



**Governing Council
Sixty-sixth Session**

GC/66/20-Revision 1
25 April 2024

Lyon, 15–16 May 2024
Hybrid format

ADMISSION OF A NEW PARTICIPATING STATE
The Government of Egypt

1. The Director has the honour to inform the Governing Council that the Government of Egypt has applied to be admitted as a Participating State in the International Agency for Research on Cancer. This application was communicated under cover of an official letter to the Director-General of the World Health Organization dated and received on 27 March 2024 (see Appendix below).
2. The Director-General transmitted this application to all Participating States by a Note Verbale on 5 April 2024 and informed them that it would be considered by the Governing Council in accordance with Rule 50 of the Rules of Procedure of the Governing Council.
3. The documents in relation to the application of the Government of Egypt were sent for review to the members of the Governing Council Subcommittee on the Admission of New Participating States, who will meet by teleconference on 23 April 2024, and report to the Sixty-sixth Session of the Governing Council.
4. A report on cancer research activities by the Government of Egypt is also appended (see Appendix below).

APPENDIX

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Ministry Of Health and Population
Minister



Date: 27/3/2024

Dr. Tedros Adhanom Ghebreyesus
Director General
World Health Organization
Avenue Appia 20 - CH-1211 Geneva 27 - Switzerland

Egypt's Application for Admission as a Participating State of the International Agency for Research on Cancer of the World Health Organization

Dear Dr Tedros,

On behalf of the Government of Egypt, the Ministry of Health and Population formally requests admission as a Participating State in the International Agency for Research on Cancer (IARC), with immediate effect.

As per Articles III and XII of the Statute of IARC, we are sending you our application for admission to the Agency, including a brief description of the cancer research and control activities in Egypt, and we would be grateful if these documents could be forwarded to the IARC Governing Council before its next session, to be held in Lyon on 15 and 16 May 2024.

The Ministry of Health and Population, on behalf of the Government of Egypt, hereby undertakes to observe and apply the provisions established in the IARC Statute, Rules and Regulations, including assuming the financial commitment associated with being a Participating State of the Agency, as assessed by its Governing Council.

The Ministry of Health and Population, on behalf of the Government of Egypt, awaits the processing of this application, and is looking forward to becoming a Participating State of IARC as soon as possible and to contributing effectively to the scientific and technical work of the Agency. Our understanding is that, on admission, Egypt would have full voting rights as and from the first year of its participation.

Any further clarifications on this matter should be addressed to the Ministry of Health and Population (New Administrative Capital - Governmental District, Cluster 17A-18A).
The Ministry of Health and Population also kindly informs you that a copy of this letter has been sent to Dr Elisabete Weiderpass, Director of IARC.

Yours sincerely,


25.3-24
Minister of Health and Population.

Prof. Dr. Khaled Abdul Ghafar

Received
27 MAR 2024
WCO/Egypt

Enclosure: Summary of cancer research and control activities in Egypt
cc: Dr Elisabete Weiderpass, Director, IARC

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Summary information to be filled in by the applicant state for the attention of the Subcommittee on the Admission of new IARC Participating States

Summary

Egypt, as the sixth largest lower-middle-income country in the world, boasts a population of 112 million. In 2022, the Egyptian society and health-system faced an estimated 148,000 new cancer diagnoses and 93,000 cancer-related deaths. Predominant incident cancers among men include liver, bladder, lung, and prostate, while breast and liver cancer are most common amongst women. Becoming a participating state of the International Agency for Research on Cancer (IARC) would render Egypt as the fourth IARC member from the lower-middle-income category, alongside India, Iran, and Morocco. Such membership would bolster representation from lower-middle-income countries (LMICs) at IARC's Scientific and Governing Councils, and facilitate collaborative cancer research among participating states, between IARC and Egypt, and across Egypt's neighbouring countries given its unique standing in Africa and within the WHO Eastern Mediterranean Region (EMRO).

