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GENERAL ARTICLE

Management and performance of home health care services for chronic patients of Chao Praya Yommarat Hospital in urban community, Suphanburi Province

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Abstract

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Currently, demand for home health care (HHC) services is increasing to reduce complications and severity of chronic illness, number of hospital services, and health expenditures. The purpose of this qualitative research was to identify the problems and provide suggestions to develop the patterns of HHC management of executives and performance of responsible HHC service providers for chronic disease patients in the urban community of Chao Praya Yommarat Hospital in Suphanburi Province. The study sample includes five managers from a HHC center, primary care unit (PCU), and three community health centers (CHC), and 16 service practitioners, consisting of nurse practitioners or professional nurses from a social medicine unit. The data were collected by in-depth interviews. Qualitative data were analyzed and synthesized for content analysis.

The results of this study revealed that the main problem of HHC management was the lack of some multi-disciplinary team members, especially doctors, due to their excessive workload. Also, performance problems of HHC were attributed to lack of nurse practitioners. Village health volunteers (VHVs) and care givers lacked adequate knowledge of HHC. Following up elderly patients was difficult because of a change of address.

The research findings demonstrated that the multi-disciplinary teams have an important role in HHC for chronically ill patients, with assistance from VHVs, family health leaders, and care givers. The Ministry of Public Health (MoPH) should have a policy to support a proactive approach of the multi-disciplinary team and increase compensation for team members. There should be support for the training of nurses to become nurse practitioners. There should be more capacity development of VHVs, family health leaders and caregivers on a regular basis.

Keywords: home health care services, management, performance, chronic disease patients

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การบริหารจัดการและการปฏิบัติงานในการให้บริการดูแลสุขภาพที่บ้านในผู้ป่วยเรื้อรัง ของโรงพยาบาลเจ้าพระยายมราช ในชุมชนเขตเมือง จังหวัดสุพรรณบุรี

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บทคัดย่อ

ช่อทิพย์ บรมธนรัตน์ การบริหารจัดการและการปฏิบัติงานในการให้บริการดูแลสุขภาพที่บ้านในผู้ป่วยเรื้อรังของโรงพยาบาลเจ้าพระยายมราช ในชุมชนเขตเมือง จังหวัดสุพรรณบุรี
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ปัจจุบันความต้องการบริการดูแลสุขภาพที่บ้านในผู้ป่วยโรคเรื้อรังเพิ่มขึ้นเพื่อลดอาการแทรกซ้อนลดความรุนแรง ลดการไปรับบริการในสถานบริการและลดค่าใช้จ่าย การวิจัยเชิงคุณภาพนี้มีวัตถุประสงค์เพื่อค้นหาปัญหาและข้อเสนอแนะการพัฒนารูปแบบการบริหารจัดการในการดูแลสุขภาพที่บ้านของผู้บริหารและการปฏิบัติงานของผู้รับผิดชอบงานบริการดูแลสุขภาพผู้ป่วยเรื้อรังที่บ้านในชุมชนเขตเมือง โรงพยาบาลเจ้าพระยายมราช จังหวัดสุพรรณบุรี กลุ่มตัวอย่างประกอบด้วย กลุ่มผู้บริหารจำนวน 5 คน คือหัวหน้างานบริการดูแลสุขภาพที่บ้านหน่วยบริการปฐมภูมิและศูนย์สุขภาพชุมชน และกลุ่มผู้ให้บริการคือพยาบาลวิชาชีพพยาบาลเวชปฏิบัติ แผนกเวชกรรมสังคม จำนวน 16 คนเก็บรวบรวมข้อมูลโดยการสัมภาษณ์เจาะลึกการวิเคราะห์ข้อมูลเชิงคุณภาพใช้การวิเคราะห์เนื้อหา

ผลจากการวิจัยพบว่า ปัญหาการบริหารจัดการที่สำคัญของกลุ่มผู้บริหารคือ ทีมสหวิชาชีพ มีจำนวนน้อย โดยเฉพาะแพทย์ มีภาระงานมาก จึงไม่สามารถออกเยี่ยมบ้านในชุมชนได้พร้อมกันตามแผนที่กำหนดไว้อย่างต่อเนื่อง ปัญหาการปฏิบัติงานของผู้รับผิดชอบงานให้บริการดูแลสุขภาพผู้ป่วยเรื้อรังที่บ้านคือ มีจำนวนพยาบาลเวชปฏิบัติมีน้อยอาสาสมัครสาธารณสุขและผู้ดูแลผู้ป่วย ยังขาดความรู้การให้บริการดูแลสุขภาพที่บ้านและการนัดหมายผู้ป่วยสูงอายุก่อนออกเยี่ยมบ้านเป็นไปได้ยากเนื่องจากมีการย้ายที่อยู่

