municipal health office personnel of Ilocos Sur, Philippines. The municipal health officers were requested to validate the responses of the implementer - respondents. The researchers sought permission from the respondents in compliance with research ethics protocol.

The study utilized a questionnaire as the main instrument formulated by the researcher. DOH guidelines was partially adapted specifically on natal and postnatal part of the questionnaire. The questionnaire content was validated by a pool of experts.

The questionnaire-checklist for the implementer-respondents consisted of two parts: Part I obtained the information on the socio-demographic profile and work-related profile of the implementer-respondents. Part II gathered data on the extent of implementation of the maternal, neonatal, child health and nutrition strategy of the DOH in Ilocos Sur. The first subpart covers the services offered on maternal care such as prenatal, natal, and post-natal, expanded program on immunization to mothers, micronutrient supplementation and family planning program. The second subpart deals on child care practices like the information dissemination of child programs, immediate newborn care, provision of essential newborn care, expanded program on immunization, micronutrient supplementation, deworming, and integrated management of childhood illnesses. The municipal health officers were also requested to answer this part to validate the responses of the implementer - respondents. The quantitative data on equipment and supply of the municipal health offices were elicited through counting or observation based on the standard non-hospital health facility for maternity care package as required by PhilHealth. It was answered by the Public Health Nurse and Rural Health Midwives in some municipal health offices.

The following numerical forms were arbitrarily set to describe the adequacy of equipment and supplies of the MHOs:

Range	Descriptive Rating		
more than 1	Very Adequate		
one	Adequate		
less than one	Inadequate		

According to PhilHealth, the standard minimum number of equipment and supplies required for non-hospital facilities is one.

Numerical Value Range of Scores	Item Descriptive Rating	Overall Descriptive Rating
5 4.25-5.00	Always (A)	Very High (VH)
4 3.41-4.20	Often (O)	High (H)
3 2.61-3.40	Sometimes (So)	Fair (F)
2 1.81-2.60	Seldom (Se)	Low (L)
1 1.00-1.80	Never (N)	Very Low (VL)

The norms used for the interpretation of the extent of implementation of the MNCHN Strategy are presented below:

The data gathered were treated using frequency, percentage, mean, and evaluation.

RESULTS AND DISCUSSION

Profile of the Implementer-Respondents

A great number of the implementer-respondents (105 or 43.0%) belong to age bracket 25 years and below. Most of the implementer-respondents (211 or 86.47) are female and majority of them (128 or 52.5%) are bachelor's degree holder. Majority of the implementer-respondents (121 or 49.59%) have a monthly income of 50001- 10,000 and a great number of them (121 or 49.6%) reside in the rural area.

Majority of the implementer-respondents are DOH support personnel (143 or 58.61 %). A great number (111 or 45.49%) of them are RN Heals. Out of 19 PHNs, majority of the PHNs (12 0r 63%) occupy the Nurse II position and only three (15.79) of them are Nurses. Furthermore, out of 82 RHMs, a great majority of the RHMs (63 or 76.83 %) occupy Midwife II position and the least (8 or 9.76%) occupy RHM 1.

Majority of the implementer-respondents (128 or 52.45) are contractual and most of them (159 or 65.2%) have been in the service for 0-4 years. In addition, majority of the implementer-respondents (136 or 55.8%) have not attended training/ seminars on EINC for the past three years and a great number of them (112 or 45.9) % are members of the Philippine Nurses Association.

Profile of the Municipal Health Office

No one among the MHOs has the ordinance in supporting the MNCHN Strategy. According to the provincial office, there is already a draft made, but it is for the entire province entitled, "An Ordinance Establishing and Adopting a Set of Measures and Systems to Ensure Effective and Efficient Implementation of the Maternal Newborn Child Health and Nutrition (MNCHN) Strategy." This includes the setting up of management structures to oversee the implementation and coordinating mechanisms to implement MNCHN services, and ensuring commodity self–reliance.

Most of the MHOs (15 or 93.75%) have an adequate number of public health nurses, (1: 5,000 population) while Candon City Municipal Health Office lacks 1 RHM and the MHOs of the following towns like in Santa, San Ildefonso, Magsingal, and San Esteban have an excess of 1 RHM. Most of the standard basic consultation and delivery room equipment required by PhilHealth to be present in a non-hospital health facility for maternity care package is "Very Adequate" in all the Municipal Health Offices except for the municipal health office of San Esteban. Most of the standard supplier required by PhilHealth to be present in a non-hospital health facility for maternity care package as required by PhilHealth is "Adequate" in the municipal health offices except in the MHO of Sta. Maria and San Esteban.

