ORIGINAL ARTICLE

Production, Recruitment, and Retention of Health Workers in Rural Areas in the Philippines

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ABSTRACT

Objective. This study aimed to examine capacities and initiatives of the local government units (LGUs) in the Philippines in producing, recruiting and retaining human resources for health (HRH).

Methods. This 2-phase, descriptive, cross-sectional study employed multiple methods such as key informant interviews (KIIs), focus group discussions (FGDs) (for Phase 1) and surveys (for Phase 2) in rural municipalities across the country. *Phase 1:* We employed qualitative methods to develop a quantitative questionnaire in 22 purposefully selected municipalities. An exhaustive enumeration of responses from the guide questions of the FGDs and KIIs were then translated into a questionnaire. *Phase 2:* We administered the survey questionnaire from phase 1 to another 67 municipalities to obtain a greater representation of the intended study population as well as quantify results from the qualitative methods. We analyzed data with descriptive statistics.

Results. Initiatives in HRH production were mainly on provision of scholarships. Active recruitment was not done due to lack of available pool of applicants, lack of vacant positions, financial constraints leading to utilization of deployment programs and temporary nature of employment. Recruitment was influenced by budgetary constraints, political biases, dependency on deployment programs and other hired temporary HRH, and set health worker-to-population ratios. Initiatives to retain HRH were largely financial in nature based on pertinent policies. The capacities of LGUs to produce, recruit, and retain needed HRH were strongly dependent on the internal revenue allotment (IRA), along with their local income.

Conclusion. Rural municipalities in the Philippines have initiatives to produce, recruit, and retain HRH. However, these are not enough to meet the needed number of competent and highly motivated HRH that are expected to respond to the unique needs of the rural municipalities. Strategies to increase the capacity of LGUs, address the shortage of HRH, and increase motivation of HRH are recommended.

Keywords: devolution, human resources for health, production, primary health care, Philippines, retention, recruitment

BACKGROUND

Nearly all nations are challenged with human resources for health (HRH) shortage, maldistribution, skill mix imbalances, and inadequate competencies. In some nations, such as the Philippines, this has been aggravated by out-migration of health professionals.[1–3] These perennial issues have resulted in understaffing, particularly in rural areas, and has impacted population health in general. This situation has resulted in a disproportionate lag in the attainment of health-related millennium development goals (MDGs) in the Philippines, with urbanized regions having nearly attained the target while rural regions have lagged.[4] The known association between health worker density-to-population ratios and health outcomes, renewed commitment

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to primary health care espoused in the Astana Declaration,[5] and the recent passage of the Universal Health Care Act of 2019 in the Philippines are important reasons to address the HRH challenges.

Production, recruitment, and retention of sustainable HRH remain to be the key focus of actions aimed at addressing HRH challenges. Specific interventions are also tailored depending on various contextual factors at the macro-, meso-, and micro-levels.[6] In the Philippines, an important meso-level factor is its devolved health system. Devolution of the public health sector in the Philippines started in 1991 when the Local Government Code (Republic Act 7160) provided for the transfer of health and other sectors to local government units (LGUs) (i.e., provinces, cities, and municipalities). In the health sector, this involved the transfer of physical facilities, such as hospitals and health centers, and health personnel (i.e., doctors, nurses, midwives) to the LGUs. Financing of the local health system is through an allocation from the national government to the LGUs called the Internal Revenue Allotment (IRA).[7]

The devolution has increased the decision space for LGUs on governance matters. However, there were reported problems in the mechanisms of financial decentralization.[7,8] The computation of the IRA is based on arbitrary percentages allocated to each level of local government, and this has been criticized to be favoring cities and barangays and leaving provinces and municipalities at a losing end.[7] While ideally, a devolved health system can maximize resource availability and utilization,[9] the reality is that, several LGUs, particularly rural municipalities, have finite resources and are financially almost reliant on the IRA. As a result, rural LGUs are not able to adequately provide the nationally mandated pay scales and benefits, hence, impacting their ability to recruit and retain health workers.

The Department of Health (DOH) developed deployment programs for health workers to help address the shortage problem. However, the over two-decade existence of the deployment programs have reportedly made several LGUs dependent on these deployment programs. While there are deployed health workers that have remained and ultimately retained by their LGUs as part of organic health workforce,[10] this seems to be an exemption rather than the rule.

This study aimed to explore the initiatives, capacities, and challenges of the LGUs in the production, recruitment, and retention of health workers. Previous studies on recruitment and retention have focused on individual factors influencing decision to work and stay.[1,6,9–11] The results may inform the Master Plan for HRH as well as the implementation of Universal Health Care in which access to health services is ascertained when there are adequate human resources available for the people especially in remote areas.

METHODS

Research Design

This descriptive, cross-sectional study employed multiple methods such as key informant interviews, focus group discussions, and surveys in rural municipalities across the country. Phase 1 of the study employed qualitative methods to develop a quantitative questionnaire. Since the aim of this phase is to generate an exhaustive list of initiatives, issues, and challenges, it does not intend to interpret or analyze the meaning of experiences that is usual for a qualitative design. Consequently, phase 2 of the study involved a survey to larger a sample (Figure 1).

Sampling Procedure

We invited municipal officers and health workers across 22 rural municipalities in the Philippines using purposive sampling. The study was limited to rural municipalities; hospitals were excluded.

