Research Progress on the Home-based Healthcare Plan for the Elderly with Chronic Diseases

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Abstract: Objective: To develop a home-based care plan for the elderly person with chronic diseases based on the status of their home-based care needs and relevant literature. Methods: The clinical data consisted of 132 patients who were 60-year-old or older with chronic diseases from June 2019 to May 2020 were selected and categorized into control and treatment groups of 66 patients each. For the experimental group, a care team for chronically ill elderly receiving regular post-treatment home-based care. Meanwhile, a general clinical care team for chronically ill elderly receiving regular treatment for the control group. The effectiveness of these two healthcare models was evaluated and analyzed.

Results: Results showed that satisfaction and effectiveness of home-based care among the elderly with chronic diseases were statistically better ($P<0.05$) than those in the usual care group. Conclusion: Providing home-based care services to elderly patients with chronic illnesses helps them to improve their chronic disease condition, patients are more receptive to home care, and patients have higher rates of recovery and treatment satisfaction.

Keywords: Chronic disease in elderly; Home-based care; Research planning

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With the increase in the ageing population and reformation of the healthcare system, home care services are gaining more attention and acceptance. Continuing home care services are gradually becoming the best option for older patients with chronic diseases, especially those who have been treated for long periods while having little impact on their daily lives\textsuperscript{[1]}. This helps older patients maintain a good daily routine, mindset and continue to recover effectively. In this paper, 132 elderly patients with chronic diseases who were admitted to the hospital from June 2019 to May 2020 were selected to study the impact of home-based care on improving the chronic diseases in elderly patients by using existing inpatient treatment methods for general clinical care and home-based care for elderly patients with chronic diseases, respectively.

1 Methods

1.1 Methods of care

During the treatment, the patients were divided into two groups. The control group received regular health training and discharge instructions. The experimental group performed home-based care based on the control group with the following details. Firstly, to provide better home-based care to patients, it is often necessary to recruit a professional home-based care team based on the situation. This includes rehabilitation therapists, general practitioners and community nurses who have specialized and extensive experience in the field. To provide high-quality home-based care, the team members should have acquired professional skills, including communication skills, rehabilitation skills, and specialized general knowledge, which were professionally trained by the hospital\textsuperscript{[3]}. Secondly, the improvement of home-based care services. Since patients will be discharged from the hospital for home-based care, team members will be asked to assess and review the patient three days...
before discharge. The appropriate home-based care planning was proposed to ensure that the home-based care requirements are met, and then the home-based care digital records were created for the patients. With this, the routine home-based care services were conducted for six months.

Thirdly, the method of care services. The services usually included telephone follow-up, home visits and professional consultations. In telephone follow-up, the caretaker usually needed to in-charge of the frequency and set up a fixed timing of telephone follow-up. In home visits, the main purpose was to follow-up if the patients had performed rehabilitation, consumed sufficient medications, and recorded the patients’ status, to address the concerns of the patients and their families besides guiding on home-based care.

Fourthly, timely visitation. Professional daily vital sign checkup and appropriate home-based care services for the elderly with chronic diseases were conducted by the community nurse of the home-based care team. (Daily visits and records were not necessary for the community). The visit schedules were determined by the community nurse to allow the follow-up from the rehabilitation therapist and the general practitioners. During an emergency, doctors were allowed for emergency consultation and treatment. For other home-based care team members, the patient visit was conducted at least once a month, with providing health education and following up on patient's condition besides providing guidance and answering the questions regarding home-based care. The follow-up involved two teams and usually lasted for more than six months. The patients were also provided with health information to help them fully understand their health conditions.

1.2 Observational indicators
The nurse-in-charge assessed the satisfaction levels of the two groups of patients receiving nursing care throughout the surveys. The main indicators are “Highly satisfy”, “Satisfy” and “Dissatisfy”. At the end of caring services, the effectiveness of the care services of the two groups of patients was observed. The indicators were classified as “Highly effective”, “Effective” and “Not Effective”.

