# **INTRODUCTION**

The mission of the faculty of pharmacy – Tanta University (FPTU)" is excellence in pharmacy education, firmly grounded in and integrated with sciences and the advancement of pharmacy practice through the emphasis on student centered learning, scholarly activity, research and services to society".

In 1973 the faculty of pharmacy started as a department in the faculty of medicine – Tanta University. Further developmental lead to the born of faculty of pharmacy with its own identity in 1980. FPTU started as a leading school in pharmacy education with special emphasis on clinical pharmacy education. **FPTU** developed five years undergraduate Programme stressing on the role of pharmacist in the clinical practice and it was the leading programme in faculties of pharmacy in Egypt with special attention to integrate the pharmaceutical sciences with pharmacy practice by introducing professional practice during the programme and introducing clinical pharmacy courses. The programme has a major advantage in its structure as it allows a good degree of flexibility to make additions of new development in its contents.

FPTU represented a movement of modernization and change in the pharmacy education not only in Egypt but also in Arab world, as many faculties of pharmacy in private and governmental universities started to introduce clinical pharmacy and pharmacy practice courses in their programmes with the help of FPTU staff members; as they represented the first generation of the graduates from well respected international universities in these new fields.

FPTU building is relatively old (built in1980) however several improvements and additions were made on the last 7 years. Two major lecture theaters, centrally air conditioned supplied with new sound system, fixed data show and computers with a capacity of 900 students each. Also a new wing was built which host department of analytical chemistry with all modern new laboratories and modern library. The university has a plan to add more departments to the building and the university allocated 6 million Egyptian pounds for the new constructions.

The academic year 2009/2010, undergraduate students enrolled in the five-year programme of FPTU; "Bachelor Degree in Pharmaceutical Sciences", reached 4747 students in addition to 62 graduate students registering for M.S. & Ph.D. degrees. The number of faculty members, and their assistants, is 95 whereas administrative personnel is 192. The faculty; comprises eight scientific and ten administrative departments. The scientific departments include Pharmacology and Toxicology, Pharmacognosy, Clinical Pharmacy, Pharmaceutical Microbiology, Biochemistry, Pharmaceutical Chemistry, Pharmaceutical Technology and Analytical Chemistry. These departments teach 66 undergraduates courses. The language of study for both undergraduate and graduate programs is; English. The administrative departments include administrative affairs, students' affairs, store houses, financial affairs, library, graduate students and research, cultural affairs, youth welfare, general affairs, and treasury departments.

This report represents the first annual faculty self-evaluation study conducted for the purpose of establishing an internal quality assurance system in our faculty. An objective self-study is necessary for institutions of higher education aiming for accreditation. The self-study is mainly conducted to certify that our pharmacy education program meets certain national/international standards and to promote institutional self-evaluation and improvement. The self-study provides data about the program with emphasis on programme strengths and weaknesses. It also defines strategies to ensure that strengths are maintained and weaknesses are addressed.

A special committee was responsible to initiate, organize and manage the self-study process. Subcommittees were organized to focus upon a number of areas like mission, organization and administration, curriculum, academic standards, faculty staff, learning resources and facilities etc... The responsibilities of the self-study committee include coordinating and providing leadership to the self-assessment efforts; selecting, orienting and ;overseeing self-study subcommittees; developing a timetable for the self-study and assuring the adherence to the established timetable; reviewing and coordinating subcommittee reports for unnecessary overlap, inconsistencies, contradictions, and statistical inaccuracies; assuring that objective information and self-assessment have been incorporated by the subcommittees; and finally preparing a succinct final self-study report.

The FAR is written as brief document with some inclusion of supportive information, documents, and survey results. Bulky documents, such as manuals, student hand book, bylaws, survey documents and academic standards are provided as appendices. The QAU wants to express its great thanks and appreciations to everybody for their contributions to prepare these documents.

# **I- Mission**

The vision of the Faculty of Pharmacy, Tanta University (FPTU) continues to advance contemporary educational approaches to student learning and integrate liberal arts and sciences with professional disciplines.

The Faculty will continually encourage and enhance scientific research in all fields of pharmaceutical sciences especially these connected with biotechnology.

The Faculty will continually enhance environment to provide a wide off social and cultural opportunities including the physical facilities necessary to support lifelong learning and professional development.

The Faculty will be recognized, both nationally and regionally, as a pre-eminent educational institution that prepares its graduates in the pharmaceutical sciences and for pharmacy practice.

The Faculty will activate this vision in an atmosphere of respect that is sensitive to the needs of students, faculty members, and staff in their cultural intellectual and professional development.

#### I.1- Existence of a mission for the institution

FPTU has a mission, a vision and strategic objectives that were approved by the faculty council no. (10) in 13/6/2006. Opinions of representatives of end users and stakeholders contributed to the development of such mission including members from the Ministry of Health and pharmaceutical companies, syndicates of pharmacists, in El-Gharbia, Monofea and Kafr El-Shiek research centers, public and private pharmacies. Faculty members in administrative positions and

representatives of students from all educational years also participated to the establishment of the stated mission. This process was achieved through engagement of these participants in a survey addressing the mission's clarity and comprehensiveness where their suggestions including additions and deletions were taken into consideration.

## **I.2- The mission statement:**

The mission of the Faculty of Pharmacy – Tanta University (FPTU) is excellence in pharmacy education, firmly grounded in and integrated with **sciences** and the advancement of pharmacy practice through the emphasis on student-centered learning, scholarly activity, research and service to society.

For disseminating and raising the awareness of the faculty mission, it was distributed and posted in the faculty entrance, the dean's office and the main faculty hall. The mission statement was also distributed to different academic and administrative departments. Uploading the mission statement on faculty website and discussions with faculty leaders, faculty staff, administrative personnel, and collaborative bodies also contributed to raising the awareness of the faculty's mission.

The mission of FPTU is complying with the mission of Tanta University that targets environmental and societal development.

The mission and the vision of the faculty were included in the student index and graduation day book as well as in the contents of pharmacy orientation course.

# **I.3-** Reviewing / updating the institution mission:

Revising of the mission statement is planned to be done every other year to insure its transparency and comprehensiveness through the Curriculum development committee (CDC). The self-assessment study revealed the need for policies and procedures for reviewing and updating the mission statement. With the establishment of the Quality Assurance Unit (QAU) and the internal QA system in FPTU, such policy and procedures will be prepared and implemented while encouraging students, faculty staff, and collaborative different bodies to participate in revising and updating the mission.

The mission statement is publicized through posting it on more than one noticeable site in the faculty campus and uploading the mission statement on the website of the faculty.

# I.4- Strategic objectives:

**FPTU** objectives are concerned with achieving several values including: excellence in teaching and in research, graduation of highly qualified motivated pharmacists that cope with international standards for pharmacists. The main strategic objective of FPTU is to be internationally accredited. To achieve the former objectives we are working to implement the following:

1- Modify our curricula; since the current curricula do not assure graduation of pharmacists with adequate abilities and professional skills that satisfy the local and international needs. Therefore, recent curricula that comply with the advancements in pharmacy education will be established with a focus on specific societal needs for graduates to practice pharmaceutical care in all health settings.

- 2- To support the resurrection of target-focused programs during the last two years of undergraduate study that direct the students to study areas of emphasis in advanced topics in industry, community pharmacy, biotechnology, drugs of natural origin, research and quality control. This will facilitate the creation of professional skills in students and allow them to select the areas they like to advance in their future.
- 3- To provide an interactive learning environment that fosters faculty student communication and promotes lifelong learning and career development.
- **4-** Encouraging cooperation between the staff members to provide the most effective and efficient education for pharmacy students.
- 5- To create quality culture, environmental awareness and social responsibilities among faculty staff, employees as well as students.
- **6-** To enhance faculty staff, employees and student involvement in local, national and international professional and extracurricular activities.
- **7-** To motivate continuous upgrading of faculty staff and employees as well as students with respect to education, professional skills, knowledge, morality, and experience, through training, courses, seminars, lectures & workshops.
- **8-** To shift, as much as possible, our major research interests to a number of rapidly advancing areas like nanotechnology in pharmacy, biotechnology in drug design and development, herbal medicine, pharmacogenomics, specific drug delivery systems, and biopharming.

- 9- To update our research capabilities through searching new nontraditional resources necessary for raw materials, chemicals, scientific equipments for performing a good research and to provide departments with educational and research facilities such as computers, printers, scanners, copying machines.
- **10-** To establish close partnerships with the pharmacy community and pharmaceutical industry, through consultancies and services, that enhances the intellectual quality and economics of pharmaceutical services.

# **CONCLUSION**

# **Strengths**

- 1. A well stated, approved and updated mission statement including the mission, vision and strategic objectives
- 2. The mission is available in both Arabic and English versions
- <u>3.</u> The mission statement is publicized through posting it on more than one noticeable site in the faculty campus

# Weaknesses

- 1. There are no policies and procedures for reviewing and updating the mission statement
- 2. Mission may not be fully understood by all students

# Recommendations

Policy and procedures will be prepared and implemented while encouraging students, faculty staff, and collaborative different bodies to participate in revising and updating the mission to get full understanding of it.

# II- GOVERNANCE AND ADMINISTRATION

The governance of Faculty of Pharmacy, Tanta University (FPTU) is based upon enhancing both educational and research processes in order to increase job opportunities of its graduates. This is reflected from the good practice in preparing the graduates, planning for research projects, and approaching community for financial cooperation for the benefit of undergraduate and graduate student education.

The Dean and the administration systems in the faculty are responsible for performance of the above statements for the purpose of achieving the Faculty Mission.

The Faculty organizational structure has an effective relationship between top management and Faculty Staff members. The well-defined organizational structure of the faculty and the relationship between the Faculty and the university permits a proper administrative work.

The continuous meetings between the top management and the Faculty Staff members through the Faculty Council and different committees as well, are effective and they are guided by the "Universities Organization Law'.

Such meetings ensure effective relationship between Faculty Leaders and Staff Members while spreading and clarifying the policies and procedures in the decision making process.

The decisions are disseminated in minutes through the communication channels to Faculty Staff and Administration personnel to further ensure transparency and clarity. The governance policy also allows organization flexibility and changing priority according to the Faculty and stakeholders demands.

# **II.1- Organizational Structure**

FPTU has an organizational and administrative system within the Egyptian Universities Law. The Dean is the formal head of the Faculty and has the authority to manage the Faculty Affairs and to execute the policies of the Faculty Council. There are three Vice-Deans in charge of Educational and Students Affairs", "graduate Studies and Research" and "Community Service and Environmental Development Affairs". The Faculty management is controlled mainly through Faculty and Department Councils.

## **Description of the organization structure:**

#### 1- Dean:

The Dean is the responsible person for managing academic, research, environmental, financial and administrative affairs. In addition he/she is responsible for ensuring the implementation of the university's laws and to put the Faculty Council and the University Council's decisions into action. The Dean is also is the head of the Faculty Council who manages the Affairs of the Faculty Staff and makes day-to-day decisions and judgments necessary to carry out the Mission of the Faculty.

The Dean also chairs the different specialized and executive committees and he/she reports directly to the University President and Council. The Dean is normally appointed by the University President for a period of three years that can be reviewed only once. There are no clear criteria for choosing him/her, except being an acting professor with scientific and administrative qualifications.

#### 2- Vice-Deans:

There are three Vice-Deans to assist the Dean in the managerial responsibilities; the Vice Dean for Educational and Student Affairs, the Vice Dean for Graduate Studies & Reseach, and the Vice Dean for Community service

and Environmental Development Affairs. Vice-Deans are appointed by the Dean after consulting the University President, for a period of three years that can be renewed only once, but there are no clear criteria for choosing him/her, except being an acting professor with scientic and administrative qualifications.

- Vice-Dean for Educational and Students Affairs is responsible for all the undergraduate students' issues and affairs including teaching and examination schedules, requirements of different teaching methods, assessment and grading of courses, student admissions, student union and activities.
- Vice-Dean for Graduate Studies and Research is responsible for all the issues related to the graduate studies starting from the teaching schedule, through grading of examinations. He is also in charge of monitoring research activity in the Faculty and recommending ways and means of increasing the quality and effectiveness of the Faculty Staff Members research output.

Encouraging the scientific communication of FPTU with other national/international universities, colleges and institutes through scientific meetings and conferences and supporting the activities of the "Scientific Society for the Union of Pharmacy Students" are among the responsibilities of the Vice-Dean for Graduate Studies and Research.

• Vice-Dean for Community Service and Environmental Development Affairs is responsible for communication with stakeholders and the community for the purpose of assessing their needs and solving Pharmacy related problems. Other responsibilities include providing technical consultations mainly through Drug Information Center & Pharmaceutical Service's Unit (monitoring other special units and sites of community service, and maintaining the condition of the Faculty buildings).

## **3- Faculty Council:**

Members of the Faculty Council include the Dean, Vice-Deans, the acting heads of the academic departments, professors, one representative of assistant professors, one representative of lecturers, and three external members representing stakeholders in different Pharmacy sectors.

Meeting of the Faculty Council are held periodically, normally on a monthly basis. Such meetings facilitate the process of monitoring and management of a number of issues such as regulating the teaching and learning process in different subjects of study, supporting the University in its commitment to monitoring quality and performance, making recommendations and decisions related to Faculty Affairs, and meeting the requirements of the scientific departments.

The Faculty Council has seven assisting committees that approve the departments' decisions and help in setting the policies and making decisions that are submitted to the Faculty Council. These committees include:

- The Educational and Students Affairs Committee
- The Graduate Studies and Research Committee
- Community Service and Environmental Development Affairs Committee
- Equipments and Laboratories Committee
- Cultural Affairs Committee
- Library Committee
- Curriculum Development Committee (CDC)

#### 4- Quality Assurance (QA) Unit:

The QA unit was established with the beginning of the Quality Assurance and Accreditation Project (QAAP) as a requirement of higher education reform process. The QA Unit members are carefully and strategically selected to reflect the culture of quality with a deep scientific and societal experience. Administration personnel help in implementing the unit activities. Active

students are also welcomed and encouraged to participate in the reform proceeded. The unit aims for:

- Establishing and implementing an internal QA system in the Faculty.
- Raising the awarenes of QA to all Faculty Staff, Administrative Personnel and Students.
- Advancing teaching and learning methods used on the basis of internal and external evaluation
- Making use of the Faculty staff, students, alumni and employers feedback,
   on all elements pertinent to the educational process
- Investigating whether the mission and the objectives of the Faculty are achieved
- Ensuring periodic reviewing and updating of the Faculty's Mission and Educational Programme.
- Developing an integrated policy and strategy for the Faculty and coordinating its implementation
- Conducting annual self-evaluation studies and documenting the findings for the purpose of enhancing the institution performance
- Monitoring the process of writing course description and report in different departments.

