Research on Problems and Countermeasures of Health Records in Community Health Services in Tai’an City

Xu Tingting¹, Ma Cunhong² & Shang Yulian¹

¹ College of Information Engineering, Taishan Medical University, Tai’an, China
² Enrollment and employment office, Taian Technician College, Tai’an, China

Correspondence: XU tingting, College of Information Engineering, Taishan Medical University, Tai’an, Chang Cheng Road, China. Tel: 86-135-6289-8290. E-mail: xutingtinghot@163.com

Received: January 24, 2016         Accepted: February 4, 2016         Online Published: March 22, 2016
doi:10.5539/cis.v9n2p19            URL: http://dx.doi.org/10.5539/cis.v9n2p19

The research is financed by the research project of Taian Technology Bureau (project number: 201430774-13), research project of Taian Philosophy and Social Science (project number: 15skx029,15skx039), important project of Shandong Provincial Arts and Sciences (project number ZX2015002).

Abstract
Objective: To standardize and improve the management of health records in community health services in Tai’an city, also to improve community health service level, and enhance residents' awareness of health. Method: taking the residents within the service range of TaiQian Community Health Center in Tai’an city and the relevant medical staff as research respondent, 120 questionnaires have been sent out to the residents and 15 questionnaires to the staff, then statistical analysis would be made according to the survey results. Results: at current, there are two main ways to establish personal health records, i.e. residents health examination and community personnel pay visit, which are effective; community residents seldom use their personal records, only 93.5% for once a year; 35% of community doctor hold the opinion that the health records have no big value, so there is no need to read, reflecting that the community medical personnel lack of the awareness of use it; the security and completeness of electronic health records are poor . Conclusion: Government should play a leading role in establishing and managing the community health record, improve awareness of community medical personnel in using health records through training, seminars, On-line advertising and other forms, and strengthen and improve the comprehensive management of electronic health records.

Keywords: health records, questionnaire, community medical staff

1. Introduction
Health records is a systemic file that records the health status of residents, based on personal health and throughout the life course, and also an information resources covering a variety of health-related factors, so as to achieve multi-channel information dynamic collection and meet the requirements of residents in health care, health management and health decision making. Since 2009, our nation has launched a basic public health services, establishing health records for both urban and rural residents free of charge. Setting up health records is not only one of the basic public health services, but also premise, basis and key to carry out other community health services. The establishment of a complete community resident health records is conductive to understand the health status and health problems of community residents, laying foundation for further screening high-risk groups, prevention and control of chronic diseases, and immunization. Only complete and authentic health records can provide community residents with high quality, integrated, targeted health management services; besides, people can understand their health conditions, and develop good habits and a healthy lifestyle under the guidance of professional medical personnel. Therefore, understanding the establishing process and use condition of community health records is of great significance in the promotion of health record management, exploration of the long-term mechanism of resident's health record information resources management, and raising the level of medical and health services.

In 2010, Taian municipal party committee and government responded positively to the deployment of the national medical and health system reform, gradually established health records for the city's urban and rural
residents, and introduced a series of implementation plan. The record was made based on experimental and progressive principle, with the mode of "people-centered" health management. [4] In order to know the management of resident health records in Taian city after completion, Taian city, we have carried out survey and evaluation on the use of community health records. Through the survey, we have studied the establishment and use of health records, investigated the factors restricting the establishment and use of health records, providing objective, concrete and feasible policy suggestions in better playing the role of resident health records.

2. Methods
Taking the residents within the service range of TaiQian Community Health Center in Taishan District of Taian City and the relevant medical staff as research respondent, 120 questionnaires have been sent out to the residents and 15 questionnaires to the staff.

Questionnaire contents include respondents names, gender, age, level of education, presence of personal health records, and frequency of use; the establishment of personal health records includes community personnel paying visit for records, clinics for records, health check for records, the lecture for records and failure in records. The frequency of using health records includes once per quarterly and more, once a month, once a week, once a day, and not use. Questionnaires were sent out by random and door to door within the community.

After the data input-into excel, the SPSS17.0 would be imported for statistical analysis. According to the data's categories, distribution and analytical purposes, the statistical standards p<0.05 was significant.

3. Result
3.1 Analysis on the Establishment of Community Resident Health Records
The survey showed that the proportion of health records established by community staff's visit, clinics, health check, the lecture and non-establishing were separately 23.4%, 21.7%, 35%,1.6% and 18.3%. Obviously, community workers' visit and clinic were the main method.

