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CONSIDERATION AND EXPLORATION ON IMPROVING CLINICAL ABILITY OF TCM POSTGRADUATE STUDENTS

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Abstract: Objective: Theoretical study on how to improve the clinical ability of TCM postgraduate students. Methods: The first one is to raise teacher quality, enrich curriculum system, perfect assessment mechanism and optimizate education resource. And the second one is to improve the clinical practice ability, scientific research ability and develop good medical professionalism. Results: Through standardizing the management system and enhancing the practical ability two ways to improve clinical ability. Conclusion: Only in this way, can we build the postgraduate education quality assurance system which is suitable for students' development and improve the clinical ability of TCM Postgraduate Students effectively.

Key words: clinical TCM, postgraduate, management system, clinical ability

TCM is an applied science which is used for therapeutic purposes and known to experience medicine. In this paper, TCM clinical postgraduate education is regarded as a system composed of many elements and analyse the existing problems in the elements.

1.The current analysis on the research quality of TCM clinical postgraduate students:

After the investigation and analysis on the quality of postgraduate students in the university of TCM, finding that the clinical students generally have solid basic skills and Chinesesolid theoretical foundation, solid basic skills and basic theory of TCM. But the ability to combine TCM theory and practice is a little poor and could not apply the professional knowledge to diagnose and treat disease.

1.1 Ignoring the ideological and moral education is the first factor that influences the research quality of TCM clinical postgraduate students.

1.2 Curriculum system setting is unreasonable,teaching material and methods are boring and postraduate students lack of practical experience is the second factor that influences the research quality of TCM clinical postgraduate students.

1.3 Colleges and teachers are lack of understanding and recognition to the postgraduate training mode,excessively emphasze on the importance of the paper, which make the postgraduate students pay more attention to the foundation experiment than the clinical practice.

1.4 Clinical Division is refined step by step,the clinical direction of postgraduate students are clear and definite, so that it is quiet difficult to take time for other professional practice.

1.5 The specialty of medical education and the imperfect of medical legislations and regulations which make postgraduate students get little opportunities to do clinical practice.

2.The measures to improve the research quality of TCM clinical postgraduate students

Postgraduate medical education aim at training the application and the clinical type of medical talents and improving the clinical skills as the core. Now in view of the present situation that more and more postgraduate students' clinical ability is poor, author applys some solutions .

2.1 Standardize the management system

2.1.1 To improve the teaching quality of postgraduate students and attach great importance to the teachers.High quality teacher team is a guarantee for the postgraduate students to improve the capablity of postgraduate teaching. First of all, the tutors have good medical ethics,surefooted working styles and solid professional proficiency.

2.1.2 To reform and enrich the curriculum system setting of postgraduate students.Curriculum system setting and content is quiet important for improving the postgraduate students clinical skills. The curriculum system setting should be based on the cultivation of practical skills, consolidate the foundation theory and broaden knowledge as supplement.

2.1.3 To strong the postgraduate examination mechanism of postgraduate students and optimizate the training conditions. Liu Zhengxin[1] puts forward to evaluate the postgraduate clinical ablity by stage assessment scheme.

2.1.4 To establish a national TCM clinical research base and optimize educational resources.

The poor clinical ability of postgraduate students is related to the limitations of the clinical practice scope and the particularity of medical education.

2.2 Enhance the capacity of postgraduate clinical practice

2.2.1 To Practice education and focus on cultivating the ability of postgraduate students in clinical practice. Improving the postgraduate students' clinical practice ability is the most direct and effective method to solve the poor clinical ability. Asking students to proficiently apply professional knowledge and clinical skills to the medical research and the disease diagnosis, treatment and prevention. Getting the ablity to differentiate and prescribe independently.

2.2.2 To imporve the medical ability by scientific research and pay more attention to the cultivation of clinical postgraduate student scientific research ability. The relationship between scientific research and clinical practice is not contradictory, but complementary. The cultivation of clinical scientific research ability is the bridge for postgraduate students to realize scientific research and clinical practice tight binding.

2.2.3 Goodness first and give priority to the good medical professionalism. Medical and health services is noble. The postgraduate students must have a good professional ethics and professional excellence. For futher training postgraduate medical professionalism, universities should organize and carry out ideological andtheoretical course.

In short, many factors may influence the research quality of TCM clinical postgraduate students. This paper just selectively talk about the experience of author and research the appropriate measures to improve the research quality of postgraduate students from different aspects.

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PRELIMINARY SCREENING AND IDENTIFICATION OF THE ABSORBED BIOACTIVE COMPONENTS AND METABOLITES IN RAT PLASMA AFTER ORAL ADMINISTRATION OF GUIZHI FULING WAN USING UPLC-ESI-Q-TOF-MS

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Abstract Objective: Traditional Chinese medicine(TCM) plays an irreplaceable role in healthcare-focused medical system[1]. The therapeutic effects of traditional Chinese medicine (TCM) are mainly due to their synergistic effects of its multiple constituents[2]. Therefore, characterization of constituents may be equally significant for understanding the pharmacological foundation. Guizhi Fuling Wan (GFW), as one of well-known classical prescription containing five herbs, namely Cassia twig, Poria cocos, Cortex moutan, Peach kernel, and Radix paeoniae rubra, is widely used to treat gynecological diseases and remove blood stasis for thousands of years [3]. On the basis of previous research, the pupose is to further study the absorbed bioactive components and metabolites from GFW.

Methods: In this study, a rapid and sensitive analysis method of UPLC-ESI-Q-TOF-MS with automated MetaboLynx analysis software were established to characterize the absorbed bioactive components and metabolites in rats after oral administration of GFW, simultaneously. The analysis process was implemented on a Waters UPLCTM HSS T3 (2.1 × 100 mm, 1.8 um) using gradient elution system. Combined MS/MS fragmentation behavior with retention time to promote the structural identification of the constituents.

Results: With optimized conditions, a total of 62 constituents were identified in vivo after oral administration of GFW (41 prototype constituents and 21 metabolites).,41 compoounds were absorbed into rat plasma in prototype identified as peaoniflorin , Oxypaeoniflorin, (+)-Catechin , gallic acid, paeonol , mudanoside B , Ellagic acid , etc. The compounds absorbed into rat plasma were further metabolized by various drug metabolizing enzymes. These metabolic reactions mainly include phase Ⅱ reactions whichoccurred by conjugation with molecule (glucuronic acid, amino acid, methyl, etc.) to form conjugated metabolites. In this study, a total of 21 conjugated metabolites were tentatively identified, including demethylated metabolites of paeonol and Oxypaeoniflorin, catechin glucoside, Cinnamic acid glucoside, etc. Related pharmacological studies have shown that peaoniflorin mainly possessed analgesic, anti-inflammatory, anticancer, immunomodulatory, and hematopoietic effects[4,5]. Furthermore, both gallic acid and catechin could inhibit the growth of cancer cell, and cancer therapy of in clinic[6-7].

Conclusions: This work demonstrated that feasible and integrative UPLC-ESI-MS approach coupled with reliable MetaboLynx analysis platform can elucidate structural features of bioactive components and metabolites from GFW rapidly. This constituents might be the potential active constituents in vivo. Based on these results, this identification and structural elucidation of the chemical constituents may provide useful information for further clinical application and mechanism studies of GFW.