#### 5- Academic departments:

The Faculty has eight scientific departments. These departments are:

- 1. Department of Pharmacology and Toxicology
- 2. Department of Clinical Pharmacy
- 3. Department of Pharmaceutical Technology
- 4. Department of Biochemistry
- 5. Department of Pharmaceutical Chemistry
- 6. Department of Microbiology
- 7. Department of Pharmacognosy

### 8. Department of Analytical Chemistry

Each department has well-defined series of courses to teach and the coordination of examinations, academic performance of undergraduate/graduate students, and integration and organization of the entire course work are carefully coordinated through the Department Council.

There are course coordinators selected by the Department Council for each course. Each department supports and executes the goals and objectives of the Faculty. Each Department Council is chaired by the Head of the Department and consists of all professors and associate professors in the department (acting and emeritus), the most senior five lecturers, alternating annually according to their seniorities.

# The Department Council meets typically on a monthly basis. The duties of the Department Council include:

- Implementation the decisions made by the Faculty Council
- Implementation and monitoring the Faculty Policy
- Suggestion of new courses and research proposals
- Monitoring undergraduate/graduate studies and reseach
- Making decisions related to Faculty Staff Affairs.

The Head of the Department is the most senior professor/acting professor in the department. He/She chairs the departmental council and supervises all the academic research, financial and administrative issues in the department. The Head of the department reports directly to the Dean of the Faculty.

The Head of the department is normally appointed by the University President after consulting the Dean. He/She is typically one of the three most senior acting professoors in the department. The turnover period of the department chairperson is three years that can be renewed only once.

## 6- Faculty Administrator:

The Faculty Administrator ensures that the policies, activities, and recruitment strategy are consistent with the university regulations, contributes in the process of decision making according to financial policy, and is responsible for all administrative matters. The Faculty Administrator reports directly to the Dean.

## 7- Non-Academic Departments:

The non-academic administrative personnel of FPTU are adequate for the implementation of the Faculty Mission and Objectives. The Faculty has ten administrative departments including:

- 1. Student's Affairs Department.
- 2. Graduate Studies Department.
- 3. Cultural Affairs Department.
- 4. General Affairs Department.
- 5. Administrative Affairs Department.
- 6. Treasury Department.
- 7. Youth Welfare Department.
- 8. Procurement and Store Houses Department.
- 9. The Library Department.
- 10. Financial and Accounting Affairs Department.

# **II.2- Selection of Academic Leadership**

Faculty Leaders should demonstrate significant professional accomplishment within the higher education environments. It is expected that the successful candidate would have a good sharing in the academic governance and should have interpersonal skills, superior communication skills and high integrities and have the ability to lead and make a significant contribution to the continued success of university.

The selection of academic leaders is done by appointment. The appointments for such positions are done for acting Faculty Staff probably with qualifications and attending courses for development of their capabilities. Their good achievements, communication skills and flexibility may also have an impact on the appointment decision. Academic leaders are aware of their duties and responsibilities outlined mainly in the law issued by the Universities' Supreme Council and internally by each Faculty Council.

# **II.3-** Effectiveness of Policies, Systems and Practices

The policies and procedures of the faculty are clear and transparent in the decision making process. There is a continuous evaluation of their decisions and policies through workshops and meetings with academic and non-academic staff. Since the establishment of the QA unit in the Faculty, the unit takes a prominent role in running of these meetings and workshops. Among the policies of the Faculty is to make continuous updating for the curricula and course contents. These actions were done by the appointed Curriculum Development Council (CDC) and by the Faculty Members, respectively.

The practices in the Faculty are somewhat adequate to achieve the improvement of the above points. However, the Faculty management intended to make an action plan to improve policies of enhancement and to foster excellence in management and services. Such plan will motivate Faculty Human Resources to achieve the required improvement. Also, the action plan should ensure that the Faculty decision-making processes (in all the departments) are clear and that they will be directed towards achieving and sustaining excellence.

Undergraduate students 'complaints are rapidly and effectively resolved through systematic procedures starting with administrative personnel in Students Affairs' Office, followed by the Vice-Dean for Educational and Students' Affairs, and finally the Dean. In such cases the system allows for the students to submit

their complaints individually or collectively in issues concerning the teaching schedule, the educational process and the exams. These complaints are solved immediately according to the faculty council decisions representing the opinions of the Dean, Vice-Dean for educational and students affairs and other faculty leaders, department Heads, and a number of faculty staff. The offices of the Dean and Vice-Dean for Educational and Students Affairs are always open during teaching schedule hours welcoming any queries from students.

In order to ensure that all the students submit their complains without fear of harm or disadvantage and with the assurance that privacy and confidentiality is respected, the Vice Dean for Educational and Student Affairs had an action plan to make a number of boxes available safely in every floor in the Faculty building for collecting students' complaints. Also, another decision was made to form a committee of top management to discuss all complaints and plan for the effective and fair solutions before raising these issues for the intervention through the Faculty Council.

A system also exists to approve student requests to delay examinations even the final written exam, in case of health problems or emergency situations.

# **II.4- Responsiveness to Changing Priority and Emerging Needs**

There is a good response of the top management to changes, they are accepting all the dictated changes, and they are always creating new approaches for the improvement of the Faculty. They are all looking forward to accreditation and putting efforts forth for its earning. The policy of the Faculty Management is not rigid, and they are characterized by flexibility, they are capable of changing their priorities according to the current situation and the education environment in the university.

The top management & staff members cope with changes by the following mechanisms:

- 1. Arranging the priorities of the current actions.
- 2. Observing the current action.

- 3. Deciding on the changes once a problem happens.
- 4. Direct contact with the Heads and Faculty Staff of departments which are involved in the action to encourage them for the changes.
- 5. Resolving the issues through the Faculty Council's intervention.

In our faculty, the vast majority of staff members are oriented for the continuous development. However, some of them suffer from difficult acclimatization with the changes, and the Faculty's Management makes continuous meetings and training workshops to teach them different methods of making documentation of the educational process, strategic action plans for their department, and evaluation and assessment of their work.

The Vision of the Faculty is spread in the form of posters inside the Faculty building. Also, the awareness of such vision is done through the Faculty website "www.tantapharmacy.org".

The vision for the development is also disseminated between staff by performing workshops, and continuous directions and advising about the procedures for efficient reform.

# II.5- Contribution of recent improvement/enhancement activities to the strategic objectives and plans

# Types of recent quality improvement/enhancement activities include:

- **1-** Issuing a Faculty Council decision to rearrange the positions of administrative personnel in different departments in order to enhance the overall performance.
- **2-** Arranging more than ten workshops to improve the skills of the administrative personnel and the Faculty Staff and their assistants.
- **3-** Using a computerized system for student's affairs including:
  - *i* Summation of the final grades of courses & calculation of the final cumulative score for students.

- *ii* Arrangements and ranking of students according to their grade.
- iii- Issuing of student's certificates and IDs.
- *iv-* Applying the rules in favor of failed students.
- *v* Performing statistical analysis of student grades for course evaluation.
- vi- Final statistics indicating % of success in each course.
- **4-** Completion of courses' specifications and reports.
- 5- Completion of program specification and report.
- **6-** Uploading of all documents of the Faculty on the Faculty website.
- **7-** Completing the Faculty Annual Self Evaluation Report.
- **8-** Uploading of staff CVs on Faculty Website according to university protocol for their spontaneous updating issued by the university. IT committee headed by the Vice-President for Graduate Studies and Research.
- **9-** Launching a Computer Center for the use of Undergraduate students and Faculty Staff.
- 10- Forming a committee of the Faculty's top management for discussing all complaints and planning for their solutions before raising these issues for the intervention through the faculty council.
- **11-** Raising the awareness of QA to all Faculty Staff, Administrative Personnel and Students.
- **12-** Agreeing upon the intended learning outcomes of the Faculty's educational programme and their comparison for achieving international standards.
- **13-** Establishment of the CDC for regular reviewing and updating of the educational programme.

Such recent improvement/enhancement activities have contributed to the strategic objectives and plans of the faculty by causing many changes towards a better education such as:

- Attaining an updated curriculum and preparing pharmacy students to develop
  a new programme which directs the students to cover recent advances in
  pharmacy.
- **2.** Continuous development of Faculty Staff and employees as well as students with respect to education, professional skills, knowledge, morality, and experience, through training, courses, seminars, lectures & workshops.
- **3.** Conducting interdisciplinary research programs between different departments in FPTU.
- **4.** Establish close partnerships with the pharmacy community and pharmaceutical industry, through consultancies and services, which enhances the intellectual quality and economics of pharmaceutical services.

# II.6- Review of the impact of previous improvement plans

Since this is the first formal self-evaluation report of FPTU, an internal auditing system for the results of the previous improvement plans may have not been into action. Nevertheless, an internal audit for the quality of educational research, and community services in the faculty was done through regular meetings of the QA unit in the process of completing the self-evaluation study. The results of the improvement plans written by the completion of this annual report will be dealt with through official internal audit system effective through the QA unit and its regular meetings and documented minutes.

# **CONCLUSION**

# Relevant strengths, weaknesses and recommendations are as follows:

# **Strengths:**

- 1. The existence of a well organized institutional structure.
- 2. Establishment of QA unit.
- 3. Presence of a formal system to deal with student complaints.
- 4. Completing the self-evaluation study.

## **Weaknesses:**

- The existence of administrative personnel resisting change, hindering the reform, bureaucratic and can not be fired through government rules and regulations.
- 2. Some faculty staff members are not fully aware of the law organizing the work in governmental institutions.
- 5. There is no external evaluation of courses which helps in putting forth some objectives and plans for improving the teaching and learning process.
- 6. There is no feedback from alumni, and employers regarding the intended learning outcomes of the Faculty's Educational Programme.

#### Recommendations

- 1. Setting both internet and intra-net connection between Faculty Staff through ADSL electronic communication system.
- 2. Making available a number of boxes in every floor in the Faculty building for collecting student's complaints.
- 3. Encouraging different departments to apply external evaluation of courses which helps in putting forth some objectives and plans for improving the teaching and learning process.

# **III- FACULTY STAFF MEMBERS**

According to vision of the faculty we aim to transform FPTU into a center of excellence in undergraduate and graduate education, scientific research, and society services. In order to achieve such vision, it is important to develop the most important element of both education and research processes which are the faculty staff members. Really we have low number of staff members as compared to other pharmacy faculties. However, we have excellent opportunity to select highly qualified staff members to temporarily join our faculty. We also have an updated young faculty staff with competent teaching and research abilities. This part of the report is concerned with evaluation of the status of staff members during 2009/2010 concerning their number, their distribution, their commitment to the faculty mission and strategic objectives. This section also involves the efforts done to develop staff members and their adequacy to support teaching and research activities in FPTU. Action plan was finally suggested to overcome the inadequacy of staff members in FPTU.

#### **III.1- Statistics**

• Number of faculty staff members and their assistants distributed according to their academic degrees in year 2009/20010 is summarized in table (1):

Job Title	No	Active
Professor	21	17
Assistant Professor	14	12
Lecturer	16	11
Assistant Lecturer	22	20
Demonstrator	44	43
Total	117	103

• Number of active faculty staff members and their assistants relative to students' number in year 2009/2010 is summarized in table (2):

Year	Student Number	Academic Staff	Assistant lect/ Demonstrator
Prepharmacy	1169	1:29	1:18
1 <sup>st</sup> . year	1389	1:35	1:22
2 <sup>nd</sup> . Year	1245	1:31	1:20
3 <sup>rd</sup> . year	975	1:34	1:15
4 <sup>th</sup> . year	887	1:22	1:14

The distribution of the staff members seems to be inadequate and does not follow the pyramidal pattern which enables best utilization of the available resources. Worth noting is that within the staff members of the faculty the females are significantly higher in number.

# III.2- Adequacy of staff members and their profiles to achieve the institution mission and strategic objectives:

The ratio of staff members to students is calculated. The overall number of active faculty staff is 103. The total number of the students is 5665. Accordingly, the overall staff/student ratio is 1 : 55. This ratio does not put into consideration the additional academic staff participating in teaching of different specialized pharmaceutical courses. Moreover, there are some basic science courses taught by adjunct professors from faculties of Science, Medicine and Arts.

From the previous data, it is evident that there is a shortage in the faculty staff members. The compromised number of faculty staff is quite expected due to the early faculty strategies of low number of demonstrator opportunities, also

there was a long period of time where no demonstrator opportunity was provided by the faculty. Faculty members acting as fulltime staff in other private or international universities offering higher salaries is also a major factor contributing to the decrease in the number of faculty members.

The compromised number of faculty staff is dealt with through the following means:

- 1) Increasing the annual number of demonstrator opportunities.
- 2) Inviting external visiting professors and adjunct staff, as partial appointment, to teach undergraduate and graduate courses.
- 3) Collaboration with external professors in supervising graduate students earning Master or Ph.D. degrees.
- 4) Encouraging all staff member assistants to engage scientific missions, for Master or Ph. D degrees, to international universities in Europe and USA.