Extent of Implementation of MNCHN Strategy

As a whole, the implementation of the MNCHN Strategy in terms of maternal and child care is "Very High" as evidenced by a grand mean rating of 4.69.

Maternal Care. The implementation of the MNCHN Strategy in terms of maternal care is "Very High" as signified by the grand mean rating of 4.61. The overall mean rating of 4.64 indicates that there is a "very high" extent of implementation of prenatal care, natal care, (x= 4.64), post-natal care, (x= 4.92) expanded program on immunization, (x=4.65) micronutrient supplementation, (x= 4.43), and family planning program (x= 4.14).

Maternal healthcare depends primarily on the socio-economic and cultural milieu in which a woman lives. The World Health Organization Expert Committee on Maternal and Child Health (MCH) stated that if MCH care programs were to be effective, they must focus not only with immediate causes of morbidity and mortality, but with the social organizations and values that characterize the population. Moreover, the resources available both to the family

and community determine the access of women to maternal healthcare services (WHO, 1999).

On Prenatal Care. The overall implementation of the MNCHN Strategy along prenatal care is "Very High "as indicated by the mean rating of 4.64.

The rate of pregnant women with at least four prenatal visits decreased from 77% in 1998 to 70.4% in 2003, and pregnant women who received at least two doses of tetanus toxoid also declined from 38% in 1998 to 37.3% in 2003. There was also a notable increase in the percentage of women with at least one prenatal visit to 51% in 2003 from 43% in 1998. Pregnancy always involves risk to the life of every woman for she may suffer from different complications and die. Therefore, it is necessary that every woman should visit the nearest facility for antenatal registration and avail prenatal care services. The standard prenatal visits that women should follow during her pregnancy are as follows: 1st visit as early as possible before four months or during the first trimester; 2nd visit during the 2nd trimester; 3rd visit during the 3rd trimester- every 2 weeks after 8th month of pregnancy until delivery (DOH, 2013).

Natal Care. The overall extent of implementation of the MNCHN Strategy along natal care is "Very High" as indicated by the mean rating of 4.64. Among the natal care rendered, the implementer-respondents "Always" conduct quick check upon admission for emergency signs (4.92) and conduct counselling on family planning and provide the family planning method of choice by the couple (4.90). On the other hand, the MHO personnel "Often" encourage mothers on labor to empty bladder and bowel (3.49).

Decline in maternal mortality rates between 1990 and 2010 may be due to improvements in other MDG 5 indicators such as the proportion of deliveries attended by skilled health personnel (WHO,2 013). Ketsela et al. (2009) mentioned that majority of the estimated 325,000 babies who die from neonatal sepsis and pneumonia could be saved with simple preventive measure such as clean skin and cord care, breastfeeding and warmth, and better management of those who are sick, especially using antibiotics. Most newborn deaths are among low birth weight (LBW) babies, or babies weighing less than 2500 grams at birth. Simple health care practices of these small babies and early treatment of complications is a great help to save their lives. However, neither home care practices nor care of small babies, or even treatment of newborn infections has been systematically addressed by child health programs at scale, including Integrated Management of Childhood Illness (IMCI). **Post-Natal Care**. The overall extent of implementation of the MNCHN Strategy along post-natal care is "Very High" as indicated by the mean rating of 4.92. The implementer-respondents "Always" inform, teach, counsel woman on self-care during postpartum and where and when to seek care (x=4.99) and inform, teach, counsel women on birth registration with a mean rating of 4.98.

According to the Geneva Board World Health Organization (1999), the WHO/UNFPA/UNICEF/ World Bank had a joint statement calling all countries to ensure that all women and newborn babies should have skilled care during pregnancy, childbirth and the immediate postnatal period, thus, reducing maternal mortality.

Expanded Program on Immunization The implementation of the MNCHN Strategy in terms of Maternal Care along expanded program on immunization is "Very High" (x=4.65). Among the EPI activities, the implementer-respondents "Always" administer tetanus toxoid immunization 1 with the right dosage anytime during pregnancy (x= 4.97) and administer tetanus toxoid immunization 2 one month after TT1 ((x=4.93).