A rural municipality is defined as having an average annual income of at least 35 million pesos but less than 45 million pesos. This definition corresponds to the third (3rd) to sixth (6th) class municipality classification by the National Statistical Coordinating Board (NSCB) and the Department of Finance (DOF) Department Order 23-08. This definition of a rural municipality was adopted since income classification is used as basis for establishment of salary scales, implementation of personnel policies, and determination of financial capability of a municipality to implement developmental programs and projects (Executive Order 249), all of which may be related to a municipality's capacity to produce, recruit and retain HRH. The complete list of third to sixth class rural municipalities per province was obtained from the Department of Finance.

The criteria used in selecting rural municipalities are the following*:* (a) third to sixth class rural municipalities representing each island group (i.e., Luzon, Visayas and Mindanao) based on the DOF Classification, (b) with ample data on the focus of this study (i.e. LGU initiatives for retention of HRH) based on specific indicators such as Seal of Good Local Governance, Seal of Good Housekeeping, rating in the LGU scorecard and in the Local Government Performance System primarily items related to human

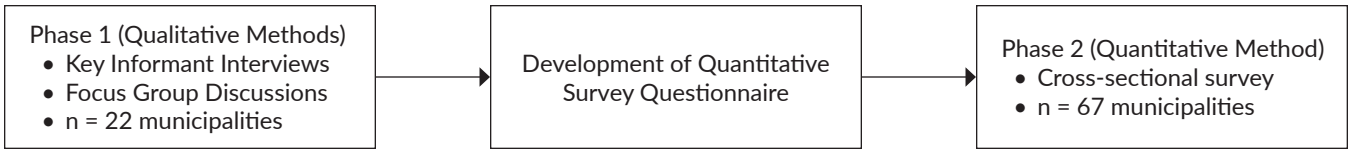

Figure 1. Study diagram.

resources and health services, and other significant awards pertaining to health (e.g., Excellence in Local Governance, Champions for Health Governance).

We conducted qualitative methods such as key informant interviews and focus group discussion which explored production, recruitment and retention trends, issues and challenges.

Instruments

The interview and FGD guides contained questions about the initiatives, capacities, and challenges of rural municipalities to produce, recruit, and retain health workers. The questions for the KIIs and FGDs were largely similar. The KIIs were done with local officials and contained questions on municipal-level initiatives, issues and challenges. On the other hand, the FGDs were done with the health workers and were mainly on their individual perceptions and experiences as they went through these initiatives. The questionnaire was then pretested with local officials and health workers in one municipality to determine understandability and refine items. As a result, the sequence of questions was revised to follow a more logical flow and redundant items were deleted.

There were two questionnaires developed: one LGU-level questionnaire for municipal officials (i.e., jointly accomplished by the mayor, administrative officer, budget officer, and the human resource officer) and another MHO-level questionnaire for the health workers (i.e., jointly accomplished by the municipal health officer and other health workers). The LGU-level questionnaire had the following sections and number of items: production (1 item), recruitment (7 items), retention (2 items), and issues and challenges (4 items). The MHO-level questionnaire, on the other hand, has the following sections and number of items: recruitment (2 items), retention (30 items) which also included items that asked about push and pull factors, issues, and challenges (5 items). There were also several questions that asked about the individual health workers' intention to stay in their municipality in the next two to three years. The results on the push and pull factors as well as the intention of health workers to stay will be discussed in a subsequent publication as this current paper focuses on LGU-level data.

Data Collection

Phase 1

The nature of the questions were answerable by an enumeration of a given initiative or experience. Each interview or FGD lasted for about an hour and was conducted in a time and place conducive to the interviewees. The results of the interviews and FGDs were transcribed and discussed by the research team.

A total of 22 FGDs were conducted in representative municipalities in Luzon, Visayas, and Mindanao. These FGDs and KIIs were facilitated by at least two members (one interviewer, another taking notes) of the research team at the either at the office of the concerned official or at the rural health unit. In some cases, the health workers assigned in different barangays were requested by the municipal health officer to come to the RHU to participate in the FGD. Informed consent was obtained from each participant of the FGD. The questions in the guide were straightforward and were read as listed.

Phase 2

Questionnaires including informed consents were mailed to 120 third to sixth class municipalities across the Philippines. Two follow-ups were made to the sample municipalities to increase response rate.

Data Analysis

Phase 1

All responses were audio-recorded with consent. After transcribing the results of the initial interviews and FGDs, these were discussed by the research team. Attention was given on statements that either were recurring or mentioned as an innovative initiative. The statements from the FGDs and KIIs were merged. The same procedure was done for the rest of the municipalities in a process of comparison while generating more exhaustive data. The resulting product was an enumeration of responses from the guide questions of the FGDs and KIIs. These were then translated into a questionnaire. The final list of items in the questionnaire were determined by consensus with the research team. Since the questionnaire is an enumeration of the responses obtained from the qualitative methods, the questions were very similar.

Phase 2

Qualitative data from the larger sample were analyzed and quantified using descriptive statistics, and presented in terms of frequency distribution.

Ethical Approval

The study was approved by the UP-Manila Research Ethics Board (UPMREB 2014-346-01).

RESULTS

Profile of Respondents

Phase 1

A total of 172 individuals participated from 22 third to sixth class municipalities; 117 came from 22 FGDs and 55 from key informant interviews (Table 1). Respondents from each municipality were composed of the mayor, budget officer, human resource management officer, municipal health officer, as well as the municipal HRH. However, not all municipalities had a complete set of key informants due to conflicts in schedules and unavailability of some invited personnel. Most participants in the KIIs and FGDs were

Table 1. Distribution of informants in the interviews and focus group discussion according to position in the LGU and RHU

KII (N=55)		
Position in the LGU	**No.**	**%**
Mayor	9	16.4
Budget Officer	11	20.0
HRMO	11	20.0
MHO	15	27.3
Others	9	16.4
Total	**55**	**100.0**
FGD (N=117)		
Position in the RHU	**No.**	**%**
Nurse	17	14.5
Midwife	37	31.6
Medical Technologist	3	2.6
Sanitary Inspector	1	0.9
Dentist	2	1.7
NDP	33	28.2
RHMPP	9	7.7
HFEP	3	2.6
Others	12	10.3
Total	**117**	**100.0**

from Luzon (54.5%), particularly from Cordillera Administrative Region (CAR) (20.0%). Table 2 shows the number of key informants per region who participated in the qualitative phase of the data collection.

