

An analysis of maternal deaths in Camarines Norte: Points for action*

INSIDE

Background	1
Major Findings of the Study	2
Revisiting ICPD, Policy Implications and Recommendations	4

This policy brief discusses the salient findings of a research commissioned by Zuellig Family Foundation, which was intended to understand the maternal death situation in the province of Camarines Norte. This summarizes the policy indications presented in the report and identifies the gaps and areas where appropriate health leadership and governance intervention is needed.

Background

The Zuellig Family Foundation (ZFF) has been a partner to the Philippine government and international organizations in addressing the health concerns of the poor since 2008. This program initiative is implemented by providing training aimed at transforming local chief executives to become responsive leaders. Improvements in health indicators and roadmaps supplied by ZFF are used to gauge leaders' transformations and effectiveness of ZFF's training programs. Coaching is also done in-between the conduct of training modules.

The findings, policy implications and recommendations presented in this paper were culled from the research report: Why Do Mothers Die? A Maternal Death Review in Camarines Norte implemented by a team consisting of Ofelia P. Sanieel, MPH, Ph.D. (principal investigator), Amiel Nazer C. Bermudez, M.D., MPH (co-investigator) and Zenaida Dy-Recidoro, RN, MPH (consultant) completed in January 2016.

The research aimed to provide an in-depth analysis of the high number of maternal deaths in Camarines Norte. Specifically, the study aimed to: (1) describe the maternal deaths at the Camarines Norte Provincial Hospital (CNPH) from 2010-2014, their causes and the demographic characteristics of the deceased; (2) describe the resources and capacity of the CNPH with respect to Comprehensive Emergency Obstetric and Newborn Care (CEmONC) standards like blood supply, human resource capacity, and other relevant resources; (3) identify characteristics of the Camarines Norte's health system affecting the access and utilization of health services by pregnant women including availability of transportation for emergencies, availability and accessibility of health centers and birthing facilities, human resource capacity, and a functional referral system between various health facilities; and (4) provide practical recommendations to address the gaps in health services supply/delivery in the health or birthing facilities to decrease the number of maternal deaths in the ZFF-engaged municipalities.

CONTACT US

For comments, suggestions or further inquiries please contact:

Romulo Nieva, Jr.
Policy Advocacy Associate
Zuellig Family Foundation
A: Km. 14 West Service Road corner
Edison Avenue, Barangay Sun Valley,
Parañaque City 1700 Philippines
T: +63 2 821-4332
F: +63 2 776-4727
E: rfnieva@zuelligfoundation.org
W: www.zuelligfoundation.org

*This policy brief is written by Exaltacion Lamberte, Ph.D., ZFF Research Advisory Board Member, and is based on the research "Why Do Mothers Die? A Maternal Death Review in Camarines Norte" by Sanieel, et al.

2 Policy Brief: Maternal Death Review in Camarines Norte

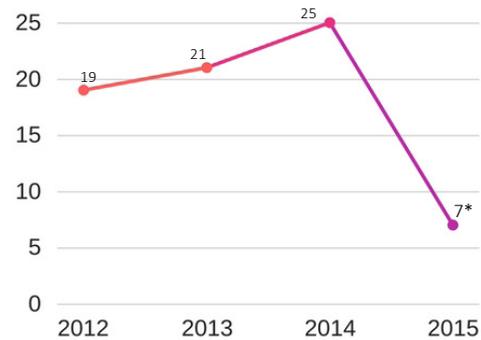
Records were reviewed to describe the maternal deaths at CNPH from 2010-2014. Key-informant interviews and review of records were used to describe the resources and capacity of CNPH with respect to CEmONC standards. Review of records and verbal autopsies were used to describe the characteristics of Camarines Norte's health system which may affect the access and utilization of health service by pregnant women.

