Knowledge Reconstruction for Medication Nursing Based on Working Thought of Vocational Elderly Nursing Oriented

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ABSTRACT

The course of medication nursing for vocational elderly nursing students belongs to basic medical knowledge and skill course, which plays an extremely important role in clinical practice. Because the elderly nursing-oriented students mainly serve elderly patients with chronic diseases, patients suffer from a variety of diseases, drug types and quantities, drug interacted with each other, more adverse reactions, with medication risk. The treatment and nursing of clinical patients are based on the systematic type of disease, and the contents of medication nursing textbooks still is according to the traditional pharmacological knowledge structure, which cannot meet the clinical needs of elderly nursing. There are many differences between the independent and comprehensive knowledge points in clinical and teaching materials as well as the depth and three-dimensional thinking of patient education with the point and line thinking of medication nursing. Clinical practice puts focus on drug interaction, adverse reactions, medication precautions and so on. Thus, the knowledge reconstruction based on working thought is particularly important.

Keywords: Vocational elderly nursing; Course of medication nursing; Working thought; Knowledge reconstruction.

1. BACKGROUND

In the 21st century, with a series of problems brought about by aging, the number of elderly people aged 60 and above in China in 2014 has exceeded 0.2 billion [1]. According to the fourth national health service survey, 85.2% of the urban elderly people aged 65 years old and above suffered from chronic diseases. The prevalence of chronic diseases was 52.4% in rural elderly people aged 65 years old and above. The average two-week visit rate and annual hospitalization rate of the elderly people aged 65 years old and above were 30.3% and 15.3%, respectively, which were higher than the average level of other age groups. The elderly usually have the characteristics of long course, coexistence of several diseases and atypical symptoms, many complications and difficult to cure, multiple medication causing health problems, and long recovery period. Based on this, it is particularly important to train elderly nursing talents in higher vocational nursing specialty. The hospital's combination of medical care and nursing, nursing home, home-based care and other modes also further promote the demand for elderly nursing talents, thus the cultivation of elderly nursing talents is very important. The disease characteristics of elderly patients: physical function decline; most of them are with chronic common diseases; diseases have mutual influence; there are many kinds of therapeutic drugs, interacted with each other, with many adverse reactions. Medication nursing course is an important course of basic medical knowledge and skills in the field of elderly nursing. It is the cornerstone course of professional core competence course in the curriculum system of core competence with working and studying combination.

2. ANALYSIS ON CONTENT STRUCTURE OF CURRENT TEACHING MATERIALS

2.1 Comparison of Existing Teaching Materials and Clinical Medication Nursing

At present, the content of medication nursing in the teaching materials of geriatric nursing is still classified according to drug efficacy, and then the teaching content is organized according to the five aspects, namely, pharmacokinetics, pharmacodynamics, clinical application, adverse reaction and medication nursing of the relevant representative drugs. According to the classification of drug efficacy, it puts focus on the horizontal comparison of the effects of different drugs in the same kind of drugs. The sub classification drugs of each major category of drugs can be regarded as the independent, while the clinical work puts focus on the horizontal comparison of similar diseases in the same system, the vertical comprehensive comparison with other system diseases, the clinical drug treatment and application of diseases, and medication precautions. At the same time, the drug treatment can be significantly affected by the system changes of the elderly patients (including the changes of the body systems on pharmacodynamics and pharmacokinetics). The treatment and application of clinical drugs include the selection of disease drugs and the drug selection with other diseases; the monitoring of adverse drug reactions (side effects, drug interactions, incompatibility, etc.); the needing attention items in clinical drug using can be including: route of
administration, appropriate time for taking some drugs, correct use of dosage forms, preparation of solvent for injection, dilution solvent and concentration, intravenous drip patient education can be including: disease knowledge education, self medication for acute attack, diet, resting and exercising precautions and so on.

2.2 Existing Problems

(1) Although the teaching materials of medication nursing have been reformed on the basis of pharmacology teaching materials, the nursing knowledge of medication required by elderly nursing posts, such as drug indication, administration time and route, incompatibility of drug, observation and monitoring of drug efficacy and adverse reaction, reporting and treatment, and medication nursing education, are not prominent enough [2]. The survey results show that the drug knowledge of clinical application and patient consultation is more about adverse drug reaction, drug use and medication precaution, drug effect and drug clinical use, which shows that adverse drug reaction, drug use and medication precaution, drug effect and clinical use of drugs are particularly important in clinical nursing practice [3]. The content of clinical medication nursing and current medication nursing teaching materials can not be effectively connected.

(2) Characteristics of Disease in Elderly Patient. There are many kinds of chronic diseases in elderly patients, many adverse reactions caused by cross medication of the same system or secondary system disease, and interaction between multiple use of one drug or multiple drug at the same time. Therefore, clinical nursing requires nurses to be able to master the differences and connections of clinical application, medication guidance, adverse reaction of drug treatment, medication precaution and patient education as well as the other skills.