Table 1. The way of establishment of health records

<table>
<thead>
<tr>
<th>The way of establishing health records</th>
<th>Number of case n=120</th>
<th>Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>by visit</td>
<td>28</td>
<td>23.4</td>
</tr>
<tr>
<td>by clinics</td>
<td>26</td>
<td>21.7</td>
</tr>
<tr>
<td>by health check</td>
<td>42</td>
<td>35</td>
</tr>
<tr>
<td>by lecture</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>non-establish</td>
<td>22</td>
<td>18.3</td>
</tr>
</tbody>
</table>

2.2 Analysis on the Utilization Rate of Community Resident Health Records
According to the survey, for residents who have established health records, the average life of owning their records is 5.04 years. The use frequency is 59.2%, 15.9%, 4.1% and 2.5% for once per every quarter and more, once a month, once a week and not use. Annual health examination become the only chance for the majority of residents to "interact" with their health records;

Table 2. The utilization rate of health records

<table>
<thead>
<tr>
<th>The utilization rate of health records</th>
<th>Number of case n=120</th>
<th>Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>every quarter and above</td>
<td>71</td>
<td>59.2</td>
</tr>
<tr>
<td>every moths</td>
<td>19</td>
<td>15.9</td>
</tr>
<tr>
<td>every week</td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td>non-utilization</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>non-establish</td>
<td>22</td>
<td>18.3</td>
</tr>
</tbody>
</table>

2.3 Four Main Health-Care Compared With Other Cases
The survey showed the record use rate is 61% for four major health management, i.e. child vaccinations, hypertension, diabetes, and coronary atherosclerotic heart disease (hereinafter referred to as coronary artery
disease), 29% higher than that of other diseases. This indicates that community outpatient health records mainly focus on the community children's vaccination and chronic diseases.

Table 3. The utilization rate of health records of four main health-care compared with other cases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Non-utilization</th>
<th>Utilization</th>
<th>Total(120)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four main health-care</td>
<td>24 (37%)</td>
<td>40 (61%)</td>
<td>64</td>
</tr>
<tr>
<td>other cases</td>
<td>22(71%)</td>
<td>12(29%)</td>
<td>34</td>
</tr>
<tr>
<td>non-establish</td>
<td>22</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

2.4 The Use of Electronic Records

At present, the electronic health records in Taian city mainly refers to input paper records into computer. Electronic health records include name, gender, age, home address, past medical history, examination results and so on. If community residents update the information on electronic health records through clinics, health examination or doctor visiting, it is regarded as "used". Otherwise, it is regarded as "not used". The survey found that electronic health records were less used. The follow-up visit of community health workers on health records should be once a year of follow-up, 55% staff showed less frequent use of health record in their daily reception of patients, 40% of which believed that the information has little value, so there was no use to read.

It is also found that electronic records management is in lack of standard, with low security. The electronic records at each community health service stations will normally be updated once 2 to 4 weeks, input by the person in charge. The computers stored the information have connected to the Internet, easy to be attacked, Poor safety.

3. Discussion

1. This study showed that community health service center in Taian city has consciously used health records in their work, and most of the family health records can be used, instead of becoming a silent record, indicating that relevant management is effective. But the records are still less used and the community health workers are still lack of the understanding of the health records, so the future work should further enhance the use of electronic health records, and at the same time, strengthen quality evaluation and management of health records, so as to promote the quality of community health service.

2. The survey also showed that currently, the construction of community health stations in Taian City mainly includes the appointment of register, charges and pharmacy management, lack of unified platform for regional medical information. In further, "Internet +", cloud computing, database technology should be used to establish regional community health service information platform in Taian, so as to share regional health resources through the data mining of medical information about the community residents.

3. The government should play a leading role in the establishment and management of community health records, and the management work should be strengthened from the aspects of follow-up visit, privacy information protection, informationization and record standardization; should also improve the medical staff's awareness of the use of resident health records through training, lecture, etc.

4. Complete person's system for community medical health records should be set up. The security of community residents' private information should be guaranteed. Various health service stations should assign special person for input, management and taking in charge. The security of health records should be ensured.

To establish health records is an important part of deepening the reform of medical care system. In order to ensure the implementation of health records work in urban and rural residents, Department of Health should strengthen the inspection of the establishment of health records in the counties (cities, districts) on a regular basis. Besides, the department should also establish complete regional health and medical information platform, in particular, should enhance the training of the establishment and use of resident health records to the community medical staff; moreover, the department should explore the long-term mechanism of resident's health record information resources management, and fully play the role of resident health records in raising the level of medical and health services.

References


**Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).