Neonatal Tetanus is one of the public health concerns that people need to address among newborn babies. To avoid deadly diseases, tetanus toxoid immunization is needed for pregnant women and child-bearing age women. With this, the mother and the child are protected against tetanus and neonatal tetanus. A series of 2 doses of Tetanus Toxoid vaccination must be taken by a woman one month before the delivery to protect her baby from neonatal tetanus. Finally, the 3 booster dose shots to complete the five doses following the recommended schedule will provide full protection for both mother and child. The mother is then called as "Fully Immunized Mother" (FIM). For women of child-bearing age, vaccines that contain tetanus toxoid (TT or Td) are given not only protect women against tetanus, but also prevent neonatal tetanus in their newborn infants (WHO, 2013).

Micronutrient Supplementation to Pregnant Mothers. The overall extent of implementation of the MNCHN Strategy along micronutrient supplementation is "Very High" as indicated by the mean rating of 4.43. Among the micronutrient supplementation activities to mothers, the implementer-respondents "Always" administer vitamin A supplementation to post-prenatal women (x =4.58) and promote iodized salt (x=4.58) and "Often" give vitamin A to pregnant mothers suffering from night blindness regardless if they are taking micronutrient tablets

(x=3.28).

Two important factors that affect children's survival and development are Vitamin and mineral deficiencies. Anemia affects 74% of children under the age of three, more than 90 % of adolescent girls and 50% of women. Iodine deficiency, which reduces learning capacity by up to 13% is becoming prevalent because fewer than half of all households are using iodized salt. Vitamin A deficiency, which causes blindness and increases morbidity and mortality among preschoolers, also remains a public-health problem (Health Education to Villages, n.d.).

On Family Planning Program. The overall extent of implementation of the MNCHN Strategy in terms of maternal care along Family Planning Program is "Very High" as indicated by the mean rating of 4.58. Among the family planning program activities, the implementer-respondents "Always" inject Depo-Provera to clients following the prescribed time of administration (x=4.73), and act as advocate of the family planning program (x=4.67). This is attributed to the fact that IUD is really used by mothers as claimed by them during the interview.

Natural family planning is previously known as the rhythm method, and it is based on abstinence from sexual intercourse on days when fertility is probable, and its effectiveness depends on accurately predicting the times when the woman is ovulating. Prediction is attempted either by monitoring changes in the woman's basal body temperature that signal ovulation, or by identifying changes in the cervical mucus and other symptoms that indicate ovulation, or both. Studies show that with proper instruction, this method is 98% effective. However, it should not be relied on if pregnancy is likely to threaten the woman's health (DOH, 2013).

The grand mean rating of 4.68 for the extent of implementation of the MNCHN Strategy in terms of child care, overall mean ratings of 4.82 for information dissemination on child programs, 4.81 for immediate newborn care, 4.83 for essential newborn care, 4.78 for expanded program of immunization, 4.57 for micronutrient supplementation, 4.91 for deworming, and 4.87 for integrated management of childhood illnesses indicate a "Very High" extent of implementation of the MNCHN strategy in terms of child care.

On Information Dissemination on Child Programs. The overall extent of implementation of the MNCHN Strategy in terms of child care along information dissemination on child programs is "Very High" (x=4.82). Among

the information dissemination on child program activities, the implementerrespondents "Always" educate the mothers on the benefits of immunization, inform parents on the availability and nature of the different immunizations (x=4.90 respectively) and disseminate information about the child health programs through distribution of IEC materials (x=4.50).

On Immediate Newborn Care. The overall extent of implementation of the MNCHN Strategy in terms of child program along Immediate Newborn Care is "Very High" (x = 4.81). Among the immediate NB care activities the implementer-respondents "Always" provide additional care for small baby or twin(x =4.86), and reposition, suction, and ventilate (if after 30 seconds of thorough drying) NB who are not breathing or gasping (x=4.83)and maintain non-separation of the NB for early initiation of breastfeeding (x=4.61).

The goal of the MNCHN Strategy of the DOH is to reduce neonatal mortality rates by 2/3 from 1990 levels. The following are the objectives: To provide evidence-based practices to ensure survival of the newborn from birth up to the first 28 days of life or during the neonatal period; To deliver time-bound core intervention in the immediate period after the delivery of the newborn; To strengthen health facility environment for breastfeeding initiation to take place and for breastfeeding to be continued from discharge up to 2 years of life; To provide appropriate and timely emergency newborn care to newborns in need of resuscitation; To ensure access of newborn infants to affordable life-saving medicines to reduce deaths and morbidity from leading causes of newborn conditions; and To ensure inclusion of newborn care (DOH, 2011).

