Summary

imPACT Review Report

Kazakhstan

Mission date: November 2016

Summary

Following the request from the Ministry of Health of Kazakhstan on 15 April 2016, the IAEA, through its Programme of Action for Cancer Therapy (PACT), conducted an imPACT review mission to the Republic of Kazakhstan in partnership with the World Health Organization (WHO) and the International Agency for Research on Cancer (IARC) from 14 to 18 November 2016, within the framework of the WHO-IAEA Joint Programme on Cancer Control. The imPACT Review´s main objective was to support Kazakhstan´s Ministry of Health in developing a comprehensive national cancer control programme and to improve access to quality cancer care.

The imPACT Review expert team, nominated by the IAEA, the World Health Organization (WHO) and the International Agency for Research on Cancer (IARC), assessed Kazakhstan´s cancer control capacity and needs in the areas of cancer control planning, cancer registration, prevention, early detection, diagnosis and treatment, and palliative care, as well as radiation safety infrastructure and practices, and the security of radioactive sources used for medical purposes.

The mission team visited sites in Almaty and Astana, including the Ministry of Health; Kazakh Institute of Oncology and Radiology - KazIOR; WHO Country Office; Republican Centre for E-Healthcare; Republican Centre for Public Health Development; Medical University Astana; Astana Oncology Centre; Kazakh National Medical University; Republican High Medical College; Almaty Centre for Palliative Care; Nazarbayev Medical University; Almaty Oncology Centre; Almaty Regional Oncological Dispensary; Representatives of the Pharmaceutical Sector (SK Farmacia). Meetings with delegations from the Aktobe Oncology Centre and Karaganda Oncology Centre were arranged in Astana, as well as a video conference with representatives of the Regional Cancer Centre in Semey. On the final day of the mission, a detailed debriefing was arranged for the Minister of Health and Social Development.

Main findings

1. The Government of the Republic of Kazakhstan recognized the importance of tackling cancer, which constitutes 15% of all deaths. According to the IARC GLOBOCAN 2012 data, the age standardized incidence rate for all cancers excluding non-melanoma of skin was 282.2 per 100 000 (18 744 cases) in men and 216.7 per 100 000 (21 675 cases) in women. The age standardized mortality rate was 202.5 per 100 000 (12 878 deaths) in men and 104.8 per 100 000 (10 942 deaths) in women. Cancers of lung, stomach, colorectum, prostate and oesophagus represent 53.0% of all new male cancer cases. Cancers of breast, cervix uteri, colorectum, stomach and corpus uteri are the top five in women, constituting

IAEA International Atomic Energy Agency

World Health Organization

International Agency for Research on Cancer

World Health Organization

63.2% of all new female cancer cases. There are almost 40 419 new cancer cases every year, of which lung, breast and stomach cancers account for more than 36% of new cases, and together with cancers of colon and rectum, cervix, uterus, ovary, liver, prostate, lymphoma and leukaemia constitute more than 50% of the cases.

2. The preparation of a new Programme for cancer care development (2017-2021) was under way.

3. The cancer registration system in Kazakhstan has been established in 1953. A system of electronic collection of cancer data started in 2003. The web-based Electronic Registry of Oncological Patients (EROP) was established in 2012 and is accessible throughout the country. Kazakhstan lacked uniform morphology coding practices.

4. The cancer profile indicates that primary prevention - tobacco and alcohol control, healthy diets and physical activity, HPV and HBV vaccination – are key to better cancer control. The alcohol consumption remains high as well as the prevalence of overweight and obesity among men and women.

5. There is no data on the prevalence of cervical HPV infection. The pilot HPV vaccination initiative suffered from the lack of an educational campaign on its health benefits. The vaccination programme against hepatitis B is obligatory (since the birth), has nationwide coverage and universal access. Screening for hepatitis B and C among specified high-risk groups of populations is state-funded.

