Field Research on the Construction of Service Quality Evaluation Index for Professional Home Care

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ABSTRACT

Objective: The purpose is to pinpoint the problems during home care practice and identify the points and critical links of service quality control. **Method:** The qualitative field research was adopted. The three-month participatory observation was implemented to the home care practices performed by three community health service centers in Shanghai. Then the collected materials, including the field notes of nearly 100 thousand word count and pictures and images, have been sorted and analyzed. **Result:** The key factors that affect home care quality and the critical links of quality control have been identified, namely, structure dimension, procedure dimension and result dimension, among which, structure dimension includes system, personnel, environment and equipment, etc., procedure dimension includes health assessment, basic nursing, nursing manipulation, emergency treatment, health education and instruction, psychological nursing, hospice care and rehabilitation nursing, etc., and result dimension includes patient outcomes and nursing personnel outcomes, etc. **Conclusion:** This research unveils the true process of home care service and the key factors that affect service quality, thus providing firsthand information for the construction of a quality control index system for home care and in accord with national conditions.

Introduction

In recent years, with the acceleration of population aging, the increase of chronic diseases and the transform of medical pattern, the demand for home care service is increasing. However, due to the great differences between home care and traditional clinical care and the characteristics of home care such as diverse service objects, complicated service environment, special working nature, limited resources and facility and unique family atmosphere, it is difficult to guarantee the quality of home care service. Doran [1] et al showed through research that adverse nursing events account for 40% of the safety incidents of home care. Masotti p [2] et al carried out an investigation into the factors that affect home care service and found that adverse events occur on home care recipients at the rate of 8.58 to 8.92 per 10 thousand a day. Therefore, a quality evaluation index system for home care and in accordance with national conditions must be established to ensure home care safety, reduce adverse event rate and improve service quality.

Field research is known by another name as field work which is one of the commonest and most traditional methods in qualitative research and in which process the researcher will immerse himself as a research tool in the subjective and objective experiences of the subjects and obtain first-hand research materials by means of direct observation, interview and temporary residence. The author implemented the non-structured and participatory observation to the home care practices performed by three community health service centers in Shanghai by means of field research to identify the unsafe factors in such practice and uncover the points and critical links of quality control. The finding concludes as follows.

1 Subjects and Methods

1.1 Subjects

Based on typical sampling, three community health service centers representing the developmental level of community health care of Shanghai were selected as the research field. With permission granted the author followed behind the family visiting nurses, family out-call nurses and station nurses to observe the characteristics of service environment, service content, service time, service procedure, home care service staff, service objects and their families, etc.

1.2 Research Method

1.2.1 Data Collection Method

The most commonly used method in field research is observation. The prerequisite of obtaining raw and genuine materials from the subjects is keeping the observation objective, natural and non-invasive. The researcher acquired the overall information of the field through descriptive observation and learned about the status quo and vulnerabilities of home care quality management through communicating with the people of all categories at the community health service centers. Also, the researcher identified the problems of home care service process by means of focal observation and explored the nursing service content, nursing service environment as well as operational flaws and corresponding solutions.

1.2.2 Data Analysis Method

The method incorporating both field records and memoirs was employed. The data, which contained the home nurses' statements and the researcher's field notes, was put into the computer and diagnosed through content analysis. The subject of the data was extracted through the observation on the coding of words, phrases and texts of the field notes and the key factors that affect home care quality were gathered and categorized. The interview data was analyzed with Colaizzi's seven-step method designed for phenomenological materials. The coalition method was adopted to collect and analyze the materials. Finally, the sorted data was returned to the research subjects for authenticity check.

1.2.3 Ethics

The research area was set at three community health service centers. The researcher entered the field with the permissions of the heads of the facilities. The researcher promised that the activities of the subjects would be recorded in code and the language or behavioral evaluation or intervention would not be given to the operational process of home care and the content of home care service.

2 Result

The researcher followed 12 home care practitioners (see Table 1) and observed 148 home care practices and took field notes of nearly 100 thousand word count. 1831 factors that affect home care quality were found through the analysis on the home care facilities, service content, service process, working attitude and patient satisfaction and then sorted and summarized into 52 critical links in home care quality based on the SPO theoretical model.

3 Discussion

3.1 Urgency for the Construction of Service Quality Evaluation Index for Professional Home Care

It can be seen from the service specification and the quality control system of professional home care that a mature evaluation system for home care service has been shaped in some foreign countries. For example, for the purpose of quality control, the United States has formulated evaluation instruments such as OASIS (Outcome Assessment Information Set) and RAI (Resident Assessment Instruction) to help the health personnel collect the information about public health condition and nursing service, evaluate the existing nursing plans and interventions then improve them and

