Chapter IV

Isfahan Medical Science University

4.1. Faculties

4.2. Research Centers

4.3. Al-Zahra Hospital

4.4. Central Library
Chapter IV

Isfahan Medical Sciences University
(IMSU)

The Foundation of Isfahan University of Medical Sciences dates back to 59 years ago when Isfahan Behyar Training School admitted a few medical students. In fact, this University was initially under the auspices of Isfahan University. Isfahan Medical Sciences University was officially inaugurated on December 18, 1946, with existing Isfahan Behyar (Medical Auxiliary) Training school in Ahmedabad, Isfahan. In 1956 the department of Pharmacy was added to medical sciences and started working inside the Isfahan Behyar (Medical Auxiliary) Training school. The Faculty of Health was established under Medical Faculty in 1964. In 1968, Mehr-Aeen higher education nursing school for Nursing and in 1975 the Faculty of Dentistry were added to medical sciences and started working in two small rooms inside the school of medicine.

For years, as a major faculty of Isfahan University, it continued its educational activities. In 1986 education of medical sciences was taken over by the Ministry of Health, Treatment and Medical Education. This was to make use of the medical resources in the country more desirably and also to promote health, treatment, teaching and research more directly. With its new name Isfahan Medical Sciences University the university commenced its activities in 1986.
In 1994 with the inclusion of regional organizations for Health and Treatment in the University of Medical Sciences, this university was named the University of Medical Sciences and Health Services, Isfahan Province. Presently, Isfahan University of Medical Sciences and Health Services is one of the largest and most reliable universities in Iran and Middle East. Isfahan is also known as the second industrial city in the country, which provides many opportunities for education, research and community involvement. IMSU has developed both facilities and programs since then continually responding to the changes in demand from the medical and affiliated sciences industry.

This university educated and trained young people to take up professional careers in medical services in wide range of programs including Medical Sciences, Health Sciences, Nursing & Midwifery, Rehabilitation Sciences, and Management & Medical Information Sciences.

At present, IMSU with more than 7000 students, seven faculties, 60 departments, 93 different majors, and 603 teaching staff (154 lecturers, 345 assistants, 76 assistant professors, and 28 professors) and 20000 non-teaching staff, not only offers educational services but also provides required health services for the whole country in general and for Isfahan Province in particular. Also IMSU had done 450 major research projects.

“Iranian Journal of Medical Education”(IJME: In English & Persian) and “Journal of Research in Medical Sciences” are owned and published by Isfahan Medical Science University. The Research in
Medical Sciences Journal is a quarterly peer-reviewed scientific Journal providing academically sound, clinically practical information for physicians, medical scientists and health care providers. It is published in Persian language internationally. Abstracts of articles are published in English.

IMSU includes 12 hospitals with 3500 beds such as Al-zahra Hospital, Amin Hospital, Ayatollah Kashani Hospital, Eisa-ibn Maryam Hospital, Emam Mousa Kazem Hospital, Farabi Hospital, Feyz Hospital, Noor & Ali Asghar Hospital, Sayed-Al Shohada Hospital, Shahid Beheshti Hospital, Shahid Modares Hospital, and Shahid Chamran Hospital.

IMSU includes 6 research centers such as Isfahan Endocrine & Metabolism Research Center (IEMRC), Behavioral Sciences Research Center (BSRC), Skin Diseases and Leishmaniasis Research Center Isfahan, Cardiovascular Research Center (ICRC), Isfahan Medical Student Research Center (IMSRC), and Infectious Diseases & Tropical Research Center (IDRC). There is also another important center in this university, namely, the Medical Education Development Center (MEDC) that plays an important role in the development, educational and research programs of IMSU.

**Major Functions of IMSU**

- Training talents through scientific education and research, and expansion of medical sciences in order to supply the specialist staff required in the country;
• Setting research and educational facilities to recognize potentialities and enhance the scientific capacity in relation to health and treatment issues;

• Expanding health and treatment facilities throughout the society through affiliated health and treatment organizations and centers.

4.1. Faculties

Medical University of Isfahan, Iran consists of seven faculties such as Faculty of Medicine, Faculty of Pharmacy, Faculty of Dentistry, Faculty of Health, Faculty of Nursing and Midwifery, Faculty of Medical Information and Management, and Faculty of Rehabilitation.

4.1.1. Faculty of Medicine

The Medicine Faculty was officially inaugurated on December 18, 1946, replacing the existing Behyar (Medical Auxiliary) Training school. Later, when Isfahan University came into being (1962), the Faculty of Medicine became an integral part of the University. The faculty started work with nine members. In June 1962, Isfahan University was established, including the Faculty of Medicine.