6. All screening programmes have well-defined legal framework. The national oncology centre (KazIOR) monitors the cancer situation. Systematic quality monitoring and quality assurance for the entire screening process requires further improvement. Data on non-malignant and pre-cancerous lesions should also be monitored with the intent to downstage cancers such as cervical and colorectal.

7. According to the registered number of patients in Kazakhstan, the number of treatment units is sufficient. However, a significant number of treatment units are outdated (cobalt units 68.4%, median age of the source is 12 years) which hampers implementation of some radiotherapy techniques.

8. According to patient load, the staff levels are near or above the European average, although the education and training curricula and the continuous professional education are not in compliance with international standards.

9. Generally the quality assurance (QA) and quality control (QC) programmes in radiotherapy departments lack RT-specific protocols, operational RT-QA Committees and RT-incidence reporting system, and have inadequate patients' immobilization practices.

10. Palliative care standards exist and palliative care is recognized and incorporated in cancer planning. Legal restrictions, opiophobia and required special prescription forms constrain access to opioids.

11. For paediatric oncology, challenges are delayed presentation (60% of cases at Stages III and IV), no dedicated registry and no donor bank for bone marrow transplantation.

12. There is no formal palliative care education system and there is shortage of trained palliative care workers.

Summary of recommendations

Cancer Control Planning

- Strengthen existing quality control system by enforcing quality standards in the following areas: quality standards in laboratories; screening programmes; clinical practices; cancer registry; and surveillance.

- Encourage creation of NGOs that involve patient, families, lay persons and cover community engagement, to be involved in prevention, public awareness and creation of integrated, people-centred health services, notably by increasing governmental funds for competitive grants that NGOs can apply for.

Cancer Registration and Surveillance

- Standardize cancer registration practices across the country.

- Introduce and/or adopt international guidelines on cancer registration, in particular for: i) date of incidence and ii) multiple primary cancers.

- Introduce regular assessments of data quality and data entry procedures.

Cancer Prevention

- Continue implementing national plan to gradually increase excise taxes on tobacco and alcohol and generate additional revenues to state budget to support cancer prevention, early detection, treatment and palliative care services.

- Increase information and educational campaigns on HPV vaccination as a prevention measure against cervical cancer. Continue with the ongoing pilot vaccination in 4 regions.

Early Detection

- Establish a system for regular and systematic quality monitoring and quality assurance for the entire screening process.

- Ensure that registration of non-malignant and pre-cancerous lesions is part of the screening programs, which is very important to monitor trend in down-staging for some cancers (e.g. cervical; colorectal).

- Ensure standardization of the screening equipment and external validation of the equipment quality and performance.

Cancer Diagnosis

- Develop protocols for diagnosis/staging of cancer consistent with international standards.

- Consequently, develop standardized curricula for training of health providers, as well as technicians in pathology and radiology that align with international practice.

- Develop and implement accredited training programme in nuclear medicine (NM), medical physics, NM technicians/nurses and radiopharmacists, according to international curricula with formal recognition of these professions.

Cancer Treatment

- Develop and/or review the RT-specific protocols for all segments of RT process and align them with best available international standards (e.g. IAEA, ESTRO, ASTRO).

- Strengthen the RT Quality Assurance (QA) program by organizing the RT QA Committee in all departments, with clear list of responsibilities and competences.

Paediatric Oncology

- Strengthen early diagnosis programmes by increasing public awareness, as well as skills and competencies of primary health care providers.

- Plan and arrange for the education abroad of technicians in radiation oncology and nuclear medicine as soon as possible.

