

International Agency for Research on Cancer



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COOPERATION BETWEEN IARC AND WHO

Introduction

1. The role of the International Agency for Research on Cancer (IARC) within the World Health Organization (WHO) structure is unique; IARC is the only autonomous agency of WHO specifically dedicated to carrying out research on a particular disease. Moreover, the relationship between the two organizations is complementary: IARC has a primary objective of coordinating and conducting international research to provide a scientific basis for the adoption of effective measures for cancer control, whereas WHO is primarily concerned with providing guidance and technical support to its Member States for implementation of cancer control policies and programmes.
2. The Agency is uniquely placed to provide the type of evidence-base required by WHO for cancer prevention and control. However, IARC's remit is broader: according to its Statute the Agency's purpose is to carry out research into all aspects of the causes, treatment and prevention of human cancer, which it does through interdisciplinary studies involving laboratory- and population-based approaches, and to collect and disseminate information on cancer. The Agency's mission and activities therefore support the formulation of public health policy, but their proximity to policy development and implementation varies depending on the context and maturity of specific research areas.
3. This document provides an overview of the key areas of collaboration where the work of the Agency makes or could make a strategic contribution to the activities and the attainment of the goals of WHO. It examines how WHO's cancer agenda helps inform priority setting for the Agency's research activities. It opens the question of the need to identify additional funding for priority areas of joint IARC-WHO activities in cooperation with Participating States or funding agencies. Finally, the strategic aspects of this collaboration are discussed in order to define its scope and limits.

Nature of the interaction between IARC and WHO

4. The nature of the interactions between the two organizations varies depending on the type of collaboration, ranging from the provision of technical support and expertise underpinning policy and guideline development through to mutually shaping the strategic objectives and direction of both organizations on cancer.

5. The interactions occur at all levels and between different groups and units. Examples include participation of IARC staff as technical experts in WHO working groups or in the drafting of technical and policy documents; the organization of joint conferences or development of joint research projects; and the provision of assistance and advice on defining the strategic direction of specific programmes and initiatives, such as the IARC Medium-Term Strategy or the WHO noncommunicable disease (NCD) research agenda.

6. A number of mechanisms to facilitate and encourage regular exchanges and closer collaboration between the two organizations are established. These include the regular participation of WHO-HQ representatives in the Agency's Scientific and Governing Councils; participation of WHO-HQ staff in IARC Committees and ad hoc advisory groups; and regular teleconferences between the Assistant Director-General of the Noncommunicable Diseases and Mental Health (NMH) Cluster and the IARC Director to discuss strategic collaborations.

7. In addition, over the last two years IARC has hosted a series of more targeted meetings between IARC researchers and specific WHO-HQ Departments and Clusters with whom it has closer collaborations, to discuss areas of common interest and coordination of future activities. For example, IARC organized visits for WHO-HQ staff from Chronic Diseases and Health Promotion, the Tobacco Free Initiative, Nutrition for Health and Development, Public Health and Environment and the Global Burden of Disease.

Organizational links to WHO-HQ

8. Cancer prevention and control activities at WHO-HQ are not grouped under a single unit, but rather span a number of organizational clusters and their related departments. The Agency therefore has a wide range of collaborative activities with several Clusters, notably with NMH, but also with other Clusters that develop programmes and projects relevant to cancer control such as Health Security and Environment (HSE), Family and Community Health (FCH) and Information, Innovation, Evidence and Research (IER). These key areas of collaboration are outlined briefly below. A more detailed description of specific joint projects and collaborations between individual WHO-HQ and IARC Sections and Groups can be found in the Annex.

Noncommunicable Diseases and Mental Health (NMH) Cluster

9. NMH is the WHO Cluster with overall responsibility for coordination of cancer prevention and control strategy and policies.

10. The Agency has collaborated closely with NMH in a major piece of work in preparation for the United Nations (UN) General Assembly High Level NCD summit in September 2011 by preparing the *"Global Status Report on Noncommunicable Diseases, 2010"*. Senior staff at the Agency worked closely with NMH to develop a common position in the chapters on cancer prevention and control.

11. The forthcoming UN General Assembly summit represents an unprecedented opportunity to highlight the key role of research in the development and implementation of strategies for the prevention and control of these diseases. The close collaboration that has been established

between IARC and NMH in the preparation for this meeting reflects the recognition by both organizations of the value of their complementary relationship.

12. The IARC Director is also a member of the International Scientific Steering Committee for the *"First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Diseases"* to be held in Moscow on 28–29 April 2011, has helped develop the Draft Declaration for consideration by the WHO Member States and will speak in the first plenary session at the conference.

13. A further example of work on a strategic level was the collaboration in defining the priorities of the WHO cancer research strategy which is part of the *"2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases"*. The Agency has been strongly involved in Objective 4 of the Action Plan – *"Promote research for the prevention and control of noncommunicable diseases"* – for example, through participation in the drafting of the *"Prioritized Research Agenda for Prevention and Control of Noncommunicable Diseases. Research priorities: cancer – prevention, early detection, screening, treatment and palliative care"*.