In 1988, the various schools and programs related to the field of medicine were segregated and their activity continued under the name of Isfahan University of Medical Sciences, under the supervision of Iranian Ministry of Health and Medical Education.
Objectives of Faculty of Medicine

The objectives of Faculty of Medicine are to:

- Teach the students of medical sciences;
- Conduct scientific research in different fields of medicine, health, and treatment;
- Coordinate education, research and treatment policies;
- Hold scientific conferences through collaboration with related authorities;
- Provide the required faculty members and supervise the proper implementation of educational, research and treatment affairs.

The faculty offers postgraduate courses (MS & PhD) in Basic Sciences' and Clinical Sciences', and disciplines included in the “Basic Science Department” are Anatomical Sciences, Bacteriology & Virology, Biology & Genetics, Family Medicine, Medical Physics, Immunology, Physiology, Pathology, Parasitological & Phonology.

The “Clinical Sciences' Departments” includes Anesthesiology, Dermatology, Infectious Diseases, Internal Medicine, Obstetric & Gynecology, Ophthalmology, Orthopedics, Pediatrics, Psychology, Radiology, Radiotherapy, Surgery, Urology, ENT.
The library of medicine faculty was inaugurated in the year (1946). The library moved to the university building in 1969 and later it moved to the present building in 1980 (as seen in photo 4.1). The library is 360 square meters large and also is having a reading hall of 360 square meters, rendering services in different sections.

The library activities include collection, maintenance and organization of the print material and non-print sources for educational and research purposes.

Library of Faculty of Medicine provides services to students and academic staff of the University of Medical Sciences, using student card, and a letter of introduction and ID card for those who work in other universities and governmental organizations. Reference books, dictionaries and dissertations are available on site. Copies can also be made of the articles in journals, so the journals must be used on site. On
delayed returns payment penalty is charged. Membership or ID cards are necessary while borrowing books. Library's membership card is issued only once. Table 4.1 shows statistics of resources in Medical Faculty Library (IMSU). There are more than 30000 volumes books and 359 journals in this library.

Table 4.1. Statistics of resources in Medical Faculty Library

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farsi Books</td>
<td>15596</td>
</tr>
<tr>
<td>Latin Books</td>
<td>14631</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>70</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>289</td>
</tr>
<tr>
<td>Theses</td>
<td>5651</td>
</tr>
<tr>
<td>Research Projects</td>
<td>289</td>
</tr>
<tr>
<td>Proceeding of Conferences</td>
<td>157</td>
</tr>
<tr>
<td>CDs</td>
<td>262</td>
</tr>
<tr>
<td>Educational Films (video tapes)</td>
<td>340</td>
</tr>
</tbody>
</table>

4.1.2. Faculty of Dentistry

Founded in 1974 by Dr. Rahimi and Dr. Khamesipoor, faculty of dentistry admitted 20 students in 1975. The faculty started is work in two small rooms inside the school of medicine, and continued educational and practical courses from the building of faculty of economics and Amin hospital. Initially, the academic staff consisted of a professor, and four assistant professors. In 1984 the faculty moved to
its new building (Photo 4.3) on Southwest of university campus with 17000 square meters foundation, 4 stages and 6 wings. In 1986 faculty departments increased from 6 to 10. In 1990, the Ministry of Health and Medical Education approved the faculty to admit post-graduate students in orthodontics, periodontics and restorative dentistry. Currently, along with undergraduate students, 56 residents are studying orthodontics, prosthodontics, endodontics, restorative dentistry, oral and maxillofacial surgery, periodontics, oral and maxillofacial pathology and periodontics.

**Educational facilities**

- **Library** is having 14500 Latin and Farsi books, 66 Latin and 15 Farsi journals.

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
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<td>7500</td>
</tr>
<tr>
<td>Latin Books</td>
<td>7000</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>15 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>66 titles</td>
</tr>
<tr>
<td>Theses</td>
<td>1055</td>
</tr>
<tr>
<td>CDs</td>
<td>65 titles</td>
</tr>
</tbody>
</table>

**Table 4.2. Statistics resources in Dentistry Faculty Library**
Audio-visual unit supports the faculty for photos and slides, video presentation for classes and patient waiting room to educate oral hygiene, and live show from operation room to amphitheatre.

Photo 4.2. Library and Information Center/ Faculty of Dentistry (IMSU)

Saloons consisted of study room for 100 students, and amphitheatre for 280 people. Laboratories, Included: Oral pathology lab, Orthodontics lab, Central laboratory, Removable denture lab, fixed prosthesis lab, Dental materials lab, Animal study center, Dental implants department, maxillofacial prosthesis department.

