

# Research on the Medical Representative Against the Context of China's New Medical Reform

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**Abstract.** The medical representative has been controversial in China since it appears, and it has become an important part of China's new medical reform. Since the medical representative was officially classified as an occupational category in the revision of the Standard Occupational Classification, the definition, content, and norms of the medical representative profession have been gradually clarified. This paper first reviews the definition, function and professional norms of medical representative both at home and abroad, and thereby makes a comparison between domestic and foreign development. Secondly, based on the interview of the employees from M Company and the method of participant observation, this paper applies the approach of case study to analyze the opinions of the medical representatives about the definition, content, and plan of their own profession before and after the new medical reform. In the last section, this paper puts forward some relevant suggestions on the development and standardization of the medical representative profession, providing a reference for the pharmaceutical industry to strengthen the construction of the medical representative team.

**Keywords:** Medical representative, new medical reform, pharmaceutical industry.

## 1. Introduction

According to statistics, 73% of the information about new drugs received by the American clinicians is from the dissemination and explanation of medical representatives. At the same time, more than 90% of the adverse drug reaction reports, received by the FDA, are collected from medical representatives and pharmaceutical enterprises (1). It can be seen that medical representatives play a crucial role in powerful countries with advanced medical system and health care as well as mature drug sales system. In China, Shanghai Squibb Pharmaceutical Co., Ltd. introduced the first batch of medical representatives in 1988. In 2013, GlaxoSmithKline was trapped in the bribery scandal. Although the medical representatives are of great significance to the pharmaceutical industry and spread their influences widely, they are always pushed to the cusp of public opinion.

In recent years, in order to make medical care more affordable and accessible, the government intensifies efforts to rectify the pharmaceutical industry, especially in medical representatives, such as the introduction of the two-invoice system and the medical representative filing system. The government constantly standardizes and strengthens the work content and responsibilities of medical representatives, and clarifies the bottom line, aiming to guide medical representatives to focus on the dissemination and feedback of medical knowledge and drug information instead of selling drugs. With the method of literature review, interview, and field observation, this paper explores the situation and changes of the medical representatives from M Company and finds out the dilemma they are trapped in as well as the lack of correct guidance for the public opinion. This paper also sorts out the causes and effects of changes in career orientation of medical representatives before and after medical reform. In the last section, this paper provides some relevant suggestions on the development and regulation of the medical representative profession, and reference for the pharmaceutical industry to strengthen the construction of the medical representative team.

## 2. Literature Review

This paper reviews the development of medical representatives both at home and abroad, and analyzes the changes in the work contents and related regulations of the medical representatives before and after the new medical reform.