## In FPTU, faculty staff members have many responsibilities including:

- 1) Teaching undergraduate and graduate courses.
- 2) Grading examinations.
- 3) Supervising laboratory sessions.
- 4) Contribution in the examination logistics.
- 5) Contribution to committees for purchasing chemicals, instruments, glassware and books.
- **6)** Supervising Master and Ph.D. students.
- 7) Contribution to research projects.
- 8) Preparation of manuscripts of their research work.
- 9) Contribution to the community in the form of consultations in pharmaceutical companies.
- **10)** Involvement in different councils and committees such as students affairs committee, graduate studies & research committee etc. .....
- 11) Contribution to the activities provided by the pharmaceutical services center in the faculty, e.g bioavailability studies of different drugs

- **12)** Contribution to the "Development of staff members capabilities" program by either attendance or lecturers presentation .
- 13) Contribution to "The Continuous Pharmacy Education" program by presenting lectures in some important subjects that meet the need of all pharmacists in the market.

With such compromised number of staff members, having many responsibilities, their contribution in teaching, research, and community service could be expected to be hindered. Nevertheless, many faculty members at FPTU have superb international research publications. They also participate in a number of community services as consultants in pharmaceutical firms and reviewers in reputable international journals. The faculty also shares in university circular visits to some villages and poor areas in different governorates in Egypt to provide health services to needy people. These services include medical examinations, laboratory diagnoses in addition to offering medicines for free. Faculty staff members and students largely contribute in these campaigns.

# III.3- Staff development to meet the needs of the mission and strategic objectives

The development of capabilities of the faculty staff members is achieved through:

- 1) Increasing of at least 10% of academic staff attending and participating in educational conferences and scholarly meetings.
- 2) Demanding faculty staff to regularly attend training courses through the Faculty and Leadership Development Project (FLDP). These training courses are concerned with developing staff members in different aspects such as: thinking skills, communication skills new research techniques, teaching techniques, time management ..... etc.
- 3) Before being appointed as a lecturer, the staff member is required to attend a training program for preparing lectures.

- 4) Before appointing the lecturers or the teaching assistant, they should show good command of English language since they will teach to pharmacy students in English. The candidate is required to achieve a score of at least 500 in the TOEFL.
- 5) The faculty encourages staff members to have good computer skills through allowing them to attend ICDL training courses.

Other methods are being adopted by the institution to develop effectively the capabilities of all staff members, and these include the seminars held at the faculty. In these seminars, large number of prominent professors from Egypt and abroad and socially-respected scholars are invited to give lectures and seminars to all staff members. However, the faculty needs to put more effort to update the teaching methods used by the staff members and to introduce the concept of interactive teaching. This requires extensive training courses about teaching methodologies and approaches and other recent ways engaging students in the learning process.

# III.4- Review of the policies implemented to develop capabilities of staff members :

The FPTU now has documented policies and mechanisms for professional development of the faculty staff and the teaching assistants in link with the mission and strategic objectives through the following strategies:

- *1-* Engagement in post-doctoral scientific missions to international universities in Europe and USA.
- **2-** Working as part-time faculty staff in private universities in Egypt.
- **3-** Acting as visiting Professors in some Arab Countries.
- **4-** Participation in national and international conferences and workshops.
- 5- Attending development programmes offered by TU through the FLDP.
- 6- Development of the language skills. The teaching assistants have to, prove a good command of English language (TOFFL) and computer skills (ICDL).
- **7-** Encouraging of participations in research projects.
- **8-** Allowing for joint research collaboration & training programs with other national and international institutions.
- **9-** Offering scholarships for teaching assistants to earn their Ph.D.s from international universities.
- **10-** Continuous updating of the curriculum to enforce faculty staff to match current trends in pharmacy education worldwide.

# **CONCLUSION**

#### Strengths, weaknesses, and recommendations are as follows:

## **Strengths:**

- 1- The vast majority of faculty staff members are of high caliber, well trained and excellent experts in their fields.
- **2-** There is a considerable number of available scientific missions and scholarships for faculty staff and their assistants.
- **3-** Commitment of faculty staff to the QA process.
- **4-** Appropriate research output of the faculty staff in spite of the insufficient financial support, insufficient salaries, and continuous increase of prices of chemicals, kits and other necessary research tools.

#### Weaknesses

- 1- Compromised number of faculty members leaving them overloaded with responsibilities, e.g Analytical chemistry Dept..
- 2- Lack of policies that mandate the annual regular performance appraisal of faculty and staff.
- 3- Shortage in financial resources that help postgraduate students to quickly finish their Master or Ph.D degrees

#### **Recommendations**

- 1- Increasing the number of faculty staff within academic departments to compensate the worked shortage in faculty staff members.
- 2- Sustainability of performance appraisal of the faculty staff.
- 3- Establishing a complete database for the faculty members including their credentials.
- 4- Establishing a unit for continued pharmacy education to develop professional training programmes.
- 5- Providing faculty with more financial resources.

## **Annexes and documents**

- 1- Faculty staff C.Vs containing list of international and national publications and communications.
- 2- Lists of faculty members acting and on leave.
- 3- List of training courses offered through FLDP programme to faculty, academic and non-academic staff.

# IV- EDUCATIONAL PROGRAMME

Educational programme faculty of pharmacy Tanta University (FPTU) offers a 5-year educational programme; "Bachelor Degree in Pharmaceutical Sciences". The aim of this educational programme is to provide students with knowledge, skills and abilities needed to practice the pharmacy profession effectively in various settings including community pharmacies, hospitals, academic institutions, research centers, pharmaceutical firms and governmental health departments. For that purpose, students receive basic practical training to make them eligible for licensure as pharmacists and clinical training to qualify them to serve as pharmacy practitioners involved in medicine use and pharmaceutical care reviewing the monitoring patients' medication regimen. Students are also taught to acquire the necessary knowledge in areas related to the extraction, synthesis, production, design, use, control, approval, management, and marketing of pharmaceutical products.

#### **IV.1- Statistics:**

The following table represents the number of **of Students Admitted to the Program** for the academic year 2009/2010 as well as the **Total Percentage of Success**. Table (3):

Statistical Information						
Number of Students Admitted to the Program (Prepharmacy Year:	1155					
2009/2010)						
Total Number of Students Enrolled in the Program (All Years:	5676					
2009/2010)						
Total Percentage of Success	71.79 %					
Trend of Admission to the Program	Decreasing					
	(Figure 1)					
Detailed Grades Distribution	Table 1					

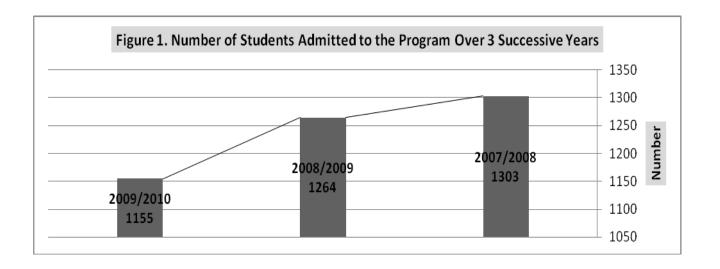
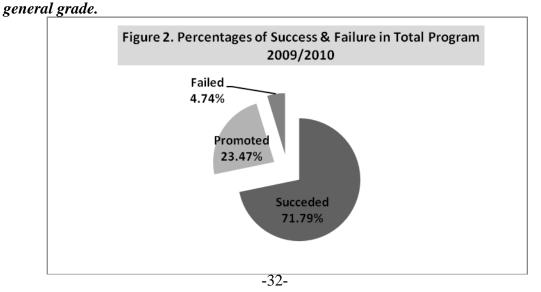


Table 4. Detailed Yearly &Total Grades Distribution in Academic Year 2009/2010													
Grade	Prepharmacy Year		First Year			Second Year		Third Year		Fourth Year		Total Program	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Excellent	27	2.31	21	1.51	44	3.56	22	2.26	142	15.67	256	4.51	
Very Good	347	29.66	285	20.52	367	29.69	340	34.87	468	51.66	1807	31.84	
Good	375	32.05	399	28.73	472	38.19	369	37.85	194	21.41	1809	31.87	
Acceptable	15	1.28	86	6.19	78	6.31	15	1.54	9	0.99	203	3.58	
Succeeded*	764	65.3	791	56.95	961	77.75	746	76.51	813	89.74	4075	71.79	
Promoted**	316	27.01	496	35.71	243	19.66	198	20.31	79	8.72	1332	23.47	
Failed***	90	7.69	102	7.34	32	2.59	31	3.18	14	1.55	269	4.74	
<b>Total Year</b>	1170	100	1389	100	1236	100	975	100	906	100	5676	100	

\*Succeeded in all courses and given a general grade; \*Failed in < 3 basic courses so promoted to next year without being given a general grade; \*\*\* Failed in  $\geq$  3 basic courses and did not pass to next year and not given a



# **IV.2- Educational programme framework:**

# Programme structure:

- No. of contact hours per week: Lectures 137, Lab 161, Total 298.
- No. of hours of basic sciences courses: 26, 8.7%
- No. of hours of courses of social sciences and humanities: No 8, 2.7 %
- NO. of hours of specialized courses: No 179, 60 %
- No. of hours of biomedical courses: No 75, 25..2 %.
- No. of hours of elective courses: No 10, 3.4 %.
- Practical / Field Training: 300 hr.

The classification of the courses into different categories, as follow:

#### Basic sciences:

Physics, zoology, botany, mathematics, physical chemistry,.

#### Biomedical sciences:

Anatomy, histology, biochemistry, medical microbiology, physiology, parasitology, pathology, public health, toxicology, clinical pathology, pharmacology.

#### Pharmaceutical sciences:

Pharmaceutics, pharmaceutical formulation biopharmaceutics, medical terminology and pharmacy orientation, pharmaceutical organic chemistry, analytical pharmaceutical chemistry, pharmacognosy, physical pharmacy, medicinal plants, industrial pharmacy, pharmaceutical chemistry, drug design, clinical pharmacy, quality control, pharmacokinetics, pharmacy law, instrumental analysis drug interaction, drug information, therapeutics, forensic chemistry,

pharmaceutical microbiology, phytochemistry, bioassay & biostatistics and health care administration.

*Elective courses:* All faculty departments have at least 2-3 courses to be selected by the students. Total number of elective courses available is 19.

#### Social Sciences and Humanities:

English, psychology and sociology.

The student handbook describing the organizational structure of the faculty and the curriculum together with faculty regulations related to students affairs and activities is at students' convenience. A programme specification handbook is also available to students. This handbook contains full description of all courses, including course topics and their duration, references together with the required teaching and practical facilities and aids.

Each educational year is divided into two-terms; 15 weeks each. The basic sciences are taught in the pre-pharmacy year followed by biomedical, pharmaceutical and other sciences which are spread over the five educational years. Before the beginning of the third and fourth professional years, students get involved in field training where they are trained to practice the profession in different pharmacy practice settings such as retails pharmacies, pharmaceutical companies and hospitals under the supervision of faculty staff. Each faculty staff supervises a group of 10-20 students. At the end of the 400 hours practice training period, the students should prepare a research paper about a topic determined by his/her supervisor.

Faculty pharmacy, Tanta University stresses the importance of updating its educational programme through a committee. Through such committee, a new programme will be developed which is based upon the credit hour system. This programme will be raised to the Faculty Council, then by the University Council

and finally the Pharmacy Sector Committee and waiting for be approval the Supreme Council of Universities.

# Criteria for admission to the FPTU's educational programme:

The main criteria for admission of high school students to the educational programme of Faculty of pharmacy Tanta University are:

- 1- A passing grade in chemistry, biology, physics and a fourth social science.
- **2-** High score in the national high school examination or equivalent certificate according to the rules set by the registration office.

#### Regulations for progression and programme completion are:

- 1. A minimum of 60% of the maximum grade (MG) is the passing grade for any of the fundamental courses. In the complementary courses 50% of MG would suffice to pass the course.
- **2.** Course grades are as follows:
  - 85% or more: Excellent.
  - 75% MG to less than 85% Very Good.
  - 65% MG to less than 75%: Good.
  - 60% MG to less than 65%: Pass for fundamental subjects.
  - 50% MG to less than 65%: Pass for complementary subjects.
- **3-** Students can not proceed to the next year of the programme if they fail more than two fundamental courses.
- **4-** First year marks count towards the final cumulative score of students without affecting the Honors-ship.
- 5- There is a re-sit examination period after each term in February and Jully for pre-pharmacy, first, second and third professional year courses. Final year students who have failed in a maximum of two fundamental subjects in

that year or from previous years can re-sit for their exams in those subjects in November of the same year. Should the student fail again, he/she has to re-sit for his/her exams in those subjects with the fresh students registered in the fourth professional year.

- 6- Some students enrolled in the first professional year can be transferred from other governmental faculties of pharmacy to our faculty at the first professional year according to rules approved by the faculty council.
- **7-** Students are given two opportunities of enrollment as regular students in the exams of pre-pharmacy year after which they are not allowed to be enrolled as external students.
- **8-** Students in the first professional year are given the chance to fail the exams twice before they are enrolled as external students for once and for all.
- **9-** Students are given the chance to fail the exams twice in the second and third professional years before they are allowed to be enrolled as external students for 3 times.
- 10- Students in the fourth professional year are given two opportunities of enrolment as regular students, but if they succeed in half the number of subjects they would be allowed to re-sit for the exams in the subjects they have failed indefinitely until they are graduated.
- 11- Once an "external" student in a certain year succeeds in exams for that year to be allowed to be transferred to the following year, he/she automatically becomes registered as a "regular" student again."
- 12- Students are allowed to halt their enrolment for a maximum of two years in every academic year conditioned the approval of the faculty council. After that, the university as well as faculty council's approval would be mandated.

# **CONCLUSION**

# **Strengths**:

- 1. The current educational programme provides graduates with clinical pharmacy training which represents the most recent trend in pharmacy education.
- **2.** The curriculum also provides graduates with knowledge of marketing and pharmacoeconomics.
- 3. The curriculum permits the students to achieve the respective ILOs in accordance with the programme academic standards referenced to relevant external standard and related to the faculty's mission. This is documented by a questionnaire that was targeted to end-users asking whether the ILO's of the program is mission-related.
- **4.** The FPTU ensures that the curricular content meets the expectations of end-users and; that it should ensure the achievement of the ILOs stated in the programme specification.
- **5.** The curriculum comprises some social sciences and humanities.
- 6. The curriculum includes 400 hours field training in a community or hospital pharmacy, pharmaceutical firms and research centers which allow the students to get acquainted to the different modes of pharmacy practice.
- 7. Summer training outside the faculty improves the creativity and critical thinking abilities of students.
- **8.** Student handbook is at students' convenience to be familiar with the regulations governing the educational programme and procedures for retention and progression.