Egypt's history of and current activities in cancer control reveal an evolving cancer burden met by a strong governmental commitment to widespread cancer control at the population level. Several exemplary Presidential Initiatives reveal impressive success stories in cancer control, showcasing Egypt's experience of successful cancer control implementation; experience that will be shared via IARC's network of countries facing analogous challenges. Notably, Presidential Initiatives including "100 Million Healthy Lives" have been a turning point in Egyptian healthcare, transforming the situation for liver cancer in particular. Egypt formerly experienced amongst the world's highest incidence rates of liver cancer (hepatocellular carcinoma) but the Presidential Programme to screen, treat and eliminate hepatitis C¹ across the entire population has led to the country being declared by WHO in 2023 as the first to achieve a "gold tier" status on the path to elimination of hepatitis C. A further success story is that of Schistosomiasis control² where urinary infection with *S. haematobium* after exposure to snail-infested water was attributable to high rates of squamous cell bladder carcinoma of the past. More recently, the 2019-initiated Women's Health Initiative³ includes a nationwide programme for the early detection and treatment of breast cancer, which comprises one-third of incident cancers in women. Evaluation of this initiative is timely in light of WHO's 2021 launch of the Global Breast Cancer Initiative and will have relevance for real-life scalable breast cancer control across LMICs.

The cancer landscape in Egypt is thus shifting and major challenges are currently of an excessively high prevalence of tobacco smoking and obesity. Altogether, the cancer control efforts and challenges facing Egypt render the country important in IARC's international arena for cancer research and control.

¹ <https://doi.org/10.1136/bmj.p2353> Hepatitis C: Egypt makes "unprecedented progress" towards elimination BMJ 2023; 383

² Salem S et al. BJUI 2011. Successful control of schistosomiasis and the changing epidemiology of bladder cancer in Egypt. 10.1111/j.1464-410X.2010.09622.x.

³ <https://www.sis.gov.eg/Story/173151/Egyptian-Women's-Health-Initiative?lang=en-us>

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A description of the current cancer research community, including relevant expertise in the areas of IARC activities

Egypt's Presidential Health Initiatives are prime examples of cancer control measures to promote cancer prevention, and each of these is accompanied by a strong cancer research component to which Egypt's membership of IARC would add technical expertise. A critical initiative is that of the "100 Million Healthy lives" coordinated by the Ministry of Health and Population. Two of these initiatives so far have positively impacted upon cancer: liver cancer through hepatitis C control, whilst currently the Egyptian Women's Health Initiative (WHI) is tackling breast cancer early detection and treatment amongst other health issues in women. The latter, alongside childhood cancer, also coincide with two of the three topical WHO Cancer initiatives, support for which IARC is also prioritizing. On the other hand, cervical cancer is not a major priority in Egypt as it ranks 20th commonest cancer.

Hepatitis C

Excessively high prevalence of hepatitis C virus (HCV) infection rates in Egypt led to a large burden of liver diseases in the country, including of hepatocellular carcinoma. Through a Presidential Initiative on HCV, in 2014 Egypt began a nationwide program for HCV elimination. Its successful implementation led to the 2023 declaration by WHO of Egypt being the first country with gold status for HCV elimination, having achieved safe blood, safe drug injecting, diagnosis over $\geq 80\%$ of people living with HCV and treating at least 70% of them, as well as establishing of a sentinel surveillance program for the sequelae of HCV, including liver cancer. Owing to the successful rollout of this program, Egypt has transitioned from a HCV prevalence of 10% to 0.38% in just over a decade. 50 million Egyptian residents were screened for HCV. This large-scale HCV control program is exemplary for other affected countries. Egypt has adopted a pro-active role in this undertaking, and in 2022 declared a target to treat 1 million HCV-infected people across 18 African countries, working with the African CDC and the African Union. Egypt's work herein has overcome implementation challenges such as in diagnostics, drug and vaccine manufacturing and drug access. This HCV control program serves as a model to shape strategies for hepatitis elimination. It aligns well with IARC's past and ongoing work on hepatitis, including systematic reviews on the affected cancer sites, population-attributable fractions across populations and specific at-risk sub-groups.