14. Aside from these higher level activities the Agency has developed a close working relationship with several of the Departments in NMH on a number of projects:

Chronic Diseases and Health Promotion (CHP) Department

15. The primary mission of CHP is to provide leadership in global efforts to promote health and in the prevention and control of major chronic diseases and their risk factors. CHP ensures the overall coordination of the development and implementation of comprehensive evidence-based public health policies on cancer.

16. Collaborations between IARC Groups and CHP are extensive, but probably the most prominent are in the area of cancer screening and early detection, in particular on the research developed by the Screening (SCR), Quality Assurance (QAS) and Infections and Cancer Epidemiology (ICE) Groups, on approaches appropriate for implementation in low- and middle-income countries. The cooperation in this area has been primarily on cervical cancer, but also on breast cancer. These activities also involve other WHO-HQ groups, namely in the Reproductive Health and Research Department (RHR) within the Family and Community Health Cluster (FCH), as well as WHO regional and country offices. This research provides evidence to support the development of policies and recommendations for the implementation of screening in a range of healthcare settings.

17. In addition to collaborations on specific country projects on screening and prevention of cervical cancer and early detection and screening of breast cancer (for example, in Albania and Belarus), these Groups have also been closely involved with CHP and RHR in drafting a number of WHO guides and other publications designed to provide comprehensive practical advice to health care providers on prevention, early detection and treatment of cervical cancer.

Nutrition for Health and Development (NHD) Department

18. The NHD Department of WHO promotes the implementation of sound food and nutrition policies to tackle malnutrition (including both under-nutrition and overweight) and improve health.

19. The IARC Nutrition and Metabolism (NME) Section's main research objectives in this area are the evaluation of the association between diet (including dietary patterns), nutrition, physical activity, and energy imbalance with cancer risk. This is an area where the Agency's research has the potential to make a substantial contribution to the development of international public health recommendations and policy. This is therefore one of the key areas where the Agency aims to expand the interaction with WHO.

Tobacco Free Initiative (TFI) Department

20. The TFI Department coordinates WHO activities on tobacco control through providing global policy leadership, coordinating international advocacy and promoting the implementation of the provisions of the WHO Framework Convention on Tobacco Control (FCTC) by Member States.

21. At a meeting organized by the IARC Director early in 2009, TFI staff and Agency scientists, now within the Sections of Environment and Radiation (ENV) and of IARC Monographs (IMO), identified shared priorities and subsequently these groups have cooperated closely on various aspects of tobacco control research, in particular on the development of methods and benchmark measurements to evaluate the effectiveness of tobacco-control policies including those outlined in the FCTC.

Health Security and Environment (HSE) Cluster

22. Within the HSE Cluster, the Public Health and Environment (PHE) Department develops a broad range of activities in the area of environmental health and is another unit of WHO-HQ with whom the Agency has substantial collaborations.

Public Health and Environment (PHE) Department

23. The primary objective of the PHE Department is to promote a healthier environment by strengthening primary prevention and advocating the implementation of effective public health policies to address the causes of environmental threats to health.

24. The ENV Section of IARC investigates risk factors of cancer related to environmental, lifestyle, occupational or radiation-related exposures and has therefore a natural synergy with some of the core activities of PHE. IARC Monograph reviews provide the basis for some of PHE's risk assessments and risk management recommendations on certain chemicals, pollutants or other occupational and environmental exposures. The close collaboration established between the IMO Section and PHE has enabled the rapid follow-up to the publication of the Monographs with policy recommendations.

25. In order to support and further develop these relationships the Director hosted a meeting in February 2011, where senior members of PHE and IARC Groups reviewed current collaborations and identified areas of common interest for future work.

26. Finally, the Agency actively participated in the *“International Conference on Environmental and Occupational Determinants of Cancer: Interventions for Primary Prevention”* organized by PHE in Asturias, Spain last March. This was a major PHE initiative which brought together specialists from a broad range of areas to review key policy options and interventions to strengthen primary prevention of environmental and occupational cancers.

Family and Community Health (FCH) Cluster

27. The FCH Cluster works to enhance the health of individuals, families and communities, by supporting the establishment, implementation and evaluation of interventions that foster health and accelerate human development.

28. IARC has extensive collaborations with FCH, in particular with RHR and Immunization, Vaccines and Biologicals (IVB) Departments, primarily relating to its research on infection-related cancers, in particular cervical and liver cancer. In addition, as outlined above, the Agency also has collaborations with RHR on screening for not only cervical cancer but also breast and colorectal cancer.

29. The Agency’s research in this area is aimed at understanding the association between infections and cancer, characterizing the prevalence of cancer-associated infections in the population and testing novel strategies for their prevention. For example, the ICE and SCR Groups work closely with the RHR and IVB Departments on cervical cancer prevention and human papillomavirus (HPV) vaccination, surveillance and monitoring in developing countries.