Photo 4.3. Faculty of Dentistry (IMSU)
Faculty departments, have dental equipments for 20 students and include: Orthodontics, Endodontics, Pediatric dentistry, Restorative dentistry, Periodontics, Oral radiology (with periapical, panoramic and cephalometric radiography), Oral and maxillofacial surgery, Oral medicine and diagnosis, Oral and maxillofacial pathology, Dental prosthodontics.

4.1.3. Faculty of Pharmacy and Pharmaceutical Sciences

Faculty of Pharmacy and Pharmaceutical Sciences was founded in 1956. The faculty started work in the premises part of Faculty of Medicine, and continues educational and practical courses in the current building of Faculty of Pharmacy and Pharmaceutical Sciences. This building is housed on the main campus of the University, close to Isfahan city center.

Photo 4.4. Faculty of Pharmacology (IMSU)
Goals and Objectives

1- Acquire knowledge of the basic and clinical pharmaceutical sciences necessary for success in the practice of pharmacy and advance training.

2- Communication with patients to provide counseling and with other professionals regarding pharmacotherapy.

3- Perform critical analysis of professional literature, including using the latest information retrieval technology.

4- Develop the skills of critical thinking, problem solving and independent thinking.

5- Research in various fields of pharmaceutical sciences, Pharmacognosy, Pharmacology, Pharmaceutical Chemistry, and Medical Biochemistry.

At present, the faculty includes the following departments:

Pharmaceutics, Pharmacognosy, Pharmacology, Pharmaceutical Chemistry, Medical Biochemistry.

The department of Medicinal Chemistry started its activity in educational and research fields since 1970 at undergraduate level.

Postgraduate students are admitted through a national level entry exam for a 2 years MS or 4 years PhD degree. After undertaking the teaching courses, students of both these degrees carry out a research project and submit a thesis.
The library of Faculty of Pharmacy and Pharmaceutical Sciences has started working in 1956 from the premises of library of medical faculty. Later this library moved to the current building of Faculty of Pharmacy and Pharmaceutical Sciences. The library renders services in the following sections: Circulation, Journal Section, Information Center, Storage, Dissertation, and Reference.

Table 4.3. Statistics of resources in Pharmacy Faculty Library

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farsi Books</td>
<td>11000</td>
</tr>
<tr>
<td>Latin Books</td>
<td>13000</td>
</tr>
<tr>
<td>Theses</td>
<td>1640</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>15 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>188 titles</td>
</tr>
<tr>
<td>CDs</td>
<td>88</td>
</tr>
<tr>
<td>Educational Films (video tapes)</td>
<td>70</td>
</tr>
</tbody>
</table>

Table 4.3 shows statistics of resources in Library of Pharmacy and Pharmaceutical Sciences Faculty. There are 24000 books in this library and 203 journals in Persian and Latin languages.
4.1.4. Faculty of Nursing and Midwifery

Initially the higher education institute affiliated to Isfahan university medical school started a three years nursing course in 1968. Then, in 1980, an educational complex affiliated to the Red Crescent, educated nurses and midwives at post-diploma and BS levels. In addition, Mehr-Aeen higher education nursing school started educating nurses and midwives at MS level in 1968. It was during the same time that the ministry of health, treatment and education was established and it took over the education of medical science courses. Thus the above-mentioned schools were joined together to formally constitute the nursing and midwifery faculty of Isfahan University of medical sciences. Nursing education at MS level including the branches of internal surgery education, community health, pediatric nursing, psychiatric nursing and nursing management started in 1989 while midwifery education at MS level with the branches of mother and child health education and obstetrics was started in 1990.

In 2004, there were 584 nursing students educating at BS level, 31 at MS level, 93 midwifery students at BS and 21 at MS levels, 36 operating room technicians at post-diploma, 17 students studying medical emergencies and three students studying nursing at PhD level. The dean of the faculty, teaching affairs assistant, research assistant, financial and official affairs assistant and student's affairs director handle the administrative and management affairs. The faculty consists of departments such as Medical surgical nursing, community health, midwifery, psychiatric nursing, pediatric nursing, operating room and
nursing skills. The faculty has 73 lecturers, two assistant professors, one associate professor and 28 educational supervisors.