The results from the KIIs and FGDs (Phase 1) were quantified to a larger sample of rural municipalities through a survey questionnaire (Phase 2).

Phase 2

Out of the 120 municipalities to which the survey questionnaire was sent, 67 (55.8%) responded. Out of this, 48 municipalities returned the LGU-level questionnaire while 53 municipalities returned the MHO-level questionnaire. Among the municipalities that participated, 26 (38.8%) were from Luzon, 22 (32.8%) were from Visayas, and 19 (28.4%) were from Mindanao (Table 3). Most of the municipalities that participated are in Region VIII (20.0%). In ARMM, 12 (17.9%) municipalities and 2 provincial health offices returned the accomplished survey forms. The municipalities that participated were mostly fourth-class municipalities (43.8%), with one-third (33.3%) being third class municipalities and 20.8% being fifth class municipalities. There was only one sixth class municipality (2.1%).

There were 105 individuals from 48 municipalities who jointly accomplished the LGU-level questionnaire. They were composed mainly of the budget officer (25.7%), human resource management officer (29.5%), and the municipal mayor (14.3%). Majority (60%) of the respondents were female, with a mean age of 51.7 years old, college graduate (81.9%) and have been in service for an average of 19.9 years (Table 4).

For the MHO-level questionnaire, 134 respondents from 53 municipalities jointly accomplished the form. Respondents were mostly physicians (37.3%), nurses (26.1%) and midwives (24.6%). Majority were female (76.1%), college graduate (59%), with mean age of 50.5 years and have been in service for an average of 15.2 years (Table 5).

Initiatives of local government units

Production

Phase 1

Interview findings showed that LGU initiatives in the production of HRH are limited to the provision of scholarships or active search for sponsorship for scholarships. At the national level, scholarship programs such as the Rural Health Midwives Placement Program (RHMPP)/ Midwifery Scholarship Program of the Philippines and the *Pinoy MD* Program have been implemented by the Department of Health. The said programs grant students with scholarship for health degrees in exchange for service in priority areas in the country upon graduation. However, similar programs funded by the LGU are not common. Only one municipality reported an agreement with the University of the Philippines Manila - School of Health Sciences (UPM-SHS) where the former would support a scholar to earn a health science degree, usually midwifery, in the latter. Scholars receive

Table 2. Distribution of participants in the key informant interviews and focus group discussion across regions and island groups

Island / Region	No. of Municipalities (N=22)		KII (N=55)		FGD (N=117)		Total (N=172)	
	No.	%	No.	%	No.	%	No.	%
Luzon	**11**	**50.0**	**30**	**54.5**	**62**	**53.0**	**92**	**53.5**
CAR	4	18.2	11	20.0	22	18.8	33	19.2
I	2	9.1	5	9.1	11	9.4	16	9.3
III	2	9.1	5	9.1	14	12.0	19	11.1
IV-A	3	13.6	9	16.4	15	12.8	24	14.0
Visayas	**6**	**27.3**	**10**	**18.2**	**33**	**28.2**	**43**	**25.0**
VI	2	9.1	7	12.7	11	9.4	18	10.5
VII	2	9.1	1	1.8	12	10.3	13	7.6
NIR	2	9.1	2	3.6	10	8.6	12	7.0
Mindanao	**5**	**22.7**	**15**	**27.3**	**22**	**18.8**	**37**	**21.5**
IX	2	9.1	7	12.7	10	8.6	17	9.9
X	3	13.6	8	14.6	12	10.3	20	11.6
Total	**22**	**100.0**	**55**	**100.0**	**117**	**100.0**	**172**	**100.0**

Table 3. Distribution of third to sixth class municipalities across provinces, regions, and island groups (N=67)

Island / Region / Province	No.*	%
Luzon	**26**	**38.8**
Region I	9	13.4
Ilocos Norte	3	4.5
Ilocos Sur	4	6.0
La Union	1	1.5
Pangasinan	1	1.5
Region III	8	11.9
Aurora	1	1.5
Bataan	1	1.5
Nueva Ecija	2	3.0
Pampanga	2	3.0
Tarlac	2	3.0
Region IV-B	9	13.4
Occidental Mindoro	1	1.5
Oriental Mindoro	2	3.0
Palawan	2	3.0
Romblon	4	6.0
Visayas	**22**	**32.8**
Region VII	10	14.9
Bohol	4	6.0
Cebu	6	9.0
Region VIII	12	17.9
Biliran	2	3.0
Eastern Samar	1	1.5
Leyte	1	1.5
Northern Samar	3	4.5
Samar	3	4.5
Southern Leyte	2	3.0
Mindanao	**19**	**28.4**
Region IX	5	7.5
Zamboanga del Norte	1	1.5
Zamboanga del Sur	4	6.0
Region XI	2	3.0
Davao del Sur	1	1.5
Davao Oriental	1	1.5
ARMM	12	17.9
Lanao del Sur	8	11.9
Basilan	1	1.5
Sulu	3	4.5
Total	**67**	**100.0**

**Number of municipalities that responded to Phase 2 survey*

financial support from their LGUs during their studies. After completion of their studies, the scholars are required to give service back to their sponsoring municipalities, and often hired as health workers in their RHUs.

