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#### Full Length Research Paper

# Health service delivery in selected municipalities in Leyte: Inputs for improved health service delivery

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Utilizing descriptive research design, this study investigated the nature and implementation extent of service delivery related to reproductive health (RH) and tuberculosis (TB) control. Data were gathered using existing data files, survey checklist questionnaires and interview schedule. The questionnaires were pilot-tested then implemented on actual respondents. Findings showed there was adequate number of needed personnel in all rural health units (RHUs) with the appropriate educational qualification, eligibility and training. Facilities and materials available were functional and most often used. Most health service delivery units have no specific allocation earmarked for TB control and RH programs. Information dissemination techniques were one-on-one session and lecture during check-up. Linkage with either one or two NGOs among the RHUs existed, but, none of such linkage existed between NGO and the two hospital facilities. The health service delivery profile in RHUs and hospitals is adequate in terms of personnel number and experts' availability. Inadequacy of facilities and scarcity of information materials were noted. Legal mandates were partly enforced together with implementation of health service delivery related to TB control and reproductive health programs. There was no extent of linkages of local government units. Gaps and overlaps in health service delivery for the two programs were evident.

**Key words:** Health service delivery, tuberculosis control, reproductive health, local government units, non-government organizations.

#### INTRODUCTION

Health service delivery is one the major concerns of the state. As stipulated in Art. II, Section 15 of the 1987 Philippine Constitution, the state is mandated to promote people's health (De Leon, 2003). Indeed, government incurs much expense in the prevention and containment of diseases. In like manner, it requires so much

investment in both human and capital resources in curtailing diseases that continue to plague our society such as tuberculosis, and reproductive health.

The government, therefore, had to organize the Department of Health (DOH) which is primarily tasked monitoring and controlling the implementation of national

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health programs. The creation of local units was viewed as a mechanism that can make the delivery of health services percolate to the barangays (Bustos, 1993). Barangays here would mean a geographical subdivision which is considered the smallest subdivision in Philippine geography.

With reference to the effects of the pre-devolution health service delivery, the Department of Health, National Epidemiology Center (Philippines)(2000) stipulates that even if health outcomes in the country have significantly improved, there are still so many challenges of the health delivery system, risk and financial protection with reference particularly to the poor and marginalized sectors of the society. It is further indicated that notwithstanding the significant containment of many diseases by reason of health technology and advances in science, most Filipinos are not able to access appropriate health services. Such a situation is attributable to physical, social and financial barriers.

It is further posited that even in instances where health facilities are available, people continue to find difficulty in accessing health services because they are beyond their financial capability. There is lack of quality care or the providers of health services cannot respond effectively to the health needs of the people.

Hernandez et al. (1993), citing the findings of a 1984 World Bank review analysis, found out that the Philippine health delivery system was excessively centralized, with fragmentation and duplication existing between central and field units. There were also observable weak linkages between rural programs and centrally-run disease specific campaigns.

Grundy et al. (2003) summarized the state of health during the pre-devolution era as characterized by: a) high fertility levels resulting in a rapid population growth; b) a declining mortality, but, with tuberculosis as the leading cause of morbidity and mortality; c) declining mortality rate, though the decline was not comparable to that of neighboring countries; and maternal deaths related to pregnancy and maternal births contributing 14% of all deaths of women aged 15 to 49.

Gleaning from the theoretical views cited, a conceptual framework was developed which sheds light on the scope of the study. The conceptual paradigm indicates that this study will investigate specific areas provided by the local government health units and the extent of health service delivery involving two health concerns, namely: reproductive health and tuberculosis control which will serve as input data in order to suggest improvement of the health service delivery in selected municipalities of the Philippines: a) The profile of the health delivery system of the local government units involved the study with respect to: a.1) Adequacy of personnel, expertise, facilities, finances, information dissemination, a.2) Extent of enforcement of legal mandates; and a.3) Existence of linkages with non-governmental organizations; b.)

Perceived level of implementation of health service delivery with regard to the following programs: b.1) reproductive health and b.2) control of tuberculosis; c) Gaps in health service delivery in terms of: c.1) personnel; c.2) expertise; d.3) facilities; d.4) finances; c.5) information dissemination; c.6) extent of enforcement of legal mandates; and c.7) existence of linkages with non-government organizations, and d) Overlaps in health service delivery in terms of: d.1) personnel; d.2) expertise; d.3) finances; d.4) information dissemination; d.5) extent of enforcement of legal mandates; d.6) existence of linkages with non-government organizations.