Nursing and midwifery faculty is located in the southern parts of Isfahan University of medical sciences, adjacent to the dentistry faculty and Al-Zahra post-specialized educational hospital. This hospital provides the clinical setting for the education of nursing, midwifery and operating room students. The faculty area is about 30000 square meters (sqm) together with the green area around it. The faculty building occupies an area of 7340 square meters with 16 classes (1121 sqm), skill lab with eight classes (500 sqm), library (520 sqm) consisting of a lending-book section with open access, and a journal section, a study hall, a discussion hall, an audiovisual section equipped with self-learning facilities and modern audio-visual aids, a computer unit connected to internet and a gathering hall (550 sqm).

Photo 4.5. Faculty of Nursing & Midwifery (IMSU)

The library was established in 1968 somewhere out of its present place in nursing school. In 1986 it was transferred to Nursing and Midwifery Faculty. The library is 520 Square meters, and it is open from 7:30 AM
to 6:00 PM all days of the week except Thursdays and Fridays. It is composed of three sections, namely books, journals and computer units. There are total 24000 books consisting of 10000 titles, 8500 titles for 16000 Persian books and 4500 titles for 8000 English books. The books on Psychology, Islam, management, education, research and all medical fields, of which some of the best ones are on Nursing, including Medical Surgical nursing, Basic nursing, Health, Pediatric nursing, psychiatric nursing. Midwifery including pregnancy and labor, Obstetrics, gynecology, maternal childcare and family planning and midwifery education.

Table 4.4. Statistics of resources in Nursing & Midwifery Faculty Library

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farsi Books</td>
<td>16000</td>
</tr>
<tr>
<td>Latin Books</td>
<td>8000</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>77 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>89 titles</td>
</tr>
<tr>
<td>Theses</td>
<td>227</td>
</tr>
<tr>
<td>CDs</td>
<td>236 titles</td>
</tr>
</tbody>
</table>

The library is equipped with open computerized system and includes lending department, collection building and reference sections on the first floor while the computer and journals units are on the second floor.
There are also 227 theses and projects in the library. There are total 20 computers as well as 4 laser and needle printers. Students can use 13 computers for their research activities. In the computer unit, services such as the Internet access, educational CDs, all databases of university home page are available for students.

There are also two VCRs, and two TVs on the second floor for the student to watch educational films. In the section of journals, the central library orders all foreign journals while the nursing library procures the Persian ones. There are now a total of 83 subscribed English journals and six non-subscribed English journals as well as 41 subscribed and 36 non-subscribed Persian journals. Photocopy facility is available in the library.

4.1.5. Faculty of Health

The public Health Division at Isfahan University was established in 1964, as part of the faculty of Medicine. Later in 1987 it developed in to the School of Public Health and Nutrition Sciences, as one of the
schools of Isfahan University of Medical Sciences, which is located in one of the most popular and historical areas in Iran.

Isfahan being the second most industrial city in the country, provides many opportunities for education, research and community involvement. The school is dedicated to the promotion and protection of the health of human population and its programs focus on teaching, research and service activities.

This school provides both undergraduate and graduate education in population based health disciplines to prepare students for health related careers and positions in NHS, hospitals, clinics and private health agencies.

At present the school is divided in five departments, namely: Health Promotion and Education, Environmental Health, Biostatistics and Epidemiology, Occupational Health, and Nutrition. The aim of these departments is to advance the state of knowledge in different disciplines and to improve the population health. The library of this school was established in 1985 with about 2000 books and it currently has 22600 books related to different areas of health and majority of these books are in English. The most important subjects for procuring the books in the library are Environmental Health, Occupational Health and Safety, Public Health, Nutrition and Diet therapy, Statistics, Management and Epidemiology. The system of this library is open and is connected to the Internet and many databases, which the students can access through computers, available in the library. The students can also search the library catalogue by computer.
Table 4.5. Statistics of resources in Health Faculty Library

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
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<td>Farsi Books</td>
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<tr>
<td>Latin Books</td>
<td>13500</td>
</tr>
<tr>
<td>Theses</td>
<td>155</td>
</tr>
<tr>
<td>CDs</td>
<td>73</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>100 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>43 titles</td>
</tr>
</tbody>
</table>

Table 4.5. Shows statistics of resources in Library of Health Faculty. The Journal and Medical information center of library currently has 143 Journals, which are mainly subscribed from USA, UK, Australia, Canada, and 40 Iranian Journals.
This section of the library is also connected to the Internet and there are 35 databases related to different areas of health that are subscribed, and 409 electronic journals through the Internet that students and academic staff can refer to for areas of their interest.

4.1.6. Faculty of Management and Medical Information

The Faculty was established in 1992 in response to the demand of Isfahan University of Medical Sciences to develop a faculty which was previously active in Iran University of Medical Sciences. The degree courses run by the faculty consist of B.S. in Hospital Management, Medical Library and Informatics and A.S. in Medical Records. The faculty started its activity with 62 students in the above-mentioned majors.