ผลการศึกษาแสดงว่า รูปแบบการบริหารจัดการและการปฏิบัติงานในการดูแลสุขภาพผู้ป่วยเรื้อรังที่บ้านคือ ทีมสหวิชาชีพมีบทบาทสำคัญในการดูแลสุขภาพผู้ป่วยเรื้อรังที่บ้านโดยมีอาสาสมัครสาธารณสุข แกนนำสุขภาพครอบครัวและผู้ดูแลผู้ป่วยให้การช่วยเหลือทั้งนี้ ผู้บริหารกระทรวงสาธารณสุขควรมีนโยบายสนับสนุนการดำเนินงานเชิงรุกของทีมสหวิชาชีพอย่างเป็นรูปธรรมและเพิ่มค่าตอบแทนสนับสนุนการฝึกอบรมพยาบาลวิชาชีพให้เป็นพยาบาลเวชปฏิบัติ และมีระบบพัฒนาศักยภาพอาสาสมัครสาธารณสุข แกนนำสุขภาพประจำครอบครัวและผู้ดูแลผู้ป่วย อย่างต่อเนื่อง

คำสำคัญ: บริการดูแลสุขภาพที่บ้าน การบริหารจัดการ การปฏิบัติงาน ผู้ป่วยเรื้อรัง

Introduction

In Thailand in 2009,[1] the top five non-communicable diseases were diabetes mellitus, high blood pressure, cardiac ischemia, stroke and lung disease and chronic obstructive pulmonary disease (COPD). More than two million patients needed to be admitted to hospitals around the country. Most of them had high blood pressure. Of these, over 200,000 patients had complications of renal disease, paralysis, and heart disease. These circumstances might be due to lifestyle, unhealthy habits, and communication constraints with health personnel such as hearing problems, illiteracy, or attitude toward physician's instructions.

In 2012, the Suphanburi Provincial Public Health Office[2] reported hypertension, diabetes mellitus, stroke, heart disease, cancer and disability from accidents as major chronic health problems among inpatients of the Chao Phraya Yommarat Hospital in Suphanburi Province. These chronically ill patients needed long-term medical care, and some required ongoing home health care (HHC) toward the end of life.

As defined by the American Nurse Association,[3] HHC is health care provided to the patient, family and caregivers that focuses on health services. Home care nurses are well-positioned to lead interventions directed at patient self-management. They also have established an ongoing care management relationship with the patient and care partners in the home setting. Moreover, home care nurses are knowledgeable about the availability and accessibility of community resources. Hence, they apply adult learning principles, goal setting, and patient education materials to perform the essential functions of the home care activities. In addition, the experience of working with elders in their homes immediately after a hospitalization provides the home care nurse with a realistic view of the challenges that patients and their families face. The Canadian Home Care Association[4] defines "Home Care" as an array of services provided in the home and community setting that encompasses health promotion and teaching, curative interventions, end-of-life care, rehabilitation, support and maintenance, social adaptation and integration, and support for the family caregiver. Home care services help people with a frailty or with acute, chronic, palliative or rehabilitative health care needs to independently live in their community. While the majority of clients receiving HHC are seniors aged 65 years of over, home care is provided to individuals of all ages.

The concept of HHC includes five dimensions as follows:(1) Proactive health service teams that travel to provide health services to the patient and family at home; (2) Basic health services that cover health promotion, prevention, medical treatment and rehabilitation; (3) Delivery of primary health care as a foundation for each family to care for their ill relative; (4) Support and encouragement for self-health care. One can examine their own symptoms and disease progression, assess potential to take care of oneself to a certain degree, and obtain advice or help; and (5) Installing and collecting information to indicate progress of medical treatment, including various disease guidelines for self-health care.[5].

The HHC process is defined using a system concept of inputs, process, and output components.[6] Input involves home visit teams' nursing related to patient care(discharge planning, supporting self-care of patients and family), equipment and appliances, factors supporting home care nursing (community potential, family caregivers, benefit sources in the community).