The different drawbacks, gaps and inadequacies in the matter of health service delivery performance during the pre-devolution era serve to underpin the need to institutionalize the devolution of health service delivery.

In the case of Region VIII, the Department of Health (2007), points out that of the ten leading causes of morbidity, 50% are communicable in nature. The same report further points out that in 2006, acute respiratory infections remained the top leading causes of morbidity in the region and tuberculosis still ranked 7<sup>th</sup> in morbidity rate as compared to 2005. An earlier report (National Tuberculosis Program, 2002) also indicates that of the total population of 79,503,675, the number of tuberculosis cases reached 123,208. Region VIII had 5,516 cases and Northern Leyte had 1,627 cases.

Concerning reproductive health (RH), Friedman (1993); Ainsworth and Over (1994), as cited in World Health Organization (1995), pointed out that approximately one third of the world's population is between 20-24 years of age, and four out of five young people live in developing countries. This figure is expected to increase in year 2020. It was further cited that in several countries, majority of the young people have sexual experience by age 20.

Reproductive health primarily connotes the right to remain free of disease, disability or death associated with sexuality and reproduction. It is a major component of women's health (Department of Health, 2007). Specific facts relating to reproductive health in Region VIII serve to justify the conducting of a study pertaining to this aspect of health service delivery. For example, in 2006, there were 81 maternal deaths reported, with complications related to labor, delivery and puerperium. Post partum hemorrhage and hypertension in pregnancy were the top two major causes of maternal mortality (Department of Health, National Epidemiology Center, (Philippines) (2006).

The previously quoted data highlight the inadequacies of various aspects of health dispensation in the predevolution era. In general, there were weaknesses in the area of structure, governance, financing and overall health delivery. As already cited, the inadequacies in specific aspects include persistent high fertility levels, continuing rise in population and rising mortality,

particularly, infant and maternal mortality. A worsening situation is observable in relation to the containment of communicable diseases, specifically, tuberculosis.

Further, the quoted data point out that devolution has been resorted to in order to bring about improvement in health delivery performance. Notwithstanding the implementation of devolution, however, various aspects of the program remain defective.

The health delivery program continues to be plagued by problems such as the backlog in capital spending, poor availability of drugs, and breakdown in referral system, declining hospital quality, ineffective delivery mechanism and inadequate facilities, among others. Also, specific health problems persist despite devolution, particularly with regard to high fertility rate, child and maternal deaths and incidence of tuberculosis. These problems continue to beset Eastern Visayas, which necessarily include the province of Leyte. Devolution is the transfer of powers and authority from the national government to the local government units.

The aforementioned data indicative of poor health delivery performance in the Philippines, in general, and in Region VIII in particular, provide the rationale for the choice of this study. Further, the continued existence of the health problems, namely, high fertility rate, which engenders continued rise in population, maternal and child mortality and the continued incidence of tuberculosis, despite disease control, serve to provide the rationale for the inclusion of these two health problems in the present study.

#### **METHODOLOGY**

This study is descriptive in nature. It required gathering of data utilizing existing data files, survey questionnaire, survey-checklists, individual interviews and focus group discussions. Quantitative data gathered from different research instruments was corroborated by qualitative data gathered from the interviews and focus group discussions, documentary analysis and questionnaire.

Respondents of the study are: a) implementers; b) selected patients; and c) selected members of non-government organizations. The number of respondents distributed according to categories, manner of selection as well as the information they expected to give are based on the statement of the problem. The study involved: a) implementers of the health service delivery which include the doctors, nurses, medical technologists, midwives, sanitary inspectors, b) selected patients and c) selected members of non-government organizations.

A permit to conduct the study was sought from the Regional Director of the Department of Health of the Philippines. A copy of which was given to the chiefs of 2 hospitals and Municipal Health Officers of three rural health units (RHUs).

The pertinent existing data files were analyzed in order to determine the profile of the health service delivery of the local government units in terms of a) adequacy of personnel, expertise, facilities, finances, information dissemination; b) extent of legal mandates, and c) extent of linkages with non-government organizations.

#### Location of the study

This study was conducted in three selected municipalities in the Philippines using a purposive sampling technique.

