

## **MIDDLE EAST CANCER CONSORTIUM (MECC)**

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Middle East Cancer Consortium (MECC) was established upon the treaty concluded by the Health Ministers of member countries, namely Egypt, Israel, Jordan, Palestinian Autonomous Region and Southern Cyprus in Geneva on May 20th, 1966, in the witness of the Minister of Health of USA and the Chairman of USA National Cancer Institute (NCI). The purpose of MECC was defined as “increasing the information on occurrence of cancer by supporting the cooperated works and hence decreasing the occurrence and effects of cancer”. Another reason for the establishment of such an organization was the opinion that multilateral cooperation in the field of health would strengthen the friendship and tolerance among societies and would improve the conditions of public health within the member countries. Turkey participated in this intergovernmental organization officially when Prof. Dr. Recep Akdağ, Ministry of Health of Turkey, signed this treaty in July 2004.

One of the first activities of MECC was to establish and improve the relations between cancer registry centers, which constituted a very critical step for planning and research in public health, and developing efficient cancer control programs, by means of the Joint Cancer Registry Project (CRP). Another essential activity of MECC is the Small Grant Program, which supports cooperated activities of member countries.

### **United Cancer Registry Center Project (CRP-Cancer Registry Project)**

The short term target of the project is to establish population based cancer registry centers in the MECC member countries, to provide data comparability, to perform studies on comparing the incidence rates with the results of the population based cancer registry centers of both MECC member countries and the others. The long term targets are the targets concerning the further usage of the cancer registry centers. To encourage the usage of the data obtained from the cancer registry centers

in estimating the cancer burden, to discriminate the abnormal cancer patterns and to plan the health policy on the basis of evidences; to encourage collective studies between MECC members using the datum of the cancer registry centers in the field of cancer epidemiology; to develop a strategy or a program focusing the cancer registry centers can be listed among these targets.

The strategy of CRP is to support the population based cancer registry and to build up relations between these centers in the member countries. Cancer registry is a process of collecting data systematically and continuously about the emergence, characteristics and results of cancer, in order to guess and control the effects of malign illnesses on society. A population based cancer registry center collects data about all newly emerging cancer cases in a defined population and its main interest field is epidemiology and public health. Instead of executing the cancer registry activity within the entire society, it is offered to execute it actively within a sample of 10 %, which can socio-demographically represent the society, in terms of financial effectiveness.

It is not a coincidence that the Middle East Cancer Consortium, which was established in order to decrease the emergence and effects of cancer in the region, started its activity in the field of cancer registry. Cancer registry is the starting point of cancer control. To be able to maintain cancer control efficiently in a society of whatever size, it is required to determine the right targets and to choose efficient tools. For achieving these targets, it is necessary to have data such as cancer emergence rates, risk levels of special groups, prevalence, incidence and mortality of cancer types. Executing a scientific and systematic cancer registry activity complying with international standards is the first requirement for calculating these rates and for compiling the required data. For cancer registry activity to be meaningful and scientific, it is necessary that the compiled data can be comparative both within themselves and with the data of the cancer registry centers in other countries. To provide this comparability, cancer registry activities must be performed according to the international rules and standards required by scientific discipline.

Before this project, information about cancer burden in the region was based on mortality records, data of hospitals or case series. Ethnic, cultural and religious diversity, including the diversity of birth places (Europe, Asia, Africa) in the region, was creating a special interest in terms of research on cancer appearance. Because of being particularly closed communities, some abnormal allocations of genetic mutations and polymorphisms can be observed in some community of this region. For

example, specific mutations of BRCA 1 and BRCA 2 genes being determined, Ashkenazi Jews are the best examples known on this situation. This diversity makes the comparison of coverage rates between communities in the region even more interesting. The main principle of MECC cancer registry center project is to standardize data headlines, definitions, codes and quality control in order to allow confidential comparisons.

Information collected from hospital based studies, some case series and mortality data strengthened the expectations of diversity although the data from population based cancer registry centers were lacking. For instance, occurrence of the urinary bladder cancer, whose relative incidence is lower in Western countries and is thought to be related with the widespread prevalence of schistosomiasis, is the most frequent cancer within men in Egypt; information that mentions lymphoma has the second rate after breast cancer in Gazza and West Sheria; the frequency of lung cancer is not as high as the western countries in Israel although the smoking prevalence is not abnormally low, these can be thought as messengers of extraordinary patterns.

MECC United Cancer Registry Center Project was started on January 1, 1998. Establishment of the population based cancer registry center in Israel was dating back to 40 years; in Jordan it was established in 1996; in Southern Cyprus the registry center which was established in 1990 became fully operational in 1993. Upon starting the project, new Cancer Registry Centers were established for Egypt and the Palestinian Autonomous Region. While all the population registry centers were taken into the project scope in Jordan, Palestinian Autonomous Region, Southern Cyprus and Israel, which were less populated regions, in Egypt the region of Garbia was set as the geographical area of the cancer registry center. By the membership of Turkey in the Consortium in 2004, Izmir Cancer Registry Center established in 1992 was registered in this project.

The age differences between the populations and regions of the registry centers, shown in the Table 1, force us to maintain the age standard frequencies instead of basic frequencies.