Major Findings of the Study

A. Features of Maternal Deaths

1. Review of available records of the Camarines Norte Provincial Hospital (CNPH) indicated an increasing trend in the number of recorded deaths from 2012 to 2014. This was reduced significantly in first half of 2015.

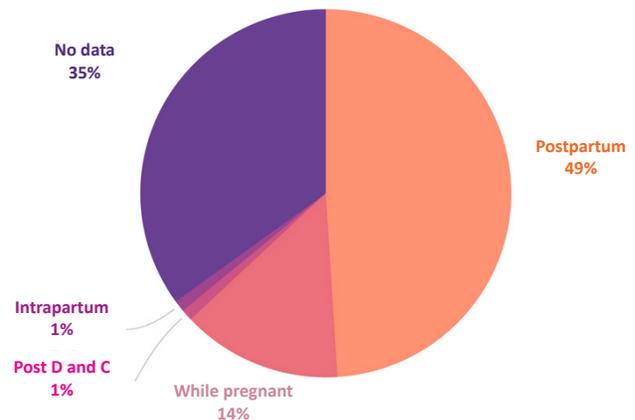
Figure 1. Number of Maternal Deaths at the CNPH, 2012-2015 (n=72)



*Data as of July 17, 2015

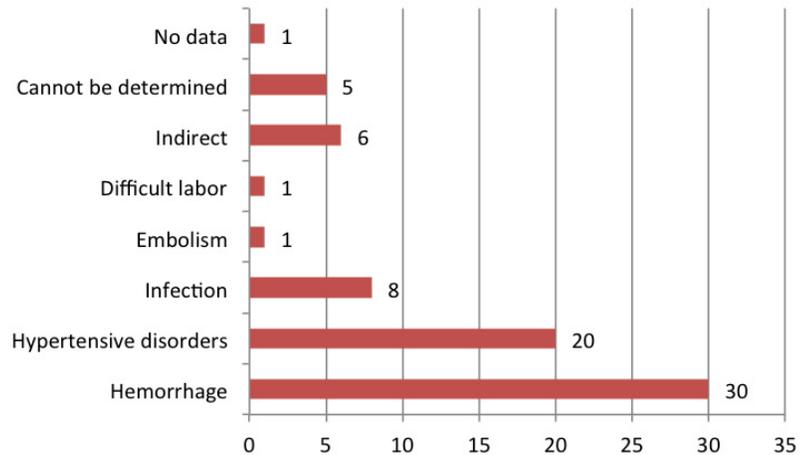
2. The majority of the mothers who died delivered at CNPH (76%), while others delivered at home (15%). The rest died in other hospitals or while on the way to facility. More than half of the mothers died after delivery or during the postpartum status of pregnancy, and a number died during delivery.

Figure 2. Distribution of Maternal Deaths According to When the Death Occurred (n=72)



3. Records also indicated most of the cases were *direct maternal deaths* with hemorrhage, hypertensive disorders and infection as major causes. Mothers who delivered in the hospitals were attended by skilled health professionals (14 of 21) that is, medical doctors, nurses or midwives were present during delivery. In many cases, those who delivered at home were attended by non-skilled health professionals such as the traditional health attendants.

Figure 3. Distribution of Maternal Deaths According to Cause of Death (n=72)



It should be noted that similar pattern of results is gleaned with regard to features of maternal deaths even if varying frameworks in analyzing the causes of maternal deaths were used in the analysis. The consistency of data attests to its reliability.

B. Factors Contributory to Maternal Deaths

The factors explaining the situation of maternal deaths in hospitals were classified into two aspects: (1) service delivery and (2) cultural and social aspects at the levels of the individual, family and community.