In another municipality, the LGU's initiative was to establish a school of midwifery. However, the said school was not sustained over the years due to various circumstances, especially financial challenges. At present, it is already under the management of the national government.

Phase 2

Survey results showed that only 29.2% of the LGUs offer scholarships for students while only 2.1% actively seek sponsorship for their scholars (Table 6).

Table 4. Profile of LGU survey questionnaire respondents (N=105)

Position in the LGU	No.	%
Budget officer	27	25.7
Human resource management officer (HRMO)	31	29.5
Mayor	15	14.3
Municipal health officer (MHO)	5	4.8
Municipal accountant	3	2.9
Municipal administrator	4	3.8
Municipal treasurer	3	2.9
Others	10	9.5
Not specified	7	6.7
Total	**105**	**100.0**
Sex	**No.**	**%**
Female	63	60.0
Male	39	37.1
Not specified	3	2.9
Total	**105**	**100.0**
Age		
Mean	51.7 years old	
Median	53 years old	
Educational Attainment	**No.**	**%**
Post-graduate	11	10.5
College graduate	86	81.9
College undergraduate	3	2.9
High school graduate	1	1.0
Not specified	4	3.8
Total	**105**	**100.0**
Years in Service		
Mean	19.9 years	
Median	20.5 years	

Recruitment

Phase 1

Results showed that the municipal mayor was ultimately responsible for HRH management, including recruitment and hiring, within his jurisdiction, as provided by the Local Government Code (Republic Act 7160). Despite being granted the power to recruit and hire HRH, the mayor must still abide by the recruitment and hiring process delineated in the Civil Service Commission regulations and guidelines. However, not all the LGUs are able to fully comply with the requirements for recruitment. Several practices and initiatives on recruitment have been noted such as 1.) localization or the prioritization of the residents of the municipality in hiring; 2.) augmentation of health workforce by requesting deployed HRH; and 3.) augmenting financial resources to fund the creation of new plantilla positions. In localization, health workers are first recruited as volunteers, after which they would be given a job order employment before finally appointing them into a plantilla position. Those who served as volunteers or job order employees are prioritized in hiring once a plantilla position becomes available. Several LGUs reported augmenting their health workforce by requesting deployed personnel from DOH. The DOH provides health workers to rural municipalities

Table 5. Profile of MHO survey questionnaire respondents (N = 134)

Position in the RHU	No.	%
MHO, MO V, RHP, DTTB	50	37.3
PHN (I, II), Nurse (I, II)	35	26.1
RHM (I, II, III,), RHMPP	33	24.6
RMT	4	3.0
RSI	2	1.5
Others	10	7.5
Total	**134**	**100.0**
Sex	**No.**	**%**
Female	102	76.1
Male	28	20.9
Not specified	4	3.0
Total	**134**	**100.0**
Age (years)		
Mean	48.1	
Median	50.5	
Educational Attainment	**No.**	**%**
College graduate	79	59.0
Postgraduate	51	38.1
Not specified	4	3.0
Total	**134**	**100.0**
Length of Service (years)		
Mean	15.2	
Median	21.5	

Abbreviations: MHO - municipal health officer; MO - medical officer; RHP - rural health physician; DTTB - Doctors to the Barrios deployed physician; PHN - public health nurse; RHM - rural health midwife; RHMPP - Rural Health Midwife Placement Program-deployed midwife; RMT - rural medical technologist; RSI - rural sanitary inspector

through Doctors to the Barrios (DTTB) Program, Nurse Deployment Program (NDP), Rural Health Midwife Placement Program (RHMPP), Public Health Associate Deployment Project (PHADP), and other deployment programs which are funded by the national government.

While most LGUs resort to recruiting and hiring additional HRH with temporary appointments (e.g., casual and job order), there are still several LGUs that can create new plantilla positions by augmenting their budget through resource-generating initiatives such as joining competitions sponsored by government and non-government agencies, improving collection of local taxes, and requesting support from higher government officials. Even with initiatives to increase revenues, however, HRH who hold non-plantilla positions exceed those with plantilla items, especially among nurses and midwives.

Phase 2

LGUs implement various initiatives in recruiting HRH. More than half (66.7%) of LGUs reported that they prioritize residents of the municipality in hiring. Most LGUs (72.9%) also augment their health workforce by requesting deployment from DOH. More than half (58.3%) resort to recruiting and hiring additional HRH with temporary nature of employment. Creation of new plantilla (permanent) positions ranked only as the fifth most common initiative

Table 6. Initiatives of LGUs in the production of HRH (N=48)

Initiatives	No.*	%
Provide scholarships	14	29.2
Specific for health-related degrees	4	8.3
Provision of support for the scholars	4	8.3
Actively seeking sponsorship for scholars	1	2.1
Government agencies (e.g., UP-SHS)	1	2.1
Scholars required to go back to the municipality to render health services	3	6.3

**Number of municipalities*

Table 7. Initiatives of the LGUs in the recruitment of HRH (N=48)