Process comprises three phases: (1) Before the home visit: prepare health data, define plans and objectives of the home visit, and prepare equipment and appliances; (2) During the home visit: assess health, environment/community, family, caregivers; nursing diagnosis, nursing care plan, nursing implementation, nursing evaluation, and nurse's notes; (3) Post-home visit: evaluate following the objectives and home visit plan, define continuous nursing care plan, discharge, referral, and nurse's notes. Output and outcome performance is measured by nursing home care quality indicators. There are clinical quality indicators, and nursing service quality indicators. Four criteria of achievement are effectiveness, continuity, efficiency, and timeliness. According to Phothisupsuk[7], the HHC process consists of health assessment, planning, implementation/operation, and evaluation. The process is adapted from patient care in the clinic setting. The steps are adjusted to service users and environments that are different in each family. HHC operations bring the health service to individuals and families at home as an extension of the in-patient ward of the hospital. The main strategy used for implementation are home visits, for which there are three steps as follows:(1) Before the visit: prepare staff, prepare patients and family information, and prepare equipment and appliances for the home visit, (2) During the visit: give service, and (3) Post-visit: clean home visit bag, write home visit report.

Keuranon[8] studied "The Model of HHC Implementation of the Hospital Affiliated Regional Hospital Division, the Ministry of Public Health (MOPH)for1996-2006" and found that the model operation of the "Health Begins at Home" Project involves experts, hospital directors, and health staff integrated with HHC, with hospitals and the community working together. HHC can be managed by a working committee from the hospital, including the social medicine and nursing units without home support. More effective HHC would allocate clear responsibility and adequate preparation of knowledge and attitudes among health personnel on the "health begins at home" processes. According to Lawung[9], in "Problems and Needs of Diabetic Patients in HHC in Bangkok,"control of blood sugar varied from good to poor control. Fear of complications and anxiety about blood sugar level were moderate. There were no consultants when patients were uncomfortable about illnesses. Moreover, Pongsuka[10] conducted a study on "An analysis of the process of HHC administration of public health services in Angthong Province," and found that the overall process of management was adequate. Planning, organization, directing and reporting were adequate, but human resources management must be improved. A problem was lack of clearly assigned agency responsibilities. Coordination was not yet fluent and the care was not continuous. There was a lack of trained personnel for development of HHC work, and operative supervision was crucial. Sumano[11] studied "Effects of a Home Visit Programme on Practice according to the Health Care Plan of Pulmonary Tuberculosis Patients in Sriracha District, Chonburi Province." It was found that home visits could help patients and their families'awarenessof health risks, benefits and barriers to health problems together with continuous social support. Pulmonary tuberculosis patients cooperated in the plan for better health care. Uppapatwanich[12] studied "Effects of HHC by Health Team according to Knowledge, Self-care Behavior and Blood Pressure Value in Patients with

Hypertension of Unknown Cause of in Kanghangmaew Hospital, Chantaburi Province." It was found that patients with hypertension of unknown cause who received home health care by a health team gained more knowledge and better self-care than before. They were better than a control group that received normal services at the hospital. Maneekhat[13] who studied "Effects of Home Visits on Health Behavior of Hypertensive Patients, in U-mong District, Lumphun Province" found that home visiting with a nursing care plan could promote appropriate behavior in a group of hypertensive patients. Moreover, Chainet[14] studied "Effects of Home Visits on Family Participation in Caring of COPD in Mae-Lao District, Chiang Rai Province" found that family involvement in caring for COPD patients after home visits was better than before. These results related to home health nursing that could be used as a guideline for HHC patients.

The Chaopraya Yommarat Hospital in Suphanburi Province developed their HHC program in 1995, and continued until 2012 to develop the potential of self-health care under continuous care from a multi-disciplinary team. The hospital developed a network of continuous cardiac care through a community program under the responsibility of the Family and Community Medicine Section in the Department of Social Medicine. The goal was to reduce the complications in continuous patient care, both in the hospital and community. This program emphasized that good health begins at home and used the concept of HHC as a strategy in discharge planning services and continuing care at home. The emphasis is on cooperation of the multi-disciplinary team starting from admission. This is to prepare the patients (and their families) with enough knowledge so that they are able to take care of themselves and to be discharged from the hospital to community faster. The program also strengthens the link between the professional team and local services. The cooperative health system network between health personnel partners empowers the patients and their families to take care of their health. As a result, the patients have a better quality of life, and the incidence of complications, infection, disability, and death is reduced.