1. Service Delivery Element

The service delivery component may be classified into two, namely: (a) organizational- and health governance-related factors and (b) provision of quality health and medical care

a. Organization- and governance-related factors found to have contributed to deaths of mothers particularly in the hospital were: (a) the absence of a responsive leadership and governance in the hospital; (b) lack of human resources (HR), as shown by the inadequate number of HR complement in the hospitals; (c) lack of essential drugs, equipment and supplies; (d) inadequacies in facilities such as blood bank station, obstetric services rendered and compliance to defined standards and work shifts among staff; (e) less consciousness of accountability and professional commitment, as well as integrity by showing transparency in transactions involving availment of Maternal Health Package incentives for mothers; (f) low level of motivation; and (g) low level of knowledge on the adequate maternal health services that should be provided to the patient-clients.

b. Aspect related to management involved rendering of quality services to the mothers while in the hospitals. This aspect included: (a) less compliance on the referral system protocol and less compliance of nurse/midwife hospital staff on the medical advice given by the attending physician;

4 Policy Brief: Maternal Death Review in Camarines Norte

(b) less or irregular conduct of inventory and monitoring of drugs and medicines necessary for the performance of the childbirth task and procedures (e.g., availability of drugs and medicines needed in the hospital); (c) low level of competency among the hospital staff which was highlighted in a report noting the urgency of providing retooling training and designing mechanisms among staff and the apparent lack of knowledge on the complete lineup of health services given to pregnant women; (d) long waiting time in obtaining care in the hospital; and (e) lack of compliance in establishing well-maintained recording and information system including the use and maintenance of the Target Client List. This is important in tracking the progress of mothers throughout the pregnancy cycle and post-delivery period; thus, preventing the unnecessary occurrence of maternal deaths during childbirth.

2. Social and Cultural Elements

The social and cultural factors may be grouped into three levels: (a) at the level of the individual; (b) at the level of the family; and (c) at the level of the community. Unlike in the aforementioned element which touched on matters related to systems, mechanisms and rules, or healthcare delivery norms, this dimension talks more about individuals, families and the communities.

a. At the individual level, the contributory factors were: (a) low level of empowerment as shown in the inability of the mothers to decide for themselves on matters involving their own health; (b) dependency on the husband, and if absent, on the in-laws who likely dictate how and where to deliver the baby; (c) low level of education; (d) less knowledge on matters related to pregnancy management; (e) poor health-seeking behaviors; (f) tendency to keep illness and health status conditions away from the knowledge of immediate family members—this is particularly true in cases where pregnancy carries social stigma such as rape, infidelity and incest. In addition, mothers tended to perceive pregnancy period as something ordinary, a normal life stage cycle, thus, expecting less likely occurrence of untoward event in her life.



Oftentimes, inability of the mothers to make health decisions for themselves hinders them from seeking much-needed medical attention.

b. At the level of the family, the factors were: (a) lack of financial resources allotted for child delivery expenses such as money for pre-natal checkup, diagnostic and laboratory fees; if there is money, such was found to be insufficient; (b) lack of confidence in hospital staff or hospital healthcare delivered; (c) continuous reliance on traditional health attendants, especially when pregnancy carries social stigma; (d) influence of in-laws in the mother's decision-making processes; (e) family members' tendency to be insensitive to the mother's health conditions; and (e) negative perceptions of the family toward the care delivered by health professionals and toward the hospital itself.

c. At the level of the community, the following conditions were shown: (a) geographic distance of the residence from the hospital especially those located in cities; (b) poor road infrastructures; (c) lack of communication facilities including absence of radios and telecommunication signals; (d) distance from the Rural Health Units (RHUs) to the hospitals; (e) lack of transportation facilities from RHUs to the hospitals. The problem of motorcycle and "habal-habal" as inappropriate transportation in carrying a pregnant woman undergoing labor was highlighted in the interviews. One was a case of a pregnant woman about to deliver and had to be transferred twice to get to the hospital.

