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# A CALL TO AN URGENT ACTION TO CHANGE IN THE CURRICULUM ON COMMUNICATION SKILLS FOR PHARMACY UNDERGRADUATES IN TURKEY: A COMPARISON WITH THE UK

--Manuscript Draft--

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| **Abstract:** | Introduction: Globally, pharmacy undergraduate programs are evolving to reflect a more patient-centered approach to clinical practice. The importance of teaching communication skills in any undergraduate pharmacy curriculum cannot be overstated. This paper aims to shed a light on the way forward by comparing current literature and practices related to pharmacy services and CST in pharmacy undergraduate education in the UK and Turkey and discusses the need for an urgent change in the curriculum on CST in Turkey. Additionally, it provides potential strategies for improving the quality of CST and for expanding pharmacy practice to ensure students and graduates are motivated to use communication skills.<br>Commentary: The concept of traditionally structured curriculum with the basic sciences components in the early years and clinical experiences in the later years should be changed into an integrated environment where CST could be offered more effectively. CST offered at the University of Nottingham could be considered as a framework.<br>Implications: To meet patient care and educational needs, the authors have identified three key strategies to develop a change in CST for curriculum planners and policy makers. |
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Dear Shane Desselle, RPh, PhD, FAPhA,,

We would like to request you to consider the attached manuscript entitled "A CALL TO CHANGE IN COMMUNICATION SKILLS TRAINING IN TURKEY: COMPARISION WITH THE UK" for publication in *Currents in Pharmacy Teaching and Learning* as a commentary.

Dr. Gulpinar has been conducting her postdoc researches at the University of Nottingham on communication skills in pharmacy. She had some observations on the way of offering communication skills training in the University of Nottingham. Her PhD thesis was also about communication skills training and she had developed a course and implemented it to the students at Ankara University during her PhD. However, while she was doing her postdoc researches at the University of Nottingham under my supervision, she mentioned that she realized offering communication skills training in a discipline based environment like in Turkey would not give chance to students to gain these skills and has to be changed rapidly. We have some suggestions for stakeholders to how to change the curriculum throughout the world. These strategies could pave the way of other trainers throughout the world who are trying to create their communication skills training in an integrated environment.

Additionally, this paper presents a comparison of both the current situation of pharmacy practices and communication skills training in Turkey and the UK, which can be an essential reference for academics. There is no paper comparing these two fields between two countries, one of has a high standard and one of is a developing country. We have not come across any paper representing the current situation of pharmacy practices and communication skills training in Turkey. One of the most significant part of this paper is to establish the connection between communication skills training and the practice environment where the pharmacists have a chance to use these skills by comparing with a developed country. In addition, we have presented the structure of the fully integrated curriculum of University of Nottingham, vertical and horizontal themes, as to set a model for the curriculum planners for their future designs.

We prefer this journal because of the fact that the journal has a broad range of readers and it can give authors a greater chance to reach targeted population who will benefit. We believe that the content of the commentary is relevant to the scope of your journal and will be of interest to its readership. We have provided a figure summarizing the way of CST in the University of Nottingham which can be a good resource for other researchers who need to examine the structure of the integrated curriculum as well. We exceeded the word limit of commentary papers in terms of the rules of your journal. However, we need your flexibility for this paper as we need to fully explain the structure of Turkey and our way of offering course to make an impact on the curriculum planners to come to a change.

Do let us know if you wish to have a look at the paper.

This manuscript has not been published elsewhere in part or in entirety, and is not under consideration by another journal. There are no conflicts of interest to declare. All the authors have read the manuscript and agreed to submit it to that journal.

We look forward to hearing from you.

Sincerely,

Claire Anderson, BPharm, PhD, FRPharmS, FFRPS, FFIP, FRSPH

Professor of Social Pharmacy

Dear reviewers,

We reviewed the manuscript according your recommendations. We addressed all issues that are marked prior to resubmission:

1- The reason why we chose UK as the comparator region was explained on pg2 line5.

2- The grammatical errors were corrected both on the specified pages and throughout the manuscript.

3- The main element was expressed by altering the structure of the sentence on pg3 line2-3.

4- GPhC was explained on pg4 line1-3.

5- The study revealing the poor communication skills of pharmacists were explained in a clear way on pg7 line 23-27 and pg8 line 1-2.

6- We carefully reviewed the manuscript against the guidelines provided in the Copy Editing Checklist once more.