# Weaknesses:

- *i* The elective courses offered are not truly elective (where the faculty council decides on these courses ;every year) due to the shortage in learning resources and staff members.
- *ii* External evaluation of the education program is yet to be activated
- *iii* There are higher numbers of students compare to staff members.

### **Recommendations:**

- Activating the external evaluation policy of the programme.
- Running of all available elective courses for all the students to select from according to their interests.

### **List of annexes and documents:**

- The student handbook.
- Bylaws and Regulations for Undergraduate Students, Faculty of Pharmacy, Faculty of pharmacy Tanta University (1980), Articles (10-14).

# V- ACADEMIC STANDARDS

General standards of Faculty of Pharmacy of Tanta University (FPTU) are the academic standards through the faculty can achieve its programme intended learning outcomes. Such standards include the minimum knowledge and skills to be gained by the graduates from the academic programme. These standards should also fulfill the stated mission of the faculty. The faculty standards are in line with the academic standards of the Pharmacy Sector Committee of the Universities Supreme Council. The faculty designed its current 5-year educational programme, which was approved in 1980, to achieve certain intended learning outcomes. The harmony between the academic standards of the programme and the external referenced for standards (benchmarks) is considered. Therefore, the academic standards in pharmacy for Quality Assurance Agency (QAA) in UK were adopted as benchmark.

# V.1- Academic standards compared with references standards:

The most advanced trend in pharmacy education worldwide is to graduate pharmacists to be available side by side with the physician in hospitals to ensure effectiveness of drug treatments while monitoring their pharmacokinetic and safety profiles. The FPTU's programme is current to recent academic developments since it is clinically oriented toward the new role of pharmacists, in addition, the faculty has a separate department of clinical pharmacy to ensure the quality of delivering such requirement.

As previously documented in the specification of the educational programme, the comparison between the "Provision" and the "Benchmark" revealed that the design and structure of the curriculum meet and coincide to a great extent with the reference standards. Also, it converse all the ILO's of the programme.

### V.2- Student assessment

There are four methods of assessment used to evaluate the students' performance effectively in respect of the achievement of the ILO's of the programme. This includes periodic, practical, oral and written examinations. The English language is used mainly as the language of both teaching and assessments. Students are provided with grading criteria for assessments and this information is included in the student handbook in addition to the detailed grading information provided by each department and written in the examination sheets. Some of the departments announce the results of periodic examinations and give model answers to students to allow for formative and self evaluations.

The institution has definite policy and procedures for the constitution of examiner; boards for oral, written and practical examinations which should be approved by the department and faculty council. A questionnaire was filled by external evaluators for each course, they commented on the appropriateness of the assessment methods used with reference to the ILOs.

The examination scheduling system is always suitable for most students since the students' union participates in developing it. The Vice-Dean for Educational and Students' Affairs approves and announces the examination schedule after students' union agreement. Effective procedures for reviewing the examination results exist in the faculty where examination papers are checked for any errors upon students' dissatisfaction and complaints about the announced grades. Such procedures are done according to the "Universities Organization Law", through Vice-Dean for Educational and Students' Affairs and Educational and Students' Affairs Office.

# V.3- Student retention and progression:

According to the overall statistics, the percentage of succeeding students exceeded 90 % in all years. This % may reflect the great effort of the staff and

their assistants as well as the students. The statistical results of the students in all grads are included (Annex 3).

# V.4- Student achievement, including employment opportunities and take-up:

In the last few years, the employment opportunities became very limited for graduated pharmacy students. This may be due to the increase in the numbers of the graduated students from the old faculties, mandated by the government, and from the newly established private faculties.

Until recently, the faculty had no system to monitor student employments and had not established alumni office and therefore there were no available data about employment opportunities. However, after the establishment of the QA Unit, the office was established and the faculty planed to follow up and support student employment.

# V.5- External evaluation of the students and the academic standards achieved:

The system of external evaluation of the programme has not been established.

# **CONCLUSION**

# Strengths, weakness, and recommendations are as follows:

# **Strengths:**

- 1. The curriculum is clinically oriented which is in accordance with the most recent advances and trends in pharmacy education worldwide. Only few other faculties of pharmacy have a similar approach.
- **2.** The faculty management takes fast, rational and malleable, actions for reform in response to students, and employers; feedback of the faculty's educational programme.
- **3.** The faculty has a good system for managing the final exams and responding to students complaints.
- **4.** High rates of student progression and satisfactory achievements in terms of students' grades and graduation.
- **5.** Policies for examiners boards are available and well stated and documented.
- **6.** Involvement of students in construction of examination schedule.

### Weakness:

- 1. The external evaluation system is not fully established for the faculty's educational programme.
- **2.** Formative evaluation is lacking in most courses.
- **3.** Formal policy and procedures for supporting alumni's employment is not fully established.

### **Recommendations:**

- Activating the external evaluation system for the faculty's educational programme.
- Encouraging all departments to do formative evaluation in their courses.
- Establishing formal policy and procedures for supporting alumni's employment.

### **Annexes and documents:**

- 1- The academic standards of the Pharmacy Sector Committee.
- 2- The Academic standards in pharmacy for Quality Assurance Agency (QAA) in UK.
- 3- Statistical results of students examination.

# VI- QUALITY OF LEARNING OPPURTUNITIES

# VI.1-Teaching and learning:

Faculty of pharmacy – Tanta University takes the initiative to be more responsive to students' needs and more concerned about how well students are prepared to assume future scientific and pharmacy practice roles. The faculty is aiming, in the future, to lecture less, to make learning environments more interactive, to integrate technology into the learning experience, and to use collaborative learning strategies when appropriate. Some of the more prominent strategies are included in the faculty teaching strategy (annex 1).

Several methods of teaching are used including lectures, practical sessions, field visits, and summer training in retail Pharmacies, hospitals, and pharmaceutical companies to provide students with knowledge, understanding, practical and professional skills.

In many courses, the students assignments include report writing, data collection and presentation. These activities would enhance the student's independent learning.

I.T. skills are developed through computer courses. A computer and internet center offer training courses to all students.

# e-learning and on-line courses:

Tanta University has constructed an e-learning center to help the university staff to introduce their courses in electronic form. However, there was a resistance from some of the staff, this may be due to the low extent of dissemination of the idea and the low number of the faculty staff with their heavy duties in teaching the students, monitoring the laboratory work and administrative responsibilities.

Recently, a phenomenon of private lessons was appeared, although it is a bad phenomenon, a reasonable number of students was engaged in it. This may be due to their private lessons habit in high school and dependency. The faculty

is aware of this phenomena and taking this behavior in consideration by doing more effort with the students, trying to increase tutorial sessions, improve the performance of the staff through engagement in FLDP, implementing academic advisor and office hours systems.

# VI.2- Students support, academic and pastoral:

# **Outstanding Students:**

- They officially receive financial awards (though very low with respect to the increase in prices, however it gives them moral support).
- Also during the graduation ceremony they are honored and receive good awards which are offered by some professors as well as some industrial pharmaceutical companies.

### **Disabled students:**

The faculty has a strategy for helping students with special needs. Special need could be apparent such as wheel chairs, or inapparent such as diabetes, epilepsy, pregnancy, etc...

The detailed plan for helping students and the role of each department are included in the annex.

Programme handbook is available which contains the specification of both the educational programme and the courses. The main student support is offered by the Youth Welfare Office, in collaboration with the Vice-Dean of Educational and Student's Affairs. Several social, sports, scientific artistic and cultural activities are conducted every year. In the academic year 2009 – 2010, several achievements have been performed through the Youth Welfare office as follows:

Helping students in need through payment of their faculty fees, charges for residence halls, purchasing the required scientific notes or books for them providing eyeglasses and medical devices for students with special needs.

Some staff members offer financial donations for students in need and supply them with the required notes free of charge..

Health care is provided freely to all students through the main University Hospital. Medicines are given for free and surgical operations are carried out for those who are in need by specialist doctors'. Also dentist clinic are available. The faculty has health service center for emergency cases.

# Participation of the students in the academic and social life:

Students of Faculty of Pharmacy, Tanta University are very active participants in the academic and social life; their activities are carried out through:

- Faculty and University student union.
- The Scientific Society of the students.
- The administration of youth welfare.
- Students assemblies.
- The social solidarity.
- Arrangement of smoking and addiction conference.
- Campaigns for blood donation.
- Medical caravans and project of medicine collection.
- Welcome party for new students.
- Participation in selection of ideal students.
- Visits to pharmaceutical companies.

# **Sports Committee:**

# **Sports committees' activities included:**

- Participation in University's league in different sports including handball, football, volleyball, table tennis and basketball (male and female).
- Sharing University youth week, Assuit and 6 October University (2002).

- The students of the faculty of pharmacy, Tanta University achieved good ranks on different faculties of pharmacy e.g.:
- Second rank in volleyball (2009/2010).
- Table tennis (male) third rank on Tanta University (2009 2010).
- Basketball (male) second rank on Tanta University (2009 2010).
- Basketball (female) fourth rank on Tanta University (2009 2010).
- Football and Handball 3<sup>rd</sup> rank on Tanta University.
- Swimming (Male) first rank (2009 2010)...
- Finally, the results of the different competitions in different sports activities showed that the students of the faculty of pharmacy, Tanta University are very competent. Also the girls scored the advanced position at the level of University in athletic, squash and advanced position in karate.

### Social Activities:

Social activities included organization of a blood donation campaign, participation in different social competitions and also arranging for the selection of the ideal student at the level of the faculty, then at the level of the University. The students issued different wall magazines, also the annual issue of the faculty magazine and (Hamasat) magazine. Students arranged two visits to Book exhibition and Dream Park as well as they arranged establishment of Dar El-Maaref exhibition in the faculty. Also students organized different trips allover the year to Cairo, Eien Sharm and Alexandria.

A student handbook is available to all student admitted in the prepharmacy year, and is also available in the students affair office. The current hand book contains information for both undergraduate and graduate students including:

- The study regulations and instructions.
- Chances for examination admission and withdrawal.
- Faculty departments, academic and administrative.

- Curriculum design.
- Grading system.
- Degree awarded by the faculty.
- Available services.
- Time table concerning education and examinations.

# **VI.3- Learning Resources:**

# Adequacy of the faculty staff members:

In 2009 / 2010 the total number of staff members is 51, the number of acting is 40. Total number of staff assistants are 66, 63of them are acting The total number of students at that time was 5676.

Ratio of number of staff members to number of students = 1:111

# **Responsibilities of staff members:**

- Delivering and updating different courses.
- Participating in the process of students' assessment and in oral exams in the faculty and in other faculties in different governorates.
- Participating in preparing the examination results for the two semesters, which necessitates enormous effort and time to be done according to the university regulations.
- Supervising the students during summer training in hospitals, public pharmacies, drug companies and giving them academic support through the system of scientific leadership.
- Supervising the research process done by the demonstrators and assistant lectures for completing their MSC and PH.D. Theses. The staff members always support them scientifically morally and sometimes financially, although the reward for this supervision and discussion of the finalized theses is very low.
- Doing their own research work for promotion.
- Attending obligatory training programs for developing via faculty leadership development project (FLDP) for promotion, the staff member and their assistants have to attend certain number of workshops and trainings under the supervision of the university.
- Participating in local and international conferences.
- Participating in the social, scientific, sports and charity activities carried out by the faculty.
- Updating their courses and developing the methods of students' assessment and learning.
- Few numbers of staff members are involved in research projects.

# **Staff Assistants:**

This comprises assistant lecturers 22 members, 20 of them are acting and demonstrators 44, 43 of them are acting. The total number of assistants is 66, 63 of them are acting. The ratio between the number of staff assistants and the number of students is 1: 86.

# **Responsibilities of staff assistants:**

- Preparing for practical sessions and supporting the students during their practical work.
- Under the supervision of the staff members they participate in the assessment of the practical and some review articles presented by the students.
- Watching the attendance of the students during the practical work.
- Doing their research work under the supervision of staff members for their promotion and participate in national and international conferences.
- Attending general and special courses for postgraduate students program.
- The staff is competent to facilitate learning by providing the students with hand out lectures, books and CDs. Compared to other faculties, private lessons are not common and the staff members never miss their lectures.
- Despite the shortage in the number of staff members and their assistants
  when compared to the increasing number of students, all members are
  highly qualified and specialist in their fields and they are dedicated to
  their college.

# Library:

Square meters with adequate lightening conditions and ventilation. It is usually open from 8 am to 4 pm and has 120 chairs and 14 large reading tables. It also has (17) large stands for books. Library is located on the third floor of the building of the faculty. The library contains 6,000 books, 5,900 are foreign books in addition to 100 Arabic books. It also includes many

The faculty has a wide library of more than 638 m<sup>2</sup> (18 X 36).

theses of Master's degrees and Doctorates, which were rewarded either by the faculty members or members of some other universities. The library has a net

hall containing 6 sets.

As of the periodicals, library contains many scientific periodicals specialized in the field of pharmacy. Recent periodicals have not been available.

The number of students and researchers who visit the library during the academic year is increasing, which represents a burden on the capacity of the library.

# **Laboratories and equipments:**

Each department contains a number of laboratories which used for practical lessons. They are equipped by facilities and reagents suitable for practical study. All laboratories are equipped with instruments to protect students from any chemicals or fire hazards. However the safety measures of the laboratories are still needed.

# **Computing facilities:**

There is a computer room equipped with 20 computers in the ground floor. Students can get access to the computers and the internet however more computing facilities are required for the students.

Most departments have their own computers, however, staff members and their assistants cann't get access to the internet in their offices right now.

# **Teaching Halls:**

There are four major halls, two of them are present in the building of the faculty, while the other two are newly established and separately located. An overhead projector and data show are available in the new teaching halls, they are air conditioned and equipped with a good lighting system. They have capacities of about 850 students each, while the other two are with capacities of 450 and 200 students.