Recruitment Initiatives of the LGU	No.*	%
Request for Department of Health deployment programs (e.g., DTTB, NDP, RHMPP)	35	72.9
Prioritization of residents of the municipality in hiring (localization)	32	66.7
Recruitment of additional health workers with job order/casual/contractual status	28	58.3
Augmenting resources through:	20	41.7
Improving collection of local taxes	25	52.1
Attracting business investments to the municipality	18	37.5
Creation of Local Economic Enterprises (LEEs)	9	18.8
Market Stalls	1	2.1
Requesting support from the Congressman, Governor, Senators and other government officials	20	41.7
Requesting support from non-government organization (e.g., Zuellig Family Foundation)	18	37.5
Joining in competitions (e.g., Seal of Good Housekeeping, Seal of Good Local Governance, Gawad Pamana ng Lahi, Champions for Health Governance)	26	54.2
Creation of new plantilla positions in the RHU	17	35.4
Recruitment of volunteer health workers in the RHU	15	31.3
No answer	2	4.2

**Number of municipalities*
Abbreviations: DTTB - Doctors to the Barrio Program; NDP - Nurse Deployment Program; RHMPP - Rural Health Midwives Placement Program; RHU - Rural Health Unit

of LGUs in the recruitment of HRH (35.4%). Recruitment of volunteers in the RHUs was the last priority initiative of LGUs (31.3%) (Table 7).

Augmenting financial resources to fund the creation of new plantilla positions was reported as a common initiative among LGUs (41.7%). The most common means of resource maximization among LGUs were to join competitions sponsored by government and non-government agencies (54.2%), improving collection of local taxes (52.1%), and requesting support from higher government officials (41.7%).

Results of both interviews and surveys showed that strong support from the LCE was perceived as the key factor in the creation of additional plantilla positions for HRH (45.8%) (Table 8).

Table 8. Initiatives of the LGUs in the creation of additional plantilla positions for HRH (N=48)

Initiatives	No.*	%
Strong support from the local chief executive	22	45.8
Prioritization of the creation of plantilla positions for the Rural Health unit over other departments in the local government unit	14	29.2
Creation of lower position titles from higher position title (e.g., Midwife II to two Midwife I)	5	10.4
Hiring of health workers under a different position title (e.g., midwife is hired under item of clerk, or medical technologist is hired under item of laboratory technician)	8	16.7
No initiatives	5	10.4
No answer	3	6.3

**Number of municipalities*

Table 9. Financial incentives for HRH provided by the LGUs

Financial Incentives	% of LGU (N=48)	% of MHO (N=53)
Travel allowance for health workers attending seminars, conventions, trainings, etc.	93.8	94.0
Personal Economic Relief Allowance (PERA)	91.7	86.0
Representation and Travel Allowance (RATA) for municipal health officer (MHO)	89.6	92.0
13th-month pay	87.5	98.0
Clothing Allowance	87.5	96.0
PhilHealth Capitation	87.5	92.0
Subsistence Allowance	85.4	98.0
Hazard allowance	81.3	82.0
Laundry allowance	79.2	90.0
Performance-based bonus / Productivity bonus	75.0	72.0
Extra Bonus (from LGU)	64.6	74.0
Per diem for health workers doing field work	47.9	32.0
Loyalty pay	45.8	46.0
Longevity pay	18.8	24.0
Medical assistance	8.3	4.0
Salary upgrade 3 months prior to compulsory retirement	8.3	16.0
Compensation for injuries incurred during work	6.3	4.0
Night-shift differential	4.2	0.0
Overtime pay	4.2	2.0
Pay for work during rest day	2.1	2.0
Remote assignment allowance	2.1	4.0
Educational assistance for dependents	2.1	2.0

Retention

Phase 1

The results of the interviews (Phase 1) reveal that the initiatives of the LGUs in terms of HRH retention are largely financial in nature. These initiatives are based on the provisions of the Magna Carta for Public Health Workers (Republic Act 7305). It provides that HRH in the LGUs should receive salary rates equivalent to their counterparts in the national government, regardless of the income class of the municipality they work in. However, despite the existence of such regulation, many municipalities are incapable of implementing it. Most LGUs provide compensation and benefits for the HRH subject to the limitations imposed by their budget. Nevertheless, current policies (e.g., DBM LBC No. 2009-92A) also enable the local government council to implement adjustments in the salaries and benefits should the budget allow for it and the local chief executive has the final discretion to provide mandated compensation and benefits of HRH.

Aside from salary, other financial incentives that were reported to be given by the LGUs are include travel allowance, Personal Economic Relief Allowance (PERA), hazard pay, clothing and subsistence allowance. The other financial incentives given are summarized in Table 9. The additional financial incentives are not implemented uniformly across the 22 sampled municipalities. Interview results reveal that the implementation largely depends on the availability of funds.

The LGUs reported several non-financial incentives that they provide to their health workers, such as leave benefits, supporting health workers to participate in training programs, and initiation of recognition and award mechanisms. The other non-financial incentives are summarized in Table 10. Similar with the financial incentives, the implementation of non-financial incentives are not uniform across the LGUs and largely depends on LGU-specific practices.

Table 10. Non-financial incentives for HRH provided by LGUs

Non-financial Incentives	% of LGU (N=48)	% of MHO (N=53)
Leave benefits	77.1	74.0
Trainings	77.1	62.0
Compensatory day-off for those who performed night duties and did overtime work	39.6	44.0
Team-building activities	37.5	40.0
Recognition and Awards system	27.1	22.0
Formation of organizations, unions	20.8	14.0
Retreat/Outing	16.7	20.0
Free living quarters/Quarters allowance	10.4	10.0
Free yearly medical examination	8.3	6.0
Scholarship grants for advanced studies and continuing education	4.2	0.0
Free shuttle service for employees	4.2	2.0
Dual practice (allowing health workers to render private health services outside RHU)	2.1	6.0

Phase 2

Survey results showed that despite being classified as rural municipalities, one third (33.3%) of the LGUs can provide the salary of HRH with rates at par with special cities and first-class provinces. Majority (77%) of the LGUs were also able to provide the benefits under the Magna Carta for Public Health Workers although only 16.7% can fully implement it.