Table 1 Basic Information of Home Care Practitioners

SN	Gender	Age	Length of Service	Technical Title	Education Degree	Length of Home Care Service
N1	Female	38	16	Supervising Nurse	Junior College	8
N2	Female	47	29	Nurse	Secondary Technical School	10
N3	Female	37	15	Supervising Nurse	Secondary Technical School	5
N4	Female	39	17	Supervising Nurse	Secondary Technical School	8
N5	Female	36	12	Supervising Nurse	Junior College	4
N6	Female	42	20	Supervising Nurse	Secondary Technical School	8
N7	Female	46	22	Supervising Nurse	Secondary Technical School	8
N8	Female	33	12	Nurse	Junior College	4
N9	Female	45	23	Nurse	Secondary Technical School	11
N10	Female	32	10	Nurse	Junior College	5
N11	Female	33	11	Supervising Nurse	Junior College	4
N12	Female	34	12	Supervising Nurse	Secondary Technical School	3

thus maintain and promote the health conditions of the residents [3]. Canada and the United Kingdom also have a relatively sound and normative home care quality evaluation system featured by strong organization of evaluation items and strong operability of quantitative evaluation criteria[4-5]. China, however, still lacks such a quality management and evaluation system for home care service and a applicable service specification and quality management and evaluation system for professional home care service items. This research analyzed the major risk factors (see Table 2) in home care service through in-depth observations and interviews. A standard regulation for home care service shall be established against time to reduce adverse event rate and ensure that home care service is developed with normalization and scientification. It can be seen from the professional home-based care service that safety and suitability evaluation is a must due to the remoteness of well-equipment hospitals. In some foreign countries, the service items of professional home care must be studied and evaluated first before put into practice. In the United States, for example, the Home Health Care Classification System (HHCC) was developed based on the study of nearly 9000 samples gathered in three years of nursing diagnosis and was promoted nationwide into the management and evaluation of home care service[6]. The United Kingdom uses the Nursing Needs Assessment Tool (NNAT) to determine the type of service through evaluating from 21 perspectives such as patient self-identity, social psychological status, cognition, communication, physiological function, pain control and risk factors and from there risk evaluation, stability evaluation, predictability evaluation and complexity evaluation are carried out for the final determination on service items[7]. Relevant studies shall be implemented as soon as possible since China still lacks safety and suitability evaluation for home-based professional care service items.

3.2 Suggestions for the Construction of Service Quality Evaluation Index for Professional Home Care

Since China lacks a quality standard for professional home care, most practitioners resort to clinical or community standards which are obviously not suitable for home care. The researcher discovered through deep immersion in home care service places that low professionalism of nursing personnel, low efficiency of hierarchical

management system and lack of professional evaluation instrument are key contributory factors to the decline of home care quality. To ensure the quality of home care, we shall first cultivate more qualified practitioners, then

Table 2 Critical Links in Home Care Quality

Dimension		Critical Links in Quality Control
Structural Quality	1	Nursing personnel awareness of the regulations
	2	Assessment on the execution of the regulations
	3	Proportions of home nurses and service personnel
	4	Pass rate of on-job training
	5	Job qualifications of nursing personnel
	6	Composition of nursing personnel
	7	Environment of home care operation
	8	Environment of necessities preparation
	9	Equipment category
	10	Equipment intact rate
	11	Necessities for emergency situations
	12	Rescue specifications for critically ill patients
Process Quality	1	Vital signs monitor
	2	Consciousness and pupils observation
	3	Limb function
	4	Mood monitor
	5	Observation on drainage volume, color, texture and flow of the tubes on the incubated patients
	6	Observation on adverse drug reactions
	7	Pain monitor
	8	Skin care
	9	Oral care
	10	Hair care
	11	Diet management
	12	Cleanness of the necessities for each bed
	13	Pass rate of progressive care
	14	Pass rate of nursing form filling
	15	Hand cleaning before technical nursing operation
	16	Necessities preparation for technical nursing operation
	17	Pass rate of operational procedure
	18	Disposal of necessities after operation
	19	Tube fixation

	20	Treatment of adverse transfusion reaction
	21	Colostomy management
	22	Wound care
	23	Disease-related guidance
	24	Medication guidance
	25	Safety guidance
	26	Off-bed activity guidance
	27	Functional exercise guidance
	28	Psychological nursing for patients
	29	Psychological nursing for patients' family
	1	Pressure ulcer occurrence rate
	2	Falling-off-bed occurrence rate
	3	Falling occurrence rate
	4	Acquired infection occurrence rate
	5	Tube coming-off occurrence rate
Outcome Quality	6	Residence awareness rate of health knowledge
	7	Effective rate of pain management
	8	Rate of urinary catheter associated urinary tract infection
	9	Re-admission rate
	10	Patient satisfaction rate
	11	Nurse job satisfaction rate

encourage more higher-educated nursing talents to join home care business, positively improve the hierarchical management system and regularly supervise and instruct home care practices. Meanwhile, we shall explore an evaluation instrument that fits our national conditions. An evaluation instrument is the prerequisite of home care quality control and foreign practices have confirmed that only on the basis of appropriate home care demand evaluation can home care service be practiced with efficiency and economic benefits and social benefits[8-9]. Therefore, it is of an important subject in home care quality control to establish a home care evaluation instrument incorporating national conditions and foreign experiences.

4 Summary

In a word, China's home care business is on the threshold of development and a sound evaluation system for home care quality remains to be developed. Some foreign countries have established a relatively mature and adaptive evaluation index for home care service quality and their home care clients can all receive efficient and high-quality services and home care development has become more professional and normalized[10]. Therefore, the construction of an evaluation system for home care service and improvement of its quality with learned advanced foreign experiences and based on the status quo and characteristics of China's home care shall be deemed an urgent matter and a key priority to be handled by community health personnel and managerial departments. This research, due to limited time and manpower, might have missed some items even though the researcher has achieved the satiation of critical links in home care quality through 12 weeks of non-structured and non-participatory observations.

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