In addition, there are small halls for tutorials are present in each department. It is necessary to have especial hall for carrying out the examinations of the students.

# **Financial resources:**

The main source of the financial support is the university budget, however, some budgets come from the drug company and some projects.

### VI.4- Students feed back on courses

Students feed back on courses was checked through questionnaires. Students have some comments which will be considered in the next year action plan.

# **CONCLUSION**

# Relevant strengths, weakness and recommendations are as follows:

# Strengths:

- 1- Presence of different methods of teaching and learning to attain ILO's.
- 2- The coursed have clear objectives and linked to each others.
- 3- The faculty has a recently well developed teaching strategy.
- 4- Large number of the faculty staff have granted their Ph.D from international universities and this is reflected on their teaching.
- 5- Presence of system to support outstanding students.
- 6- Presence of financial support system for students in need.
- 7- Offering many students activities
- 8- Presence of health care services to all students.
- 9- Participation of many students in all academic and social activities.

### Weakness:

- 1- No academic advisor system.
- 2- The office hours system is not applied.
- 3- Limited number of staff members.
- 4- Some staff members still using the traditional method in teaching which depends mainly on giving knowledge only.
- 5- No e-learning and online courses were established right now.
- 6- The library should be supplied by recent scientific periodicals and books, internet services, more library specialists and flexible borrowing system.
- 7- Electronic library system should be started.
- 8- The number of laboratory, equipments and chemicals are not enough compared to the large number of students.
- 9- Very low university budget.

### **Recommendations:**

- 1- Using the academic advisor system by development of new curriculum depending on credit hours system.
- 2- Apply the office hours system.
- 3- Encourage the use of independent learning techniques to help students to acquire self-learning.
- 4- Training workshops are needed for encouraging staff members to use the new information technology in their lectures.
- 5- Encourage staff members to transfer their courses to online courses and enhance e-learning process.
- 6- Increasing the number of laboratories by constructing a new extension building.
- 7- Trying to increase the financial support through the university, projects, and drug companies.

# Annex:

- 1- Faculty teaching strategy.
- 2- Faculty meeting acceptance of detailed plan for helping disabled students.
- 3- Statistical results of questionnaires targeted to the students for courses evaluation.

# VII- QUALITY MANAGEMENT

The responsibility of quality management rests primarily on the Faculty Council and the Faculty Quality Assurance (QA) Unit. The quality management depends dramatically on the co-operation between the different committees of QA and the Faculty staff members. Commitment of the Faculty to welcome peer evaluation is an evidence for serious efforts toward quality management and enhancement.

# VII.1- Faculty's vision for enhancement:

A strategic plan for quality assurance and enhancement is well defined and can be derived from the Faculty's mission statement, which stems out from the University's mission. The Faculty encourages strategic quality enhancement through continuous meetings of the Faculty Council and then circulating announcements in order to rectify deficiencies in its three covered domains; **Education**, **Research** and **Community services**.

Evidences for the existence of important procedures for quality assurance and enhancement in the fore-mentioned three domains at Faculty of Pharmacy, Tanta University (FPTU) are listed below.

# VII-1-1 The undergraduate educational program of the FPTU is carefully performed to achieve the Faculty's strategic objectives by the following means:

1) Establishing the QA Unit inside the Faculty to identify the obstacles and weak points, this will help to improve the quality of the educational program and methods of teaching, learning and assessments.

- 2) Approving a new educational program that offers B.Sc. in Pharmaceutical sciences with emphasis on new advances in pharmacy to fulfill the stakeholders' requirements.
- 3) Launching a student computer laboratory containing 15 computers connected to the University's internet.
- 4) Performing summer training programs for the 2<sup>nd</sup> and 3<sup>rd</sup> professional year students at drug manufacturing factories, hospitals, and pharmacies. Such training programs are held under the supervision of al Faculty staff members and assistants.
- 5) Organization of scientific seminars in Molecular Modeling & Computerized Drug Design for students of 4<sup>th</sup> year under supervision of Pharmaceutical Chemistry Department.
- 6) Quizzes during the lectures in order to pinpoint students with intellectual skills and to increase the attendance of students during lectures.
- 7) Student members of Tanta Pharmaceutical Scientific Society (TPSS) are participating in many conferences of the Pharmaceutical Scientific Society at different Egyptian universities. The students were sharing in the conferences by different researches including Gene Therapy, Drug Targeting, Avian Flu & Obesity. These conferences would increase students' information in all fields of pharmaceutical sciences, and foster their critical thinking abilities.
- 8) Student members of TPSS established a site on the internet (www.tantapss.com) to know opinions of students and make a link between students and staff members.
- 9) Establishment of a fair system for dealing with students complaints.

# VII-1-2 Graduate studies and research development:

- 1) Construction of a new Library provided by a computer program for getting the required books by a simple means.
- 2) Introduction of internet in the library mainly in the drug information center.
- 3) Collaboration of research projects, between the Faculty staff members and professors in foreign universities.
- 4) Registration of distinguished graduate students for master & Ph.D. according to the Tanta University policies.
- 5) Preparation of research laboratories equipped with the basic facilities for performing the Departments' research plans.

# **VII-1-3. Community Services' enhancements:**

- 1) Establishment of a special unit "Bioavailability Unit", which works according to national & international standards, and increasing its facilities and capacity to fulfill many research projects for the pharmaceutical factories. This unit has good facilities to achieve its goals.
- 2) Engaging stakeholders in the process of establishing the Faculty mission.
- 3) Performing "health care campaigns" in collaboration with physicians from Faculty of Medicine, Tanta University. In these campaigns, the Faculty members and students make field visits, participate in health awareness, and offer free samples of medicaments to patients.

# Examples:

- Health care campaign to Samanoud at 23/03/2005.
- Health care campaign to El-raas El-Akdar village in Kafr El-Sheekh at 15/05/2005.

- Health care campaign to El-dalgamoon village in Kafr El-zyaat at 14/09/2005.
- Health care campaign to Basyoon at 26/03/2007.
- 4) Establishing "Alumni Affairs' office" as part of the Students Affairs' Department.
- 5) Establishing a First Aid room for students and all Faculty members under medical supervision.
- 6) Student members of TPSS participated by many activities and researches in the International Day for AIDS, International Day for Tuberculosis, and Smoking Management.
- 7) Student members of the "Cultural Society" participated in the National Day for "Yateem" by visits to the special houses and presenting gifts.

### **Enhancement of students' activities:**

- 1) Student members of TPSS are participating in many conferences of the Pharmaceutical Scientific Society at different Egyptian universities. In such conferences, the students participated in collecting scientific information, reviewing scientific data, and presenting these data aiming to find solutions for existing problems in different fields of study including marketing, biotechnology, drug industry, drug discovery, and health care.
- 2) Student members of TPSS conducted workshops and training sessions to train students on First Aid & Drug Marketing.
- 3) Organization of scientific visits to Drug Companies for the students of 4<sup>th</sup> year to enrich their knowledge in industrial pharmacy.
- 4) Different committies of Student Union of FPTU are well supported to practicize their activities in the Art, Poem & Cultural knowledge.
- 5) The "Cultural Society" publishes a magazine named "Kalam Fy El-Adab" annually and another magazine "Hamasat" every term.
- 6) An exhibition for Art and Poem is conducted near the end of the academic year at the "Graduation Day".

- 7) Organization of journey to Book Fair every year.
- 8) Organization of cultural journey to Aswan & Luxor for students of 4<sup>th</sup> year.
- 9) Organization of competitions in sport, culture & Quran.
- **10**) Organization of celebrations to welcome students of Prepharmacy & to greet newly graduated students.
- 11) Election of the "Ideal Student" for each of the five years and then for the Faculty.

# **Enhancements of administrative aspects:**

- 1) Encouraging the attendance of administrative personnel for the training programs and workshops to enhance their capabilities.
- 2) Supplying each administration department with computerized system for registration of data to keep it and to get it easily later on.

# **Enhancement of Faculty staff members' capabilities:**

- 1) Encouraging Faculty staff to attend training workshops conducted through Tanta University program for enhancing their capabilities fulfilling the aims of the Faculty and Leadership Development Project (FLDP).
- 2) Facilitating funding for the Faculty staff to attend national and international conferences.

# Mechanisms for dissemination and implementing policies:

These include well-established channels of communication, such as Department Councils, subcommittees, Tanta Faculty website (www.tantapharmacy.org), circulations of the Faculty top management to the Heads of Departments and then to Faculty members through Departments Councils.

# VII.2- Implementation of the University's policies and regulations:

The Faculty ensures to implement the University policies through the following channels:

- 1) The Faculty and Departments Councils.
- 2) Faculty committees, meetings, seminars, workshops, and conferences.
- 3) University top managements circulations to Faculty top management then to Departments Heads and finally to Faculty members through Departments Councils.

# VII.3- Engagement with stakeholders to gain the community's trust in the academic program:

The policies, plans and mechanisms set in order to engage stakeholders in the process of enhancement require their participation in assessing the Faculty's educational program and community services. Their opinions are valued and benefited from in developing the educational process and the involvement with the community.

The main collaborative bodies with the Faculty include Supreme Council of the Universities, Pharmacy Sector Committee, Ministry of Health and Population, General Syndicate of Pharmacists, Pharmacists, Drug Companies, and some Research Institutions. Strengthening the collaboration with these collaborative bodies is always one of the strategic objectives of the Faculty. Members of different collaborative bodies, including General Syndicate of Pharmacists and Drug Companies attend the Faculty Council as external members.

# VII.4- Effectiveness of the internal review system for quality assurance:

The Quality Assurance Unit of FPTU is the driving force behind institutional quality management policies. It ensures the performance of two important and integrated procedures for quality management. These include internal evaluation by getting student feedback on course contents, instructors, teaching methods, facilities.... etc. The obtained data are guided to improve the

educational outcome. Following up is also a necessity to keep up the Faculty's high standard and efficiency in management, administration, education, research and community services.

The internal review system for quality assurance is effective as reflected by a number of improvements in the overall education process in response to problems raised in students' evaluation of program's intended learning outcomes and learning facilities. The annual program report incorporated the measures taken by the Faculty in response to such shortcomings.

Statistical analysis of the results of final examinations of all courses is performed and reported to relevant Departments for future improvement in assessment methods. Departments offering different courses are responsible for monitoring and evaluating their courses by the Department Council appraising course performance at the end of each term. This is mainly based on the students' achievements and evaluations.

The Faculty addresses its responsibility for improving the quality of education, through monitoring students' assessments and reviewing the educational program.

# VII.5- The issues arising from any external review report:

External review is a vital component of overall QA unit activities that should be performed through suitably appointed qualified and experienced people. FPTU is working towards establishing a complete and effective QA system. Therefore, the external evaluation system of courses is planned to consider external peer reviewing of the program in the near future. Currently, the Faculty engaged end-users as external evaluators of the academic program. The annual program report reflects the opinions of different end-users in the Faculty's program including employers, alumni and students.

# VII.6- Review of the last enhancement/action plans for improving the quality of education:

There is no official and documented action plan before this self evaluation study. Nevertheless, a number of problems pointed out by students, assistants, and Faculty staff through the open-door policy were tackled by the Faculty top management. Examples are the actions taken to launch the computer facility, maintain audio-visual aids, and to access the internet.

# **VII.7- Action plan for enhancement:**

- 1) Increasing the number of Faculty staff members.
- 2) Need to supply the library with high-speed internet.
- 3) Need to supply Faculty staff rooms with high-speed internet.
- 4) Providing all of the administrative departments by computerized and automated system.
- 5) Starting construction of an extension of the Faculty building to widen some Departments esp. Biochemistry, Microbiology & Clinical Pharmacy Departments.
- 6) Starting construction of an additional building to cope with increase in student number and to satisfy all objectives of the Bioavailability Unit.
- 7) Need to satisfy laboratory chemicals, reagents & instruments to improve and develop practical work.
- 8) Continuous training of administrative and Faculty staff.
- 9) Continuous improvement and updating of curriculum.

# **CONCLUSION**

# I. Strengths:

- 1) Establishing the QA Unit.
- 2) Establishing a student computer laboratory center.
- 3) Establishing Bioavailability Unit.
- 4) Construction of new library, new laboratory for Analytical Chemistry Department, and two new large lecture halls.
- 5) Training of Faculty staff on how to specify courses and write their reports.
- 6) Distinguished publications by the Faculty staff members, as main author researchers, in local and international journals.

### II. Weaknesses:

- 1) Small number of staff members and assistants.
- 2) No internet terminals in the staff members' rooms.
- 3) Low speed internet in the Drug Information center.
- **4**) There is no research laboratory in many departments, and the existing ones lack equipments and instruments.
- 5) Student labs are not equivalent to the increasing number of students so that the **practical work is performed every other week**.
- 6) Chemicals and instruments are not sufficient for student practical study so that students can not work individually but work as groups.
- 7) Absence of strategic plan for research and organization between different departments in this field.
- 8) Absence of computerized and automated system in most of the administrative departments.
- 9) Small number of well-trained secretary and administrative personnel.
- **10)** Small number of well-trained laboratory technicians.
- 11) Inadequate work efficiency and performance of some administrative personnel.
- **12)** Low salaries of Faculty staff members and administrative personnel in relation to their job responsibilities.

### **Recommendations**

- 1) Increase number of staff members and assistants.
- 2) Setting internet terminals in the staff members` rooms.
- 3) Increase internet speed in the Drug Information center.
- **4)** Establishing research laboratory in needy departments with necessary equipments and instruments.
- 5) Getting chemicals and instruments for student practical study so that students can work individually
- 6) Make strategic plan for research and organization between different departments in this field.
- 7) Provide computerized and automated system in most of the administrative departments.
- 8) Increase number of well-trained secretary and administrative personnel.
- 9) Increase number of well-trained laboratory technicians.