On Provision of Essential Newborn Care. The overall extent of implementation of the MNCHN Strategy in terms of child care along provision of essential newborn care is "Very High" (x=4.83). Among the provision of essential newborn care activities, the implementer-respondents "Always" inject hepatitis B vaccination at birth and inject BCG vaccinations at birth (x=4.90) and give vitamin K prophylaxis to the NB (x=4.86).

On Expanded Program on Immunization. The overall extent of implementation of the MNCHN Strategy in terms of child care along expanded program on immunization is "Very High" as indicated by a mean rating of 4.53. Among the expanded program on immunization activities, the implementer-respondents "Always" ensure that every child receives complete immunization

following the guidelines of the DOH (4.94) and follow-up mothers who fail to submit their children to be vaccinated at their own homes (4.53). On the other hand, the implementer-respondents "Often" allow the trained BHW to administer polio vaccines (OPV) in the immunization sites (3.69).

The targets of EPI are NBs and infants (0-12 months). It provides free vaccines that protect infants and children from the common vaccine preventable diseases. Vaccines include Bacillus Calmette Guerrin (BCG) for childhood tuberculosis, rotavirus vaccine, which is a combination of Diptheria-pertussis-Tetanus-Hepatitis B-Haemophilus influenza vaccine (DOH, 2013). Furthermore, the 2008 NDHS report (Tutali 2008) showed an overall 80% of children ages 12-13 months have received prescribed vaccinations.

On Micronutrient Supplementation to Children. The overall extent of implementation of the MNCHN Strategy in terms of child care along micronutrient supplementation is "Very High" (x=4.57). Among the micronutrient supplementation activities, the implementer-respondents "Always" administer personally the vitamin A to the child (x=4.88) and enumerate to the mother the rich sources of vitamin A and encourage mothers to eat food rich in vitamin A (x=4.46), respectively. However, the implementer-respondents "Often" administer vitamin A supplements to children 0-5 years-old and children with low BMI (x=3.80).

Eilander et al. (2009), claimed that micronutrient malnutrition impairs children's cognitive performance and developmental potential: 1) Single micronutrient interventions have shown that iodine and iron, and possibly other micronutrients such as zinc and B vitamins, may benefit children's mental development; 2) Because micronutrient deficiencies often coexist and synergistic effects of micronutrients on physical functions may indirectly affect cognition, supplementing children with multiple micronutrients could have advantages over single micronutrient supplementation.

On Deworming. The overall extent of implementation of the MNCHN Strategy in terms of child program along deworming is "Very High" as indicated by the mean rating of 4.91. Among the deworming activities, the implementer-respondents "Always" educate mothers on ways of preventing parasitism such as proper usage of toilet (x=4.98) and educate mothers on ways of preventing parasitism thorough proper hand-washing and always wearing of slippers (x=4.96).

Worm infestations often cause serious health problems and affects child's school performance and another UNICEF report says that research had shown that regular deworming can substantially increase school attendance and significantly improve a child's learning ability.

According to the WHO (2015,) the nutritional impairment caused by schistosome and soil-transmitted helminthic infections during childhood has a significant impact on growth and development of children. Furthermore, a regular treatment (deworming) of children health education and sanitation can reduce the transmission of schistosome and soil-transmitted helminthic infections.

On Integrated Management of Childhood Illnesses. The overall extent of implementation of the MNCHN Strategy in terms of child care along IMCI is "Very High" (x=4.87) Among the IMCI activities, the implementer-respondents claim they "Always" assess the main symptoms such as fever, assessing status on nutritional, immunization and vitamin supplementation (x=4.92), check for danger signs such as unable to drink and vomits everything (x=4.91), classify conditions and identify treatment actions according to color-coded treatment, and treating local infection by giving oral drugs as prescribed by the physician (x=4.71).

Since 1995, the Integrated Management of Childhood Illness Strategy has been introduced in different countries worldwide. IMCI is focused on child survival, healthy growth and development. It is based on the combined delivery of essential interventions at community, health facility and health systems levels. The objectives of IMCI are to reduce death and frequency and severity of illness and disability, and contribute to the growth and development. The components of IMCI includes improving case management skills of health workers, improving overall health systems and improving family and community health practices (DOH, 2011).