**Table 1 MECC Regions and Populations Covered  
by Cancer Registry Centers**

<b>Cancer Registry Center</b>	<b>Population Covered</b>	<b>Population (x1000)</b>	<b>Location</b>
Southern Cyprus	National	645	Nicosia
FÖ Gazza	National	2360	Gazza
FÖ Western Bank			Bethlehem
Turkey	Izmir Province	3600	Izmir
Egypt	Garbia Region	3705	Tanta
Oman	National	4140	Amman
Israel	National	5700	Jerusalem

The program, which was developed to provide comparability of data between the centers, had some requirements. Firstly, MECC members have set and accepted common definitions and codes for 12 main data headlines and prepared the Booklet of Standards in Cancer Registry which will be used by all centers and which includes sets about the methods of data collecting and coding. In 12 main data headlines age, gender, date of diagnosis, basis of diagnosis, coding of primary sites (ICD-O 2), type of histology, behavior, codes of stages (ICD-O 2) and frequency of the illness. The second tool needed was a common computer program. Five centers of the starting six have agreed on using the adapted versions of CANREG program which had been prepared by International Agency for Research of Cancer (IARC). Izmir Cancer Registry Center being participated in the project subsequently is using CANREG and Israel Cancer Registry Center is using its own well developed program. Thirdly, the staff of these centers were given standardized training. Fourthly some practices were performed in order to summarize medical records and to provide comparability of the codes. By summarizing and coding the same cases, comparisons have been done both between employees of the same center and between different centers. Fifthly, to maintain a high level of data perfection and accuracy, in every center some activities were arranged by controller experts.

CRP, which is directed by an Executive Committee, composed of the experts performing the activities of the centers, has always mentioned the importance of high quality data and that international comparisons could only be possible by ensuring data standardization, and proving perfection and accuracy of the data. It has put emphasis on increasing the standards, developing the computer program and training the cancer registrars. Today, comparison studies between centers and publishing preparations of these have began.

## **Publications about MECC CRP**

- Freedman, L.S., Edwards, B.K., Ries, L.A.G., Young, J.L. (eds.) Cancer Incidence in Four Member Countries (Cyprus, Egypt, Israel, and Jordan) of the Middle East Cancer Consortium (MECC) Compared with US SEER. National Cancer Institute, 2006. NIH Pub. No. 06-5873. Bethesda, MD
- Freedman, L.S., Guest Commentary: MECC Tracks Cancer Incidence through International Collaboration. NCI Cancer Bulletin, 2006, 3:8.
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## **Small Grants Program**

Because of the reality of being at the beginning level of collaborative researches in the region, MECC has started the Small Grants Program. By this program, support is provided for the research projects of clinicians and scientists. Cooperative projects, which only the members are attending, are being supported in order to activate common activities between MECC members. Program has limited Funds (up to 15,000 USD/year per researcher; for example, if three countries are taken place in the project, it is for three researchers annually total of 45,000 USD/year).

## **Other Activities of MECC**

Besides its two main activities – United Cancer Registry Center and Small Grants Program – MECC supports the activities which are organized to support communication, information sharing and cancer control in the field of cancer in the region. Within this concept, it supports many activities organized about cancer– lymphoma course,

oncology nursing course, meeting about environmental carcinogenic, radiotherapy course, and etc. It can be said that these educational activities have been the basis of another institution, MESO (Middle East School of Oncology) whose establishment process has been performed under the roof of MECC.

The list of MECC meetings that participants from Turkey took place is listed below:

- 9. Executive Committee Meeting, Ankara, June 16, 2004
- Cancer Registry Center Executive Committee Meeting, Ankara, June 15-16, 2004
- Middle East Cancer Consortium, Larnaka, February 2-3, 2005
- MECC meeting Leded by American Cancer Community, Amman, March 26, 2005
- Scientific Meeting of Turkey National Cancer Week, Ankara, April 4-7, 2005
- Çalıştay: Malign Lenfomalar (Malign Lymphomas) - INTCR-MECC meeting, İzmir, 11-13 Nisan 2005
- Latest Developments in Field of Cancer Nursing, INCTR – MECC meeting, İzmir, April 11-13, 2005
- Executive Committee Meeting, Geneva, Switzerland, May 16, 2005
- Ministers Executive Committee meeting, Geneva, Switzerland, 17 May, 2005
- Screening and Radiotherapy Workshop, ESCU – MECC meeting, İzmir, May 27-29, 2005
- ASCO meeting and MECC delegation in Calvary Hospital, New York, June 13-17, 2005
- 9. Cancer Registry Center Meeting, Lyon, June 21-23 June, 2005
- International Workshop: Inflammatory Breast Cancer, Lyon, June 24, 2005
- MECC – INTCR Workshop: in Cancer Patients, Larnaka, November 15-17, 2005
- Introduction to Epidemiology and Statistics – course – Ankara, April 3-4, 2006
- MECC Session: Cancer Registry in Middle East, Ankara, April 5, 2006
- 10. Cancer Registry Center Executive Committee Meeting, Ankara, April 6, 2006
- Palliative Care Executive Committee, Ankara, April 7, 2006

- Workshop: Communication Skills in Pediatric Oncology, Larnaka, June 23-25, 2006
- Internationally Participated MECC – Istanbul Pediatric Oncology Meeting, Istanbul, November 16-19, 1006

In addition, since Turkey joined MECC in 2004, 21 researchers from Turkey have participated in short or long term courses abroad by the support of MECC.

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