In the first semester of 1993 and, as a response to the growing need of university, General Courses Department was established in the faculty to offer general courses to all the other departments of the university. The department courses include: The Farsi Language, Mathematics & Computer, Sociology, and Physical Education.

This faculty includes the departments such as Medical Records, The management of Health-Treatment Service, Library Science & Medical Information, English, and the General Courses.

Faculty also educates about 60 students in night courses in each semester in the three fields of study. The first group of 21 graduates majored in Medical Records in 1994. The first group of graduates in
majored in Medical Records in 1994. The first group of graduates in Hospital Management and Medical Library were 34 students who graduated in the year 1996. The teaching staffs of the faculty consisted of 22 academic members and 10 expert staff.

The faculty’s research activity began in 1992 and has taken successful steps to develop and improve the quality of research and education. The steps are taken to encourage and promote the academic members and students to participate in research programs, to arrange extra-curricular activities, to invite outstanding and distinguished professors and lecturers of other universities, and to arrange scientific seminars.

At present 229 students (185 girls and 44 boys) are studying regular courses and 415 students in night courses, all studying for the three offered degrees. The faculty’s General Courses Department presents
about 460 credits in each semester and thus, covers a total number of 3600 students.

The library of Management Faculty was founded in 1983 with a collection of almost 2000 titles. The present area is almost 200 square meters. According to an estimation done in Winter 2003, the library has 6500 titles including more than 13000 volumes of Persian & Latin books in different fields including Psychology, Literature, Islam, Science, History, informatics, References, Medical Records and Computer Science.

Most pedagogical sources are related to the three fields of the faculty: Library & Informatics, Therapeutic- Health Management, and Medical Records. Moreover, there are 120 titles of MS thesis & research reports in these fields in the library. Presently, the library system is “open stack” and circulation is fully automated. The library encompasses different sections including: bookmaking circulation, documents, periodicals, information services, audio-visual sections.

The audiovisual section has equipment such as T.V. sets, videotape players, cassette players, and some educational materials such as audio and visual tapes as well as tutorial CD’s. In other sections of the library, users have access to computer sets, laser printer, and stylus printers. Academic members and students of the faculty can use the computers to search different academic articles and surf different information databases through Internet Network as well as the Home Page of the Medical University of Isfahan.
Table 4.6. Statistics of resources in Management and Medical Information
Faculty Library

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
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<td>Farsi Books</td>
<td>11200</td>
</tr>
<tr>
<td>Latin Books</td>
<td>2750</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>48 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>14 titles</td>
</tr>
<tr>
<td>Theses</td>
<td>120</td>
</tr>
<tr>
<td>CDs</td>
<td>76 titles</td>
</tr>
</tbody>
</table>

The central library only orders English journals for FLIC and the faculty library orders only Persian journals. The subscribed journals of the library include 14 specialized English journals and 48 specialized Persian journals.

**Library science and Medical Informatics Department**

Libraries and informatics centers have different tasks and in order to perform these tasks, they require trained personnel with different levels of education. The schedule for B.A in library science and medical informatics is designed in such a way that it can train professional librarians with a disposition to medical subjects. In addition to carrying out their specialized tasks in libraries and medical informatics centers, the librarians and those in charge of medical informatics can also act as
research assistants and present valuable services in the domain of informatics. The students graduating from this field as informatics specialists are considered as human resources, who can play an important role in the development of the country.

**Objectives of the Library science and Medical Informatics Department**

The purpose of education for B.A in library science and informatics is to make the students familiar with the importance of the role of library, library science and informatics in the development of culture, science and technology in human societies and to enable the students to perform the library and informatics centers specialized activities. In this regard, the students acquire the necessary skills to work in different libraries. The library science and medical informatics department was set up in the faculty of Management and Medical Informatics in Isfahan University of Medical Sciences in 1993.

**4.1.7. Faculty of Rehabilitation Sciences**

The faculty has three scientific groups; physiotherapy, speech therapy and technical orthopedics. It is soon going to establish new groups such as ergo therapy and audiology. About one hundred and fifty students are being educated in the faculty. The faculty consists of a central core that manages all divisions and wards are located in the different hospitals.
The library of this faculty was established in 1993 and there are 3677 books and it subscribes to 33 journals in Persian and Latin languages (Table 4.7).