# A CALL TO AN URGENT ACTION TO CHANGE IN THE CURRICULUM ON COMMUNICATION SKILLS FOR PHARMACY UNDERGRADUATES IN TURKEY: A COMPARISON WITH THE UK

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**Abstract**

Introduction: Globally, pharmacy undergraduate programs are evolving to reflect a more patient-centered approach to clinical practice. The importance of teaching communication skills in any undergraduate pharmacy curriculum cannot be overstated. This paper aims to shed a light on the way forward by comparing current literature and practices related to pharmacy services and CST in pharmacy undergraduate education in the UK and Turkey and discusses the need for an urgent change in the curriculum on CST in Turkey. Additionally, it provides potential strategies for improving the quality of CST and for expanding pharmacy practice to ensure students and graduates are motivated to use communication skills.

Commentary: The concept of traditionally structured curriculum with the basic sciences components in the early years and clinical experiences in the later years should be changed into an integrated environment where CST could be offered more effectively. CST offered at the University of Nottingham could be considered as a framework.

Implications: To meet patient care and educational needs, the authors have identified three key strategies to develop a change in CST for curriculum planners and policy makers.

**Key words:** communication skills training; integrated curriculum; pharmacy education; community pharmacy

There are no conflicts of interest to declare.

There are no financial conflicts of interest to disclose.

There is one figure in this commentary. The caption of the figure is “The curriculum design at the University of Nottingham”.

**Contribution to literature**

This paper is a comparison of both the pharmacy practices and communication skills training in Turkey and the UK, which can be an essential reference for academics. There is no paper comparing these two fields between two countries, one of has a high standard and one of is a developing country. The authors have not come across any paper representing the current situation of pharmacy practices and communication skills training in Turkey. One of the most significant part of this paper is establishing the connection between communication skills training and the practice environment where the pharmacists have a chance to use these skills by comparing with a developed country. The authors have been given some suggestions for stakeholders to how to change the curriculum throughout the world for communication skills training. These strategies could pave the way of other trainers who are trying to create their communication skills training in an integrated environment. Additionally, in this paper authors have presented the structure of the fully integrated curriculum of University of Nottingham, vertical and horizontal themes, as to set a model for the curriculum planners for their future designs.

# A CALL TO AN URGENT ACTION TO CHANGE IN THE CURRICULUM ON COMMUNICATION SKILLS FOR PHARMACY UNDERGRADUATES IN TURKEY: A COMPARISON WITH THE UK


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## Introduction

Throughout the world, pharmacy education is experiencing a complete change to develop the practice of pharmacy and improve patient outcomes. Pharmacists are providing advanced services such as collaborative drug therapy management, medication safety systems, and improving transitions of care. Transforming patient care services requires pharmacists to be educated and skilled in communication to support patients' wellbeing. The educational system and professional regulatory bodies should match both people and the capabilities and training of the healthcare providers as regard communication skills training (CST). This need is especially prominent in Turkey.

An urgent call for a change in CST in pharmacy undergraduate education is an essential need for Turkey. Hence, it is thought to be beneficial for the curriculum developers to move forward by comparing a developing country like Turkey and the United Kingdom (UK), which has already stepped the way forward in terms of pharmacy services offered, and CST given in undergraduate pharmacy education. The first author was funded by Scientific and Technological Research Council of Turkey (TUBITAK) to visit University of Nottingham in the UK to study CST and pharmacy practice and to develop some recommendations for the curriculum in Turkey. This paper compares current literature and practices related to pharmacy services and CST in pharmacy undergraduate education in the UK and Turkey and discusses the need for an urgent change in the curriculum on CST in Turkey.

## Commentary

### Comparison of pharmacy services in the UK and in Turkey

#### An overview of pharmacy services in the UK

In the UK, there are 11,569 community pharmacies and most of their total income comes from the National Health Service (NHS). More than half of (60%) pharmacies are within multiple chains, the remaining 40% run as independents or small chains.[1] The pharmacy profession in the UK has long embraced the idea of public health as a primary area for development, and the government has been eager to involve pharmacists in achieving its public health goals.[2] Pharmacists providing care to patients can be generally classified as community pharmacists, hospital pharmacists and primary care pharmacists in the UK. Community pharmacy sector employs most of pharmacists.[3]