Breast cancer in the Women's Health Initiative

The WHI was launched in 2019, part of which is a nationwide breast cancer program to promote breast cancer awareness in women of all ages and clinical breast examination (CBE) at ages 35+ years and in symptomatic women as the first-level population-wide approach. Health workers across an organised referral network were trained in clinical breast examination (CBE), which is offered to eligible women attending a health centre for any reason, and any symptomatic woman. CBE+ women are referred for a 2nd CBE by an oncologist / breast specialist and then if still CBE+, referred for mammography and diagnostic work up if needed. All data have been recorded from the time of first CBE. Preliminary results reveal a large improvement in the stage at diagnosis distribution. To date

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over 10 million women have undergone CBE. The program and its design and implementation (CBE training, referral system, treatment access) are timely as it coincides with WHO's Global Breast Cancer Initiative (GBCI). With the first line of screening being the relatively low-cost CBE, it may be a feasible model for other LMICs. To date, the GBCI's first two KPIs, achieving 60% stage I/II at diagnosis, and presentation to diagnosis within 60 days have been achieved successfully. IARC is actively supporting research for GBCI, across health awareness, early detection and treatment of completion through patterns of care studies and thus a close collaboration between Egypt, IARC and the GBCI will provide invaluable information on GBCI implementation across the three GBCI pillars.

Childhood cancer

The Children's Cancer Hospital of Egypt (CCHE, known as "57357" for donations) is the largest paediatric oncology hospital in the world with 320 beds. It treats half of all childhood cancer patients in Egypt. Situated in Cairo, in addition to therapeutic services, active areas of research relevant to IARC include updated monitoring of survival in children with cancer, cost-effectiveness of childhood cancer treatment, as well as genomics and proteomics research. These areas align with WHO's Global Initiative for Childhood Cancer, also supported by IARC.

Beyond the above cancer-focusses, Egypt has a large and growing cancer research community spanning all areas of cancer prevention research. Notably these include cancer registration, primary prevention, population-level early detection programs, health economics assessments and a large community of oncologists and basic scientists whose research and activities additionally bring genomic, therapeutic, translational and survivorship research. Basic and translational research involving biospecimen processing is largely conducted in-country, strengthening biobanking and state of the art laboratories. Hosting the WHO EMRO regional headquarters, Egypt also has strong engagement across EMRO region, as well as with the AFRO region to the south. Several cancer research societies are highly active in both primary and secondary prevention:

- The National Cancer Institute (discussed later)
- The Egyptian Cancer Research Network (<https://www.egyccrn.net/>): A network of cancer researchers and oncologists in Egypt since 2016, ECRN facilitates the design and implementation of research studies in cancer by enabling researchers to identify and locate resources and expertise that may not be available to them at their own institutions and hence plan collaborative work that may not be possible for a single institution separately. The network also enhances the conduct of large-scale research studies that require the participation of multiple institutions, the identification of National research priorities in the field of cancer and the process of technology transfer among Egyptian research institutions. Current members include the Military Medical Academy, and the Universities of Menoufia, Beni-Suef, Mansoura, Suez Canal, Tanta, October 6, Assiut, Misr, Port Said, Kafrelsheikh, Sohag, Badr in Cairo, Zagazig, Matrouh, Damanhour, South Valley, Suez and Minia
- The Egyptian Cancer Society (<https://ecs.org.eg/>), sitting within the Egyptian Medical Association, was founded in 1991. It is structured into twelve research groups, predominantly tumour-specific and one in Cancer Epidemiology.

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- Egypt organises and hosts the annual BGICC (Breast Gynaecology and Immuno-oncology International Cancer Conference) in Cairo, led by Cairo University and Ains Sham University. This international conference is among the largest cancer conferences in the region and draws international participation from across Africa, EMRO and the Middle East.
- Civil society organization are also strongly represented across Egypt. There are 11 such members of UICC, including the National Cancer Institute (below), "Can Survive Egypt", BGICS and the Arab Medical Association Against Cancer.

