

Exploration and Practice of Implicit Ideological and Political Education in Medicinal Chemistry Course

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Abstract: The thesis combines ideological and political work with professional class education. Based on the Medicinal Chemistry course, this article aims at strengthening teachers' self-construction, incorporating hidden ideological and political elements, improving teaching methods, cultivating students' patriotism, and enabling students to have good professional quality, physical quality, psychological quality, outstanding social adaptability, at the same time expanding their horizons and improving their judgment in the field of industry, to cultivate modern talents with strong pharmacy-related professional qualities, high sense of responsibility and high quality.

Keywords: Implicit Ideological and Political Education; Medicinal Chemistry; Practice

At the current stage of undergraduate teaching in universities, ideological and political theory courses are mainly concentrated in the first two academic years, while in the third and fourth academic years, students mainly study professional courses^[1]. From the perspective of students, improving professional skills can increase their employment rate, but it ignores the important role of ideological and political learning and self-improvement in work. For the ideological and political theory teachers, school party and government cadres, counselors and other specialized ideological and political education practitioners, the professional teachers' relevant consciousness is relatively weak, which limits their joint responsibility for ideological and political education^[2].

Having Worked for the course of Medicinal Chemistry for many years, the author has continuously explored the incorporation of invisible ideological and political education in the course, effectively and integrated the teaching of professional courses with the ideological and political education of students, to cultivate high-quality modern talents with strong pharmacy-related professional qualities and high sense of responsibility^[3].

1. Dedication for the teaching occupation, strengthen teachers' self-construction

1.1 Good ethics and morals are the basic conditions for teaching

Ethics is the premise of teachers. Teachers' words and deeds will have an important impact on students. In the teaching process, teachers must strengthen their ideological and political learning, improve moral quality and cultural literacy, maintain a full work enthusiasm, a positive attitude, and correct and objective language guidance to achieve the purpose of teaching and educating people. For example, the life stories of Yu Jiayan, a famous medical doctor in the Qing Dynasty. After experiencing dynasty changes, he practiced Buddhism, avoided the world, and returned to lectures, pioneering the teaching of Chinese medicine classrooms, and trained a large number of Chinese medicine workers. Teacher style has had a profound impact on students' lives, emphasizing that noble professional qualities are essential in the specialty industry of medicine.

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1.2 Keep pace with the times and continuous learning is the basic quality of teachers

The pharmaceutical industry is developing rapidly, and teachers of pharmacy courses must also follow the development trend of the industry to update education concepts and explore teaching reform. Through the study of pharmacology, bio-medicine and other related knowledge, it is possible to improve the understanding of the knowledge of the medicinal chemistry classes, and at the same time integrate the latest research progress of the pharmaceutical industry and drug development trends to trigger student discussions, make students realize that the learning is endless, and allow them to feel the charm of professional courses and the positive atmosphere of learning together.

2. Seek the origin and cultivating students' patriotism

Science knows no borders. Only scientists have nationalities. So that cultivating students' patriotism is an essential part of university education.

2.1 Take the history of Chinese medicine as a line to strengthen the advantages and characteristics of traditional medicine in the motherland

In the lecture on local anesthetics, we should expand the history of the development of western anesthetics, and compare Hua Tuo's "Mafeisan" to highlight the historical fact that our country has led the anesthetics for more than 1,600 years. In the drug part of the digestive system, the action mechanism of H₂ receptor antagonists and proton pump inhibitors should be used as an entry point to incorporate compound traditional Chinese medicine elements, such as Dongyuan Li's "Buzhong Yiqi Pill" and Xiyong Miao's "Zisheng Pill" To improve students' correct understanding of the traditional Chinese medicine theory of the motherland and enhance their sense of honor of the motherland.

2.2 Use drug metabolism and resource events as the start point to stimulate students' sense of mission

In the antibiotics section, discussing the problem of antibiotic abuse is not a personal issue, but is closely related to the health of all people. Combined with the standardized management of antibiotics by the country, it can stimulate a sense of professional missions for students. In the anti-cancer drug paclitaxel, through the case of *Taxus Chinensis* in Lijiang, Yunnan in the 1990s, students were motivated to be work hard. Stronger young people make the country stronger, who are the hope of China and should shoulder historical responsibilities.

2.3 Take the development trend of modern medicine in our country as a clue to increase national pride

In the introductory part, based on the research achievements in the field of modern medicine in China, the independent intellectual property rights medicines such as "butylphthalide", "schizandrin", "oral recombinant helicobacter pylori vaccine", etc. should be strengthened. Teachers should train students to think independently about the development trend of China's pharmaceutical industry and enhance national pride by discussing the "Ten major events to happen in China's pharmaceutical market in 2018".