As mentioned earlier, the focus on dispensing has changed to a more advisory role on patient care within pharmacy practice. The role of the community pharmacist has been enhanced from that of a compounder and dispenser of medicines to that of a provider of clinical services.[4] All pharmacies are expected to be healthy living pharmacies, providing consistent delivery of wide range of high quality services through community pharmacies to improve the health and wellbeing of the local population and to help to restrain health inequalities is the main of The Healthy Living Pharmacy.[5]

#### An overview of pharmacy services in Turkey

Comprehensive reviews of the scope and depth of pharmacy practice in Turkey are lacking. However, several recent articles cite experiences in Turkey.[6,7] Community pharmacists, as those in other parts of the world, are seen some of the most accessible healthcare professionals in Turkey.[8]

In Turkey, the number of community pharmacists per 100,000 inhabitants is now 33.1, and this average is close to EU.[8] There are almost 25000 community pharmacists[9], each serving, on average, 3000 inhabitants. The current Law No. 6197[10] mandates that ownership of a pharmacy is restricted to pharmacists only and, each pharmacist was allowed to manage only one pharmacy. For this reason, chain pharmacies are not allowed in the country. In Turkey, after 2012 with the current Law No. 6308[11] a restriction on the number and distribution of community pharmacies was launched. To run a pharmacy, a license is required.

Only pharmacies can sell medicines to consumers.[12] Community pharmacists do not only distribute medicines, but also provide information about the effects, possible adverse effects, dosing, application, and interactions of medicines. Additionally, advice on life style and healthy living for the population is provided.[8] Even though this advisory role is included in the pharmacy law[10], the pharmacists provide this services to the public free because there is no funding for pharmacy counselling services in Turkey. Because of that, the community pharmacists in Turkey are mostly dissatisfied with their job.[6,8]

**The importance of CST for global pharmacy services**

Together with transition from dispensing medications to advanced services in pharmacy practice throughout the world, effective communication skills for pharmacists become important to help them to deal with their evolving and expanding roles.[13] In line with this view, CST has become an essential part of the pharmacy curriculum around the world.[14] Since the content of CST can vary by culture, different guidelines can arise for what pharmacy students are expected to learn. That said, counselling patients is considered crucial in virtually all pharmacy curricula.[15] Nevertheless, cultural differences have led to inconsistent communication-based learning outcomes and teaching modalities.[16] This section compares provision in the UK and Turkey.

**Current situation of CST in the UK**

Before explaining the CST in the UK, it should be understood that the body assuring and improving standards of care for people using pharmacy services known as the General Pharmaceutical Council (GPhC) has set some education standards in 2010. These standards exactly state that the pharmacy curricula "must be integrated". In the scope of curriculum integration, individual disciplines are strategically merged and the line between the disciplines are blurring to create a cohesive whole as a pharmacist. Horizontal and vertical integration, terms which can be seen regularly in integrated curriculum design, outline the direction of integration.[17] Horizontal integration defines as the integration of knowledge and skills taught at the same level/year of a program. Vertical integration outlines the process of acquiring information used at any one level and continuing until the later years.[18] Both dimensions can further be merged into an integrated spiral curriculum in which the content is designed according to increasing complexity by repeating the topics throughout the years.[18,19] A pharmacy curriculum might include modules within horizontal themes i.e, the respiratory system, the cardiovascular system, and so on, rather than courses in medicinal chemistry, pharmacology, etc.[20]

**CST in an integrated environment at the University of Nottingham**

The integrated pharmacy undergraduate curriculum at the University of Nottingham could be an example of how to provide students a scientific knowledge on managing patients and medicines, using a body system/disease-state approach. This structure is commonly used to develop integrated, spiral curricula.[18] Competency-based design is taken into consideration rather than subject-based. The content progresses from comprehending of single disease states through to management of complex co-morbid situations. Figure 1 outlines the sequencing of body systems/diseases.

An important aspect of modules within the undergraduate pharmacy education in the UK is the integration of a large body of science with clinical pharmacy and practice. In integrated, spiral pharmacy undergraduate curricula is comprised of several different and distinct subjects areas which are defined as vertical themes. University of Nottingham determined seven distinct vertical themes including professionalism and leadership in which CST is given under (Figure 1). Each of the major seven vertical themes gradually builds throughout the course so that knowledge is encountered in a logical order across all modules starting at year one, through to graduation. So, for example, the professionalism and

leadership vertical theme builds throughout the years, covering the fundamental principles of how a pharmacist will act as in an ethical, legal and effective manner, enhancing the counselling skills especially communication skills, dispensing requirements, leadership skills, and considering ethical issues.