<table>
<thead>
<tr>
<th>Resources</th>
<th>No. of Copies</th>
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</thead>
<tbody>
<tr>
<td>Farsi Books</td>
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<tr>
<td>Latin Books</td>
<td>1422</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>23 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>10 titles</td>
</tr>
</tbody>
</table>

The subjects that user can search in this library are: Bone and muscle, nervous system, psychiatry, radiology, gynecology, pediatrics, ear, nose, and throat (ENT), nursery, medical history, psychology, social science, literature, anatomy, histology, common health, internal medicine, practical medicine.

4.2. Research Centers

Medical Science University of Isfahan, Iran, covers seven research centers. These centers are Medical Education Development Center (MEDC), Isfahan Endocrine & Metabolism Research Center (IEMRC), Skin Diseases and Leishmaniasis Research Center, Behavioral Sciences
Research Center (BSRC), Infection Diseases and Tropical Center (IDRC), Isfahan Cardiovascular Research Center (ICRC), and Isfahan Medical Student Research Center (IMSRC).

4.2.1. Medical Education Development Center (MEDC)

The Medical Education Development Center at the Isfahan University of Medical Sciences and Health Services (MUI) was established in 1988 in response to the growing demand of faculty development and an up to date curricula, innovative teaching and evaluation methods. At present this center is considered as one of the pioneer centers active in the field of related objectives in the country. It has applied to the Ministry of Health and Medical Education to be known as the Educational Pole of the country.

The center occupies a three-storied building in the university campus. Administrative offices and Departments are located in the first floor. Major parts the second floor consist of an octagonal lecture hall and workshop rooms. Media services are also located in this floor. The third floor is designed to accommodate the visiting professors and students with its seven fully furnished guesthouses. All rooms and offices are connected through a high speed LAN to the Internet.

Organizational Structure

A total of 35 full time and associate academic staff and 16 administrative personnel work in a friendly environment to promote the center's goals. Following is the organizational structure of the MEDC.
Through its five departments, MEDC assists in strengthening curriculum-planning skills, improving the quality of teaching, evaluating students, learning and effectiveness of teaching. It is also active in the field of university faculty development; execution of CME programs and the last but not the least in conducting a vast array of research in education.

At Present, this center includes the following departments and units:

1- Department of Community Oriented Curriculum Planning (COCP)
2- Department of Medical Education
3- Department of Evaluation
4- Department of Continuing Education (CME)
5- Department of Research
6- Talented Students Office (TSO)
7- Publications
8- Media Services Unit (media unit)

Photo 4.9. Medical Education Development Center (MEDC)
9- Library

Located in the center of the MEDC, the library with its more than 1650 books and journals related to medical education plays a major role in assisting the staff and the faculty in finding what they are looking for.

10- Audio-Visual Unit

The AV unit provides technical supports to the teaching faculty in delivering training. The activities include lending equipments and high-quality audio recording and duplication.

4.2.2. Isfahan Endocrine & Metabolism Research Center (IEMRC)

Isfahan Endocrine and Metabolism Research Center (I.E.M.R.C), formerly named “Diabetes Training and Treatment Research Center” was established in 1992 under supervision of Research Bureau, Isfahan University of Medical Sciences and Health Services.

At the beginning, the research activities of the I.E.M.R.C were focused on different aspects of diabetes, but later and in 1995, the Council for Development of Research Centers of the Ministry of Health and Medical Education officially approved the center and its research activities spread to all branches of endocrinology and metabolism. As a well-known center in the field of endocrinology related investigations in Iran, I.E.M.R.C is dedicated to perform basic, epidemiological and clinical medical researches with the goal of prevention and elimination of metabolic and endocrinal disorders.
4.2.3. Skin Diseases and Leishmaniasis Research Center (SDLRC)

The skin disease and Leishmaniasis research center at the University of Isfahan was established in 1996 as a focus for research on skin and is a reputed center for research in dermatology and Leishmaniasis, in Iran.

It provides a unique opportunity to combine the work of a large scientific Community dedicated to skin research with one of the largest clinical dermatology department in Iran.

The clinical application of fundamental scientific research has lead to improvement in the long-term management of a variety of skin diseases. Director of SDLRC is Dr. Mohammad Ali Nilforoushzadeh, Assistant professor of Dermatology in Isfahan and Tehran medical universities. Members comprise professors and assistant professors of Dermatology, Clinicians, Parasitologists, Entomologists, Pathologists, Pharmacologists, Epidemiologists, Residents of Dermatology, Medical students, Nursing staff and scientific technical staff.

SDLRC provides education and training for Clinicians, Residents of Dermatology, medical students and specialist registrars. General practitioners can use its educational programs such as workshop, short courses etc.