#### Data processing and analysis

Frequency counts, means and percentages were computed to determine the profile of the health service delivery of the local government units in terms of variables included in the study for a) adequacy of personnel, expertise, facilities, finances, adequacy of information dissemination, existence of enforcement in the implementation of legal mandates, existence of linkages with nongovernment organizations and existence of cooperation between and among the health service delivery units; b) the perceived level of implementation of the health service delivery along the different aspects of TB control and reproductive health; and c) gaps and overlaps in the delivery of health services.

#### **RESULTS AND DISCUSSION**

On the basis of the gathered data, the study findings can be summarized as follows:

#### Adequacy of personnel in two selected hospitals

All the needed health personnel in each hospital facility are very adequate in terms of number. In the case of the Provincial Hospital at Palo, Leyte, the employment of 11 physicians is very much bigger than what is required under DOH standard of physician per 20 beds anytime plus one reliever. In the case of nurses, the DOH requirement of having one nurse per 12 bed capacity among level, in the hospital is more than satisfied due to the fact that 10 nurses plus three other nurses hired on a casual basis are employed in this hospital facility. The hiring of one medical technologist is inadequate as the requirement is one medical technologist per 24 bed capacity, which should be one physician per 20 beds.

A similar situation was observed in Carigara District Hospital in terms of adequacy of personnel. A very adequate number of nursing attendants and medical technologists are also observed as compared to the DOH standards. The presence of a very adequate number of health workers implies that the hospital can attend to the needs of several clients promptly. However, the limiting factor of lack of facilities may still stifle the dispensation of a better health service delivery to the catchment area even if there is adequacy of personnel.

## Adequacy of expertise of the RHU personnel in TB control and reproductive health

Adequacy of expertise of the RHU personnel in TB control indicates that the medical doctors, nurses and

midwives hired in all the three rural health units and the medical technologist hired in Palo RHU and Sta. Fe RHU, respectively possess the needed appropriate education and eligibility and have undergone the appropriate training in TB control. The sanitary inspector hired in all RHUs does not have the appropriate educational qualification and eligibility, as each is either a graduate in engineering or rural development. This situation can be explained by the fact that the Department of Health does not require that the position of a sanitary inspector be occupied by a sanitary engineering graduate as long as the said health worker undergoes the relevant training. In the case of both Palo RHU and Sta. Fe RHU, the sanitary inspector has the appropriate training.

#### Adequacy of facilities/materials available in RHUs

In the case of Carigara RHU, only three facilities/materials are not available, namely: chest X-ray machine, TB ward and medicine for TB. In the case of Palo RHU, only chest X-ray machine and TB ward are not available.

Concerning the functionality of facilities/materials, IEC materials are only sometimes used in all the three RHUs. Microscopy area is only sometimes used in Carigara RHU, and never used in Palo RHU. IEC means Information, Education and Communication materials.

Further, the data gathered from the group focus interview reveal that one main problem concerns the availability of medicines. In the case of Carigara RHU, the respondents indicate that they do not have an idea regarding medicines because these are managed by the Mayor's office. Also, medicines from nongovernment organizations are made available as donations. In the case of Palo, Leyte, some medicines for tuberculosis are provided by the Department of Health. In Sta. Fe, some medicines are provided by the Department of Health. It is further indicated that information materials are limited in quantity and are often neglected in favor of other needs once additional resources are secured.

In relation to medication for illness, the collected data indicate that it is not available in both hospitals. Whereas, contraceptive pills are not available in Carigara District Hospital only. The available facilities/materials, are either often or sometimes used. The availability of contraceptive pills for distribution to clients is important in the success of reproductive health. The data mentioned earlier stated the need for making available other materials such as condom and other contraceptives for distribution to users. The use of IEC materials can greatly help in attaining the program of reproductive health. For instance, the display of posters in conspicuous places can help put across the message of the importance of family planning.

Regarding adequacy of facilities/materials in reproductive health in the hospitals, the absence of

certain facilities can bring about negative effects in relation to health service delivery, particularly, the control of tuberculosis. For example, the absence of a chest X-machine can hinder the more thorough detection of tuberculosis among individuals. Referrals to private laboratory clinics may not prove effective when the poor cannot afford the charges. Lack of sufficient supply of medicines can result in a situation wherein the clients are given only prescriptions but have to buy the medicines themselves. Those who cannot afford the said medicines will not be expected to get cured. Lack of information materials on the mode of transmission of the disease, and the needed steps to be followed once the individual suspect contamination will result in the continued rise of tuberculosis patients.