The basis of giving CST in an integrated environment is to provide the students with contact with patients earlier in curriculum. Student motivation to develop attitudes including showing empathy, having responsibility towards patients, and recognizing professional identity, has been increased by creating environment enabling students to interact with the patients early in the curriculum.[21] Additionally, certain pedagogic arrangements have the potential to enable integrative CST. Various teaching methods in CST have been identified to be vital including lectures, patient interviews, small group interactions (workshops), video recording and reviewing, and the use of real and simulated patients in the UK. Well-designed case studies embedded problems, and interactive learning methods simulate complex, real-world situations and provide opportunities for students to practice the skill of integrating knowledge across subjects in CST.

University of Nottingham offers basic communication skills with lectures and providing an environment, which enables students to encounter with real patients at the first year under the "Essential Skills of Pharmacist" module. When moving on through the years with the basic knowledge of communication skills, i.e. asking question, reflective answering, empathy, the interactions between students and patients, which provide students to use communication skills, is designed in the different modules related to different body functions-disease states. As an example, in the year two "Pain Module" students come across different scenarios created to display pain related issues. Students interview simulated patients according to these pain scenarios, which focus on a clinical-based problem. Additionally, a series of patient narratives were created within the modules as clinical workshops for students to use their scientific knowledge and skills to comprehend clinical situations and improve their clinical and professional practice especially communication skills.[22] Integrative assessment methods, including written examination, case-based, and objective structured clinical examinations (OSCEs), are used at the University of Nottingham for CST across the curriculum.

## Current situation of CST in Turkey

The pharmacy undergraduate program is mainly structured as discipline-based in Turkey. Division members have shared research interests and are responsible for the courses in their discipline.[23] In 2015, National Core Curriculum for Undergratuate Pharmacy Education (NCCUPE) which is considered as a national framework, including several competencies, has been created for pharmacy students by The Council of the Deans of Faculties of Pharmacy (CDFP) in Turkey.[23] NCCUPE standards are considered as mandatory that all the faculties of pharmacy in Turkey have to adopt their curricula in line with these competencies. It is known that several faculties in Turkey have started to reorganize their curricula in a way that matches these competencies. However, in contrast to the standards of GPhC, NCCUPE has not directly require an integrated experience of science and practice that must be offered in the undergraduate pharmacy education in Turkey.

Pharmacy curricula in Turkey are traditionally structured with the components of basic sciences in the early years and clinical experiences in the later years. The courses as well as CST are given in a discipline base and under the responsibility of one discipline in Turkey. For instance, like most of the faculties in Turkey, Ankara University is offering CST in the last year of the undergraduate pharmacy program. The CST course content is structured starting from the basic communication skills through advanced skills to be taught in one semester or in a year. A few pedagogies like case studies and rarely simulated patients are used in CST in Turkey.[24] Written examination is the only-known assessment strategy being used to assess students' communication skills in Turkey.[25]

## Implications

To meet the patient care and educational needs of Turkey, the authors have identified three key strategies to develop a change in CST. These strategies can be applied to other regions of the world as well.

### *Develop CST to better prepare pharmacists for their role as a part of the health care system in an integrated environment*

The effort mentioned above was started on curricular innovation and transformation at pharmacy programs after the creation of NCCUPE in Turkey. It is known that very few faculties of pharmacy have

been trying to transform their pharmacy program into an integrated curriculum in Turkey. In line with these efforts, urgent improvement is needed considering how to offer CST in an integrated environment in Turkey. Offering integrated CST should be considered as introducing communication skills integrated with pharmacy content rather than as a separate skill. It could be used as a method for connecting knowledge between disciplines and provides learning in an environment of patient interaction, facilitated by a clinical placement. Without integration of CST, the risk remains that students might have difficulties integrating communication with science content and skills during patient encounters. It is suggested that a curriculum with more longitudinal CST attains greater increase and retention of skills[26]. Some challenges might be encountered during the process of creating CST in an integrated environment in terms of educators and students. The most challenging part might be a tension between science and pharmacy practice while designing CST in an integrated environment. Several studies showing science teachers alike have a view of science as a core component of pharmacy education and express personal fears and doubts about the impact of curriculum integration.[27,28] Despite these challenges, it should not be overlooked that the purpose of integration as a structure and method for curriculum design is to produce better pharmacists rather than to produce graduates who were experts in their own discipline.[28]