Details of the presence of a national cancer institute or equivalent "lead" cancer organizations

Egypt's National Cancer Control Plan

The current cancer program in Egypt is embedded within the 2018-2022 National Multisectoral Action Plan for Prevention and Control of Noncommunicable Diseases⁴. Its mission is to enhance multi-sectoral collaboration to alleviate the burden of avoidable morbidity and mortality due to NCDs so as to promote a healthier Egyptian population. Specifically, this plan aims to reduce premature mortality from NCDs by 15%, through primary prevention, early detection and effective treatment. Equity in access to cancer diagnosis and treatment is a central principle in this plan and a universal health care approach has been adopted. National cancer committees have been established for development of specific plans for breast cancer as mentioned within the WHI, as well as revision of the guidelines for referral, diagnosis and treatment. A National Committee for Combating Hepatitis Viruses (nccvh.org.eg) as previously mentioned has also been established. The cancer control plan identifies the following priorities:

- Primary prevention through risk factor modification including diabetes and obesity
- Early detection of cancers especially breast and cervix
- Development of national guidelines for cancer diagnosis and treatment
- Improve the National Cancer registry program of Egypt (below)
- Improve palliative care for advanced stage cancer patients
- Regulation of tobacco smoking, occupational carcinogens and pesticides
- Control of HCV and schistosomiasis

Egypt has set 9 national NCD targets for 2021 based on its national circumstances, most of which are also relevant to cancer. In order to reach these national targets, the Egypt MAP-NCD aims to reduce exposure to risk factors and improve early detection and effective treatment of NCDs through primary health care approach:

- 15 % reduction of premature mortality from NCD by 2022
- 5% relative reduction of physical inactivity
- 20% relative reduction of Salt/sodium intake
- 10% relative reduction of Tobacco use

⁴ <https://extranet.who.int/nutrition/gina/fr/node/40351>

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- 15% relative reduction of raised blood Pressure
- Halt the rise in diabetes and obesity
- 10% coverage of drug therapy to prevent CVD
- 70% availability of essential NCDs medicines and basic technologies to treat major NCDs

The strategic objectives to achieve these targets are:

- to strengthen national NCD Governance
- to reduce risk factors and protection of health
- to improve early detection and effective treatment of NCDs to strengthen national capacity for NCD surveillance
- to promote high quality NCD research

Unhealthy diet:

- Establish a sub committee composed of all relevant stakeholders.
- Reduce of salt intake from meals
- Establish health education campaigns targeting schools on balanced diet and physical activities (Health Promotion Campaign through mass media on balanced diet and physical activities)
- Reduce sugar consumption through taxation on sugar sweetened beverages
- Promote and support exclusive breastfeeding for the first 6 months of life, including promotion of breast feeding
- Replace trans fats and saturated fats with unsaturated fats through reformulation, labelling and fiscal and agricultural policies
- Label nutrition in order to improve macronutrient intake, and reduce total energy intake (kcal)

Physical inactivity:

- Provide technical guidance on physical activity. Promote physical activity in selected settings in collaboration with relevant stakeholders
- Create enabling environments for promoting physical activity
- Strengthen collaboration with NGOs for physical activity

National Cancer Institute

Egypt's National Cancer Institute was first established in the 1950s. The NCI is seated within the University of Cairo and is now the largest cancer hospital in the Middle East. Beyond the NCI, there are over 30 specialized cancer treatment centres at present, with medical, radiation and surgical oncology specialists across both public and private practice. The NCI aims to contribute to the control of cancer in Egypt through developing and maintaining integrated quality programs in patient care, research, education and prevention. The NCI is committed to a multidisciplinary approach in cancer management in which different treatment modalities cooperate rather than compete.