Based on the preliminary studies derived from the continuous care system of Chao Phraya Yommarat Hospital in 2012[15], Jangthong and Boromtanarat[16] found that chronically ill patients' names were recorded as part of the discharge plan. Most discharge planning and continuous care with the multi-disciplinary team varied from one case to another. Each provider had to have a coordinated care plan. The main problem was lack of a seamless HHC care system between health providers, clients, and communities. Community-based providers had insufficient knowledge of holistic care to coverall dimensions of the services (physical, mental, social, economic, and spiritual) palliative care, end of life care, and pain management. Home providers were not adequately equipped.The multi-disciplinary team could not always have a full team. Professional nurses were among those who were present for most home visits. Also, there were gaps in paperwork for the referral system.

The above analysis shows that there was no continuous HHC service system, limited co-operation between health providers, and insufficient knowledge of care givers. Some health providers had enormous pressures due to heavy workloads. Moreover, many patients and families were unaware of the HHC service, resulting in less participation in HHC service.

Therefore, the researcher was interested in studying the HHC's health managers and HHC operations by using the management concept of Weihrich & Koontz, 1993 (cited in Dejthai[17]) consisting of five elements including planning, organizing, staffing, directing, and work control, and apply this to the model of HHC service of Keuranon[8].

The objectives were to study the following: (1)HHC management of health managers of Chaophya Yommarat Hospital, identify the problems, and provide suggestions to improve HHC management; and (2) The performance of HHC services in urban communities ofSuphanburi Province, identify problems, and provide suggestions to improve HHC performance. The findings will be useful for the Chaophya Yommarat Hospital for planning, developing and adjusting the operationalplan to provide more efficient HHC services.

Methods

This was a qualitative research study of the performance of HHC managers and service providers in caring for chronically ill patients in urban communities of Chaopraya Yommarat Hospital in Suphanburi Province. The objective was toidentify problems and provide suggestions to improve HHC management and performance. The study sample is two groups of managers and service providers. Purposive sampling was used to select five managers consisting of the chief of the HHC center, the chief of the primary care unit (PCU), and three chiefs of community health centers (CHC) in Suwannaphum, Prasatthong and Wat- Pratoosan urban communities. The service provider group are staff of the Social Medicine Unit including 16 nurse practitioners and professional nurses who rotated among three CHC in the catchment area of Chaopraya Yommarat Hospital.

Data were collected using in-depth interviews. The discussion guide was developed by the researcher based on the literature review. The content validity assessment was done by three experts, two from the Faculty of Public Health, Mahidol University and one from the School of Health Science, Sukhothai Thammathirat Open University. Content analysis was used to analyze qualitative data.

The study protocol was approved by the ethical review committee of the School of Nursing, Sukhothai Thammathirat Open University in November, 2012 (Number 9/2012). The researcher informed the study sample about the study objectives, and participation in this research was totally voluntary.

The qualitative data was collected during 1st December 2012 to 30th January 2013 by the researcher (a nurse practitioner) and two trained research assistants(a professional nurse and nurse practitioner who were not HHC providers in the study area).

Results and discussion

1. Personal characteristics

1.1 The health managers. All managers were female (100%)with an average age of 50 years, ranging from 45 to 52 years. The highest education level was master's degree of public health (40%) and bachelor's degree of nursing (60%). All had received the certificate of nurse practitioner.

1.2 Service providers: All service providers were female with an average age of 52years, ranging from 39 to 59 years. All of them had attained a bachelor's degree of nursingand the certificate of nurse practitioner.

2. Opinions about management of HHC

2.1 Planning: All the managers developed the HHC plan by using data analysis and identifying HHC problems in terms of volume, cost, and risk level of chronically ill patients, especially diabetics and hypertensive. High cost was defined as the high cost of cervical cancer patients, heart disease, etc. High risk was defined as COPD, breast cancer, etc. Therefore the target group was chronically ill patients such as those with diabetes mellitus, hypertension, coronary heart disease, and/or cancer (breast, lung, cervix) etc. All managers had practical guidelines and plans for home visits. They cooperated with the in-patient ward about the discharge plan to the HHC center. Proactive HHC work was done by screening out chronically ill patients for transfer to the HHC center and CHC.