### 2.1 The Characteristics of the Medical Representative Abroad

The profession of medical representative originated in Europe at the beginning of the 20th century. Since doctors were not familiar with the drugs they used very well, the specialists with medical and clinical professional training were hired to teach the use of drugs to doctors, which is the prototype of the medical representative. According to International Federation of Pharmaceutical Manufacturers Associations Medical Representative Charter, Medical Representative is defined as a business staff of pharmaceutical enterprises, who is on behalf of the enterprise and responsible to contact with medical personnel, provide relevant information about the quality, effectiveness and safety of drugs, as well as collect and disseminate information (2). After years of continuous improvement and development, the career orientation of medical representatives become very clear, and the management is standardized and relatively strict. In addition, a thorough supervision and restraint mechanism is established, demonstrating four main features. The first one is the relatively strict restriction on access and comprehensive pre-job training. With the rapid development of the pharmaceutical industry in Europe and the United States, the access threshold of the medical representatives has been raised, requiring the applicants to have fairly comprehensive quality. In the UK, medical representatives are required to pass the test of medical representatives held by the Association of the British Pharmaceutical Industry (ABPI) in the first two years of their career, aiming to improve the professional quality of medical representatives and regulate the training provided by pharmaceutical enterprises for their enterprise representatives (3). In America, in order to ensure the high level of the overall medical representative team, a 5-week rigorous training is conducted to assess the quality of the representatives, and eliminate unqualified candidates. The training content is also very comprehensive, including product and professional knowledge, sales strategy, customer service and corporate culture (4). Secondly, the work content is more academic. The medical representatives are responsible for brand promotion which is based on academic education of medical concept and academic activities held by academic societies and associations. They will also establish some neutral academic platforms so as to help doctors to master new knowledge and ideas. These platforms take doctors' advice as the priority and guarantee free discussion among doctors and the neutrality of the academic activities. Thirdly, the legal and regulatory system is relatively advanced. In foreign countries, strict regulations are formed for the registration system of medical representatives. For example, the Registration Law of Medical Representatives has passed by the Massachusetts senator of the United States as early as in 2006, which legally prohibits all practices that interfere with doctors' conventional prescriptions. At the same time, the daily work of medical representatives is also supervised under the law (4). Besides, under the AMA guidelines, enterprises cannot pay for travel, accommodation, and other personal expenses while doctors are away at conferences, and the gifts that enterprises give to doctors must be beneficial to patients and not too expensive (5). Additionally, in Europe, a new medical representative charter was introduced by CEPS and LEEM on December 22, 2004, regulating visits by medical representatives. The charter specifies the ethical norms, behavior control, and mission of medical representatives, and clarifies the quality of the information provided by them. To be specific, medical representatives are prohibited to provide samples and gifts to doctors. They should take part in long-term pre-job training and on-the-job training to guarantee the quality of information. At the same time, the date should be included in the information they provide (6). Fourthly, reward and punishment mechanism is more effective. In 2009, the US government imposed a fine of US\$2.3 billion on Pfizer, the world's largest pharmaceutical enterprise, on the grounds of illegal marketing. In 2011, Johnson & Johnson was prosecuted for bribery and kickbacks in exchange for a contract for the sale of drugs in many countries and was required to pay a fine of 70 million US dollars (8).

In sum, the work of medical representatives in foreign countries is mainly based on academic sharing, with a high threshold of entry. More comprehensive training mechanism, strict regulations, and punitive measures are also the main features, which guides the healthy development of the medical representative profession.

## **2.2 A Review on Medical Representative Profession in China**

For China, the profession of the medical representative is an “imported good”, and has experienced a tortuous development history with the changes and development of the pharmaceutical industry in China. This paper has carried out an in-depth discussion on the changes of the definition and functions of medical representatives in China, and thereby proposed the factors affecting the survival and development of medical representatives, as well as the value of medical representatives after the new medical reform. In terms of the career orientation of medical representatives, according to the “Medical Representation Code of Conduct (Discussion Draft)” issued by the China Chemical Pharmaceutical Industry Association, the main duty of medical representatives is advocating scientific promotion and assisting rational drug use (9). In the 2015 edition of the “Standard Occupational Classification of the People's Republic of China”, the medical representative was included as a profession and defined as a professional who is on behalf of pharmaceutical manufacturers and responsible for the dissemination, communication, and feedback of drug information (10). As for the definition, the career orientation position and responsibilities of medical representatives in China is gradually clear and specific. At the same time, the work of medical representatives is more professional rather than only in charge of selling drugs, which distinguishes from normal sales work. In the initial step, medical representatives in China were introduced in foreign enterprises. Due to the strict regulations, they had a positive impact. In the middle step, their work was sales-oriented and the assessment was single. Medical representatives sold drugs through internal relationship and social network, leading to severe competition. Now, with relevant laws and regulations of China's pharmaceutical industry and the implementation of new medical reforms, commercial bribery and sales commission have been explicitly prohibited. It can be seen that the profession of medical representatives has been further improved and standardized. As shown in Table 1, the work of medical representatives in China should change from a commercial promotion model to a professional academic promotion model. In this way, medical representatives can better play a positive role in promoting rational drug use, improving medical personnel's knowledge of relevant drugs, and advancing the economic development of pharmaceutical enterprises.