(3) Socialization Characteristics of Elderly Patient. The drug treatment and nursing of elderly patient is affected by the patient's past history, living habits, education level, personal or family income, occupation and so on. It should be combined with the socialization level of the patient, then the scientific and reasonable treatment plan can be formulated, the compliance of patient can be improved, and the therapeutic effect of drug can be brought into full play [4]. Therefore, we should add the evaluation of the elderly patient's correct drug use level in the content of patient education; encouraging patients or their families to develop medication lists and equip with drug kits; according to Beers Standard, we should increase the content of discharge education on medication nursing. For the elderly nursing direction, medication nursing course should also increase the content of the influence of the elderly patient's own anatomical and physiological changes on pharmacodynamics and pharmacokinetics after the clinical application of drug for diseases of various systems.

3. RESEARCHING CONTENT

At present, the teaching materials of medication and nursing are for all students of higher vocational nursing specialty, and there is no special teaching materials for different directions. The future jobs of nursing students in the direction of elderly nursing and the patients they are facing are the elderly. Therefore, in the course construction of medication nursing, we should consider the clinical docking and clinical practical work. The author collected a large number of relevant literature in recent five years, according to the investigation of pharmacological knowledge demand in clinical nursing work [5], in the medication nursing teaching of senior vocational nursing direction, teachers should make clear the training objectives and responsibilities of nursing staff, and implement characteristic teaching according to the characteristics of nursing specialty. In theory teaching, teachers should not only introduce the above contents to students, but also elaborate the adverse reaction and prevention of drug, contraindication, drug interaction as well as how to implement drug monitoring [6]. Based on a large number of literature, the author reconstructed the knowledge of medication nursing for the elderly nursing direction of higher vocational nursing specialty, which can be divided into the following four parts:

Drug Treatment of Systemic Diseases: Pharmacological Effect and Medication Monitoring

1. Pharmacodynamics and pharmacokinetics of therapeutic drug.
2. Effect of anatomical and physiological change of various systems on pharmacodynamics and pharmacokinetics in elderly patient.
3. Medication guidance:
   a. Appropriate time for taking some drug.
   b. Proper use of dosage form.
   c. Calculation of dosage.
   d. Calculation of concentration and drop rate.
   e. Special tips for taking drug: effect of drinking water and diet on drug efficacy.

(2) Adverse Drug Reaction

1. Side effect of drug.
2. Drug interaction:
   a. Incompatibility of drug.
   b. Interaction between pharmacodynamics and pharmacokinetics of drug.
3. Medication Precaution

1. Observation and monitoring of mental state of patient after medication.
2. Observation and monitoring of adverse drug reaction.
3. Monitoring of drug interaction.

(4) Patient and Caregiver Education

1. Disease knowledge education and observation of side effect of drugs.
2. Evaluation of drug use level in the elderly.
3. Patient's daily life precaution items: acute attack of self medication technology, diet, resting and exercising taboo. Based on the particularity of the elderly nursing service object and the needs of clinical practice, it is imperative to reconstruct the knowledge content of medication nursing textbook. Taking the opportunity of promoting the 1+X elderly nursing vocational skills project of the Ministry of Education to meet the needs of cultivating practical skills talents of professional elderly nursing direction. Taking the specific clinical medical cases as the task carrier, the contents of teaching materials should be reconstructed, and the curriculum system of elderly nursing pharmacology focusing on systematic overall nursing ability should be constructed, so that the teaching content can be optimized [7]. The compilation of teaching materials can promote the teaching reform: according to the training goal of high skilled applied talents, the curriculum system and teaching content are the key and
difficult points in the teaching reform. The deepening of teaching reform inevitably requires the updating of teaching content and the progress of teaching methods and means, which requires the construction of teaching materials to adapt to this change and the construction of the corresponding teaching materials.[8]

4. CONCLUSION

Based on the goal orientation of vocational education and ability standard, the content of medication nursing textbook for the elderly nursing direction of vocational nursing should start from the reality of clinical nursing work, solving the problem of scientificity of textbook, pertinence and practicability of the teaching materials. It is necessary to highlight the clinical application of each system of therapeutic drug, the difference and connection between pharmacodynamics and pharmacokinetics, the indications of drug, the time and route of administration, the appropriate time for taking drug, the correct use of dosage form, the formulation of solvent for injection, the calculation method of dilution solvent and concentration, the speed of intravenous drip, the stability of infusion drug and the incompatibility of drug related theoretical knowledge, but also highlight the medication precautions and patient and caregiver education, medication considerations include: observation and monitoring of patient mental state after medication; drug adverse reaction monitoring; drug interaction monitoring. The education of patients and caregivers includes: disease knowledge education, observation and treatment of drug side effects; items needing attention in patients' daily life: self medication technology of acute attack, taboo of diet, rest and exercise and so on. Therefore, the textbook is not only a textbook highlighting "medication nursing", but also a reference book in clinical practice. The content of the teaching materials should be integrated into the content based on the clinical drug application of each system disease, the monitoring of adverse drug reaction, the precaution of medication, the education of patients and caregivers, so as to further optimize the content of each part according to the needs of clinical nursing work. Among them, the interaction of drug in clinical application, adverse drug reaction, incompatibility, contents and skills of nursing education should be the theoretical guidance necessary for clinical practice, especially for nurses, who should master them skillfully, observe and report in time, so as to reduce the occurrence of drug-induced adverse events in hospital. Therefore, these contents should be emphasized in the teaching materials during the period of teaching.

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