1.3 Statistical Analysis
The SPSS 20.0 statistical software with the Chi-squared test was applied to analyze the data related to care satisfaction and care outcomes. The data were expressed as percentages. A value of $P<0.05$ was regarded as statistically significant.

2 Results

<table>
<thead>
<tr>
<th>Group</th>
<th>Total Cases (N)</th>
<th>Number of cases (N)</th>
<th>Type of Disease (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Age range</td>
</tr>
<tr>
<td>Control</td>
<td>66</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Experimental</td>
<td>66</td>
<td>35</td>
<td>31</td>
</tr>
</tbody>
</table>

Notes: N, number of cases

2.1 Patient satisfaction with care services

<table>
<thead>
<tr>
<th>Group</th>
<th>Total cases (N)</th>
<th>Highly Satisfy N(%)</th>
<th>Satisfy N(%)</th>
<th>Dissatisfy N(%)</th>
<th>Satisfaction Level N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>66</td>
<td>33(50)</td>
<td>16(24.24)</td>
<td>20(30.30)</td>
<td>46(69.70)</td>
</tr>
<tr>
<td>Experimental</td>
<td>66</td>
<td>44(66.67)</td>
<td>19(28.79)</td>
<td>3(4.55)</td>
<td>63(95.45)</td>
</tr>
</tbody>
</table>

$\chi^2$ 21.61

$P <0.05$

Notes: N, number of cases; $\chi^2$, chi-square value

Through the statistical analysis of the questionnaires by the nurses in charge, the satisfaction level of elderly patients with chronic diseases in the home-based care (Experimental group) was statistically higher ($P<0.05$) than that of the elderly patients with chronic diseases receiving general care services (Control group).

2.2 The effectiveness of care services received by elderly patients with chronic diseases.
The survey was shown in Table 2. Based on the statistical analysis of the questionnaire by the nurse-in-charge, the elderly patients with chronic diseases who received home-based care (Experimental group) felt the care service was more statistically effective ($P<0.05$) than elderly patients receiving general cares (Control group).

### 3 Discussion

In recent years, there has been a significant increase in the incidence of chronic diseases among the elderly. Chronic diseases have become major threats and reduce the quality of life of the elderly. Chronic diseases can cause patients to become irritable and lose interest in treatment, which can lead to drug failure. However, chronic diseases in the elderly require long-term medication, along with proper diets and exercises. Therefore, home-based care is very important.

From the observation and analysis above, it is clear that home-based care services can provide a comfortable environment for chronic patients to receive care services. To establish a long-term and effective model of quality home-based care, it is necessary to establish a home-based care team which consists of excellent physicians, pharmacists, physical therapists, nutritionists and nursing staff. Through home-based care services, the team can provide different needs of patients. At the same time, the requirements for providing home-based care services need to be tightened, with the staffs need to be professionally trained, assessed and qualified. Secondly, it is necessary to provide relevant health knowledge in the care services, so that patients can understand their condition. Besides, it is also necessary to carry out timely psychological treatment to avoid anxiety and depression and to elevate the confidence in the recovery of patients. Through professional home-based care services, the care team can access the patients’ information in real-time besides determining the patients’ treatment effect from the evaluation of specific indicators and providing timely treatment to patients who experienced adverse symptoms. Thirdly, the quality of home-based care serviced will be evaluated by the nurse-in-charge based on the questionnaires and health records of patients periodically for the improvement of home-based care services. Fourthly, home-based care staffs should conduct regular telephone follow-up and on-site visits to understand the patient’s recovery status and take appropriate countermeasures in home-based care services. These interventions enable the patients’ family to receive more professional guidance. In addition, health education for family members should be focused on home-based care.

In this study, different care service models were administered to the two groups of patients. The results showed that the satisfaction level of nursing services and nursing outcomes of elderly patients with chronic diseases in the home-based care group were better than those of patients with chronic diseases in the general care group. In summary, home-based care services to elderly patients with chronic diseases are more conducive for the improvement of disease condition and health recovery. Therefore, home-based care services are worth implemented in the communities.

### References