3. Take responsibility and cultivate good professional quality

Good professional quality is the fundamental guarantee for engaging in the pharmaceutical industry.

3.1 Taking the nature of medicine as the basic point, the basic knowledge of radiation medicine is an important guarantee for engaging in pharmaceutical-related industries

There are many types of medicines in the medicinal chemistry course. By unifying the classification and refining the common structural characteristics of medicines, it helps students to derive the nature and application characteristics of medicines through the structure. In the section of antipyretic analgesics and non-steroidal anti-inflammatory drugs, a list of commonly used clinical cold medicines is compared to arouse students' intuitive awareness of the composition principles of compound cold medicines to prevent excessive use of antipyretic analgesics.

3.2 With the mechanism of action as the core, correctly understand the nature of the drug and cultivate a safe medication awareness

Through learning the discovery history of sulfonamides and the development of the US FDA, students' legal concepts, social responsibility awareness, environmental protection awareness and drug safety awareness are enhanced. In the part of the central nervous system drugs, taking the mechanism of drug action as an entry point, introducing different amounts of sedative hypnotic drugs, exerting different characteristics of drug efficacy, and the dependence problem of analgesics drugs can lay a solid foundation for future industry.

4. Self-management to cultivate social adaptability

Guiding students to establish good living habits, strict self-management capabilities, and excellent moral qualities is essential.

4.1 Care for oneself and fostering a healthy lifestyle for students

Through the pattern of common diseases of the circulatory system and the correlation between digestive system diseases and emotions, the teacher should clarify the characteristics and limitations of the application of western medicine in the treatment of diseases, so that students can clearly realize that maintaining a balanced diet, actively doing exercise, and strengthening communication between students, and cultivating good physical and psychological qualities, are the basic conditions for better adapting to the needs of the job.

4.2 Respect others and cultivate good moral qualities of students

In the teaching process, teachers should pay attention to personalized training, respect each student, encourage students with positive language, and emphasize that respecting others in work is an important quality that must be possessed. In the antibiotics section, the streptomycin discovery process was used as the starting point to explain the disputes between the discoverers and students about the Nobel Prize, trigger a correct understanding of the ownership of academic achievements, train students to respect teachers and teaching, respect the achievements of others, and better handle the relationship between gain and loss.

4.3 Cultivate students' collectivism through teamwork

The ability of harmonious teamwork is a basic quality necessary for contemporary college students. The discovery of penicillin reminds us of the classic statement of Fleming and Florey: "My only credit is not ignoring observation", "Cooperation between chemists and experts with biological training or biological knowledge is very critical. ". The part about the antimalarial drug artemisinin fully embodies the special historical period of the 1960s and 1970s in China, and the nationwide large-scale cooperation has achieved outstanding results in the shortest time and strengthened the efficiency of teamwork.

5. Broaden horizons and define drug development trends from an international perspective

Overall viewpoints, comprehensive analysis of the current pharmaceutical industry situation, and accurate judgments are the necessary professional qualities of pharmaceutical industry practitioners in the new era.

5.1 Train students to view the development trend of international medicine from a holistic perspective

In the introduction part, teachers can show the top 50 companies in the international ranking in the form of tables, explain the types of drugs with annual sales of more than 4 billion US dollars, guide students to analyze, think deeply, adjust the overall thinking of the world's pharmaceutical industry, and expand students' horizon to establish a good comprehensive analytic literacy for students.

5.2 Cultivate students' ability to analyze and judge the development of China's pharmaceutical industry

By instructing students to independently consult materials, teachers can summarize the development of the German pharmaceutical industry and the post-war reconstruction in the classroom, the rise of the US pharmaceutical industry, and the advantages and characteristics of Japanese Hanfang Medicine, to achieve good learning results. The students then summarize the characteristics of the development of medicine in the three countries, and used their own understanding to extract the reference to the development of China's medicine, which not only enabled students to understand the frontiers and development trends of the pharmaceutical industry, broadened their horizons, but also exercised the students' forward-looking abilities of macro-decisions.

Ideological and political education is not an additional teaching activity, which is attached to the teaching process, but a new educational teaching concept integrated within the system education teaching process. It is an important subject for our educators to explore and practice for a long time. Only by paying attention to the ideological education of students and improving the quality of students can we cultivate talents with sound personalities and high quality.

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