HHC manpower was managed by the patient care team (PCT) committee and multi-disciplinary team. The health providers assigned two persons for one CHC, and ten professional nurses or nurse practitioners rotated among the three CHC. The HHC budget was allocated from the annual Chaopraya Yommarat Hospital budget (Department of Social Medicine). The budget for developing the potential of the CHC was about 2,700,000 baht, and the budget for developing the potential of the village health volunteer (VHV) network was about 300,000 baht. Moreover, 300,000 baht was allocated from the Office of Health Insurance for each CHC. The required materials and equipment before the home visit were supported by the home visit center.

2.2 Organizing: The multi-disciplinary team committee consisted of doctors, nurses, pharmacists, social workers and physiotherapists for home health care services. Moreover, the PCT committee consisted of the staff from medical, surgical, pediatric, obstetric, eye-ear-nose-throat and orthopedic departments of ChaoprayaYommarat Hospital. The PCT committee meeting with the community was held two times per month for data collection.

The roles of the chief of the HHC center, chief of the PCU, chiefs of the CHC, the PCT team, the multi-disciplinary team, and professional or nurse practitioners were defined clearly. A clear schedule for HHC home visits was developed. The HHC work times were set every morning to arrange service delivery at the CHC. In the afternoon, the team paid home-visits at chronically ill patients' homes. The rotating professional nurses or nurse practitioners shift-worked in CHC two days per-person-per-week and conducted home visits two days per week. Chronically ill patients and care givers communicated by using the telephone to build relationships between them.

2.3 Staffing: Staff consisted of three persons from the HHC center and nurse practitioners, and ten professional nurses from the PCU of Chao Praya Yommarat Hospital. Staff rotated home visiting in CHC two days per week. Capacity development of the health providers and VHV was conducted at least once per year. Health providers received in-service training to increase knowledge and skills at least once a year, and someone could request specialized in-service training with the health personnel developing committee. The training content covers infection control, CPR, HHC service and quality service. The professional nurses received training in the nurse practitioner curriculum every year. Moreover, VHV received refresher training once per year.

2.4 Directing: The home visit team reviewed operations during monthly meetings and conducted problem solving. Cooperative HHC activities were both proactive and passive within the CHC. Moreover, coordination with agencies/community networks such as the sub-district health promoting hospital, CHC, VHV and local administrative organization was dynamic.

2.5 Control: There was a monthly HHC meeting for evaluation/performance summary. The CHC receive follow-up and supervision every six months. The follow-up used the family folder, HHC record, and home visit documents. The HHC performance was summarized once a year. The result of performance was analyzed and used to solve problems and adjust the HHC plan further.

This management process corresponds with studies by Dejthai[7] and Pongsuka[10] and reflects administrative processes described by Koonz. The HHC plan had a proactive plan for screening chronically ill patients and home health care services. This corresponds with Senarak W and Limtrakool[18] and Wattankit in that the principle of HHC is a proactive HHC service including primary and curative care, health promotion, disease prevention and rehabilitation. Patients (and their families) are coached to be able care for themselves to the greatest extent possible. Moreover, Oonchienjit and Treetrong[19] said that the concept of a healthy HHC service does not only include health service activities, but also includes coordination with hospitals and other resources in the community to appropriately assist patients. HHC aims to help patients (and their families) accept the circumstances of their illness and be able to perform essential health-maintenance tasks, with involvement of all members of the family.

2.6 Problems of HHC management and suggestions to improve it

The main problem of the multi-disciplinary team was lack of a complete HHC team because of competing demands for the time of doctors, pharmacists, physiotherapists and social welfare workers, etc. Another constraint was lack of an available vehicle for home visiting. The MOPH managers, the hospital manager and the chief of the provincial public health office should have a more proactive approach for the multi-disciplinary HHC team, and provide enough compensation to make it worth their while to participate on every home visit, or at least have an alternative substitute. The home visit plan and time/personnel/vehicle management should be adjusted to the local situation. The communication and cooperation between health providers and chronically ill patients or care givers should be developed (see Figure 1).

