How to Implement Pharmaceutical Care in the Curriculum? The Cuban Pharmacy Education Experiences

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SUMMARY. Pharmacy schools across Cuba have been charged to ensure their students are adequately skilled in the principles and practices of pharmaceutical care. Despite this mandate, a large percentage of students experience insufficient opportunities to practice the activities, tasks and processes essential to pharmaceutical care. This paper presents a point of view about how pharmaceutical care should be incorporated in the curricula for improving the confidence and skills of pharmacists responding to pharmaceutical care practice taking into consideration the ethical dimension of this concept. At the same time, some ideas about this topic are presented, taking as reference, the Cuban experience in pharmaceutical care education, supported in the worldwide recognition of the Cuban Higher Education.

INTRODUCTION

Cuba is a country of about 11 million inhabitants. In 1988, there were three universities where Pharmacy was taught in this country. The curricula include five years of regular course work. The programme includes six subjects practical experience at a pharmacy, with the assistance of an experienced pharmacist or faculty professor as tutor. There is also a final thesis, carried out at a pharmacy, hospital, research institute or in the pharmaceutical industry. The programme leads to a Bachelor of Science in Pharmacy degree. Recently the pharmaceutical care concept was introduced in to the curriculum however there is not a clear idea about this topic from the didactic point of view.

At present, how implement the pharmaceutical care in the curriculum is a question without answer in some countries around the world. This paper presents a point of view about how pharmaceutical care should be incorporated in the curricula for improving the confidence and skills of pharmacists responding to pharmaceutical care practice. At the same time, some ideas about this topic are presented, taking as reference, the Cuban experience in pharmaceutical care education, supported in the worldwide recognition of the Cuban Higher Education.

PHARMACEUTICAL CARE IN CUBA

The foundations of the Cuban educational model: public, free, and secular education and the professional, ideological, and cultural level of the graduates are indications of the success of the Cuban educational enterprise. The results of some studies on the professional performance of graduates and progress in the productive and service sectors, along with certain scientific developments, support the position that Cuba has a highly qualified and valuable labour and cultural potential ¹.

The theoretical contribution of this research lies in offering a didactic model to implement pharmaceutical care in to the curricula, the knowledge, abilities and professional values are considered as a system, to provide all the principles and practices components for the pharmaceutical care in the pharmacy curriculum.

KEY WORDS: Clinical pharmacy method, Curriculum, Pharmacy Education, Pharmaceutical Care, Social Pharmacy.

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Since the concept of Pharmaceutical Care was introduced from United States about twenty years ago, this initiative has become a dominant form of practice for thousands of pharmacists around the world. Currently, pharmaceutical care is understood as the pharmacists' compromise to obtain the maximum benefit from the pharmacological treatments of the patients, being therefore responsible of monitoring their pharmacotherapy. As the profession has moved from a product orientation (dispensing medications) to a patient focus, clinical training requirements have expanded. This is a slow but ongoing process, which started from a philosophical point of view, in order to transform the concept of Pharmacy from commodity-based, mercantile operations into a clinical profession in the community pharmacies ².

According to, the first important aspect is to understand pharmaceutical care as a philosophy, as a representation of a new professional pharmacy dimension. Pharmaceutical care is a generalist practice than can be applied in all setting: community, hospital, long-term care, and the clinic. It can be used to care for all types of patients with all types of diseases taking any type of drug therapy ³. In other words, from the pedagogical point of view: it is a professional way of performance.

Then, is not possible to implement pharmaceutical care in the curriculum, simply changing name matter related clinical pharmacy by pharmaceutical care. This concept must be understood as a process, with the communication as principal element. In first, the professional regularities linked to the clinical pharmacy practice are studied and defined as follows: a) establishing the pharmacist - patient relation to assess the needs related to the patient's drugs; b) solving the problems related to the pharmacotherapy received by the patient, as those problems might interfere with the achievement of the results desired; c) the follow - up for assessing the present results of the patient and prevent prospective patient's drug related problems.

According to, pharmaceutical care process has a logical expression, in the clinical pharmacy method. The clinical pharmacy method results to apply, the scientific method in the patient- drug relation management.

The phases of the clinical pharmaceutical method are: *the problem* (drug- related- problem), *searching the basic information* (question-naire, therapeutic relationship), the hypothesis (*warnings or potential drug – related – prob-*

lems), checking the hypothesis (*determining*, *preventing and solving the drug related problems*) ⁴.

During pharmaceutical care process all task are achieved to get as final result, an improvement of patient's quality of life. Across the process, the clinical pharmacy method is applied, and the dialectic relation problem - method is manifested. Therefore, knowledge, skills and professional values are contained in this relation, and is possible to determinate the most essential aspect to translates into the teaching process; the method comes to be part of this content 5. Taking into consideration the pharmaceutical care functions described by the student needs to be training to design, implement and monitoring a therapeutic plan, because pharmaceutical care requires theses activities to identify, resolve, and prevent drug related problems 6. Theses functions are basic knowledge in the process of pharmaceutical care teaching.

The scopes of knowledge needed to structuring the content of the curriculum should be determined by patient needs related to the diseases, drug treatment, expectation of treatment outcomes, physical and psychological patient's situation, because within this framework, the patient is central.

Pharmaceutical Care represents a new ethic dimension of the pharmacy as profession, and then is not difficult understand that this point of view needs to be translated into the curriculum. The pharmaceutical care practitioner provides direct patient care; therefore, the first responsibility is for the patient. Thus, *responsibility* is a quality that should be the focus of the ethical training of pharmacy student.

Being consistent with the consideration of pharmaceutical care as a philosophy of practice, a set of values that guides the behavior of the professional are contained in it; the philosophy of practice prescribes how a practitioner should practice on a daily basis. It is a rules the practitioner must follow to meet the standards of practice ³. According to, the content of pharmaceutical care programmes should consider professional values teaching inherent in this practice, such as: empathy, assertiveness, service spirit, willingness for communication, sensitiveness towards the patient, and must be incorporated into the student approach to the patient care.

These considerations were taken into account to implement pharmaceutical care in the Cuban pharmacy curricula, incorporating a discipline called Social Pharmacy. Because the Cuban education system has a comprehension that, the student should be educated to solve a social problem that is real in Cuba too, that is, the drug related problems.

The new discipline included three subjects: pharmacy services (includes community and hospital pharmacy, experiences in ambulatory, inpatient and managed care environment), management and special pharmacy services (includes pharmaceutical care practice) and ethic in pharmacy (includes marketing, knowledge of drug distribution, health care delivery system, ethical principles pertaining professional practice). Specifically, Management and special pharmacy services provide the basic concepts to be applied by the student in the internship of 120 hours at the end of the fourth year. At the same time, the teaching methods in a more problem basic format, an enrolment of student who are willing to actively assume responsibility for their own education, are applied.

At the beginning of the first course (subject) in the second year, the social pharmacy concept is discussed whit the objective to show the importance of this matter in the curricula, and the student has the opportunity to express opinions and perceptions about the social impact of the pharmacy profession. Questions about drug information, patient counseling, drug use, drug utilization, drugs related problem, compliance problems are analyzed, showing through practical experiences, the impact of pharmaceutical care practice on the practitioner and the patient care.

Nowadays, the Cuban pharmacy students are capable to speak about pharmaceutical care, and to recognize the difference with other practice model; they retrieve information about patients most used drugs, common drug-related problems and obtain information that could support the proposal of a pharmaceutical care plan; students interact with patients by giving educative lectures, handing out brochures and manuals, and assess the impact of the education given on the patients' knowledge about diseases and treatments during the pharmaceutical care practice periods surveys of the patient's knowledge of their disease state and therapy. Students work with the health care team, optimized drugrelated procedures, and/or gave information about drugs.

Students considered that this course represents a stimulating activity and some express that it should be of longer duration. Even though, the work is not perfect, it is only the first Cuban academic approaches for teaching pharmaceutical care. The purpose is to continue improving the courses activities in order to offer students better opportunities to develop pharmaceutical care during their stay at the University.

CONCLUSION

Teaching pharmaceutical care to students is very important to the present and future of this practice. Many methods to be used to teach student to provide pharmaceutical care, but it is important to understand that the clinical pharmacy method as logical expression of pharmaceutical care process should be taught; taking into account that, the professional method acquires during the teaching - learning process a greater importance than answering a specific problem. The scientific facts and data learnt today can become obsolete or even not be accepted in a near future. On the contrary, those pharmacists who can identify and solve their patient's drugs - related - problems by applying a reasonable method will be able to adjust themselves to the continuous and speedy evolution of scientific knowledge so as to scientifically contribute to a better health and their patient's quality of life.

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