Han Yang (2009) put forward the inevitability of the existence of medical representatives due to the essential properties and market characteristics of drugs and the classification and management system of drugs. However, before the new medical reform, in the macro-environment, the economic level was relatively backward. In terms of the industry structure, the profits of hospitals mainly depended on the sales of medicines. Additionally, the competition between pharmaceutical enterprises was fierce, and the laws and regulations were imperfect. In the micro-level, medical representatives worked under the high pressure, irregular career development and great mobility. Due to these reasons, the development of the profession of medical representative was abnormal, and the original clear career orientation, functions, and values were also distorted.

Based on the review of both the domestic and foreign development of the medical representative, it can be seen that as for China, the integrity of the foreign medical system and the perfection of laws and regulations are worth learning.

Table 1. Comparison between professional academic promotion model and commercial promotion model

	Professional academic promotion	Commercial promotion model
Promotion concept	Evidence-based marketing	Relationship marketing
Product	Prescription drugs, especially high-tech, patented and original drugs	Generic prescription drugs with low-end competition
Enterprise property	Large and medium pharmaceutical manufacturing and trading enterprise	Generic drug enterprise with incomplete primary accumulation or drug agent
Requirements for promotion personnel	Medicine and pharmacy major, high quality	Interpersonal connection
Promotion method	Giving full play to the functional value of the product and delivering the latest professional information to doctors based on clinical experimental data	Commission-based marketing
Core advantage	Product performance, quality, brand	Material input ratio
Effects on consumers	Increasing the efficacy and decreasing the adverse reactions	The source of expensive and fake drugs
Sociological significance	Positive	Negative
Current market situation	International recognition and domestic admiration	Increasingly intensified crackdown and governance on it; living space narrowing down

Source: Study of the Present Situation of Medical Representative in China Han Yang Heilongjiang University of Chinese Medicine.

### 3. Research Methods and Results

In order to further study the changes of the profession of medical representatives before and after the new medical reform, and put forward suggestions conducive to the healthy development of the medical representative industry and relevant plans beneficial to medical representatives, this paper selects M Company, a leading enterprise in the industry, as the sample to study medical representatives. Based on the method of field observation and interviews of 5 oncology representatives, including two regional managers and three senior representatives, this paper investigates the changes before and after medical reform from three perspectives: living environment, working content, career planning. In order to ensure independence and authenticity, and comprehensiveness of the results, this paper applies single-blind interview, interviews, combining with the author's internship experience.

#### 3.1 Introduction to the M Company

M Company is a global leader in the medical industry, providing innovative medical solutions and services to more than 140 countries with prescription drugs, vaccines, biological drugs, and animal health products. China is a crucial part of M Company's global growth strategy. It is headquartered

in Shanghai and has established a Chinese R&D center in Beijing, achieving the integration of R&D, manufacturing and business operation in China. Since its entry into China, M Company has introduced 47 products approved by the State Food and Drug Administration of China (as of July 2013), covering 11 fields including cardiovascular, orthopedics, pain, skin, respiratory, anti-infection, specialty, male health, female health, diabetes, and vaccines. Its medical representative recruitment system and staff training system are recognized as models in the industry. It is also widely recognized for staff quality, academic and professional reputation. Meanwhile, the influence of the company brand on the decisions made by medical staff is also above the average level of the industry. Under the new medical reform policy, M Company adheres to the principle of "compliance wins and compliance helps win", and actively adapts to the changes in the industry environment to further promote the compliance policy, maintaining steady and continuous growth in China. To sum up, M Company is a typical representative in terms of enterprise strength, staff quality, business-coverage, industry regulation, and other perspectives. Taking M Company as the research object, this study is of forward-looking significance and can be used as a reference for relevant researches on the career orientation and development trend of medical representatives under the implementation of the new medical reform policy.

### 3.2 Research Process and Results

The outline of the interview is illustrated in Figure 1, covering personal information of interviewees, the changes in working environment and job change before and after the medical reform.