3. Opinions of HHC service providers

3.1 Performance of HHC service

3.1.1 Before the home visit: The HHC providers have the concept, principles, and HHC guidelines for holistic care. Integrated, family, continuous care begins with the HHC service. All HHC providers share the goal to help chronically ill patients and family care givers to practice self-care at home. The HHC center and discharge plan center prepare for the home visit and compile the family folder and home health care forms.

3.1.2 During the home visit: HHC services are supposed to be provided by a multi-disciplinary team, but sometimes the team lacked a key member, e.g. doctor, pharmacist, social welfare worker. Most of the HHC providers are nurse practitioners,

professional nurses, and public health officers. The HHC activities consisted of physical examination, treating chronic disease, and giving health education and guidance on self-care.

3.1.3 After the home visit: HHC service providers recorded data on the patient and home visit and entered the information into a computer. The HHC team has a post-visit meeting to evaluate and summarize the home visit. The evaluation of home visit data were analyzed and used to adjust the HHC plan for the next home visit.

These results correspond to Siangsanau[20] who said that good health begins at home and that care of patients at home helps ensure the correct medical treatment and continuous care. According to Hattheerat et al[21], HHC defines the management of comprehensive service for the patients and family in each case. Evaluation of a patient's condition at home and coordination with the health, hospital and referral team was done by assignment of the responsible unit. Moreover, Phothisupsuk[7] and Masadol, et al[22] said that the HHC service is a comprehensive service for the patients and families, provided at home by the health team. The services consist of evaluation of patients' condition, and the participation of family members to care for the patient. HHC helps the patients and families to be as self-reliant as possible. The home visit is the centerpiece of HHC in which the home is an extension of the in-patient ward[23]. HHC may also include the proactive screening of chronic diseases and high-risk groups in urban communities. One study documented some problems of HHC services in treating elderly chronic disease (Lawung).[9] Chronically ill patients expect quality services at home according to the concepts of Zeithaml, Parasuraman, and Berry[24], Saunsrida[25], and Kaewkim, Boromtanarat, and Junkong[26]

3.2 Factors supporting HHC: The hospital directors recognized the important of HHC implementation. They felt that there was adequate budget, materials and equipment for HHC. There was good cooperation between the multi-disciplinary team and HHC center. There was a good HHC system for implementing the HHC operational plan. The patients, caregivers and relatives were well-prepared to receive HHC service and were satisfied with HHC services and the home visit. The patient appointments for home visits with the heath officer can be done by telephone.

These results correspond to Keyuranon P[8] who summarized eight steps for good home health service operations: (1)Prepare patients to care for themselves and prepare relatives to help take care of the patient at home to minimize the hospital stay; (2) The doctor will refer patients to the local health services unit for home-based care; (3)The hospital service coordinator facilitates contact with social workers as appropriate; (4)The public health nurses coordinate between doctor and patient about the specific treatment instructions and health care plan based on the patient's needs;(5) The team members are assigned to carry out HHC; (6) The nurse case coordinator arranges case-specific consultation meetings once a week; (7)There is maintenance of reports and records of the patient; and (8) Good health begins at home when patients have better health and can return to normal condition or at least are able to take care of themselves.

3.3 Problems of HHC performance and suggestions to improve HHC

The main problem of HHC identified in this study were shortages of nurse practitioners and professional

nurses in the CHC, requiring a system of rotation of staff from the Social Medicine Department. Some VHV and care givers lacked adequate knowledge of HHC processes. Some chronically ill patients were elderly, and health officers had trouble confirming appointments for home visits because some patients had changed their address or contact information. Sometimes, there was no vehicle available for a scheduled home visit.

Based on the findings of this study, the chief of provincial public health office and the hospital manager should be more supportive of HHC by adding the number of nurse practitioners and professional nurses at the CHC. Professional nurses should be trained to become nurse practitioners. There should be more capacity development of VHV, family health leaders and home care givers. The VHV should be enabled to participate in HHC services and communicate with chronically ill patients. There should be more vehicles for home visits.(See Figure 1.)