Population-based cancer registration

The National Cancer Registry Program of Egypt (NCRPE) is covering 20% of Egyptian population (approximately 22 million) with the contributing cancer registries in Aswan, Minia, Behiera, Gharbiah

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and Damietta whose coverage the population of their respective governorates⁵. In 2014, IARC together with WHO EMRO, organized a site visit to Egypt and provided cancer registration assessment and recommendations. In 2022, the IARC Cancer Surveillance Branch hosted a UICC-IARC 3-month Development Fellow from Alexandria University. Staff from the NCRPE have actively participated in training events organized by the IARC Global Initiative for Cancer Registry Development (GICR) and WHO EMRO in the period 2015-2023, including the latest workshop on Cancer Data Use to Inform Cancer Control Planning held in November 2023 at WHO EMRO in Cairo.

Evidence of current scientific and technical exchange with IARC, and planned collaborations for Egypt to contribute to the research priorities of IARC and to the Agency's Medium-Term Strategy⁶

A long-term engagement with IARC would have immense benefits for IARC, Egypt and the wider region. As illustrated in the aforementioned activities, Egypt's large population size poses unique challenges in cancer control, yet valuable experience from which to expand and learn lessons. With a strong prevention focus and a key WHI activity aligned with WHO's Global Breast Cancer Initiative, Egypt-IARC collaborations on this program will provide important insights for all LMICs. Primary prevention research of the impact on cancer of the high prevalence of obesity, diabetes and tobacco (cigarettes and waterpipe) as well as strategies to achieve population-level reductions align perfectly with IARC's MTS. Egypt and IARC have several existing collaborations, whilst expansion to new opportunities will emerge upon closer collaboration with Egypt as an IARC member state. These existing and new collaborations include:

- **Population based cancer registration:** Collaboration with the Cancer Surveillance Branch's Global Initiative on Cancer Registration, via the Northern Africa, Central and Western Asia Hub, will continue, aimed at securing local support for sustained PBCR in Egypt, PBCR quality improvement to achieve high-quality registration required for inclusion in the Cancer Incidence in Five Continents, and hosting and participation in PBCR training courses.
- **Expansion of Egypt's participation in international IARC-led consortia.** At present, existing IARC-Egypt collaborations include Egypt's contribution to the 22-country International Consortium of Mammographic Density (<https://mdpool.iarc.who.int/>), a strong risk factor for breast density and a determinant of mammographic screening sensitivity. Egypt is also a participating country in Childhood Cancer and Leukemia International Consortium (CLIC) (<https://clic.iarc.who.int/>) via the Children's Cancer Hospital 57357. Being a rare cancer at a national or even regional level, large international consortia are required to decipher the causes of cancers in children such as prenatal and parental

⁵ Ibrahim AS et al. J Cancer Epidemiol. 2014; Cancer Incidence in Egypt: Results of the National Population-Based Cancer Registry Program. doi: [10.1155/2014/437971](https://doi.org/10.1155/2014/437971)

⁶ IARC Medium-Term Strategy (2021–2025): https://events.iarc.who.int/event/29/attachments/67/154/GC63_6A_MTS_2021-2025.pdf



exposures. CLIC builds on a wealth of data and biospecimens collected from more than 25 case-control studies worldwide of over 30,000 children with cancer and over 2 million controls.

Early detection of cancer: Egypt and IARC have multiple opportunities for collaboration on the early detection of cancer. First, the Cancer Screening in Five Continents (CanScreen5) project of IARC is collecting information on the characteristics and performance of cancer screening programmes across the globe in a harmonized manner, in order to disseminate the information for improved programme management and informed policy-making. Egypt's ongoing and planning cancer screening programmes will feed perfectly into this IARC initiative, supporting Egypt to collect and use cancer screening data for effective programme evaluation and quality improvement. Second, IARC's Genomics Branch has led research into the early detection of bladder cancer using the urinary TERT promotor mutation. Application of TERT in the Egyptian setting may provide a low cost less invasive method in the diagnostic triage for new or recurrent tumours. Third, with Egypt's tobacco smoking epidemic and associated current and future lung cancer burden, lung cancer screening is a potential future screening consideration in Egypt, for which IARC's experience in other affected settings will be relevant e.g. the IARC's Early Detection and Prevention Branch is currently evaluating the development and implementation of a pilot program for a low-dose CT lung cancer screening in Eastern Europe.

Capacity Building: In addition to the continued collaboration in training for PBCRs, Egypt and IARC are part of a recent Science for Africa Foundation grant (DETLAS-II) in the REACCT-CAN program: Research and Excellence in African Capacity to Control and Treat Cancer. This program is supporting over 60 students (masters, PhD and postdoc) in capacity building for cancer research across Egypt, Ethiopia, Tanzania and South Africa, with IARC being one of two international partners.

Aetiological research in cancer: To extend the existing Egypt-IARC collaboration in childhood cancer aetiology, potential new opportunities for aetiological research include in occupational cancers including of pesticides among agricultural workers with the Environment and Lifestyle Epidemiology Branch at IARC, and in the cancer risks associated with obesity, diabetes and the metabolic syndrome, the latter a key research domain in IARC's Nutrition and Metabolism Branch.

World Codes Against Cancer: Primary prevention of cancer is the most cost-effective strategy for cancer control. IARC's World Codes Against Cancer (CAC) Framework (<https://cancer-code-world.iarc.who.int/>) will be extended beyond Europe (ECAC) and Latin America and the Caribbean (LAC). Egypt will have a critical role to play in shaping a relevant regional code in the next decade; the graphical regional for the code encompassing Egypt is yet to be defined. A regional CAC relevant to, disseminated and monitored in Egypt is critical given the high prevalence of tobacco use, shisha smoking, obesity and other regional-specific carcinogens.

**Governing Council Subcommittee on the Admission of new Participating States (PS)
23 April 2024**

**REPORT FROM THE SUBCOMMITTEE ON THE ADMISSION OF NEW PARTICIPATING STATES:
APPLICATION OF THE GOVERNMENT OF EGYPT**

Present: Professor Norbert Ifrah (Gc Chairperson – Member ex Officio)
Ms Marie Charlotte Henrion (France)
Dr Masato Izutsu, Mr Motohiro Hamada and Ms Kay Ohara (Japan)
Dr Al Hareth Al Khater (Qatar)
Ms Maya Levine and Ms Christina Taylor (USA)

Apologies for absences/unable to attend: Dr Joao Paulo Viola (Brazil), Dr Mark Palmer (UK).

1. The Governing Council Subcommittee on the Admission of New Participating States met by teleconference on 23 April 2024 to consider the application of the Government of Egypt for admission in the International Agency for Research on Cancer.
2. The Subcommittee considered the application of the Government of Egypt and noted that it was received on 27 March 2024 under cover of a letter and transmitted by the Director-General to all Participating States on 5 April 2024.
3. As required by Resolution [GC/54/R17](#), in order to assess whether “the State is able to contribute effectively to the scientific and technical work of the Agency” (Statute Article XII), the Subcommittee reviewed the report on the status of cancer research activities in Egypt (see [Document GC/62/20 Appendix](#)). From this review, the Subcommittee was impressed by the quality of the application and by their willingness to share their experience with IARC’s Participating States, improving the fight against cancer in African regions.
4. agreed that Egypt has scientific and technical exchanges with IARC in many projects, has funding, interest and capacity in cancer research, has a national medium and long-term plan, for cancer control, with a focus on cancer registration, early detection and screening, and childhood cancer aetiology. In addition, it can be emphasized that Egypt aims to elaborate a regional code against cancer and is therefore meeting all the requirements to demonstrate that they would effectively contribute to the research priorities of IARC, as described in its Medium-Term Strategy.
5. In accordance with Article III of the Statute, the Government of Egypt also undertook “to observe and apply the provisions of the IARC Statute”, in its application letter.
6. The Subcommittee strongly recommends that the Governing Council do not delay the admission of the Government of Egypt as a Participating State of the International Agency for Research on Cancer.