4.2.4. Behavioral Sciences Research Center (BSRC)

Behavioral Sciences research Center (BSRC) an approved research center affiliated to Isfahan University of Medical Sciences, Isfahan, Iran was established in June 1999 and right now is located at Noor Medical
Center. BSRC aims at promoting research in the area of mental health. It primarily undertakes studies pertaining to psychiatry, neurosciences, forensic psychiatry, psychosomatic medicine, religion, social pathology, social medicine, alternative medicine, psychology, education, psychiatric nursing, psychiatric social work, occupational therapy, etc. More than 100 research projects have been undertaken in this center.

4.2.5. Infection Diseases and Tropical Center (IDRC)

Infection Diseases and Tropical Center (IDRC) was established in 1992. It is an approved research center affiliated to Isfahan University of Medical Sciences, Isfahan, Iran and is right now located at Research Campus of Hazarat Sedighe Tahereh in Isfahan, Iran. IDRC aims at promoting research in the area of Infection Diseases. It primarily undertakes studies pertaining to Epidemiology, as it has a focus for research on health, treatment, and prevention of infection and tropical diseases.

At present this center is considered as one of the pioneer centers active in the field of related objectives after Isfahan Cardiovascular Research Center (ICRC) and Isfahan Endocrine & Metabolism Research Center (IEMRC).

4.2.6. Isfahan Cardiovascular Research Center (ICRC)

Isfahan Cardiovascular Research Center (ICRC) is a WHO collaborating center for Research & Training in Cardiovascular Disease
(CVD) Control, Prevention and Rehabilitation for Cardiac Patients in the Eastern Mediterranean Region (EMR). ICRC initiated its activities in 1987 with aim of performing research on CVD prevention and health promotion for information and action.

The central goal of ICRC is to utilize the existent technology to perform community-oriented biomedical research, produce applicable results, and contribute to furthering human knowledge in the realms of science.

ICRC aims to assist academic and research centers, as well as other health care providers to conduct programs for prevention, control and treatment of CVDs and their related risk factors. The catchword in ICRC is: 'Health promotion in the community will be achieved only by applying valid research findings in health policies and all decision-making in this field'.

Presently ICRC has its own official chart and budget. ICRC is located in the historical central Iranian city of Isfahan, Isfahan Province.

Photo 4.10. Isfahan Cardiovascular Research Center
4.2.7. Isfahan Medical Student Research Center (IMSRC)

Medical Student Research Committee of Isfahan University of Medical Science is a student-centered organization to facilitate the research activities of medical students. This committee began its activity in 1993. Members of the centers are those students who obtain the minimal scores set for annual appraisal where in half of the scores are related to research activities. Members take part in one of the three structures: Study Groups, Research Teams, and Open field researchers. In 2002 the committee had 108 members. The committee is governed totally by the medical students comprising of three units: Research unit, Education unit, and Public relationship unit.

4.3. Al-Zahra Hospital

For clinical training hospitals are identified by IMSU. The list of these hospitals is given in Appendix A. Only Al-Zahra Hospital is located in the campus of the university.

Al-Zahra Hospital was founded in the year 1993. It is a major provider of medical and health services in Isfahan province. With more than one thousand beds, excellent faculty, highly trained nurses and research facilities, Al-Zahra is the second largest and one of the most modern hospitals in the Middle East. Al-Zahra provides a wide range of quality medical services to both international and regional clients at reasonable costs. AUH is a regional referral center for airborne Emergency care, Neonatology, Plastic Surgery, Pediatric, Hemodialysis, etc. Al-Zahra Hospital includes the departments. Gynecology & Obstetrics,
Dermatology, Pediatrics, Surgery, Infectious Diseases, Neurosurgery, Urology, ENT, Internal Medicine, Orthopedics, Neurology, and Radiology.

Photo 4.11. Al-Zahra Hospital (IMSU)

In the department of Emergency there are 62 beds for patients. Table 4.10 shows the statistics of resources in the Library of Al-Zahra Hospital. It possesses 9090 volumes books and subscribes to 305 journals in Persian and Latin languages.