The interview results are as follows. First, among the five interviewees, two have worked for more than 10 years, two have worked for 5-10 years, and one has worked for 1-5 years. It can be seen that the interviewees have been in contact with the profession of medical representative for a long time. Second, the major of one interviewee is marketing, while the other four are related to medicine, which matches the work of medical representatives to some extent. Thirdly, three interviewees changed their job to medical representatives from other industries and positions, and two people have been working as medical representatives. The reason why they choose this industry and this job is that the development prospect of the pharmaceutical industry is optimistic and they want to seize the opportunity.

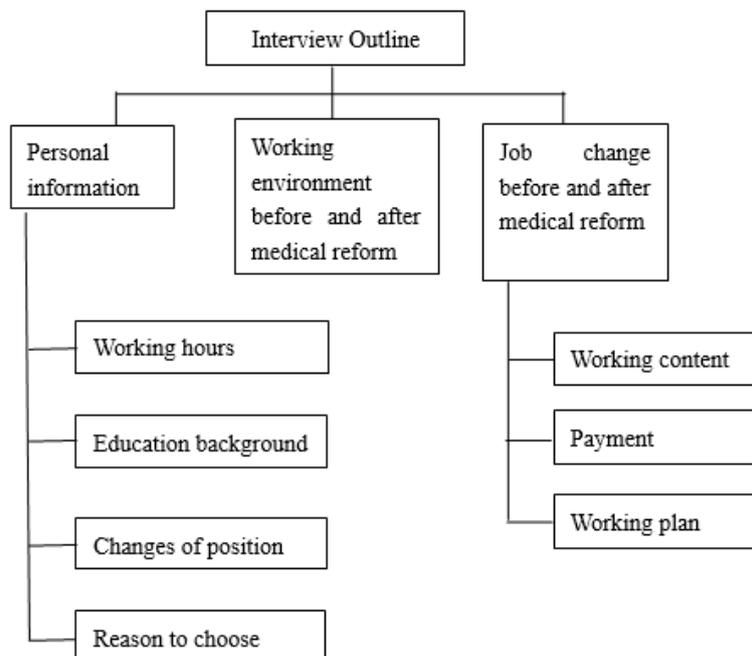


Figure 1. Interview Outline of the Changes before and after the Medical Reform

When it comes to changes in this industry, all five interviewees think that the overall situation is becoming stricter, and inspections of enterprises and individuals are becoming more and more intensive. Many foreign enterprises have accelerated mergers and acquisitions, which brings great

pressure to domestic pharmaceutical enterprises and may lead to the risk of layoff of medical representatives. However, for compliance enterprises, this reform is beneficial because the reform decreases the sales function of medical representatives and enhances their service functions.

What's more, personal job change demonstrates four main features. First of all, the work content is more professional in medicine, and requires continuous learning of professional knowledge to better provide medical information and technical services. Secondly, the pressure at work increases, featuring more spot checks, unannounced inspection, and more materials to be delivered for inspection. Thirdly, the basic salary is increased and the bonus is reduced, while the performance index is basically the same or slightly higher than that of before the medical reform. The payment is also related to the length of service, so the pressure on the new medical representatives is very great. Fourthly, for future career planning, interviewees tend to stay in the pharmaceutical industry. Generally, those interviewees with shorter service time will follow a similar career path—from an average representative, a senior representative, a regional manager to a director of sales, while those with long-time service plan to work at medicine department and engage in the work with higher academic requirements and less stressful hard targets.

Through the interview with the medical representatives of M Company, it can be seen that the establishment of the medical representative team of M Company is relatively healthy and stable, and is slightly influenced by the medical reform. The medical representatives also have relatively clear career plans for the future. Therefore, the management and training of medical representatives in M Company can be applied as the reference for some pharmaceutical enterprises in China.

#### **4. Questions and Suggestions**

Through research, it is found that even after the new medical reform, medical representatives still face great pressure on performance in practical work, and have to deal with various inspections, which increases the pressure and difficulty of survival in this industry. The positioning of "drug dealer" before the medical reform makes people have a bias against medical representatives. From the sense of honor and value, this industry is not attractive. For enterprises, how to set reasonable salary and performance assessment, and how to guide the health and stability of medical representative teams are also problems to be solved.

This paper argues that it needs the joint efforts of the government, enterprises and medical representatives to create a good living situation for the pharmaceutical industry, and build a healthy and positive image of medical representatives. First of all, the government should further improve the legislative supervision mechanism and the administrative level, and steadily promote the smooth progress of medical reform. The government can also learn from foreign countries to improve legislation, enhance the registration system of pharmaceutical agents, strictly control the qualification of practitioners, and incorporate medical representatives into the professional and standardized management. In addition, the corresponding reward and punishment mechanism should be established to improve management efficiency by means of legal supervision. At the same time, China should promote the reform of public hospitals by increasing investment in health care, adjusting the pricing of medical services, and improving the pricing system of drugs, so as to create a good environment for medical representatives. For domestic pharmaceutical enterprises, they need to cultivate their own core competitiveness through continuous innovation, research and increased investment in drug R&D, rather than simply imitating the production of foreign drugs. Such core competitiveness, rather than the rough marketing model, is the foundation of the enterprise. They can learn from foreign pharmaceutical enterprises like M Company to improve the admittance to the medical representative, introduce a comprehensive training mechanism, formulate the Drug Promotion Code of Conduct to regulate the behavior of representatives in the process of management, and set up the compliance department to supervise medical representatives to obey the code of conduct. By doing so, the brand image can be created, and the best benefits can be obtained. China's pharmaceutical enterprises should strictly check the recruitment process, raise higher requirements on professional knowledge, professional skills, and familiarity with laws and regulations, and

seriously implement the practice certification and filing system to improve the access threshold of medical representatives. They should also improve the staff training from the aspects of professional quality, professional ethics, and future career planning in order to comprehensively improve staff quality. Meanwhile, a reasonable and effective supervision mechanism should be established to grasp the working situation of medical representatives by strengthening administrative management and standardizing the behavior of medical representatives. What's more, the role scientific incentive mechanism should be fully played to improve work efficiency, and positively restrain work behavior. As for medical representatives, they should accurately realize the career orientation, change their mind and working methods, and create a new professional image. To be specific, they should promote professional and academic information of drugs so as to benefit doctors and patients. They should strengthen the ability to withstand pressure, and hold a positive attitude to cope with changes in the industry's development. The most fundamental thing is to improve professional ethics and professional skills to foster the healthy development of medical and health services.

## 5. Conclusion

As a bridge connecting medical institutions, doctors, pharmaceutical companies and patients, medical representatives are necessary for doctors to acquire the latest drug knowledge, promote the development of pharmaceutical companies and meet the needs of people related to medical and health care. Through scientific and rational academic promotion activities carried out by medical representatives, the safety and effectiveness of drugs can be disseminated. With this help, doctors can use drugs rationally. Based on the timely collection of adverse drug reaction information and feedback, manufacturers can accelerate the update and progress of drug research and development. By understanding the clinical needs of doctors and patients and providing scientific and useful pharmaceutical care in time, medical representatives build a smooth channel for doctors to obtain and update important drug information.

Some unreasonable behaviors of medical representatives do have a negative impact on the development of the industry. However, the professional value and existence rationality of this group should not be denied because of some illegal companies and representatives who threaten the medical order. The government needs to play a better regulatory role. Enterprises should more strictly implement the relevant provisions, improve the recruitment, training and planning system of their own medical representatives. Medical representatives should seriously abide by the laws and regulations, and improve their professional quality. With such trinity efforts, medical representatives will have a bright future.

Due to the lack of previous relevant researches and limited sources of data, this paper cannot take into account all related perspectives. The selection of research methods is also limited by time and samples, so it cannot completely present objective and accurate results, which makes this paper has certain limitations.

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