Majority of both LGU (95.8%) and MHO (94.0%) respondents perceived that LGUs can provide financial incentives for HRH (Table 9). Based on the reports of the LGU respondents, the most common financial incentives

provided are travel allowance (93.8%), personal economic relief allowance (PERA) (91.7%), representation and travel allowance (RATA) for MHO (89.6%), 13th month pay (87.5%), PhilHealth capitation (87.5%), clothing allowance (87.5%), subsistence allowance (85.4%), and hazard allowance (81.3%). On the other hand, respondents from the MHO shows the following as the most provided financial incentives: subsistence allowance (98.0%), 13th month pay (98.0%), clothing allowance (96.0%), travel allowance (94.0%), RATA for MHO (92.0%), PhilHealth capitation (92.0%), and laundry allowance (90.0%),

Respondents from both LGU-level and MHO-level agree that the commonly provided non-financial incentives (Table 10) include leave benefits (77.1%, 74.0%), trainings (77.1%, 62.0%), compensatory day-offs (39.6%, 44.0%), team-building activities (37.5%, 40.0%), and recognition and awards (27.1%, 22.0%).

Capacities of local government units

Phase 1

Results showed that the capacities of LGUs to produce, recruit, and retain needed HRH were strongly dependent on the support from the LCE and their internal revenue allotment (IRA), along with their local income; which subsequently determines the number of available plantilla positions and the ability to create additional positions. The IRA comes from the national budget and is the guaranteed share of LGUs in the revenues collected by the national government. All LGUs are entitled to be recipients of this allotment to support and fill their fiscal inadequacies. Still, the LGUs are expected to be able to sustain itself in terms of finances and other aspects and not to rely solely on the IRA they receive.

Income class also plays an important role in determining the capacity of the LGUs to manage human resources in general. Findings suggest that lower income class municipalities have limited budget for the creation of additional plantilla positions for HRH.

Despite limitations, the LGUs can provide scholarships, but these are not specifically towards producing HRH. Except for municipalities in Aurora, generally, there is no mechanism in place yet to ensure a continuous flow of production of HRH at the level of the municipality. Producing HRH is not seen as priority since there is a readily available pool of graduates of health-related degrees.

Based on interviews, the capacity of the LGUs to recruit and hire HRH is related with the number of available plantilla positions and the support from the LCE. As much as there is a need for additional HRH, the demand remains low because of the limited plantilla positions for health and slow turnover rate of HRH in the RHUs. Instead, the LGUs resort to hiring HRH on casual, contractual, or job order arrangement rather than creating additional plantilla positions. These temporary positions are seen to be not favourable to the HRH because they do not receive the salaries and benefits due them compared to those with plantilla positions.

In terms of HRH retention, results from the interviews show that LGUs can retain their permanently employed HRH. However, many LGUs are not able to provide adequate financial and non-financial incentives and professional and personal support resulting to the demotivation and dissatisfaction of HRH in their workplace. Still, even with such circumstances, the HRH stay in their job until retirement for various reasons which may include the benefits and incentives they receive as government employees and the limited available job opportunities outside the LGU.

Issues and Challenges

Phase 1

Results show that the primary issue of LGUs was budgetary constraint. In terms of HRH production, most LGUs could not afford to fund scholarships for health degree programs. For LGUs that offer scholarships, they were unable to employ their own HRH scholars due to limited HRH positions. The Local Government Code of 1991 stipulates that first to third class and fourth to sixth class municipalities may not appropriate more than 45% and 55%, respectively, of their annual income to personal services (PS) and this affected the LGUs' capacity to create additional plantilla positions. Given this restriction, some LGUs even intentionally left some HRH positions unfilled to reduce total expenses. Political bias was raised as an important issue that affect HRH recruitment and hiring. Conflicts between the LCE and RHU staff, and health not being prioritized were considered hurdles in hiring HRH. Even if funds were available, it was the discretion of the LCE to create plantilla and to fill up the available positions.

Another issue raised was the set ratio of health worker to population in which the number of HRH in LGUs are based. Respondents reported that the current standard ratio did not consider area-specific factors such as geography, growing population, and number of programs being implemented. In addition, the existence of facility and services enhancement programs such as Basic Emergency Obstetric and Newborn Care (BEMONC), required more manpower. Consequently, LGUs resorted to recruitment of contractual, casual, and job order health workers, especially midwives and nurses, for the provision of health services.

Regarding retention, HRH with plantilla positions tended to stay in their workplace until retirement. However, this may not apply to those in non-permanent arrangements. The hurdle was the inability of LGUs to hire additional HRH, especially permanent ones. In addition, the political pressure from the LCE, and unreasonable heavy workload brought about by the insufficient number of HRH adversely affected the retention of HRH. Many HRH verbalized that they assume too many roles which interfered with their

Table 11. Mean opinion scores on issues and challenges in production, recruitment and retention of HRH

Issues and Challenges	LGU (N=48)	MHO (N=53)
Creation of health worker plantilla positions requires higher budget compared to other LGU employees	3.51	3.57
Political patronage in recruitment and hiring	–	3.24
Constraints imposed by the Personal Services (PS) limitation	3.67	3.55
Limited income and IRA of the LGU	3.57	3.52
Limited support from the national government	3.14	3.30

**1 – strongly disagree; 2 – disagree; 3 – agree; 4 – strongly agree*

health service provision function. They needed to complete regular reports and frequently attend various seminars which were not applicable to their setting.