# VIII: RESEARCH AND OTHER SCHOLASTIC ACTIVITIES

The faculty already has a committee for graduate studies and research affairs which has a meeting held monthly. This committee has also a supporting administrative office. The responsibilities of this committee involve:

- 1- Setting the research strategies of the faculty
- **2-** Approving ;the theses done by staff members
- **3-** Setting the plans for training of the staff members
- **4-** Coordinating between the researches done at different academic departments.
- 5- Distributing the available research budget among the departments.
- **6-** Reviewing the research outcomes of the previous year

# **VIII.1- Research plans**

The research plans are suggested by department councils and approved by the research committee. The Vice Dean of the graduate studies and research affairs plays the role of the coordinator for such research plans. The Vice Dean collects these research plans and integrates them to prepare a general research strategy of the faculty. The research plans are reviewed every five years. The current research plan is extended from 2007 to 2011.

The research plan is based upon three main arms:

# 1st arm:

Separation or preparation of pharmacologically-active compounds either from natural sources (such as medicinal plants) or from chemical synthesis of structures generated by computer-assisted drug design. The obtained compounds will be studied pharmacologically and formulated in suitable pharmaceutical dosage forms.

# 2<sup>nd</sup> arm:

Studying pharmaceutical products in use in Egypt from chemical, biological and pharmaceutical perspectives. Moreover, the pharmacokinetics of these drugs in various disease states, drug interactions and the pharmacologic response in chronic diseases will be studied.

# 3<sup>rd</sup> arm:

Studying the environmental factors (pollutants and toxins), their impacts on health and the development of biological techniques to degrade pollutants including industrial waste products.

The research plan will be carried out cooperatively by the college eight departments. The following summarizes the contribution of each department within this plan:

# 1- Department of Pharmacognosy:

The department will screen plants for chemical constituents that will be further studied for pharmacological activity. Microbial transformation of these compounds into more active entities will be also investigated, as well as plant tissue culture techniques to produce therapeutic compounds.

# **2- Department of Pharmacology:**

The department research plan involves investigating the involvement of free radicals and oxidative stress in different pathological conditions as well as hazards of environmental pollution and the different organ toxicity due to exposure to environmental pollutants and different toxicants. The plan also focuses on the involvement of different immunomodulatory agents in the management of different pathological conditions.

# 3- Department of Biochemistry:

Research within the department will focus on studying mechanisms of suppressing cancerous growth in laboratory animals either using naturally-occurring or synthetic compounds, or using immunomodulatory agents. The department will also conduct a study on the rates of incidence of cancer in children of El-Gharbeya Governorate by screening for cancer markers.

# **4- Department of Clinical Pharmacy:**

The department research plan focuses on studying the different factors that can affect the pharmacokinetic behavior of drugs in different patient populations which can include drug interactions, pharmaco-genetics, routes of administration, and formulation factors. The research plan also gives a special emphasis to the evaluation of patient response to different treatment modalities using biochemical, pathological, and clinical methods for evaluations especially in the area of diabetes, cancer, and cardiovascular diseases. The plan also includes studying the different programs that can help in improving the healthcare services provided to patients especially the impact of clinical pharmacy services in the healthcare system in Egypt.

# 5- Department of Microbiology:

The department carries out research to evaluate the antimicrobial activity of natural and synthetic compounds for possible therapeutic use as antibiotics. Research within the department also involves studying the mechanisms of resistance of microbial pathogens to different antimicrobial agents at both molecular and genetic levels. The department also conducts research to study microorganisms that are involved in biodegradation of xenobiotics which cause pollution of ecosystems in Delta region

# **6- Department of Pharmaceutical Technology:**

The research plan of the department involves formulating therapeutically-active compounds of both natural and synthetic origins in suitable pharmaceutical dosage forms that can be used for patient administration. The developed dosage forms are assayed to evaluate physical, chemical, and biological stability of the active ingredients as well as to study the bioequivalence of the different pharmaceutical formulations. The department plans to focus research on the use of nanotechnology to optimize oral, topical and parenteral drug delivery.

# 7- Department of Pharmaceutical Chemistry:

The department plans to contribute to development of new therapeutic agents using drug-assisted drug design and to investigate the molecular basis of drug action especially for hepatitis drugs. The department is also active in the field of quality control especially concerning bioengineered drug products in the Egyptian market.

# **8- Department of Analytical Chemistry:**

The department focuses on chemical quality assurance of pharmaceutical formulations especially determination of the level and stability of active ingredients. The department research plan is primarily concerned with the development of new methodologies for both qualitative and quantitative analyses of the different pharmaceutical products including the various dosage forms (capsules, tablets, injectables, etc.) as well as unformulated active ingredients. Pharmaceutical products studied include those that are already in clinical use, and those under scientific investigation.

Within these research fields, all departments have documented research protocols for Master and Ph.D. Students.

Before approval of individual research protocols, the following steps are required:

- 1- The researcher is asked to give a presentation about his/her research protocol and all the staff members of the faculty are invited to attend this seminar and discuss the value of this work and how it will be done.
- **2-** The department council discusses the proposed research protocol taking in consideration the different points of view that are raised during the seminar presentation.
- 3- The department council sets the research proposal in its final form
- **4-** The proposal is delivered to the research committee for reviewing and approval.

If approved by the department council and research committee, the proposal is delivered to the faculty council for approval.

# VIII.2- Participation of faculty members in research activity.

A total of 49 Master and 23 Ph.D. research projects were running in the different academic departments during the year 2009/2010.

The faculty is planning to perform a data base for the finished thesis and published articles. This database will includes the publication title, authors and journal citation.

### **Collaborative research work:**

There are some plans of collaborative research work between departments. Within 2009/2010. Some research projects were running by internal collaboration between different academic departments in the faculty. In order to widen the scope of the research and achieve better scientific interactions, many of the research projects (Master and Ph.D.) were done in collaboration between

academic departments of the faculty and external institutions such as other faculties (e.g Faculty of Medicine, Sciences and Agriculture) and National Research Centers (research protocols are included in annex.

# VIII.3- Awards offered by the institution.

- The faculty offers:
- Master degree.
- Doctor of philosophy degree (Ph.D).
- Doctor of Pharmacy (Pharm D.)
- No Diplomas were offered..
- The number of Ph.D. and Master Degrees awarded by the faculty within the last six years was noted.
- A number of Faculty staff members gained 4 awards in the scientific research from (2000-2004).

# VIII.4- Current awards offered by the institution.

During 2009/2010 a total of 3 scholarships were offered, one to assistant lecturers to earn the Ph.D. from international university and two to demonstrators to get them in contact with the most recent advances in their research field.

The number of running research protocols in the faculty academic departments are summarized in table (6):

Department	Running research protocols for master degree	Running research protocols for Ph.D
Department of Pharmacognosy	6	3
Department of Pharmacology	5	5
Department of Biochemistry	2	2
Department of Clinical Pharmacy	6	9
Department of Microbiology	10	5
Department of Pharmaceutical technology	22	12
Department of Pharmaceutical Chemistry	6	
Department of Analytical Chemistry	1	3
Total	49	23

# VIII.5- Sources and level of research funds.

- **1-** The basic research fund is governmental through the university budget (no specific budget for research). This fund is very limited and disabling. This limited fund is the major obstacle of research and prevents invasion of recent and modern research fields.
- **2-** There are some individual efforts to gain fund from Academy of Scientific Research and Technology and from some companies however these efforts need to be organized. Some examples of these projects included in table (7):

Project title	Duration	Source of fund
Studies on the genetic effects of some plant extracts used as natural food preservative	2007-2009	Tanta University
Antitumor activity of some immunomodulating agents	2009-2010	Tanta University

# VIII.6- Published research in conferences and periodicals.

# Published articles during 2009/2010.

The distribution of publications among departments is summarized in table (8):

Academic department	No. of publications	National	International
Department of Pharmacognosy	9	7	2
Department of Pharmacology	9	7	2
Department of Biochemistry	2	2	
Department of Clinical pharmacy	16	14	2
Department of Microbiology	3	3	
Department of Pharmaceutical technology	16	7	9
Department of Analytical chemistry	1		1
Total	56	40	16

# VIII.7- Contribution of faculty members in seminars and conferences.

A total of **103** seminars were held during the year 2009-2010 in different academic departments covering various scientific fields. These seminars are summarized in table (9):

Department	No. of seminar
Department of Pharmacognosy	3
Department of Pharmacology	11
Department of Biochemistry	8
Department of Clinical Pharmacy	16
Department of Microbiology	8
Department of Pharmaceutical Technology	42
Department of Pharmaceutical Chemistry	6
Department of Analytical Chemistry	9
Total No.	103

#### - Presenting seminars for all faculty members:

A total of 9 seminars were presented by gusset speakers. These seminars aimed to enrich the research experience of faculty members, allow contact with other research schools and explore or shed light on new areas of research.

# - Offering financial support to faculty members to attend practical training courses and workshops:

During the year 2009-2010, ten (27%) of the faculty members had attended practical training courses held outside the faculty to develop their laboratory and research skills especially in new areas of research. The expenses were fully covered by the faculty through the fund offered by the university. The training courses attended by the faculty staff are summarized in table (10):

Training course	Location	No. of faculty member attended
Plasmid analysis	Cairo	2
DNA sequencing	Cairo	2
Phase contrast dark field microscope	Cairo	2
Computer aided drug design using MOE	Assuit University	4
Bio-safety dissemination	Cairo	1
Control system in the quality of clinical work	Alexandria University	2
Immunoflorescence microscope	Cairo	2
Total No. of staff	*10	

<sup>\*</sup> Same staff member has attended more than one training course.

## Faculty and Leadership Development Project (FLDP)

Most of the faculty members have attended FLDP seminars and work shop at Tanta University Project Management Unit. The number and title of seminars and work shop attended by the faculty members are included in annex No. 6

# - Offering financial support to faculty members to attend international and national scientific conferences:

During the year 2009-2010, the faculty members had attended national and international scientific conferences to develop their scientific backgrounds and to achieve more effective scientific contact with other researchers. The expenses were fully covered by the faculty through the fund offered by the university. These are summarized in table (11):

Conference title	Location	No. of faculty member attended
1 <sup>st</sup> international pharmaceutical	Tanta-Egypt	All faculty
sciences conference (Pharmacy		members
education & community		
expectations)		
4 <sup>th</sup> international conference of	Cairo-Egypt	2
pharmaceutical & drug industry -		
research division		
2 <sup>nd</sup> international conference for	Tanta-Egypt	6
enhancing scientific research:		
innovation & development		
6 <sup>th</sup> international conference: Liver &	Tanta-Egypt	3
environment	3,1	
7 <sup>th</sup> international conference: Liver &	Tanta-Egypt	3
environment	3.1	
1 <sup>st</sup> international conference in	KSA	1
biotechnology		
The international conference for	KSA	1
nanotechnology		_
69 <sup>th</sup> international congress of FIP	Istanbul-Turkish	1
8 <sup>th</sup> international Saudi	KSA	1
pharmaceutical conference		1
The 56 <sup>th</sup> scientific congress of	Cairo-Egypt	1
Egyptian society of clinical	Can't Egypt	•
chemistry		
The annual scientific conference of	Cairo-Egypt	1
ESBMB	Can o-Egypt	1
Conference of digestive disease week	USA	1
gastroenterology	CSA	1
و gastrochterology مؤتمر اطلاق تقرير حالة التعليم العالى في مصر	Cairo-Egypt	1
"التقرير القطري"	Cano-Egypt	1
المؤتمر العلمي لتحسين جودة برامج الدراسات	Menoufia -Egypt	1
العليا		
الموتمر العلمي الول لتسويق البحوث الجامعية	Menoufia-Egypt	1
التطبيقية و البحث العلمي في خدمة الصناعة		

<sup>\*</sup> Same staff member has attended more than one conference.

#### VIII.8- Review of the last recommendations for research enhancement:

There was no documentation for last year's action plan.

## Relevant strengths, weakness and recommendations are as follows:

### **Strengths:**

- 1-The faculty has a well defined research plan that conform with recent subjects.
- 2- Academic departments have their research plans.
- 3- The faculty has a clear policy and vision to enhance a collaborative research.
- 4- The faculty has policies and plans for the enhancement of the research skills of the faculty members.
- **5-** Good number of publications for such few number of faculty staff overloaded with huge teaching, grading and administrative responsibilities.
- **6-** The obvious development and activity of the faculty's graduate programme reflected from the increase in the number of graduate students in the last three years.

#### Weakness:

- 1- The total budget collected for research activities is very limited.
- 2- The research facilities are not sufficient to achieve high quality research in the new areas needing high technology, this may be clear from the limited number of publications in international journals.
- 3- Unavailability of Scientific Bulletin for the faculty.
- 4- Unavailability of computer-based data containing all the manuscripts published by the faculty staff members.
- 5- Large No. of students consume most of the faculty staff's time and efforts.

## **Action plan:**

Strategies adopted to ensure devotion for research and creativity. Faculty staff members have many duties which hinder their devotion for research and creativity.

# To overcome the overload and to devote faculty staff for research we have to plan for the following:

- 1- The faculty policy should minimize the administrative responsibilities done by the staff members. This can be achieved by training of the administrative persons and technicians to do such administrative work efficiently without the need for the staff members.
- **2-** The faculty policy should encourage creative ideas. This can be achieved by an annual research meeting:

The Vice Dean for graduate studies and research affairs has suggested to hold annual scientific meeting for the faculty.

During this meeting, the following activities will be discussed:

- **a-** The research plan of the departments will be reviewed
- **b-** The current status of each running research project will be presented and the obstacles will be discussed and solved.
- **c-** The articles published by faculty members within this year will be presented and discussed.
- **d-** Round table discussion will be held between different specialties to form new research groups.
- **e-** This meeting will allow updating of the research database of the faculty and will be a nucleus for preparing annual research booklet of the faculty.
- **f-** The pharmaceutical industry and health authority representatives will be invited to the meeting to introduce their problems that can be solved be research work in faculty.