***Define new, improved pedagogies, assessment strategies, and learning environment for CST***

Using innovative teaching and assessment techniques especially simulated patients to enrich students' communication skills is still lacking in Turkey, although few attempts has been recognized.[29] Using simulated patients provides an opportunity to the students to have more time with patients earlier in the curriculum. As a result, they will feel more confident when communicating with patients when they graduate. Additionally, asking the right question, structuring the consultation, and giving accurate information to the patient needs practicing with patients. The research carried out in Turkey presents a picture of the effects of CST on pharmaceutical services provided[7]. The services of community pharmacists in Istanbul in Turkey, were evaluated in terms of providing adequate written and verbal information to patients by face-to-face interviews. The results indicated pharmacists assumed their communication skills with patients were adequate. On the contrary, the services delivered by pharmacists were seen inadequate according to the evaluation of simulated patient interactions.

Pharmacists informed the simulated patients poorly. The reason for this inadequacy might due to the lack of clinical knowledge, as well as poor communication skills of pharmacists. On the contrary, in a study the patients notified positively on their consultation with the pharmacist in the UK. They are making patients feel comfortable by not judging and giving full information to them.[30] Experience and learning with patients should be used or expanded as a teaching method in Turkey immediately to meet the competencies set in NCCUPE.

As mentioned earlier, written examinations are mostly being used for assessment of pharmacy students in CST in Turkey. Different methods for assessing learning outcomes should be used to determine the extent of student learning and should vary according to year of study. In an integrated curriculum, case-based integrated questions from across each modules of the academic year could be designed. Most importantly, OSCE examination should be implemented and expanded across the country. Some challenges can be considered as significant time, workforce, financial sources, great amount of time sharing with staff, together with willingness of staff are all required to create an innovative teaching and learning environment.[19] Despite these challenges, there are lots of advantages of using these techniques to assess communication skills.[22,24]

***Redesign the current community pharmacy services in a way creating motivation to use communication skills***

Although NCCUPE has set some standards including communication skills for pharmacists in Turkey, the fact that pharmacy practice is different from what is taught at faculties causes confusions in students' minds about what a pharmacist does in the real work environment and the extent of services to be delivered. Students usually find themselves in a dilemma as to whether pharmacy services are formed solely of dispensing or they are also providing advanced services. Students feel disappointed because of this disparity and cannot perform their role effectively as a provider.[31] Community pharmacists have a predominant role as an owner of a business rather than a healthcare provider. The community pharmacists in Turkey feel pressure to keep their business running due to financial concerns and they prefer to spend less time with patients and provide less counselling service, and thus cannot feel satisfied.[6] Expecting students to use communication skills gained as a new behaviour needs motivation

and a desire to use them. However, presenting lots of obstacles in the workplace environment of community pharmacists in Turkey which hinders patient-centered care will decrease the motivation of students.[25] The practice environment of Turkish pharmacist indirectly influences CST and reduces its efficiency. It is understandably frustrating for new graduates to enter into practice in settings that do not fully utilize their advanced training and skills. To ensure the efficiency of CST curriculum designed with this perspective, without doubt, the community pharmacy settings in real life where students have the chance to use communication skills and to observe role models should be restructured and pharmacists should be funded for the consultation services they provide.

It has long been recognized in the UK that the method of remuneration based on number of items dispensed needed to be changed to the services provided. Reprofessionalisation campaigna have been led by professional bodies through requesting to redefine the roles of community pharmacists in the UK. An aim of the reprofessionalisation is to stop the deskilling of pharmacists and to enhance job satisfaction in the workplace by using their skills and qualifications.[32]

Changing the way of providing CST has the potential to prepare pharmacists for their role as a part of the health care system in Turkey. While some efforts has been made to improve the quality of undergraduate pharmacy education in Turkey, more still needs more things to be done together with academia, practice, and government to create and improve both CST and the workplace environment which would pave a way to students to more eagerly use communication skills. The comparison of both CST and the community pharmacy settings where communication skills are used between the UK and Turkey might shine a light on the way forward. The authors hope these recommendations serve as a starting point among key stakeholders to communicate about ways to accomplish these goals.

**Declaration of interest**

None.