Palliative Care

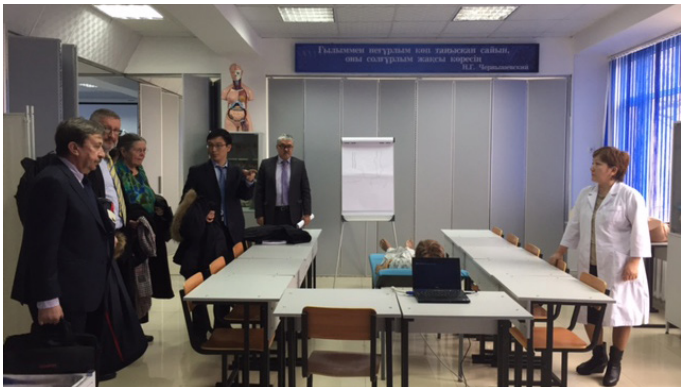
- Improve the availability and consumption of opioid analgesics, by reviewing the National Drug Policy and relevant legislation, with consideration of fiscal implications for expected increase in access and demand of opioids (cost-estimate of needs).

- Develop capacity and participation of NGOs in patient support, notably, by increasing governmental funds for competitive grants that NGOs can apply for and build capacity in the civil society sector for resource mobilization.

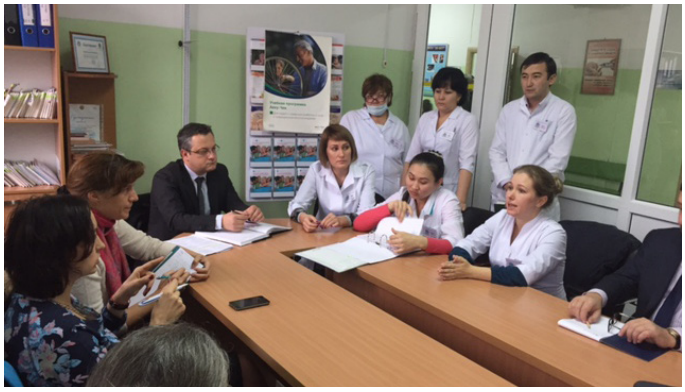
- Organize a system of training in the field of pain management and palliative care, using the existing group of leaders and palliative care specialists capable of creating and implementing “train-the-trainers” course.

Follow-up actions taken by the Ministry of Health

Following the 2016 imPACT Review, the Government translated the imPACT recommendations into the robust National Cancer Control Programme – referred to as the Programme for Cancer Care Development. The World Health Organization organized two follow-up missions, one to review the essential medicine list and provide recommendations for compliance, and the second to review ongoing screening programmes to support priority, cost-effective evidence-based practices. Resources were also prioritized for cervical cancer screening and non-evidence-based screening programmes (liver, oesophageal-stomach and prostate) were discontinued.



Dr Jerzy Jarosz, Dr Tit Albreht and Dr Margaret Fitch (standing left), experts nominated by WHO Regional Office for Europe and IAEA, attending meeting at the Center for Continuous Medical Education in Almaty. (Photo: V Igor/IAEA)



Dr Marilys Corbex (bottom, left), WHO Regional Office for Europe, and Dr Igor Veljkovikj (middle), IAEA, attend the meeting with primary health workers on cancer early detection activities in Kazakhstan. (Photo: V Igor/IAEA)

IAEA-WHO-IARC joint activities on cancer control

In March 2009, WHO and IAEA signed arrangements at the Director-General level to implement a Joint Programme on Cancer Control. The main purpose of this arrangement is to coordinate activities and resources to provide evidence-based and sustainable support to comprehensive cancer control programmes, particularly in low- and middle- income countries.

In response to a Government request, an imPACT Review is carried out as a comprehensive assessment of national cancer control capacities and needs. It is a partnership effort between the International Atomic Energy Agency (IAEA), the International Agency for Research on Cancer (IARC) and the World Health Organization (WHO). Where relevant, other partners are involved, such as the Union for International Cancer Control (UICC) and the United Nations Office on Drugs and Crime (UNODC). The IAEA Division of Programme of Action for Cancer Therapy (PACT) is responsible for coordinating the imPACT Reviews and for mobilizing the resources for their implementation.

Link to imPACT Review news and related resources:

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