In relation to RH among the RHUs, one facility like the surgical room/delivery room is not available. Contraceptive pills are not available in both Carigara and Sta. Fe RHUs. For functionality, medication for management of illness has the lowest functionality in two RHUs (Carigara RHU and Sta. Fe RHU). In the case of contraceptive pills that are available in Palo RHU, its functionality is also low (10%). For regularity of use of the available facilities/materials, in Palo RHU, all the said facilities/materials are only sometimes used. In the case of the two other RHU<sub>2</sub>, the facilities/materials are either sometimes or often used.

For functionality the different available of facilities/materials, some facilities are no longer functional such as a) microscope, face masks, sputum containers and gloves in the case of Sta Fe RHU; b) medicines in Palo RHU; and c) IEC materials in all RHUs. In terms of regularity of use of the facilities/materials, a) in the case of Carigara RHU, almost all available facilities/materials are always used: sputum containers and medical gloves are sometimes used and IEC materials are never used; b) in the case of Palo RHU, most of the materials/facilities are never used, except cotton and weighing scale that are always used; microscope and glass slides are seldom used.

In the case of two hospitals, a) all the facilities/materials are available, except medicines for TB which are not available in both hospitals; b) the available facilities, materials, TB ward and IEC are not functional in both hospitals as well as area for microscopy, in the case of Carigara District Hospital; c) with the regularity of use, most of the available facilities/materials are either sometimes or often used, with only two materials (cotton and alcohol) identified as always used. In the case of Palo Provincial Hospital, all available materials were used sometimes.

The findings on unavailability of some facilities/materials are in consonance with the findings cited by Grundy et al. (2003) pointing to the fact that the present level of state of disrepair of government health facilities and equipment underscore fund inadequacy.

#### Adequacy of finances for TB control and RH

It is worthy to note that Carigara RHU and Palo RHU have a proposed budget for TB control and reproductive health. However, the three do not have actual three RHU allocations for the two health services, even as the amount of proposed allocation for Carigara RHU and Palo RHU, the corresponding respondents perceived the proposed allocation as inadequate. This was also the perception of respondents for the two hospitals. The three local government units do not have actual RHU allocations.

The availability of fixed budgetary allocation is needed for the successful implementation of any health program including tuberculosis control and reproductive health. In the first place, such sufficient budgetary allocation is needed in buying certain materials such as those needed in the early detection of tuberculosis and in purchasing medicines and contraceptive pills. The IEC materials need to be provided by the RHU in order to respond to the need of proper information dissemination in both programs.

#### Adequacy of information dissemination on TB control

The frequency of use of the one--on-one session, and lecture during check up, the most common modes used disseminate health information, ranges from sometimes used to always used. The radio, seminar and assembly are never used in all health service delivery units. The use of one-on-one interaction can prove effective in the sense that the health officer can be assured that the client is listening intently to the discussion and is made to understand more clearly the topic discussed by allowing clarified questions. However, this has the disadvantage of having a very limited target population. Only those who go to the RHU can be given information concerning RH and TB control. The use of mass media such as having a radio program can reach the greater number of people even reach the whole region.

As revealed, three municipalities rely heavily on whatever is given out by the DOH. The said Local Government Units (LGUs) reproduce the said materials so as to distribute them to the villagers. However, this effort is hindered by budgetary constraints. These methods of information dissemination range from sometimes used to always used. Never used in all health service delivery units are radio, television, seminar and assembly.

#### Extent of implementation of legal mandates

All legal mandates are softly implemented, except:

Administrative Order No. 79, series of 2001 and Department Order No. 2 – 6, s.1993 (Voluntary Contraceptive Project of PPP) which is not implemented in Carigara RHU. No legal mandate is fully implemented.

The extent of implementation of legal mandates can have effect on the degree to which program objectives are carried out. In the first place, the mandate of each law forms part of the goals of health service delivery. These laws set the timetable for implementation, and evaluation of the program. In specific instances, the legal mandates provide punishment for nonfeasance.

With regard to the implementation of the legal mandates on TB control: a) there is full implementation of the two laws in only one RHU, the Palo RHU, but with level of implementation in the other health service delivery units; b) as the legal mandate on reproductive health, most of the laws are partially implemented. Two laws are fully implemented while four laws are not implemented at all.