#### 3- Raising funds from companies:

More workshops will be periodically conducted at the faculty where the pharmaceutical companies will be invited to create and explore the possibility of establishing collaboration between the research in the faculty and industry. The objectives of these meeting are:

- a- Maximizing the interaction between the research and industry to increase the applicability of the conducted research.
- b- Getting funds from these companies so as to enhance the research environment and facilities.
- 4- Attempt to get a project belongs to TEMPUS/ and/ or FP7 This will help to:
  - *a* maximize the applicability and financial feasibility of the research conducted in the faculty.
  - **b-** re-direct the research plans according to the needs of the community health.
- 5- Establishing electronic database containing all the manuscripts published by the faculty staff members.
- 6- Establishing electronic database for running post-doctoral researches in the faculty.

#### Annexes and documents:

- 1- Minutes of graduate studies and research committees.
- 2- Research plan of different departments from 2002/2007 (allocated fund, timing, indicators of success and/or completion, and policy for regular review)
- 3- Research protocols of different departments in the faculty and collaborative protocols of graduate students with other departments outside the faculty.
- 4- Hand out of conferences and certificates of attendance.
- 5- A copy of staff publications in national and international journals.
- 6- List of FLDP seminars and workshops attended by the faculty staff and assistants.

# IX- COMMUNITY INVOLVEMENT

The mission statement of the College of Pharmacy, Tanta University stresses the importance of reacting to the community needs while offering high quality pharmacy education. A website for Faculty of Pharmacy, Tanta University (<a href="www.tantapharmacy.org">www.tantapharmacy.org</a>) has been designed, through which, information about the Faculty are displayed.

# IX.1- Contribution of the College to the Community, Society and Environmental affairs:

As the mission of Faculty of Pharmacy, Tanta University (FPTU) states, pharmacy education would ensure societal services while meeting the expectations of the stakeholders of the profession including students, employers, alumni, the pharmacy community, and the society.

Representatives from the "General Syndicate of Pharmacy" as well as sounding pharmaceutical companies are members of the College Council. They constantly offer their consultation in issues related to the educational process, research or community services. On the other hand, a number of professors of FPTU are consultants for different Drug Companies and some of them are members of WHO.

The FPTU offers services to the community through 8 axes: the Pharmaceutical Services Center (PSC), Drug Information Center, Tanta Pharmaceutical Scientific Society (TPSS), Conferences & "Tanta Meeting", Research Projects, Periodical Seminars, the Cultural Society, and activities of the Youth Services Department.

#### 1. Center of Pharmaceutical Services Center (PSC):

The Center of Pharmaceutical Services Center was founded as a special unit within the College of Pharmacy in April 1997 for the following **purposes:** 

- 1) Offering pharmaceutical services in the areas of pharmacy, healthcare, drug industry and drug registration (consultation for drug manufacturers).
- 2) Carrying out scientific research to solve problems encountered in the areas of pharmacy, healthcare, and environmental protection, and to contribute in combating environmental pollution.
- 3) Creating and developing new methodologies to increase production and improve the quality of pharmaceutical products.
- 4) Continuous pharmacy education for pharmacy graduates.
- 5) Strengthening cultural and scientific rapports with other Arabic and international universities and scientific organizations.

# The PSC offers pharmaceutical services and consultations in the following areas:

- 1) Bioavailability and bioequivalence studies.
- 2) Studies and testing for drug registration.
- *3*) Microbiological studies.
- 4) Workshops.
- 5) Solving manufacturing problems.
- 6) Physical and biochemical examination of under complete certified medical supervision.
- 7) Pharmaceutical consultation to solve QC, safety & stability problems.
- 8) Quality control of herbal medicine.

- 9) Preparation of insert leaflets for pharmaceutical preparations.
- 10) Consultations in the field of total parenteral nutrition and I.V infusions.

### **Equipments:**

The center occupies 300 sq. meters in the college and is composed of two main parts; the first is equipped to carry out clinical studies on volunteers under supervision of physicians from College of Medicine. The second part is the laboratory, which is equipped to analyze samples obtained for bio-equivalence studies. The center is equipped with the following:

- 1) Two Shimadzu HPLC units equipped with automatic injection modules.
- 2) Two Waters HPLC units equipped with automatic injection modules.
- 3) Equipments to evaluate disintegration of solid dosage forms.
- 4) Solvent evaporators
- **5**) Centrifuge units.
- **6)** Water distillation units.
- 7) Sensitive balances.
- 8) Deep freezer & refrigerators.
- **9**) pH meters.
- **10)** Computer facility to allow for documentation and data analysis.
- 11) The Clinic contains the necessary medical equipments to be used by physicians to conduct clinical exams on participating volunteers.

# Accomplishments during 2009/2010:

### A. Activities in the areas of pharmacy, drug industry and healthcare:

1) *Bioequivalence studies:* have been done for about 5 formulation for national and international drug companies.

No.	Trade Name	Company	Date	Project  Description
1	Co-Valsartan Tablets	MEPACO	11/2009	Bioequivalence study
2	Oxigrex Tablets	EVA Pharma for Pharmaceutical and Medical Applications	12/2009	Bioequivalence study
3	Cefadroxil suspention	PHARCO B INTERNATIONA	15/1/2010	Bioequivalence study
4	L carnitine tabets	MEPACO	15/2/2010	Dissolution at different pH solutions
5	Myopirin tabets	Dar El Shefaa - Ramallah	6/2010	Bioequivalence study

2) *Expert reports:* the center has prepared expert reports of the pharmacological, toxicological and clinical studies that have been done for about 26 preparations. These reports are important for drug registration.

No.	Trade Name	Сотрапу	Project Description
1	B.B.C.® Spray	Amoun	Tolerability, study
2	Biovitone ® Capsule	Eva Pharma	Preclinical, studies
3	Chromax ® Capsules	Eva Pharma	Preclinical, studies
4	Antinal ® Suspension	Amoun	Preclinical, studies
5	Biovitone ® Capsule	Eva Pharma	Pharmacological
6	Moov Massage ® Cream	Eva Pharma	Pharmacological
7	Chromax ® Capsule	Eva Pharma	Pharmacological
8	Antinal ® Suspension	Amoun	Pharmacological
9	Biovitone ® Capsule	Eva Pharma	Clinical
			Documentation
10	Moov Massage ® Cream	Eva Pharma	Clinical
			Documentation
11	Antinal ® Capsule	Amoun	Clinical
			Documentation
12	Antinal ® Suspension	Amoun	Clinical
			Documentation
13	Antinal ® Capsule	Amoun	Preclinical, studies
14	Stimulan ® Capsule	Amoun	Pharmacological
15	Vidane ® Syrup	Eva Pharma	Clinical
			Documentation
16	Prostanorm ® capsule	Eva Pharma	Pharmacological
17	Vidane ® Syrup	Eva Pharma	Preclinical, studies
18	Vidane ® Syrup	Eva Pharma	Pharmacological
19	Prostanorm ® capsule	Eva Pharma	Clinical

			Documentation
20	Prostanorm ® capsule	Eva Pharma	Preclinical, studies
21	Antiflu Capsules	ADWIA	Pharmacological,
			Toxicological
22	Octovent Plus Syrup	October Pharma	Pharmacological,
			Toxicological
23	Prostacure Plus	October Pharma	Pharmacological,
	Capsules		Toxicological
24	Dimra® Tablets	October Pharma	Pharmacological,
			Toxicological
25	Quinidine Sulphate	AMOUN	Pharmacological,
	Tablets		Toxicological
26	Adwiflam® Ampoules	ADWIA	Pharmacological,
			Toxicological

- 3) Registration problem solving: consultation and scientific tackling of problems concerning registration of pharmaceutical formulations.
- **4)** Optimization of pharmaceutical formulations to maximize efficacy and safety.
- 5) *Quality Assurance:* was done for many pharmaceutical and cosmetic preparations and also for veterinary preparations for the division of Veterinary Medicine in Gharbyia Governorate.
- **6**) Screening of herbal preparations for efficacy and toxicity.
- 7) Determination of drug levels in biological fluids.

# **B.** Educational and training activities:

Training sessions (workshops) have been held in the following areas:

- 1) *Drug stability and storage techniques:* in cooperation with the WHO for pharmacists from the Sudan Ministry of health.
- 2) Bioequivalence studies: for students from universities in France, Syria and Yemen.
- 3) Analysis of toxins in different body fluids: for physicians of Menshawi General Hospital in Tanta.
- **4)** Computer-assisted biostatistics.
- **5**) *Continuous pharmacy education* in coordination with pharmacy syndicates in Gharbyia, Kalyoubyia, Menofyia, and Kafr El-Sheikh Governorates.
- 6) In addition, the center organized two *English language training sessions* and 16 *computer training sessions* in the period July 1997 to April 2003.

## C. Accreditation of Bioavailability and Bioequivalence Unit:

In August 1998, the center was appointed from the Ministry of Health to carry out bioequivalence studies. In March 1999, the Minister of Higher Education has inaugurated the unit that was highly equipped. In January 2000, the unit was certified by the American Company (ASR) and issued the ISO 9001-2000 certificate. This is the first unit in Egyptian universities to obtain such certificate.

# 2. Drug Information Center:

It was founded in 1997 and contains 10 computer units. The center offers *Internet services* to students and staff members, *printing services*, and *drug information services* as it contains some data bases on CDs.

# 3. Tanta Pharmaceutical Scientific Society (TPSS):

The student Pharmaceutical Scientific Society carries out several activities aiming to raise the scientific knowledge of the students and graduates of the college as well as to serve the surrounding community and environment.

# **Accomplishments of TPSS:**

- 1) Participating in the *General Assembly of the Egyptian Society of Pharmacy Students* (ESPS). Several students of our college were elected to top positions in the ESPS such as the vice-president position (2004-2005), chair of the General Relations Committee (2005-2006 and 2006-2007), and chair of the Student Exchange Committee (2006-2007).
- 2) Arrangements for training of college students in some drug manufacturing factories in Egypt.
- 3) Arranging for student *training in some European countries* (France, Germany, Poland, Romania, Hungary, and Croatia), United States of America and Australia according to a student exchange program.
- 4) Celebrating some scientific events and the Graduation Day, and welcoming new students admitted to the college.
- 5) Issuing several publications and magazines such as the "Capsula" magazine and the "Scientific Magazine". Also, the society has issued brochures about several topics such as complementary and alternative medicine, herbal medicine, first aid, tuberculosis, and avian flu.
- 6) Increasing public awareness to tuberculosis by organizing a "TB Day" and ranked as the second in paper writing competition.
- 7) Organizing AIDS day in collaboration with the scientific society in the College of Medicine on December 1, 2004.

- 8) Organizing several trips inside the country for the students (Fayoum City, Fayed City, Dreamland city, Borg El-Arab and Sharm El-Sheikh).
- 9) Organizing Annual Ramadan Breakfast.
- **10**) Organizing the first Student Meeting in the Scientific Society.
- **11)** Attending the conferences of the Egyptian Society of Pharmacy Students and accomplishing top positions in paper writing competitions (fourth position in 2005-2006 and, first and second position in 2006-2007).
- **12)** Organizing a paper writing competition about birds' flu, gene therapy, and drug targeting.
- **13)** Organizing two workshops; the first for First Aid techniques, and the second for Time Management.

## 4. Conferences & "Tanta Meeting" Held in FPTU:

- 1) Student Pharmaceutical Scientific Societies Conference: held in the College of Pharmacy, Tanta University in November 1997.
- **2**) The 3<sup>rd</sup> Annual Meeting of the Association of the Colleges of Pharmacy in the Arab World (14-16 October 1999).
- 3) Tanta Meeting: During the 1990's, Tanta Meeting was conducted annually in FPTU. Tanta Meeting is a professional, scientific forum attended by experts of the academia, research centers and the pharmaceutical industry to discuss different aspects of the pharmaceutical industry and the contribution of the academia in its upgrading and solving its problems.
- 4) 1st international pharmaceutical sciences conference (Pharmacy education & community expectations) November 2009

## 5. Research Projects

There are five running research projects illustrated under research part of current annual faculty report in table (7)

#### 6. General Periodical Seminars:

The college organizes weekly seminar to be attended by staff members as well as college students.

## 7. Activities of the "Cultural Society":

- 1) Issuing a myriad of wall magazines about variety of topics.
- 2) Organizing a seminars and meetings with .
- 3) Issuing the 12<sup>th</sup> annual issue of the magazine "Kalam Fee Al-Adab".
- 4) Issuing the periodical magazine "Hamasat".
- 5) Organizing the annual cultural fair during the Graduation Day.
- 6) Organizing annual trip to the Book Fair.
- 7) Inviting the publishing house "Dar Al-Ma'aref" to hold a book fair in the college.
- 8) Organizing "Yateem Day" by several visits and presenting gifts.
- 9) Organizing cultural competitions in general knowledge.
- 10) Organizing competitions in Poem & Quran.

## **8. Activities of the Youth Services Department:**

- 1) Since 1978, the college organizes blood donation drives twice a year (in the  $1^{st}$  and  $2^{nd}$  semesters).
- 2) The "scouts committee" organizes a 3<sup>rd</sup> drive.
- 3) In coordination with "Geil Al-Ghad" Society, the Youth Services Department arranges to provide cloths and monetary assistance to needy students.

- 4) The Youth Services keeps files about needy students and those with special needs. Donations from college staff members and other donors are directed to such students.
- 5) "Sonaa Al-hayah" family was founded in the academic year 2005-2006 and some of its accomplishments were:
  - Medication donation project.
  - Organizing a seminar titled: "communication skills".
  - Organizing a seminar about smoking and addiction.
- 6) Performing "health care campaigns" in collaboration with physicians from Faculty of Medicine, Tanta University. In these campaigns, the students make field visits, participate in health awareness, and offer free samples of medicaments to patients.

#### Examples:

- Health care campaign to Samanoud on 23/03/2005.
- Health care campaign to El-raas El-Akdar village in Kafr El-Sheekh on 15/05/2005.
- Health care campaign to El-dalgamoon village in Kafr El-zyaat on 14/09/2005.
- Health care campaign to Basyoon on 26/03/2007.

# IX.2- Evaluation of end user for community services quality:

Senior students, alumni and stake holders through questionnaires expressed the need of market for more stress on practical aspect and community needs.