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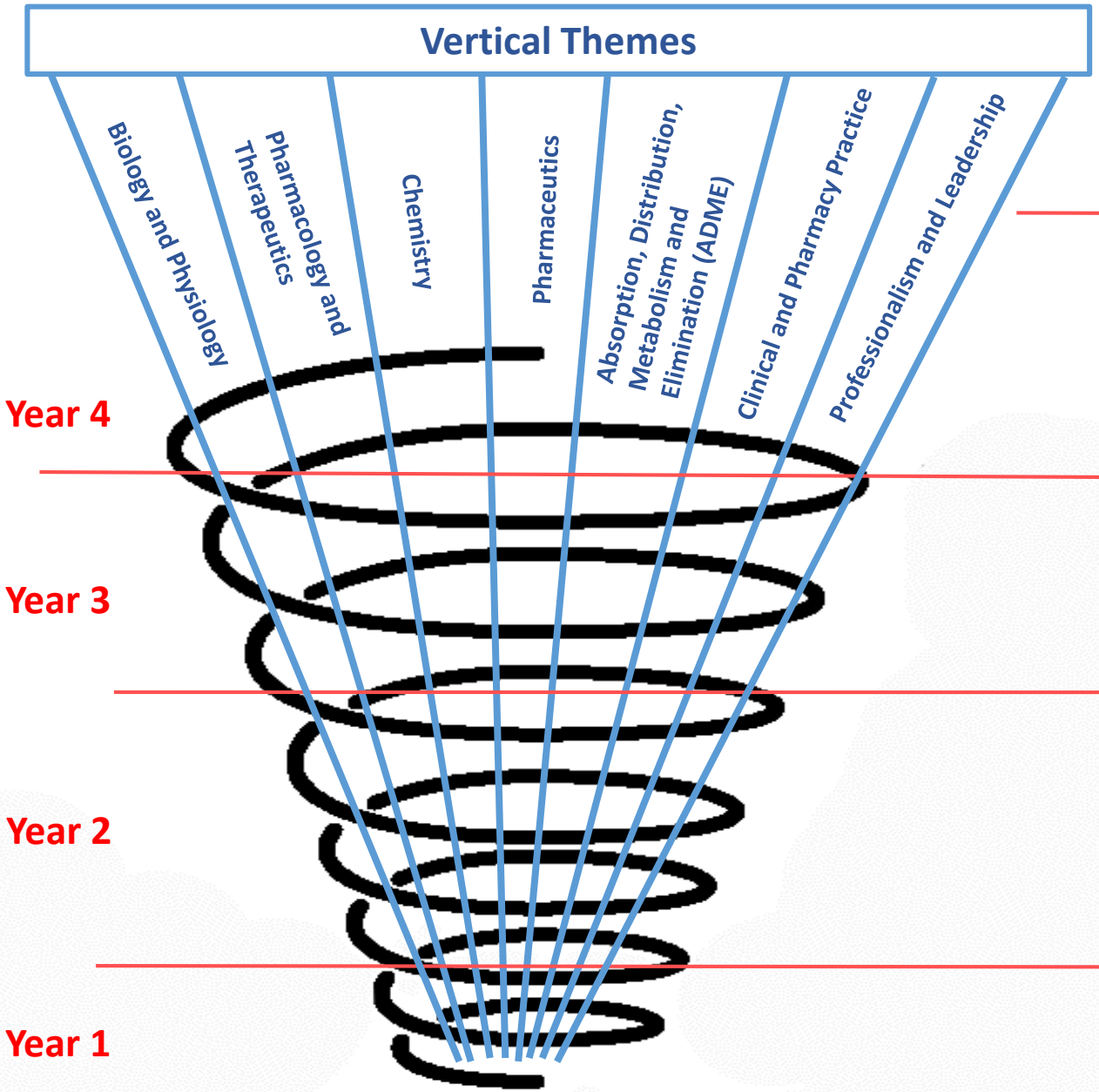
Figure




## The name of the modules

**Year 4**

- Integrated Pharmaceutical and Patient Care 1
- Advanced Drug Discovery
- Pharmacy Leadership and Management
- Professional Competencies 4
- Integrated Pharmaceutical and Patient Care 2
- Future Medicines

**Year 3**

- Viral and Parasitic Infections
- Central Nervous System Disorders
- Cancers
- Professional Competencies 3
- Research Project

**Year 2**

- Gastrointestinal and Liver Disorders
- Asthma, Allergies and Immune Diseases
- Cardiovascular
- Renal and Endocrine Diseases Sexual Health and Pregnancy
- Pain
- Professional Competencies 2

**Year 1**

- Being a Pharmacist
- Essential Skills for Pharmacists
- Professional Competencies 1
- Dyspepsia
- Bacterial and Fungal Infections

Horizontal Themes