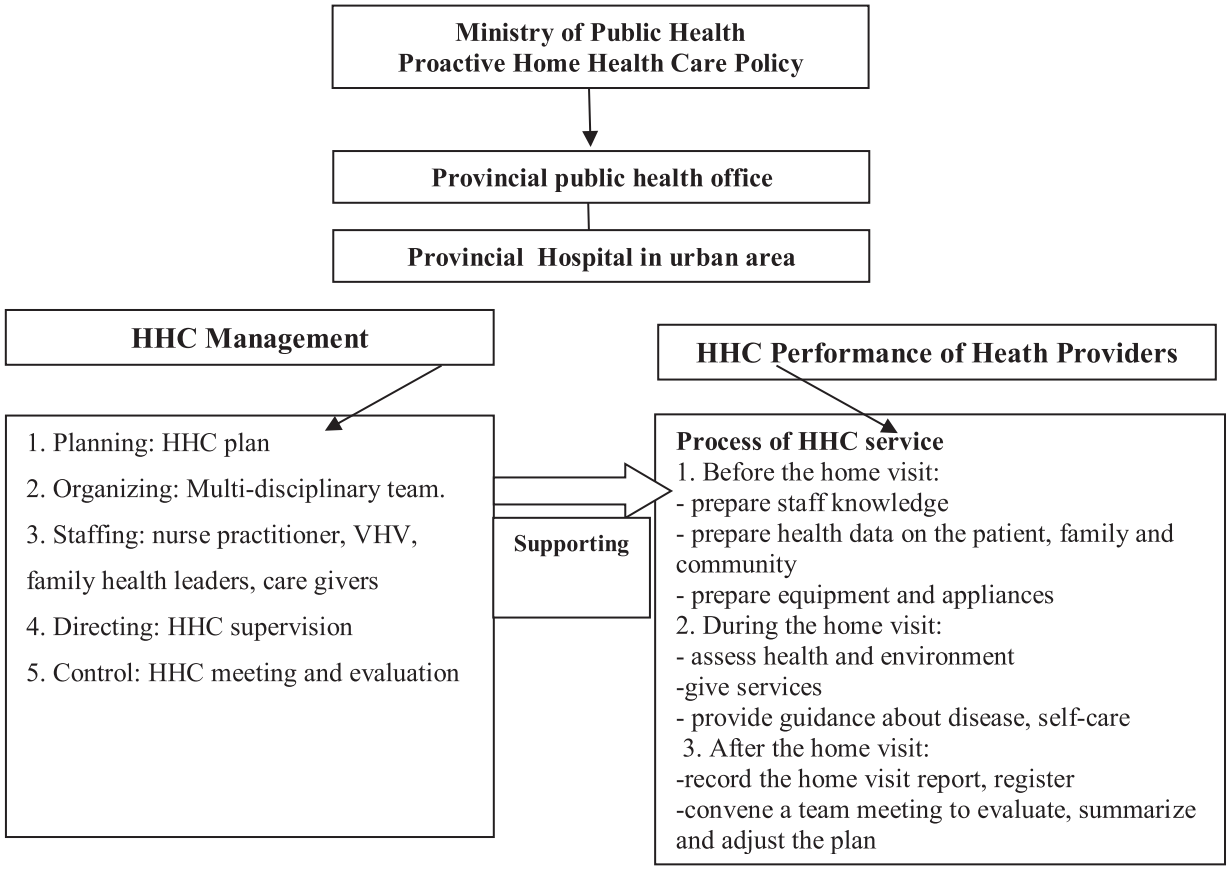

Figure 1 Home health care management and performance in an urban setting

Conclusions

HHC services for chronic disease patients in urban communities are very important. Therefore, the management and performance of HHC service providers for chronically ill patients in urban communities is crucial. The multi-disciplinary teams have a central role in HHC for chronically ill patients, with assistance by VHV, family health leaders, and care givers. The management of HHC services should be clearly planned in detail. The MOPH should have a policy to provide more support for the proactive HHC approach of the multi-disciplinary team and increase compensation for team members. The MOPH should support training of professional nurses to become nurse practitioners and support the capacity development of VHV, family health leaders and care givers on a regular basis.

Recommendations

The chief of provincial public health and the hospital manager should be more supportive of the multi-disciplinary team (e.g., doctors, pharmacists, physiologists, nurse practitioners and professional nurses) so that the team has a full quota of members for HHC home visits. The HHC providers should adjust the discharge plan, home visit plan, time management, personnel management and vehicle management as appropriate given a patient's situation. Better communication and cooperation between health staff and chronically ill patients should be promoted by using family caregivers and VHV. The VHV and family caregivers should acquire more knowledge of HHC services and help facilitate patient appointments for timely treatment and improved patient quality of life.

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