



## LETTER TO THE EDITOR GYNECOLOGICAL CANCERS IN IRAN

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### *Dear editor*

Gynecological cancers including cervix, uterus, vulva and vagina, fallopian tube and choriocarcinoma, are the third most common group of malignancies among women<sup>1</sup>. Around the world, millions of women suffer from gynecological cancers, and every year a large number of them die due to these diseases<sup>2</sup>. Although these cancers occur all around the world, their prevalence differ from region to region due to different reasons including training, access to specialized services, effective treatment, and insurance coverage<sup>3</sup>. In 2012, a significant number of new cases of cervical, uterus, and ovarian cancer in Iran were diagnosed<sup>1</sup> and it is estimated that incidence of these cancers will grow in Iran by 2035<sup>1</sup>. Various factors including alteration of lifestyle, environmental factors, increased life expectancy, improved cancer registration system, and diminished mortality due to early diagnosis and treatment are involved in the elevated levels of cancer incidence<sup>4</sup>. The ascending trend of incidence of reproductive cancers during young ages can suggest potential changes in risk factors in new generations<sup>5</sup>.

In addition to socioeconomic burden, gynecological malignancies impose profound physical and psychological effects to women. These cancers challenge specialists against preserving fertility. In addition, many of them occur in women at their fertility ages, and their treatment may involve removing the reproductive organs or necessitate chemotherapy. This, in turn, may lead

to disorder in sexual function, early menopause, and infertility<sup>6</sup>.

In spite of the advances in diagnosing and treating gynecological cancers, the incidence of ovarian<sup>7</sup>, uterus<sup>8</sup>, and cervical<sup>1</sup> cancers is increasing. In spite of various methods available for preventing, screening, early diagnosing, and treating cervical cancer, many of cervical cancer patients are diagnosed in advanced stages and have poor prognosis<sup>9</sup>. The extent of use of vaccination and screening programs is associated with various challenges and there are different factors involved in not performing them across different groups<sup>10</sup>.

Ovarian cancer<sup>7</sup> is the most fatal<sup>7</sup> and common gynecological cancer in Iran<sup>5</sup>. A significant number of patients with this disease are diagnosed at advanced stages. Research shows increased rate and load of ovarian cancer among Iranian women, which is ascending in future<sup>7</sup>. There are various factors involved in incidence of ovarian cancer including menstruation, obesity, and family history<sup>11</sup>. Obesity contributes to incidence of ovarian, endometrial, and uterus cancers<sup>12</sup>. Therefore, lifestyle can play a role in reducing the incidence of ovarian cancer<sup>7</sup>. Mutations in BRCA gene, which are involved in development of ovarian cancer, are observed to a large extent in the Iranian society<sup>13</sup>. Although there is no effective screening for this type of cancer and screening does not reduce its mortality, long-term breast-feeding is associated with diminished risk of ovarian cancer<sup>14</sup>. Therefore, in addition to its other advantages, it should be promoted as one of the solutions to prevent this type of cancer.



The rate of uterus cancer in Iran is ascending<sup>8</sup>. Although uterus cancer has no effective screening method, at primary stages it manifests itself with vaginal bleeding. Therefore, the role of healthcare providers in raising awareness and giving training to women is very bold, in order to diagnose this cancer at its early stages. A large number of people in Iran suffer from endometrial cancer<sup>5</sup>. Endometrial cancer occurs in postmenopausal women as well as people with underlying diseases like diabetes, hypertension, and obesity<sup>6</sup>. Accordingly, controlling risk factors in this type of cancer are considerably important to reduce its incidence.

Various factors cause rapid growth of gynecological cancers in young women and this is alarming for the policymakers<sup>5</sup>. Based on the above points, gynecological cancers are an important health challenge in Iran. Today, controlling cancer is based on recognizing and modifying risk factors, proper screening of patients before manifestation of clinical symptoms, diagnosing the disease in its primary stages, and timely treatment. The national cervical cancer screening schedule in Iran was implemented by the Ministry of Health and Medical Education in 1989<sup>16</sup>. Nowadays, public coverage of HPV vaccination in Iran is not cost-effective<sup>17</sup>; however, with an increase of the prevalence of cervical cancer, this conclusion may become inaccurate. Considering the increased incidence of gynecological cancers in Iran and prolonged life expectancy, establishing and implementing comprehensive cancer control program in the country should be the priority for policymakers. Caring for high-risk groups and awareness raising programs could be effective in reducing the risk. It seems that training, designing, and implementing health promotion programs, preventing and controlling the known risk factors, timely and effective treatment along with palliative care of gynecological cancers, are currently the most cost-effective solutions to control gynecological cancers. Promoting protective factors can also decrease the incidence of gynecological cancers in the future.

#### CONFLICT OF INTERESTS

The authors declared no conflict of interests.

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