Revisiting ICPD, Policy Implications and Recommendations

The results of the study bring to the fore the overall perspective of looking at the health well-being of mothers bearing and delivering a baby. This attests the objectives of the International Conference on Population and Development (ICPD) held more than two decades ago. The conference designed a plan to attain "reproductive health and rights" for all by 2015. The plan included wide-ranging targets, from contraception and fewer maternal deaths to better education for girls and greater equality for women. The ICPD plan also aimed for a paradigm shift in making policy and in delivering services. The plan worked out a way to shift view away from family planning, which implies policies on population control. Instead it highlights a broader view of sexual health and health systems, as well as services shaped by individual needs of the mothers (United Nations, 1995).

Similar to the strategies indicated in the ICPD plan, the findings demonstrated the importance of local health system in bringing about quality care. More efforts have to be exerted so poor and disadvantaged women do not die from complications of pregnancy and childbirth. The health well-being of the mothers must be given due attention. Health system needs to be shaped and appropriately upgraded to be able to meet the targeted maternal rate for the Philippines. In this line of ICPD statement, reproductive health issue again needs to be viewed from a development perspective.

Against this backdrop, responsive leadership and local governance is deemed imperative in shaping the minds of the people, the community and the entire local health system to reduce maternal deaths. As per World Health Organization local health systems framework (2007), there is a need to provide capacity building among local leaders to become responsive and dynamic leaders in the community, particularly in steering the local health system to address the health needs of the community. This formation is needed to develop a sense of accountability and responsibility to the health conditions of women, children and the entire community.

6 Policy Brief: Maternal Death Review in Camarines Norte

A. Local Leadership and Governance

Specific to this element are the following recommendations for action:

1. To urgently address health worker shortages in the local government units (LGUs), plantilla positions must be created for critical functions in the provincial hospitals and in the Rural Health Units (RHUs).
2. To improve blood supply, the LGU should support the provincial hospital in establishing a blood bank and provide assistance in the recruitment of blood donors throughout the province.
3. Expand the coverage of maternal care services in terms of a wider coverage of the eligible target population and provision of essential services through various strategies—the community health team tracking all pregnant women in their communities and motivating them to seek care in the early stage of their pregnancy.

The importance of preparing the birth plan could not be overemphasized. The availability and details of Philippine Health Insurance Corp. (PhilHealth) and the Maternity Care Package should be more widely disseminated to pregnant women and to the primary decision-makers of the households.

4. Local executives, together with the provincial and regional offices of the Department of Health, should increase the number of rural health facilities and other birthing facilities in the area to make maternal healthcare more accessible to their constituents.
5. Expand the range of services for the pregnant women to include ultrasound examination, screening, counseling and management of sexually transmitted infections including HIV; and upgrade current blood station at the provincial hospital to a fully functional blood bank.
6. For the local executives to intensify education and information dissemination campaign by mobilizing and coordinating efficiently the efforts of local agencies, local health officers, facility nurses and midwives, local population workers, and barangay health workers/nutrition scholars. These public servants need to provide education and information to men and women in the community about safe motherhood and responsibilities involved in pregnancy and child bearing, women's consciousness of their health during pregnancy and childbirth cycle. In addition, they need to mandate the local health officers to coordinate and collaborate with local social workers in educating also the mother-beneficiaries of the Pantawid Pamilyang Pilipino Program through their regular family-related sessions.
7. Local executives need to mobilize adequate financial resources to procure needed supplies, equipment and medicines.
8. Local chief executives must work and advocate to the provincial and/or national government for much better road infrastructure and transportation facilities in their areas.

B. Management and Governance of Hospital

From the hospital management and governance aspect, the following steps are recommended:

1. For the hospital authorities to review/revise, disseminate and implement policies on patient admission, management, interdepartmental referral system, maintenance of equipment, inventory and purchase of equipment, drugs/supplies, among others.
2. For the management to ensure adequate supply of essential drugs, medical supplies and equipment through improved inventory management. This will avoid stock-outs of essential drugs (e.g., methylergomethrine, magnesium sulphate and oxytocin) and supplies.

3. Mechanism should be made such that E-carts and emergency medications are made available in the wards/nurse station subject to strict inventory procedures.
4. For hospital management to develop a system to have improved availability of drugs and other medical supplies so that patients no longer need to buy them outside the hospital. This is especially important in line with the “no-balance billing” policy for qualified PhilHealth members/dependents.
5. For the hospital finance management and operations to:
 - a. Project expenditures and source of funds that should be covered in the birth plan so the pregnant mother and her family could prepare for them.
 - b. Assess level of utilization and determine the reasons for low utilization of available PhilHealth benefits. Identify measures to address the low utilization of services.
 - c. Determine the extent to which the “no-balance billing” policy is successfully implemented among those who are eligible to avail of this benefit.

C. Quality Care Assurance and Operational Information System

1. All health workers should be oriented on when and how to use the three-tiered referral system, including the filling-out of prescribed referral forms and other necessary documents to ensure continuity of patient care. For general practitioners, training is needed on advanced cardiac life support and management of obstetric complications.
2. Continuing education should be given to nurses and midwives on early recognition of common obstetric complications such as hypertension in pregnancy, and obstetric hemorrhage. Although based on a very small sample of hospital staff, this study recommends “retooling” of health providers (including RHU nurses and midwives) on services such as obstetric fistula, manual vacuum aspiration, vacuum extraction for assisted vaginal deliveries, and management of incomplete or unsafe abortions. General practitioners should also be trained on advanced cardiac life support and management of common obstetric complications.
3. Improve referral system between the Basic Emergency Obstetric and Newborn Care and Comprehensive Emergency Obstetric and Newborn Care facilities by reviewing/revising referral protocols and following them strictly. Referral protocols should be widely disseminated to all health workers in all health facilities providing maternity care.
4. Improve patient record-keeping in all health facilities, public or private, through stricter implementation of existing policies on proper documentation that meets standards of care. This can be part of updates given to health workers in the form of seminars, conferences, or newsletters sponsored by the hospital, or by professional organizations/societies or by the Provincial Health Office.
5. Based on the results, more emphasis should be stressed on the importance of health needs and status of the pregnant women and would-be mothers. In this light, personal health management and intensive information and education about the risks of child delivery should be disseminated by the health professionals to pregnant women, especially those socially and economically disadvantaged.

D. Specific Recommendations to the Provincial Review Team

The following specific recommendations to the Provincial Review Team (PRT) were raised:

1. Reduce the number of PRT members to a minimum, about five members, plus selected members of the technical secretariat. This will not only facilitate the review process but can also safeguard the confidentiality of cases being reviewed.
2. The Provincial Health Office should allocate resources (e.g., transportation and food allowance) for the PRT members who will do the review.
3. Proportionately, more maternal deaths happen outside the health facilities; therefore, the PRT should be able to include some of those cases for review.
4. There are doctors and health workers who still have the wrong idea about the objectives of maternal death review (MDR). The PRT should continue to explain to health workers, especially doctors and nurses, that the real goal of MDR is to prevent avoidable maternal morbidity and mortality, and not find faults among health workers.
5. The process of MDR will be improved if PRT prepares well for the review. It is important that all information relevant to the case be compiled by the technical secretariat and be made available to the PRT. Over time, the PRT members will develop their interview skills for the verbal autopsies. Missing but important information such as mother's and husband's education and occupation may be included in the verbal autopsy tool.

References

Saniel, O., et al. (2016). *Why Do Mothers Die? A Maternal Death Review in Camarines Norte*.

World Health Organization (2007). *"The WHO's Health System Framework", Everybody's Business: Strengthening health systems to improve health outcomes—WHO's Framework for Action*. Retrieved from <http://apps.who.int/iris/handle/10665/43918>

United Nations (1995). *Report of the International Conference on Population and Development*. Retrieved from https://www.unfpa.org/sites/default/files/event-pdf/icpd_eng_2.pdf