Relationship between the Extent of Implementation of the MNCHN Strategy and the Socio Demographic Factors

The implementer-respondents' civil status (r=.266) is significantly related to the extent of implementation of the MNCHN Strategy. Furthermore, an inverse significant correlation exists between the extent of implementation of the MNCHN Strategy and the implementer-respondents' educational attainment (r=-509).

Relationship between the Extent of Implementation of the MNCHN Strategy and the Work-Related Factors

The implementer- respondents' position, and membership in organization had an inverse correlation with the extent of implementation of the MNCHN Strategy in terms of child and maternal cares backed up by the r values of r =-.151, and r=.-175, respectively. Furthermore, a significant correlation existed between the extent of implementation of the MNCHN Strategy in terms of maternal and child care and the implementer-respondents' training program attended (r= .137).

Components	Maternal Care	Child Care	Overall
Socio Demographic Profile			
Sex	.073	049	.040
Age	.010	.182**	.119
Civil Status	.189**	.263**	.266**
Educational Attainment	401**	675**	509**
Income	052	.242**	.124
Place of Residence	.007	.060	.037
Work Related Factors			
Position	009	200**	151*
Status of Appointment	018	.196**	.106
Length of Service	091	.109	.026
Training Program on EINC Attended	.099	.120	.137*
Membership in Professional Organization	322**	065	175**
Health Facility-Related Factor			
Number of Health Personnel	.151*	.147*	.154*
Consultation & DR Equipment	102	.177**	.172**
Standard Supplies	.029	.029	007

Table 1. Correlation Coefficients between the Extent of Implementation and the Socio-demographic, Work-Related Factor, and Health Facility-Related Factor

**. Correlation is significant at the 0.01 level*. Correlation is significant at the 0.05 level

The findings imply that the implementer-respondents with lower positions tend to implement the MNCHN Strategy in terms of child care better since they are after the performance rating given by their immediate supervisor. Furthermore, the implementer-respondents with low position/designation tend to implement the maternal and child programs at a higher extent since they do not occupy administrative positions and can focus well with their job as frontline workers.

In terms of training attended on EINC, the implementer-respondent with more number of trainings on EINC, tend to implement the MNCHN Strategy at a "Very High" extent. The results are in consonant with the MNCHN strategy implementation of the Philippine government pursuant to priorities of the Administrative Order No. 0023 series of 2005. This strategy shall guide the development, implementation and evaluation programs for mothers and children in reducing maternal and neonatal mortality.

CONCLUSIONS

Results revealed that the extent of implementation of the MNCHN Strategy is "Very High". The implementer -respondents' civil status, position and membership in organization and the number of health personnel yielded positive significant relationship while the educational attainment yielded an inverse significant relationship with the overall extent of the overall implementation of the MNCHN Strategy.

The MNCHN Strategy is one of the programs the Philippines is implementing for the attainment of the Millennium Development Goals 4 and 5 aimed at reducing child mortality and improving maternal health by the World Health Organization. This entails combined actions not only of the international community, but the national government, civil society, and the private sectors.

According to the Millennium Development Goals Report of 2013, the achievement of the MDGs are a reality. In the Philippines, various programs are being implemented like the Philippine Family Planning Program, Control of Diarrheal Diseases, Integrated Management of Childhood Diseases, Expanded Program of Immunization, and the MNCHN Strategy.

In addition, the province of Ilocos Sur had implemented measures to safeguard the health of the mother and the child-such as the provision of adequate lifesaving equipment and medicines, surveillance of child illnesses, early diagnosis and treatment. Furthermore, the local government units of Ilocos Sur are strengthening their commitment to continuously support Municipal Health Offices especially on the provision of the needed equipment and supplies to sustain the "Very High" implementation of the MNCHN Strategy.

TRANSLATIONAL RESEARCH

The MHO personnel are pursuing post graduate studies and training program/ seminars on EINC with the aim of keeping themselves abreast with the latest trends and techniques on the delivery of the MNCHN Strategy. In addition, the local government unit is on the process of finalizing the ordinance passed in support to the MNCHN Strategy and lastly, the Department of Health is also fast tracking the Health Facility Enhancement Program (HEP) so that the Municipal Health Offices could upgrade their equipment in providing higher quality of health services to the community.

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