WORLD HEALTH ORGANIZATION

Regional Office for the Eastern Mediterranean

ORGANISATION MONDIALE DE LA SANTÉ

Bureau régional pour la Méditerranée orientale

GROUP MEETING ON CANCER OF THE CERVIX UTERI (CCU)

Tunis, 15 - 17 November 1976

EM/GRP.MTG.CAN.CCU./7

26 October 1976

# CANCERS OF THE UTERUS IN THE EASTERN MEDITERRANEAN

By

Dr N. Mourali
WHO Temporary Adviser*

It is difficult to give a precise view of cancers of the uterus in the Eastern Mediterranean Region because of the lack of registries in most of the countries in this Region. Nevertheless, an effort will be made to give a general impression by means of data of variable validity.

Precise information can be drawn from the Cancer Registry of Israel and the hospital-based registries in Tunis, Cairo and Beirut; as for the remaining countries, information is drawn from various publications in the Region. It is self-evident that in this latter circumstance, the validity of the information is less sure.

## Relative frequency of cancers of the uterus

The relative frequency of cancers of the uterus in the Eastern Mediterranean Region is unequal, according to the country. The percentage of cancers of the cervix uteri as a percentage of all cancers in females is reported as varying from 1.7% in Afghanistan to 29.2 in Pakistan, and from 1.7% to 3.6% in these same countries for cancer of the corpus. In Iran, Pakistan and Lebanon, cancer of the cervix uteri is the most frequent cancer in women, while in Tunisia it occupies second place closely following cancer of the breast. Thus, if striking differences are seen in the data on cancer of the cervix uteri, data on the relative frequency of endometrial cancer shows it to be low, and in the same range, in all the countries where data is available.

The distribution by age of cancer of the cervix uteri in Tunisia reveals a curve commencing early and rapidly rising to thirty years, with an elevated relative frequency between 30-60 years. For the corpus the curve is much flatter and shifted towards higher age groups.

The average age of women with cancer of the cervix uteri has been calculated to be 48.6 years in Tunis; in Beirut it is 57.5 years.

It would be, of course, most interesting to study incidence of cancers of the uterus but at the present time, except for Israel, it is difficult to derive such data in the Region. Nevertheless, the Institute Salah Azaiz in Tunis reports the cases seen and treated annually in the Institute in respect to the age-structure of Tunisia. This gives only a relative impression of incidence in the country as a whole, but it should be noted that the majority of the advanced cases seen in the general hospitals are sent to the Institute Salah Azaiz. Undoubtedly, however, many cases remain unreported, given the relatively modest medical infrastructure in Tunisia. In spite of an average number of cases on the order of 110, the calculated incidence remains in the lower limits when compared to some other countries. The exponential rise of the curve is what is observed in developing countries, with young populations. Flat at the younger ages, it rises considerably in the older age groups. The flatter curve for endometrial cancer underlines the above observations on the lower relative frequency of this cancer.

---

*Director, Salah Azaiz Institute, Tunis

The low incidence of cancer of the cervix uteri in the Ashkenazy Jew population of Israel is well-known. The curve there is also exponential, but much flatter than the Tunisian curve.

For the non-Jewish population of Israel, the situation is largely the same: a flattened curve, even though the peak of incidence is earlier, at 45 years, while that for the Jewish population is at 70 years. It is worthwhile to consider the demographic upsets caused by Jewish immigration, which primarily concern the younger age groups. It is noted in a study by Dr R. Steinitz (Israeli Cancer Registry) that there is a difference in incidence of cervical cancer between the Jews born in Europe and those born in North Africa; in these latter the incidence is three times greater. No satisfactory explanation has been found for this phenomenon. However, in fact, an increase is observed in the level of uterine cancer among the Jews born in Israel, other than those of North African origin, in whom it is decreasing.

If cancer of the cervix uteri in the Jewish and non-Jewish populations has a low incidence for reasons still under discussion, the incidence of Tunisia is mid-way between Sweden and Israel and far behind Bombay.

For endometrial cancer, the data are completely different: Tunisia, like all the countries of the Region, has a flattened curve, similar to that of Bombay. Israel, on the other hand, for the Jewish population and to a lesser degree the non-Jewisn, is more nearly like the curve for Sweden and other European countries.

Socio-economic and environmental factors in cancer of the cervix uteri

The socio-economic and environmental factors relating to the development of cancer of the cervix uteri are well known. It has been possible to study these in the data on 461 cases treated at the Institute Salah Azaiz in Tunis. A similar study has been published by the Department of Epidemiology of the American University in Beirut and a comparison of the data is most interesting; interesting too, is the role of circumcision.

Lebanon, due to its population distribution, is a favourable country for a study on a double population, where in the one the males are circumcised, and in the other they are not.

Age of puberty and of menopause

Without being completely superimposable, the data of Lebanon and Tunisia are within the same limits as are those of the control group without cancer. In any case, as it has been emphasized many times by Danon, these two variables do not influence the development of cancer of the cervix uteri.

Age at marriage

This age is particularly early in Lebanon and in Tunisia: 74% of Lebanese patients and 58.6% of Tunisians were married before the age of 20.

In the comparison of the small published Lebanese series there is a highly significant difference ($P = <0.003$) between the case and control groups and confirms this already recognized fact. Marriage in the control group is much later.

Age at first pregnancy

The age of patients in Tunisia and Lebanon at their first pregnancy is particularly low; nearly 30% had been pregnant before age 20.

Parity

Parity is high in the Tunisian series (7.4). It is the same as in the Lebanese series (7.4) while in the control group it is 5.9 in Lebanon and is 6 in Tunisian patients with breast cancer.

Socio-economic level

It is difficult to evaluate this in our series; but it may be said that, generally speaking, our patients belong to a low socio-economic level, evaluated by indirect criteria: in effect, 63% benefit from free medical assistance provided by the Tunisian Government, having low non-taxable incomes; 32% have social insurance, that is to say, belonging to the working or salaried class, of a medium level; 5% are of a high level.

Circumcision

The question of circumcision is till debated. Circumcision of the husband could play a protective role for the wife against cancer of the cervix uteri; this could explain the particularly low incidence of this localization in Jewish women. The Jewish male is circumcised early and in a complete fashion, while the Moslem is circumcised at a later age. Abou Daoud, in Lebanon, carried out a comparative study in cervical cancer patients who were either Christian or Moselm. He concluded that there is no significant difference in the two groups.

Terris et al, on the other hand, thinks that the absence of circumcision plays a role in the development of cancer of the cervix uteri.

This idea is important to study in a Region where a large majority of the males have undergone a circumcision. If it is found to be correct and if the mechanisms can be determined, it will have important implications for preventive public health measures.

Contraception

The study of the group of patients undergoing contraception has not permitted us to draw any conclusion. Our series comprised few of these (6%).

Conclusions

This short study has maintained a summary character because of the relative scarcity of information coming from the countries of the Eastern Mediterranean Region, and, above all, because of the absence of cancer registries in most of the countries.

A questionnaire that we sent to the different countries of the Region and which would have allowed us to paint a more complete picture elicited few responses.

Nonetheless, such campaigns, in largely Moslem countries, must be carefully planned and introduced by a publicity campaign adapted to local conditions, such as we have attempted to do in Tunisia. For this, the assistance of sociologists and psychologists is of great help.

In the same way, the installation of cytology laboratories in the Region is of the greatest interest and will permit the detection of inflammation and chronic infections, and the following of patients. The addition of early detection to the family planning organization, interesting and simple though it may be, does not seem to cover the population at most risk, the women wishing to limit their number of births being already of a higher socio-economic level, and probably little affected by cervical cancer. It is necessary, therefore, to address ourselves to the other classes of the population and we think that it is there that we must concentrate our efforts in the Eastern Mediterranean Region.