There was an observed inconsistency in the extent of implementation of HRH policies, such as the Magna Carta for HRH, across municipalities. For instance, most HRH received their hazard pay and other benefits fully or partially, but some do not receive them at all. In addition, the salary grades for HRH differed across LGUs. Only a third (33.3%) of the LGUs could give the mandated salary levels to their HRH due to financial constraints.

Phase 2

LGU-level respondents rated constraints imposed by the Personnel Service (PS) limitation in the LGU Code of 1991 as the most important challenge in HRH recruitment and retention followed by the limited income and IRA of the LGU (Table 11). On the perspective of MHO-level respondents, on the other hand, they rated the creation of health worker plantilla positions requiring higher budgetary allocation compared to other LGU positions as the most important challenge followed by the constraints imposed by the PS limitation. We excluded the question on political patronage from the LGU-level questionnaire because the response may be biased.

DISCUSSION

The most pressing concern of LGUs was the inadequate number of competent and motivated HRH in the rural municipalities. This problem was related to the capacities of LGUs to produce, recruit, and retain the needed HRH. Production of HRH generally has not been the main priority of the LGUs. There was no active move from the LGUs to produce HRH who can respond to the health needs of the rural communities (e.g., malaria in malaria-endemic areas). This seeming lack of initiative on HRH production of HRH can be attributed to the inadequate financial resources of LGUs to fund scholarships for health-related degree programs and other production mechanisms. According to Frontline Health Workers Coalition (2014), there is a need for educational programs in medical or nursing schools to produce a new generation of HRH, which is critical in building sustainable response towards health needs of the community.[12] This is supported by the study in low-to-middle income countries (LMICs) conducted by Johnston et al (2020) which showed that "health professional education that is sensitive to local population needs and attends to all elements of the rural pathway" produced HRH with strong intent to practice in the rural areas.[13] This inevitably calls for revisions and shifts in curricula not only in the tertiary education level but in primary and secondary levels as well.

As for recruitment, the greatest challenge among rural municipalities was the inadequate number of plantilla positions that considerably limit their health workforce. Apparently, despite the increase in the health services being provided in the primary level of healthcare, there is no corresponding increase in the health workforce that can deliver these additional health services. Consequently, the quality of health service delivery at the level of municipality is compromised. Cognizant of this, the Philippine government came up with the HRH Deployment Program which not only facilitated the recruitment of HRH to the rural areas but also allocated funds for scholarships for HRH education/training and incentives.[14] Moreover, the HRH Philippine Masterplan 2020-2040 stipulates the creation of more plantilla positions for HRH to meet the needs of the country.[15] Strategies such as these are what was envisioned by Southeast Asian members states in their call for action in strengthening HRH in the region.[16]

Retention of HRH is not a challenge for plantilla position holders but may be a concern for those in non-permanent positions. The slow turnover rate of plantilla holders contributed to unavailability of permanent positions for more skilled HRH. Non-plantilla holders tend to look for other more stable employment, leaving the LGUs with the need to train new hires. The slow turnover rate of plantilla holders contributed to unavailability of permanent positions for more skilled HRH. In order to increase retention of HRH in rural areas, monetary as well as non-monetary incentives should be established. It was shown in the study of Prust, et al. that housing, education, and facility improvements are among the non-monetary incentives for HRH to stay in rural areas.[17] As for financial incentives, HRH retention strategies employed in Zimbabwe included review of salaries, engaging donor partners, providing top-up allowances, among others.[18] In the systematic review of motivational factors that worked in LMICs, compensation and system support interventions were found effective in retaining HRH.[19] Some of these strategies may be adapted by the LGUs in the Philippines.

LGUs face the challenge in providing adequate financial and non-financial incentives and career support for HRH. Instituting sustainable career development programs for the HRH in the municipalities may prove beneficial. Internationally, it is recognized that there is a need to maintain and scale up educational and training programs

to ensure sustainable frontline HRH.[12] Studies have shown that as employees' knowledge and skills increase as a result of training and career development programs, they perform better to meet the global challenges in their work.[20]

Mallari, et al.[21] investigated the motivations of barangay health workers (BHW) in the Philippines in joining and continuing as BHW. These include social status of the position; resources such as health knowledge, skills and some financial support; and relational context pertaining to the "prospect of being involved in leadership, decision-making and building of social capital." These are mostly non-financial incentives which can be applied to the other HRH. Moreover, decentralization was seen to be beneficial because some incentive packages were given to the BHW. This, however, depended on the priorities of the LGU executives and the income of the municipality.

The inability of LGUs to adequately produce, recruit, and retain HRH stems from budgetary constraints. Most of the third to sixth class municipalities are IRA-dependent because of their limited sources of other income (e.g., inadequate tax collection, inadequate number of investors). Some policies governing HRH (e.g., PS limitation; standard HRH to population ratio) contribute to these challenges. LGUs are bound by these policies, hindering them from getting more HRH to adequately address the health needs of the community. Political culture within municipalities also affects management of HRH as the discretion to prioritize creation of plantilla items for HRH rests on the LCE. The result showing strong support from the local chief executive as a factor in creation of positions for health workers suggests a politicized consideration in recruitment and hiring. This may be advantageous for HRH if the LCE strongly supports health. Global Health Workforce Alliance (2015) highlights the need to mobilize political will and financial resources for the management of HRH as they have a significant role in the implementation of HRH agenda by the national government, and even on an international scale. This is consistent with a WHO (2006) study on production of health workers wherein training health workers and implementing deployment programs require a large investment and political leadership.[22]

Aside from above-mentioned financial and political factors, geographic difficulties in rural settings affect the equal distribution of HRH especially to areas considered as geographically isolated and disadvantaged areas (GIDA). The lack of infrastructure to access some municipalities that are in mountainous areas and islands make the delivery of health services difficult. In such cases, the only feasible solution is to permanently assign HRH within GIDA areas. In addition, there is poor working conditions for HRH in the rural municipalities. They take on heavy workload and multitasking due to the inadequate number of HRH. With such a non-conducive working condition, burnout among HRH is expected and this may consequently affect their productivity and motivation as health workers. Thus, the quality of delivery of healthcare services to the community is compromised, ultimately, leading to poorer health outcomes in the municipalities.

A consequence of the problem is that LGUs resort to faulty staffing practices and depend on deployment programs from DOH. Faulty staffing practices include splitting of positions, hiring of HRH in a different position title, over-utilization of contractual employees, and recruiting of HRH that are closely related to the LCE or other prominent LGU officials. The national government supports the LGUs through deployment programs. These are indeed beneficial to the community and the HRH, but the deployed HRH are only temporary in the LGUs. Hence, the sustainability of the HRH is not ensured. Though these are helpful, there is a need for programs that will ensure sustainable HRH in the rural municipalities. Interventions should include those that addresses increasing the capacity of LGU to produce, recruit, and retain HRH, addressing shortage of HRH in the LGU, and motivating HRH to stay.

Limitations of the study

First, this study included only the HRH with plantilla positions from 3rd to 6th class municipalities. The retention pattern of these health workers may be different from those who do not have permanent plantilla items such as those on job order, casual appointment, and the deployed health workers. Second, we have also operationalized the definitions of production, recruitment, and retention to make these more suitable for the study. Production focused mainly on the LGU's initiatives to supply needed graduates of health degree programs to work in their respective rural health units and does not include social preparation of health workers during their primary and secondary education as well as the influences of family and other sectors of society. Recruitment in this study focused on the processes and practices and did not include the adaptation process of HRH in their workplace. Retention primarily covered the initiatives of the LGUs in retaining HRH with plantilla positions and excluded those with non-plantilla positions. Although there was information acquired about the non-plantilla HRH, they are but serendipitous findings and cannot be generalized. As such, recruitment, and retention of the non-plantilla HRH should be explored further.

CONCLUSION

LGUs are confronted with problems and issues related to the production, recruitment and retention of HRH in their localities which emanate mainly from financial constraints and socio-political challenges. To address these problems, the LGUs undertook initiatives such as granting scholarships to health science students with the hope that they will serve the community after graduation; augmenting financial resources; increasing plantilla positions for HRH; requesting more health personnel from the national government; and

incentivizing retention through monetary and non-monetary means. These initiatives, however, did not adequately provide the needed HRH especially in remote areas of the country. Several the LGUs had to rely on programs from the national government. A multi-sectoral approach is necessary to address these challenges and several areas of interventions must be put into place at different levels of government.

Recommendations

For a more sustainable mechanism to ensure adequate HRH in all areas of the country, relevant policies need to be instituted. Production and recruitment of HRH go as far back as the primary education of our people, on how we bring into the consciousness among the young how health and wellness is strongly connected with the adequacy and quality of the health workforce. Hence, a deliberate educational strategy to produce the needed HRH should be institutionalized with concerned agencies on education (e.g., DepEd, CHED, SUCs).

Pertinent policies need to be formulated on (a) revisions in primary, secondary, and tertiary curricula to focus interest on public health and service; (b) establishment of return service agreements in government subsidized higher education institutions; and (c) replication of UP-SHS model among state universities and colleges. Pertinent provisions for scholarships in the Iskolar ng Bayan Act and UniFAST Act should be implemented to increase access to tertiary education. For the presently employed HRH in municipalities, there should be a systematic training program that will equip them with the pertinent knowledge, skills, and attitude.

To address shortage of health workers in the rural municipalities, there is a need to reinforce and monitor implementation of policies on the recruitment and hiring of health workers at the municipal level, in coordination with the Civil Service Commission. There is a need to review and amend policies on (a) PS limitation under RA 7160, (b) allocation of IRA to rural municipalities under RA 7160, and (c) standard health worker to population ratio as stipulated in the revised IRR of RA 7305.

To adequately motivate health workers in the rural municipalities, coordination of LGUs with accredited professional organizations on health need to be strengthened. Advocacy to prioritize health and HRH should be promoted among local chief executives, establishing a culture of safe and supportive working environment for health workers. Career development programs for HRH need to be institutionalized as well. Implementation of RA 7305 among LGUs has to be monitored. For LGUs to do all these, financial capacity has to be increased through resource-generation and support from the national government.

The implementing rules and regulations for the Universal Health Care Act contain provisions on ensuring the minimum number of HRH in all government and private facilities. Moreover, the National Health Workforce System stipulates that GIDAs should be prioritized in the deployment of healthcare workers who should receive competitive salaries. As in any law, implementation is key. Hurdles may include availability of resources and factors such as migration of HRH. Nevertheless, the UHC needs to be strategically and decisively implemented if we are to attain health for all Filipinos. This takes a whole-of-government approach wherein the different arms of the government work together to achieve it. The Department of Health as the lead agency for health has to orchestrate the realization of the recommendations above, in coordination with other government agencies such as the Department of Budget and Management and LGUs to ensure the adequate supply of skilled HRH all over the country.

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Statement of Authorship

LMST, EWAL, PJBA conceptualized the study. All authors participated in data collection, analysis, drafting of the manuscript, and approval of the final version of the manuscript.

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