Table 4.8. Statistics of resources in Al-Zahra HLIC

<table>
<thead>
<tr>
<th>Resources</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farsi Books</td>
<td>4440</td>
</tr>
<tr>
<td>Latin Books</td>
<td>4650</td>
</tr>
<tr>
<td>Farsi Journals</td>
<td>195 titles</td>
</tr>
<tr>
<td>Latin Journals</td>
<td>110 titles</td>
</tr>
<tr>
<td>CDs</td>
<td>203 titles</td>
</tr>
</tbody>
</table>
4.4. Central Library

The Isfahan Medical Sciences College Library at Isfahan University was established in 1947, as a part of the Central Library of the university. In 1988 it developed as a Central Library of Isfahan University of Medical Sciences. At present, this library plays a vital role in medical & health sciences and related subjects. It serves the faculties, students of the colleges, professional staff and other centers in this university. The Central Library subscribes to a large collection of medical format for servicing the centers under it. The basic aim of Central Library (CL) in IMSU is to give service to all the medical libraries and information centers in IMSU.

The Information Technology Services Center at Central Library in close collaboration with Computer Center of IMSU is responsible for support and development of IT systems and services across the libraries and Information Centers affiliated to Central Library. At present, in each faculty there is a library and these libraries are active in using various types of digital resources on the CENT-LIB databases.

So, they need an efficient and effective way to gather quality information related to their works. The Central Library at the IMSU developed an integrated medical search system to create a suitable collection and technology in EL in the libraries and information centers affiliated to IMSU. So, the Central Library created a web site called http://www.centlib.mui.ac.ir and it allows users to search not only the web pages and other online databases, but also allows them to perform
searches through the use of full text E-journals of medical-related topics.

4.4.1. Digital resources in Central Library

According to Sridhar [16], “Digital resources in the field of medical science are both timely and important, because, the medical knowledge of doctors at all levels can be enhanced very quickly. This will be of great service to the trainees, both at undergraduate and postgraduate levels in their various academic activities”.

The act of establishment of digital resources in IMSU was approved in 1990 and forum for electronic resource sharing in IMSU came into existence in the same year. Central Library at the IMSU, first, developed an integrated medical search system, called “MEDLINE CENTER” with funding from the Medline CD-ROMs in year 1990. “MEDLINE CENTER” allows users to search not only Medline CD-ROMs, but also allows them to search by using IPA CD-ROM, SERLINE CD-ROM, TOXLINE CD-ROM, and EMERALD CD-ROM. All the academic libraries of IMSU are active in using various types of Digital resources. All the academic libraries are fully computerized.

Due to language barriers, IMSU is using commercial library-oriented package called as Pars-Azarkhsh (Ofogh)*, a Persian version of

*What is Ofogh?
OFOGH leads you to know more about books and receive a new view in library automation. OFOGH is a library information management platform that will support user needs. Several searches can be used to receive more information. It has ability to meta search between several centers and one can search needs in other centers information. It also has ability to perform multi databases search.
CDS/ISIS developed by the Iranian Research Organization for Scientific and Technology, and the Iranian Document Center (IRANDOC). University libraries associated with the Ministry of HTME rely on either Nosa or Pars Azaraksh software packages. The commercial software available is programmed for data processing in both Persian and English languages and is easy to look after in terms of vendor support. Pars Azarkhsh database manages the Central Library in IMSU and it is called "Central Library Books & Journals Database (CLBJD)". By referencing stored information in the library information system, the library's software can give access to students from any place into the library's server at the same time and enable other value-added services.

In IMSU where a local area network has been established, the library database is available on a Windows NT server on the university’s local area network. A client/server structure allows the distribution of information by means of a search engine run as a server-based system, which can be used via the Internet or intranet. Beyond the local area network, Rose-Net, a multi-vendor center was launched officially in January 1999 by Rose systems, and hosts’ products from some of the largest producers and distributors of information in the world.

Rose-Net-Information BBS, developed with the support and assistance of the Ministry of SRT, is used via a leased line in many of the universities. Not only is the searching of local and national databases inside the country facilitated in this way, but also communication with databases outside the country is possible by means of this system.
Databases developed with a variety of software lead to heterogeneity of data, which creates problems in networking.

Central Library subscribes the online databases like Springer Journals, Oxford Journals, Ovid Journals, Ingenta, Proquest, Blackwell, Elsevier Science, EBM Review, Ovid Medline, ERL 5 Medline, MD Consult, Up-to-date Software, and Images- MD. Also Central Library possesses offline databases such as Medline (Silver platter), LCB, ISA, ERIC, IPA, MELI, Serfile, CINAHL, Ulrich’s, and BIP. These databases are accessible on the CENT-LIB LAN Network in the campus of the university including faculty libraries and Al-Zahra hospital library. In addition "Central Library Journals and Books Database (CLJBD)" is available on the IMSU website and CENT-LIB LAN Network. Chapter V deals with information databases which are accessible in IMSU.
References


10. Infection Diseases and Tropical Center (IDRC). (2004) (Available from:


