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Research

Scope and Challenges of Social Pharmacy in Training of Pharmacy Students

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Abstract

Pharmacy practice and curriculum have undergone significant changes over decades. As a consequence of this evolution, pharmacists are more involved in direct interactions with patients and community to ensure the rational use of medicines. To better fulfil this function, future pharmacists need to be well-trained to understand the patients' behaviour and psychology. Understanding patients' behaviour and psychology is paramount to achieve good outcomes from medication therapy. The concept of behavioural sciences and health psychology are embedded as the fundamental foundation of the field of social pharmacy, and it is imperative that this field is taught and nurtured to the future pharmacy practitioners. In line with the need for future pharmacists, many pharmacy schools around the world had incorporated social pharmacy subjects into their curriculum. The aim of this article is to compile the background and the social dimensions of pharmacy to make recommendations for the future directions that enable the developing countries to modify their pharmacy programs to ensure the social and behavioural competence among pharmacy graduates are adequately covered.

Keywords: Social Pharmacy Education; Developed Countries; Developing Countries.

Incorporation of Social Sciences in Pharmacy Education

Since the early 1980s, efforts have been undertaken to identify the areas to improve pharmacists' skills and competence. Among many recommendations, Nuffield Foundation advocated that "social and behavioural sciences components" should be incorporated into the pharmacy undergraduate curriculum. Defined as "*the scientific study of human behaviour, "behavioural science" is often associated with some disciplines dealing with people and society including psychology, sociology, and anthropology*"[1]. According to Morrall, (2001) [2], the discipline of sociology reveals the nature of health and illness, assist in determining the aetiology and factors associated with disease and mortality, thus, directly or indirectly helps to create a discerning practitioner capable of more focused and competent decision-making. Furthermore, the Royal Pharmaceutical Society of Great Britain (1996)suggested incorporating some aspects of sociology into the pharmacy undergraduate curriculum to adequately prepare pharmacy students for their future practice [3].

Scope of Social Pharmacy Concepts

Social pharmacy has been defined as a discipline concerned with the behavioural sciences relevant to the utilisation of medicine by both consumers and healthcare professionals [4]. In addition to behavioural and psychological aspects related to pharmacy, areas of pharmaceutical

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administration such as pharmacy management and marketing are also seen as fundamental components of social pharmacy [5].

In addition, the adoptions of innovative patient-oriented roles for pharmacy, such as medication adherence, counselling, and home medicine review emphasizing on a patient-centred role [6]. The knowledge gained in social pharmacy is very essential to bridge the clinical and fundamental knowledge taught to the pharmacists, as illustrated in (Figure-1). Thus, ensuring a competent pharmacist that is capable of integrating his knowledge and social/communication skills to improve patient's behaviour, treatment outcomes, and disease management 7.

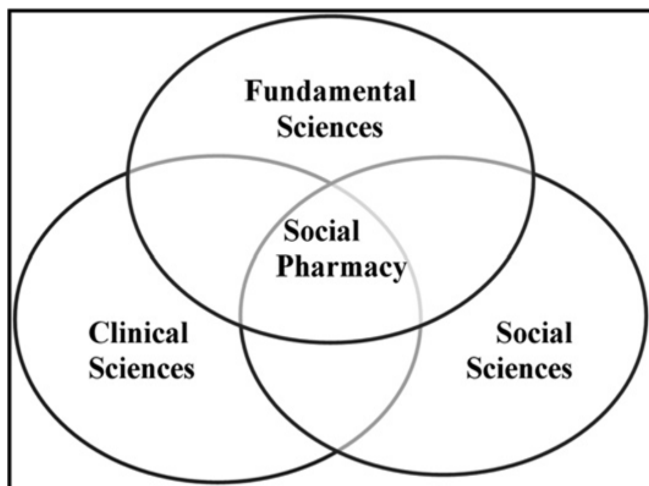

Figure-1: Emergence of social pharmacy within fundamental, clinical, and social sciences in pharmacy education.

Social Pharmacy Programmes around the World

With undergoing rapid social, economic, political and technological change around the world. With these changes, pharmacy as a socio-technical profession field is also moving along to meet the aspiration of global society [8]. Hence, it becomes clear that pharmacy curriculum and training need to be modified frequently to meet the needs of evolving health care system and community. Worldwide, pharmacy curricula for undergraduates include courses in anatomy, physiology, pathophysiology, biochemistry, pharmacology, toxicology, drug information, drug interactions, and clinical data-analysis [10]. Nevertheless, pharmacy education is essentially patient-oriented rather than product-oriented [9].

Continuous innovating and incorporating components of pharmaceutical sociology has been advocated by the Nuffield Foundation [11]. This has played an important role in the progression of academic and practice orientation in developed countries. Incorporation of social pharmacy element in pharmacy curriculum has enabled the pharmacist to address many challenges in public health. The United Kingdom and Canada are considered as the best examples in this regard. Modification of curriculum and incorporation of social pharmacy have enabled them to ensure greater awareness of patient safety, rational use of limited health resources, and greater need for accountability for outcomes [12,13].

In contrast with the advances in pharmacy practice and services, which have contributed significantly to people's health in developed countries, there is an underuse of pharmacists for patient care and public health efforts in developing countries. These differences could be partly explained on the basis of differences in pharmacy education systems of developed and developing countries.

One of the most significant differences in pharmacy education systems of developed and developing countriesis the qualification required to practice pharmacy. In some European countries like Hungary, Netherland, and Spain, M. Pharmacy is required, and Doctor of Pharmacy (Pharm.D) in France. Even Pharm D is a minimum qualification in the United States of America. In comparison, in developing countries like India, it is required to be registered pharmacist with pharmacy degree, BPharm or Pharm D [14]. This is the situation also in Arabic countries such as Jordan, Saudi Arabia, Palestine, and Egypt. A minimum requirement to practice pharmacy is being a registered pharmacist at the ministry of health by graduating from a bachelor in pharmacy or doctor of pharmacy degree.

Generally, the particular strengths of pharmacy services include accessibility within many communities and opportunities for advising on the management of health problems [15]. It is widely believed that pharmacists could make a greater contribution to the provision of primary healthcare16, especially in developing countries [15]. In this part of the world, a significant proportion of the population has an increased level of unmet health needs [17]. According to Kheir, (2008) in his paper on pharmacy education in the Middle East, progress in pharmacy practice education is still slow [18]. He also noted that hospital pharmacists often possess an advanced degree and tend to have a higher level of practice components compared with community pharmacists. Similarly, in African countries such as Ghana, the potential for pharmacy to respond to healthcare needs and contribute to specific health policy objectives is attracting greater interest. However, despite this widely acknowledged potential, developments have been limited [15]. In their study of pharmaceutical services in developing countries, Farris (2005) argue that pharmacists face some specific challenges not faced by their counterparts in the developed world; these include the lack of professional recognition by the public and other healthcare providers [19]. Where majority of doctor of pharmacy graduates work in fields such medical representative in a pharmaceutical company or community pharmacy, which can diminish the clinical skills they possess. Moreover, Farris (2005) highlighted the limited scope of extending practice especially in a community setting for pharmacists in developing countries [19].

Pharmaceutical sciences and related technologies are developing at a fast rate, as does the number of new medicines, drug price and series of social problems [16]. WHO has launched many strategies for developing countries namely, to address the problems of non-availability of essential drugs, WHO has created the "Action Program on Essential Drugs". This program aimed at providing operational support and guidance in the establishment of national drug policies [10]. To prevent the increasing problem of non-adherence noted during pharmacy consultations, WHO highlighted the need to develop strategies to improve medication adherence as an essential element in reducing the global burden of disease [20]. Moreover, the International Pharmaceutical Federation (FIP) produced recommendations for stepwise implementation of Good Pharmacy Practice in these countries [21]. This same council has also adopted in 2000, a Statement of Policy on Control of Resistance to antimicrobials, which provides a list of recommendations for governments and health authorities on the appropriate measures needed to prevent antimicrobial resistance. The statement also advocates that pharmacists are ready to collaborate actively with physicians, regulatory authorities and other health professionals in efforts to combat antimicrobial resistance and to participate in public information campaigns on this [21]. The WHO has also recognized that pharmacy education systems must be reviewed in light of their better use as healthcare resource. In addressing the education and professional development of pharmacists, through a consultative group, WHO pinpointed seven roles towards which "preparing the future pharmacist" should aspire. Recently, WHO and the Pharmaceutical Association of the commonwealth have suggested the need for a graduate level education followed by one year of practical training before one is capable of effectively performing the role of a pharmacist. The WHO recommends that countries that have not already moved towards a University Degree education for pharmacist should do so as quickly as possible [22].

To address the pharmacy education in the context of ongoing advances in basic medical pharmaceutical sciences, Yeole and Puranik appealed for the need to globally harmonize pharmacy education [22]. While most developing countries have acknowledged the policies and recommendations from international health institutions (i.e. WHO and FIP), and have recognized the potential for an enhanced contribution by pharmacy to primary health care, consideration of social pharmacy as an important subject, apart from medical and technical education is still ineffective in most of these countries. Despite health problem specificities and similarities among developing countries in terms of underuse of pharmacists in the health care and public health systems, some countries have undertaken efforts to incorporate social pharmacy in the early phase of pharmacy training at university level.

Globally, pharmacy education continues to face challenges in meeting stakeholder requirements, which is more difficult in developing countries because of the lack of resources, expertise, infrastructure and the increased pressures of globalisation [23]. A clear understanding of the challenges facing social pharmacy can be gained from the recent review on counselling given to people purchasing prescription medicines in community pharmacies [24]. Their results point to some challenges for social pharmacy research, such as the nature of the researchers' relationships with the profession, how to improve community pharmacy practice, the importance of learning from other disciplines and the need to internationalise social pharmacy discipline. In addressing the role of a pharmacy, some authors [25,26] have suggested that pharmacists should play an increasing role in patient care and that patient counselling is a crucial part of this responsibility. The very wide variation in counselling rates found by Puspitasari et al. (8% to 80% of patients received verbal counselling) suggests that this new role is carried out more in some settings than others [24]. Social pharmacy research has played and continues to play an important role in documenting this practice variation. Based on these reports, one of the major challenges is to improve the practice of those settings and practitioners who are currently lagging behind. According to Norris (2009), these challenges are both considerable and global, requiring the involvement of fraternities from both academia and practice. To date, high-income countries adopting the western research paradigm have informed these challenges. They are centred on improving practice, teaching,and research through the application of knowledge and theories from other disciplines [27].

Clearly, researchers dealing with "Social pharmacy" and "Pharmacy Practice" thread a delicate line. Relationships with practitioners must be close and positive so that research results are taken seriously. Researchers must listen to and engage practitioners so that they respond to new evidence by improving practice. In addition, researchers need to be distant and independent enough so that they can identify the need for improvement, and support the interests and health of the public rather than the short-sighted professional interests of those who want to keep things as they are and not draw attention to problems. Non-pharmacists, social pharmacy researchers face an additional set of challenges and pressures. This includes the establishment of a valid role within the social pharmacy, but not within pharmacy, and working out whether they are insiders or outsiders [28] in the pharmacy profession while maintaining their position within their home disciplines [29]. As pointed out by authors, improvements in community pharmacy practice are needed. Studies evidencing that motivated innovative pharmacists can provide effective secondary services are undoubtedly important [30,31]. However, intervention studies assessing how to improve the performance of the "average" pharmacist or pharmacy assistant are also needed. It is only when they are motivated that innovative pharmacists improve their services and thus increase practice variations. Substantial information on how to improve practice exists in other professions, and this can be useful

for social pharmacy. For instance, the Cochrane Effective Practice and Organization of Care Review Group have long-term experience in dealing with practice improvement [32,33]. Overall, the major outcome of these works is that passive dissemination of information, i.e. written materials and lectures, are not effective in changing practice. However, reminders, interactive educational meetings are effective strategies as they promote discussion and educational outreach. Multifaceted interventions tend to be more effective than single ones. Reviews of evidence on specific issues, such as interventions aimed at improving the use of antimicrobials, have produced similar findings [34].

Improving practice is a key concern in most health professions such as pharmacy, medicine,and nursing, but it is dealt with separately in each profession. Although differences may exist between professions and countries, practice researchers in each discipline can learn considerably by interacting with each other. Social pharmacy research is done in a small number of developed countries: USA, UK, the Netherlands, Finland, Australia and Canada. According to a survey, social pharmacy is taught in seventeen countries have a wide range of configuration, the content of curricula, length of training and entry requirements making difficult to compose a definite resultant [35]. Thus, increasing social pharmacy research still remains a major challenge, especially in developing countries, which are known to have serious problems in the purchase, distribution, and use of medicines. To overcome these problems, one solution would be to establish strategic alliances with countries already working in these areas or with organizations such as the WHO and Management Sciences for Health that have the expertise, experience, and commitment to improving access to and use of medicines in developing countries.Eventually, the disciplines have undergone and are still undergoing changes, hence, there needs to be continuous awareness and promotion of their role, challenges and solutions, and ways for improvement [36].

Conclusion

The social pharmacy has come to stay, and there are reasons to believe that social pharmacy will play an even more crucial role in future pharmacy. In the future, healthcare systems will be stretched far as the “invading nature” of future drugs will have a substantial impact on pharmacists’ performance, healthcare policies, and expenditures, as well as on the individual user whose life might be altered radically. Social Pharmacy is the interdisciplinary discipline that enables the pharmacy professionals to act, take part and take responsibility in drug matters at a societal level. Being a discipline developing very fast due to social demand, social pharmacy is likely to have a central position in the future curricula in pharmacy schools. In addition, a better understanding of issues related to the social pharmacy will help the profession to further improve population health. To overcome the challenges in adopting social pharmacy as a field of its own in pharmacy education and practice, the importance of social pharmacy in pharmacy practice models should be highlighted to pharmacy students, educators, and other stakeholders in healthcare delivery. This can be achieved through the establishment of strong networking among advocates and educators who have a special interest in the field.

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