#### **Existence of linkages with NGOs**

The data show that on RHU, the Sta. Fe RHU does not have linkage with any NGO. Only the Carigara RHU has a linkage with two NGOs: namely, Culion and Vision. Both hospital facilities do not have linkage with any NGO. Establishing linkage with non-government organizations pertinent to health service delivery is vital. For one thing, sole reliance on government for inputs that are vital for health service delivery such as financing, facilities and other needed materials can prove inadequate. In other words, the government does not have the full financial capability to support all these requisites for successful health service delivery. Such linkages can also be helpful in developing skills of health workers through programs of in-service training or even providing scholarship grants. Hence, lack of stronger linkages with non-government organizations implies lesser access to more needed requisites for implementing health service programs. In the case of the two municipalities: namely, Carigara and Sta. Fe, linkage with only one non-government organization, though, expectedly beneficial to efforts at tuberculosis control, such a program can be further strengthened and made more active if more nongovernment organizations deny the health delivery units of the benefits gained from maintaining close ties with non-government organizations in the two health service programs.

There is linkage with an NGO of all three RHUs. However, one RHU (Sta Fe) has a linkage with a second NGO. The hospitals don't have a linkage with any NGO.

## Existence of cooperation between and among health service delivery units

Cooperation among the RHUs with regard to both TB

control and RH exists; a) between the RHUs and Carigara District Hospital; b) between the RHUs and Palo Provincial Hospital and c) between Carigara District Hospital and Palo Provincial Hospital. Among the health service delivery units, the presence of cooperation in the matter of health service delivery is important. Firstly, cooperation can be translated in terms of sharing of facilities. This means that one health delivery unit can allow the use of such facilities only to respond more adequately to client needs. Secondly, expert personnel from other health delivery units can help improve the health services of other units. Similar advantages can be expected when the service delivery units engage in sharing of medicine and more importantly, once feasible, finances.

#### Level of implementation of the different aspects of the program on TB control and reproductive health

All the different aspects of TB control are partially implemented, except for a) X-ray, which is not implemented in Sta. Fe RHU; b) Hospitalization in excessive cases which is not implemented in Carigara RHU and Sta. Fe RHU. No aspect of the TB program is fully implemented. The performance of all activities included in tuberculosis control from case finding to hospitalization is vital to a successful TB control program. Partly implementing direct sputum microscopy in two municipalities implies that some persons cannot be fully identified as contaminated with the contagious disease, more particularly so because of the absence of chest Xray machine. Resorting to referral to the Eastern Visayas Regional Medical Center or the Provincial Hospital can mean accompanying the patients so as to be sure that the patients really go for TB treatment. Merely giving the person the referral sheet may not assure reporting to the health service delivery unit referred to in the referral letter, thus, resulting in failure in case finding. Going to private laboratory for direct sputum smear microscopy and chest X-ray can be prohibitive in terms of cost to the detriment of the patient. Full implementation on a municipality-wide basis of health education on TB control is also important in order to avoid TB spread. Hospitalization of patients with extensive TB infection can lessen the extent of contaminations at home and can lead to patient's recovery. Excessive cases here mean that some hospitals even if the patient's tuberculosis is severe, they do not confine the patients rather, they send home the patient and is treated at home instead of being treated in the hospital facility.

In the case of the program on reproductive health, all aspects are partially implemented in all health service delivery units. The data underscore the need to fully implement the other activities for more successful health service delivery with respect to RH. For instance, counseling on reproductive health, and family planning

are a must in responsible sex behavior. Promotion of safe sex can avoid unwanted pregnancies among married couples. Knowledge on sexually transmitted diseases can result in sex avoidance. Case finding and management of reproductive tract infections can help avoid the occurrence of more serious illnesses such as tumors, AIDS/HIV and other sexually transmitted diseases.

## Gaps in the delivery of services in relation to reproductive health

The following were identified as overlaps in the delivery of health services: a) The excess of number of personnel namely, a.1) midwives in the case of all the three RHUs; a.2) 1 sanitary inspector in Palo RHU; a.3) medical doctors and nurses in the case of the two hospitals involved in the study; a.4) nursing attendants in the case of Carigara District Hospital; b) Case finding of TB patients in all health service delivery units; c) Procurement of medicines by the Mayor's office in all RHUs; d) Linkage of the RHUs to the same NGO.

Certain gaps in the delivery of health services have been identified such as: a) lack of specific health personnel in all RHUs and one health personnel in Palo Provincial Hospital; b) non-availability of certain materials/facilities such as chest X-ray machine and TB ward in all RHUs and drugs for both TB control and reproductive health in all service delivery units; c) absence of budgetary allocation for both programs; d) lack of information dissemination materials also for both programs in all service delivery units; e) inadequate or absence of linkage(s) with NGOs; f) absence of cooperation in the enforcement of legal mandates.

#### Overlaps in the delivery of services

Specific overlaps in the delivery of health services were likewise identified: a) excess number of certain health personnel, namely 1) midwives in all RHUs; a.2) sanitary inspector in Palo RHU; a.3) medical doctors and nurses in the two hospitals; and a.4) nursing attendants in Carigara District Hospital; b) case finding of patients in all health service delivery units, which should have been delegated to lower health service delivery units; c) procurement of medicines in all RHUs by the Mayor's Office; and d) linkage of the RHUs to the same NGO.

#### Conclusion

It can be inferred from this study that although the RHUs have some health personnel which are either very adequate or adequate in number, they still suffer from inadequacy of a number of specific health personnel or in the case of the two RHUs, unavailability of one personnel.

A very adequate number of health personnel are hired in both Carigara District Hospital and Palo Provincial Hospital. However, in the case of some specific health personnel, the number of health personnel hired is more than what is required under the Department of Health standards, hence, for purposes of this study, such a situation is regarded as an overlap in the delivery of health services. For adequacy of expertise in TB control, the medical doctors, nurses, midwives in all RHUs and the medical technologist have the adequate education, eligibility and training. However, the sanitary inspector does not have the appropriate educational qualification in all RHUs and does not have the appropriate training in one RHU. In the two hospitals, the medical doctors, nurses and medical technologists have the appropriate qualification and eligibility but not all of them have trainings in TB control. In carigara District Hospital, the nursing attendants are professionals, having eligibility and training in TB control. The nursing attendants in Palo Provincial Hospital are professionals having civil service eligibility. However, not all of them have training in TB control.

There is adequacy of expertise in the three RHUs concerning reproductive health with reference to the following health personnel: medical doctors, nurses and midwives as well as the medical technologists in Palo and Santa Fe RHUs. Such adequacy of expertise is required in the case of the sanitary inspectors in all three RHUs.

In the case of the two hospitals, the adequacy of expertise is hindered by the fact that not all medical doctors and nurses, and nursing attendants have training in reproductive health. For the RHUs, the adequacy of facilities on TB control is hindered by the lack of chest X-ray machines and TB ward in all RHUs and the nonavaialbility of medicines in Carigara and Santa Fe RHUs; the nonfunctionality of IEC materials in all the three RHUs; microscopes, sputum containers and medical gloves in Santa Fe RHU; and medicines in Palo RHU; the nonuse of certain facilities/materials in specific RHU such as IC materials in Palo RHU and most facilities/materials in Palo RHU.

There is availability of all needed facilities/materials for TB control in both hospitals. However, the two hospitals vary in terms of functionality and regularity of use of the said facilities: a) In Carigara District Hospital, nine of the facilities are either always or often used while five facilities/materials are sometimes used. Chest X-ray machine is never used; b) In Palo Provincial Hospital, only two facilities, the IEC materials and TB ward are not functional. The rest are functional. The facilities are only sometimes used. With regards to the adequacy of facilities for reproductive health, a) certain facilities are not available in the three RHUs, namely the surgical room; b) contraceptive pills are available only in Palo Provincial Hospital and Palo RHU; c) The rest of the

materials, however, are available in all the RHUs. For functionality of facilities, most of them are functional in all three RHUs, except IEC materials and physical examination materials that are not functional in Palo RHU. With regards to regularity of use a) In Santa Fe RHU, they are always used; b) In Carigara RHU, only the room for counseling is always used; c) The IEC materials are never used.

With regards to the adequacy of facilities in two hospitals: a) some materials are not available in both hospitals, namely IEC materials; b) Contraceptive pills are not available in Carigara District Hospital; c) The other materials/facilities are available in both hospitals; b) Contraceptive pills that are available in Palo Provincial Hospital are nonfunctional; and c) The rest of the available facilities are functional in both hospitals. With regards to regularity of use of the said facilities: a) Room for counseling and physical examination materials are always used in Carigara District Hospital; In Palo Provincial Hospital, the physical examination room is often used.

With regards to adequacy of information dissemination on TB control, the most common methods used in the three RHUs are one-on-one session and lecture during check-up. For regularity of use: a) In carigara RHU, the lecture during check-up is always sued; b, In Palo RHU, both the one-on-one session and lecture during check-up are only sometimes used; c) In Santa Fe RHU, both methods are always used. In the two hospitals, there is nonuse of all materials and information dissemination. With regards to adequacy of information dissemination of reproductive health delivery: a) one-on-one session and lecture during check-up are frequently used in all health service delivery units. There is nonuse of the other materials/methods.

Concerning the extent of implementation of legal mandates on TB control: a) There is full implementation of the two laws in Palo RHU. In the other health service delivery units, the extent of implementation of the two laws ranges from no implementation to partial implementation. With regard to reproductive health: a) Most of the laws are partially implemented in all health service delivery units; b) Some laws, however, are not implemented. There is a linkage between the three RHUs and one non-government organization. The two hospitals do not have any linkage with a nongovernment organization. There is existence of cooperation in relation to health service delivery: a) Among the RHUs and the two hospitals, and b) between the Cariagra District Hospital and the Palo provincial Hospital.

#### Gaps in the delivery of health services

Lack of certain health personnel, these are as follows: 1) 1 medical doctor in Carigara RHU; 2) 1 nurse in Palo RHU; 3) 1 sanitary inspector in Carigara RHU; 4) 1

dentist in Carigara RHU and Palo RHU; 5) 2 medical technologists in Carigara RHU both Palo RHU and Santa Fe RHU; and 6) 1 medical technologist in Palo Provincial Hospital.

The following recommendations can serve as inputs that could be used to improve the health service delivery in relation to tuberculosis control and reproductive health:

- 1. Increase in the number of nurses in the Rural Health Units to meet the Department of Health standards.
- 2. Hiring a permanent medical technologist in every RHU for early detection or case finding of would-be tuberculosis in every municipality is more effective. This is so because the rural health workers are in a better position to identify specific households that could have a possible problem of TB contamination.
- 3. In each of the municipalities having no sanitary inspector at the moment, a sanitary inspector with health-related educational background must be hired. For those municipalities having sanitary inspector at present, more trainings should be conducted particularly in relation to the programs on TB control and reproductive health.
- 4. Procurement of an X-ray machine in every municipality. In this manner, case finding or detection of TB and problems related to reproductive health can be more immediate and would involve a wider area or base. Referrals to higher delivery units such as the Provincila Hospital or the eastern Visayas Medical Center would not be necessary anymore. Poor clients can access such a service without additional expenses in coming to the city for the case finding or detection of TB cases. Also, provision a TB ward in each rural health unit.
- 5. Each municipality should have an information dissemination committee to take charge of procurement/production of needed IEC materials for use in a more aggressive campaign for TB control and reproductive health.
- 6. Conducting a yearly or quarterly seminar-workshop so as to upgrade the understanding of health personnel relative to the legal mandates pertaining to TB control and reproductive health. The legal mandates should be classified such that instead of having multilevel implementation of all the legal mandates, each health service delivery unit takes charge of specific legal mandates, the implementation of which would be its major responsibility within the catchment area. Strict monitoring of the implementation of the legal mandate must be conducted by the Department of Health.
- 7. More thorough monitoring of the implementation of the activities included in both TB control and reproductive health must be done. Incentives for outstanding performance can be extended to specific delivery units. Cooperation in terms of personnel and expertise must be encouraged. The Department of Health must organize a pool of experts in the area of TB control and reproductive

- health, whose services can be easily accessed by service delivery in need of specific field of expertise.
- 8. There must be an agreement among the health service delivery units to allow easier access to facilities that are available and which have been found to be very useful in the programs of TB control and reproductive health.
- 9. The Rural Health Officer must make representation with the City or Municipal Mayor, Governor and Congressman, so as to make possible, the allocation of specific budget for TB control and reproductive health. At the national level, an agreement can be made between the Department of Health and Department of Interior and Local Government so as to have a permanent allocation for health services at the local level.
- 10. The heath service delivery units must have wider contacts with other non-government organizations.

#### **CONFLICT OF INTERESTS**

The author has not declared any conflict of interests.

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