# Other activities contributing to Society & Community services:

1) Performing summer training programs for the 2<sup>nd</sup> and 3<sup>rd</sup> professional year students at drug manufacturing factories, hospitals, and pharmacies. Such

- training programs are held under the supervision of al Faculty staff members and assistants.
- 2) Establishing "Alumni Affairs' office" as part of the Students Affairs' Department.
- **3)** Launching a student computer laboratory containing 15 computers connected to the University's internet.

# IX.3- Review of the last recommendations for community services enhancement:

It's the first year to make a self-assessment study.

# **CONCLUSION**

#### Strengths:

- 1) Involvement with the community by many activities in different fields involving drug analysis & technical consultations to drug companies, workshops & training sessions, seminars, conferences, research projects, activities of the PSC, TPSS & the Cultural Society, and Drug Information Center.
- 2) Establishing "Alumni Affairs' office" as part of the Students Affairs' Department.

#### Weaknesses:

- 1) Limited number of community service units.
- 2) Shortage in the number of Faculty staff participating in the existing community service sites.

## IX.4. Action plan for the coming academic year:

1) Need to increase number of community service units.

- 2) Increasing the number of Faculty staff participating in the community service sites.
- 3) Increasing the financial support for more community services.
- 4) Establishment of close partnerships with the pharmacy community and pharmaceutical industry

#### Annex:

Questionnaires from senior students, alumni and stakeholders

## X- ALL-FACULTY ACTION PLAN

After completing the self-study for the Faculty of Pharmacy, Tanta University, each section of this self-study pointed-out few points of strength and points of weakness which can have an effect on the achievement of the faculty mission. The Faculty Council discussed the different means for improving the points of weakness and also to reinforce the points of strength. This plan can be divided to short-term plan which includes actions that should be acted upon during the following academic year and intermediate-term and long-term plan which includes actions that require more than one year to accomplish.

While discussing this action plan the Faculty Council also considered that some of the points of weakness can be improved simply by changing the behavior of the individuals, relocation of the available resources, or modification of the internal policies and procedures. However some other issues which appear as points of weakness are more difficult to improve because of the lack of resources, because of the need for legislative changes, or because of the need for intervention by the higher authorities in the Ministry of Higher Education (such as the increased number of students). The Faculty council discussed the different means for tackling each and every issue which can improve the performance within the Faculty of Pharmacy and came out with all-faculty action This plan requires the participation of all faculty members and administrative staff to achieve its objectives. The following is a list of proposed actions for improvement with the faculty staff/administrative personnel/authority responsible for completion of each action with the expected period of time required to complete each action.

# A- Short-term action plan:

This short-term plan should be completed during the next academic year (2009-2010) and is summarized in table (12)

Action Plan	Responsibility
To create quality culture, environmental awareness and societal responsibilities among faculty staff, employees as well as students.	<ul><li>The Dean</li><li>Vice Dean for educational and student affair</li><li>QAU</li></ul>
Encourage faculty staff, employees and student involvement in local, national and international professional and extracurricular activities. This should increase the faculty recognition among peer institutions.	<ul><li> Faculty administration</li><li> Head of the departments</li></ul>
Establishing a high-speed internet connection to the staff member rooms and also to the library which should improve the communication between all staff members and also administrative departments. Also, providing all of the administrative departments by computerized and automated system.	- Faculty administration  - Vice president for graduate studies and research
Establishing a complete database for the faculty members including their credentials. This database should also include the research interest and research experiences for all faculty members and also a list of all the manuscripts published by all the staff members.	<ul><li> Faculty administration</li><li> Head of the departments</li><li> QAU</li></ul>
Increase the awareness of all Faculty members and employees with the law organizing the work in governmental institutions	- The Dean - The Vice Deans
Running more elective courses for the students in the final year to select from according to their interests	<ul><li>Vice Dean for educational and student affair</li><li>Head of departments</li></ul>
Dividing the students during the practical session to small groups to increase the chance for interaction of the students with the staff members during the practical session to enhance the learning process.	<ul><li>Vice Dean for educational and student affair</li><li>Head of departments</li></ul>

Activating the external evaluation policy of the program.	- Faculty administration
This can be activated by inviting prominent individuals in	- Head of departments
different fields to look at the program for evaluation and	- QAU
suggestions for improvement.	
Encouraging all departments to do formative evaluation in	- Faculty administration
their courses	- Head of departments
	- QAU
Increase the communications between the students by	- Faculty administration
forming regular meetings between the staff members and	
the students and establishing a formal academic advisory	
body for each class within the Faculty of pharmacy.	
Ensuring the completion of the students evaluation form	- QAU
by the students for each class, a process which is done by	
the QAU.	
Establishing a research focus for the faculty of pharmacy.	- Vice dean for graduate studies
This research focus should include health problems which	and research
are of great national interest and also should be selected to	
ensure that all the departments can participate this	
research (such as viral hepatitis).	
Holding an annual research meeting to discuss the	- Vice dean for graduate studies
different department research plan and research	and research
accomplishments and published manuscripts and granted	
degrees	
Establishment of close partnerships with the pharmacy	- The Dean
community and pharmaceutical industry	- The Vice Deans
	- The Vice president for
	community services and
	environmental affairs

# B- Intermediate-term action plan:

This intermediate-term plan should be completed during the next three year in is summarized in table (13):

Action Plan	Responsibility
Development of new curriculum for the Faculty of Pharmacy to cope with the new development in the pharmaceutical field, with the establishment of a mechanism that can ensure continuous improvement  Development of a new education programs parallel to the	<ul> <li>The Dean</li> <li>Vice Dean for educational and student affair</li> <li>Heads of the departments</li> <li>The Dean</li> </ul>
pharmacy program offered by the faculty of pharmacy. These programs will be focused on new trends in the field of pharmacy, drug manufacture and biotechnology and will be developed in cooperation with internationals schools of pharmacy.	<ul> <li>Vice Dean for educational and student affair</li> <li>Heads of the departments</li> <li>Vice president for educational and student affair</li> </ul>
Expansion of the available laboratory space and teaching halls to accommodate the increasing number of students and also the increasing number of staff members. This also should provide adequate office space for the departments which do not have separate office space such as the clinical pharmacy, microbiology and biochemistry departments.	- The Dean - The University President
Improving the research facilities by providing new instruments to improve the quality of the research. This should start by establishing a central laboratory facility for the college which should include common equipments used by different departments	<ul><li>The Dean</li><li>Vice dean for graduate studies and research</li><li>Vice president for graduate studies and research</li></ul>
Search for financial support for the college focused research projects through research funding programs such as TEMPUS/ and/ or FP7	<ul><li>Vice dean for graduate studies and research</li><li>Vice president for graduate studies and research</li></ul>
Secure additional funds for improvement of the library collection of textbooks, and computer-based instructional materials.	<ul><li>The Dean</li><li>Vice Dean for educational and student affair</li></ul>
Remodeling of all the teaching halls and laboratories and	<ul><li>The Dean</li><li>The University administrators</li></ul>

ensuring proper lighting and ventilation, and making sure that all the teaching halls are equipped with adequate audiovisual equipments and the laboratory are equipped with the basic tools and equipment required for student to work individually during the practical session.  Development of a specialized section in the faculty web site which is specialized in the educational resources and encouragement of the staff embers to utilize this site to post educational materials for the students. This should provide a virtual learning environment that can facilitate communication between the students and the instructors. This should require internet access for larger number of students and increasing the number of computers available for the students.	- The Dean - Vice Dean for educational and student affair - The IT department in the University
Encouraging the faculty members to develop electronic version of their instructional materials	<ul> <li>The Dean</li> <li>Vice Dean for educational and student affair</li> <li>The IT department in the University</li> <li>The Dean</li> </ul>
Providing additional space for the Pharmaceutical Services Center to expand the activities of the Bioavailability Unit.	<ul><li>The University President</li><li>The Vice president for community services and environmental affairs</li></ul>
Establishment of new community services sites such as a unit for continuing pharmacy education to develop professional training programs in cooperation with the pharmaceutical professional organization. Also, increasing the number of Faculty staff participating in the community service sites Establishing	<ul> <li>The Dean</li> <li>The Vice president for community services and environmental affairs</li> <li>The Vice Dean for community services and environmental affairs</li> </ul>
Establishing formal policy and procedures for supporting alumni's employment	- The Dean - Vice Dean for educational and student affair - The Vice Dean for community services and environmental affairs

# C- Long-term action plan:

This long-term plan should require more than three year to accomplish. It is summarized in Table (14):

Action Plan	Responsibility
Increasing the number of faculty staff within academic departments to compensate the worked shortage in faculty staff members. This should be done by appointing larger number of graduating students every year.	<ul><li>The Dean</li><li>The vice deans</li><li>The heads of the departments</li></ul>
Decreasing the number of students accepted to the Faculty of Pharmacy.	<ul> <li>The Dean</li> <li>The pharmaceutical professional organization</li> <li>The ministry of higher Education</li> </ul>
Providing faculty with more financial resources and raise the salaries of faculty members	<ul><li>The Dean</li><li>The University President</li><li>The ministry of higher</li><li>Education</li></ul>





# 1) في مجال دراسات التكافؤ الحيوي.

No.	Trade Name	Company	Date	Project  Description
1	Co-Valsartan Tablets	MEPACO	11/2009	Bioequivalence study
2	Oxigrex Tablets	EVA Pharma for Pharmaceutical and Medical Applications	12/2009	Bioequivalence study
3	Cefadroxil suspention	PHARCO B INTERNATIONA	15/1/2010	Bioequivalence study
4	L carnitine tabets	MEPACO	15/2/2010	Dissolution at different pH solutions
5	Myopirin tabets	Dar El Shefaa - Ramallah	6/2010	Bioequivalence study

# 2) في مجال الدراسات النظرية 2009:

No.	Trade Name	Company	Project Description
1	B.B.C.® Spray	Amoun	Tolerability, study
2	Biovitone ® Capsule	Eva Pharma	Preclinical, studies
3	Chromax ® Capsules	Eva Pharma	Preclinical, studies
4	Antinal ® Suspension	Amoun	Preclinical, studies
5	Biovitone ® Capsule	Eva Pharma	Pharmacological
6	Moov Massage ® Cream	Eva Pharma	Pharmacological
7	Chromax ® Capsule	Eva Pharma	Pharmacological
8	Antinal ® Suspension	Amoun	Pharmacological
9	Biovitone ® Capsule	Eva Pharma	Clinical
			Documentation
10	Moov Massage ® Cream	Eva Pharma	Clinical
			Documentation
11	Antinal ® Capsule	Amoun	Clinical
			Documentation
12	Antinal ® Suspension	Amoun	Clinical
			Documentation
13	Antinal ® Capsule	Amoun	Preclinical, studies
14	Stimulan ® Capsule	Amoun	Pharmacological
15	Vidane ® Syrup	Eva Pharma	Clinical
			Documentation
16	Prostanorm ® capsule	Eva Pharma	Pharmacological
17	Vidane ® Syrup	Eva Pharma	Preclinical, studies
18	Vidane ® Syrup	Eva Pharma	Pharmacological
19	Prostanorm ® capsule	Eva Pharma	Clinical
			Documentation
20	Prostanorm ® capsule	Eva Pharma	Preclinical, studies

# 3) في مجال الدراسات النظرية 2010:

No.	Trade Name	Company	<b>Project Description</b>
1	Antiflu Capsules	ADWIA	Pharmacological,
			Toxicological
2	Octovent Plus Syrup	October Pharma	Pharmacological,
			Toxicological
3	Prostacure Plus	October Pharma	Pharmacological,
	Capsules		Toxicological
4	Dimra® Tablets	October Pharma	Pharmacological,
			Toxicological
5	Quinidine Sulphate	AMOUN	Pharmacological,
	Tablets		Toxicological
6	Adwiflam® Ampoules	ADWIA	Pharmacological,
			Toxicological

# 4) في مجال الدورات التدريبية:

تم عقد دورة تدريبية بعنوان (Design of Bioequivalence studies) وذلك في خلال الفترة من 6:8 ابريل 2010.

عمید الکلیة (أ.د/ مختار محمد مبروك)

Project title	Duration	Source of fund
Antitumor activity of some immunomodulating agents	2009-2010	Tanta University

# VII.6- Published research in conferences and periodicals

# Published articles during 2009/2010

The distribution of publications among departments is summarized in table ( ):

Academic department	No. of publications	National	International
Department of Pharmacognosy	9	7	2
Department of Pharmacology	9	7	2
Department of Biochemistry	2	2	
Department of Clinical pharmacy	16	14	2
Department of Microbiology	3	3	
Department of Pharmaceutical technology	16	7	9
Department of Analytical chemistry	1		1
Total	56	40	16

Conference title	Location	No. of faculty member attended
1 <sup>st</sup> international pharmaceutical sciences conference (Pharmacy education & community expectations)	Tanta-Egypt	All faculty members
4 <sup>th</sup> international conference of pharmaceutical & drug industry - research division	Cairo-Egypt	2
2 <sup>nd</sup> international conference for enhancing scientific research: innovation & development	Tanta-Egypt	6
6 <sup>th</sup> international conference: Liver & environment	Tanta-Egypt	3
7 <sup>th</sup> international conference: Liver & environment	Tanta-Egypt	3
1 <sup>st</sup> international conference in biotechnology	KSA	1
The international conference for nanotechnology	KSA	1
69 <sup>th</sup> international congress of FIP	Istanbul-Turkish	1
8 <sup>th</sup> international Saudi pharmaceutical conference	KSA	1
The 56 <sup>th</sup> scientific congress of Egyptian society of clinical chemistry	Cairo-Egypt	1
The annual scientific conference of ESBMB	Cairo-Egypt	1
Conference of digestive disease week gastroenterology	USA	1
مؤتمر اطلاق تقرير حالة التعليم العالي في مصر التعليم القطري"	Cairo-Egypt	1
المؤتمر العلمي لتحسين جودة برامج الدراسات العليا	Menoufia -Egypt	1
المؤتمر العلمي الول لتسويق البحوث الجامعية التطبيقية و البحث العلمي في خدمة الصناعة	Menoufia-Egypt	1

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Research & Other scholastic activities