30. The collaboration between Agency groups and FCH has led to the establishment of several large joint research and implementation projects for cervical cancer screening in sub-Saharan Africa, for the coordination of the global efforts to provide guidance to countries about HPV immunization and monitoring (e.g. through HPV prevalence studies in women from 25 countries across five Continents), as well as on cancer risk among oral contraceptive users.

Innovation, Information, Evidence and Research (IER) Cluster

31. The Global Burden of Disease (GBD) project provides comprehensive and comparable estimates of mortality, incidence, prevalence, loss of health and other indicators across all disease domains, and carries out estimates of attributable deaths and Disability Adjusted Life Years Lost (DALYs) for major global risk factors.

32. Through the work of the CIN Section, the Agency has established a reputation as the definitive source of vital statistics on cancer and of estimates of the global cancer burden. The GBD project overlaps with several of CIN’s activities, in particular in the production of estimates of incidence and mortality for cancer. One of the main areas of recent collaboration between GBD and CIN has centered on reconciling methodological differences that have resulted in discrepancies in estimates. Another area of collaboration with GBD has been the development of new indicators

to assess the burden of cancer internationally, e.g. DALYs. These were key areas discussed at a recent joint CIN/GBD meeting at the Agency.

33. Finally, the CIN Section collaborates with the WHO Classifications, Terminologies and Standards group on the update of the International Classification of Diseases for Oncology, 3rd Edition (ICD-O-3) and on the dissemination of these new codes to its network of collaborating cancer registries, and is taking the lead on the Topic Advisory Group for Neoplasms for the 11th revision of the International Classification of Diseases (ICD-11).

Publications and media communication

34. The IARC Communications (COM) Group is responsible for coordinating both the Agency's Publications programme and the implementation of its external communications strategy. WHO Press is the exclusive publisher and distributor of the Agency's printed book series.

35. COM works closely with its counterpart department in the office of the WHO Director-General, to ensure the effective diffusion within WHO of the results of the Agency's research, as well as efficient coordination and the widest dissemination in the reporting of joint activities. This is key to ensuring that joint activities and overlapping areas of interest find an outlet through well-coordinated communication routes, particularly in those cases which attract high interest from the media and the wider communities.

WHO regional offices

36. Considerable collaboration exists between IARC and WHO regional offices as well as with country offices. Specifically the Agency provides technical advice and consultancy in the domain of cancer information systems, cancer screening and early diagnosis in the context of national cancer control initiatives in selected countries such as Albania, Angola, Belarus, Guinea, Iraq, Jordan, Kenya, Madagascar, Malawi, Oman, Paraguay, Saudi Arabia, Sri Lanka, Tanzania, Thailand and Uganda, among others, in the past few years.

37. Another important interaction in this area relates to the extensive network of collaborations of the CIN Section with WHO regional offices, particularly with AFRO, AMRO and WPRO, to increase the coverage and improve the quality of cancer registration in low- and middle-income countries.

Conclusions and future opportunities

38. Close cooperation between IARC and WHO places the Agency in a privileged position to permit rapid translation of its research findings into public health advice and policy. The scientific expertise at the Agency provides a rich resource of high quality information and advice to support the work of WHO.

39. Many of the existing collaborations between the organizations have been driven by personal contacts and shared commitments, rather than by initiatives at an organizational level. More recently, however, there has been a determined effort to collate information on the scope of

cooperation, to begin to define priorities, and to ensure that the opportunities for both organizations are maximized. In this context, the current document provides a first overview of the most significant collaborations between the Agency and WHO; it is not an exhaustive list.

40. In addition to the collaboration with WHO-HQ, the Agency receives great support from the network of WHO regional and country offices and this is highly valued. Whilst clearer concerted areas of cooperation with WHO-HQ are being defined, it is recognized there may be further opportunities to develop strategic cooperation with regional offices.

41. Cancer activities have no single locus within WHO, the work being spread across a wide number of Clusters and Departments. This presents a significant challenge to developing strategic direction for collaboration and to effective communication. Two initiatives are proposed:

- To name a contact person in each of the key Clusters at WHO and the Sections at IARC to form an IARC-WHO Cancer Liaison Group joined by a member of the Communication Group from each organization. The Liaison Group would meet once a year to review activities and decide on future priorities. The Group would be chaired jointly by the IARC Director and the Assistant Director-General for NMH. In addition, quarterly teleconferences would be held between the co-Chairs.
- A staff member from WHO-HQ would have a specific role in ensuring communication and facilitating cooperation between IARC and WHO under well-defined terms of reference and clear lines of reporting.

42. IARC has its credibility and reputation rooted in its research achievements. Because of the excellence of its researchers there is a frequent demand to support WHO in the development of reports, guidelines, workshops etc. Given the small number of senior scientific staff at the Agency this poses a risk of potentially deflecting the Agency from its own mission. There needs therefore to be a mutual understanding of this constraint and an acceptance that the support offered will be focused on agreed priorities.

43. In relation to subject-specific priorities, a number of areas are identified where a close collaboration is likely to be most productive. It is proposed that the major emphasis should be placed therefore on the following areas:

- Control of cancer amenable to screening and early detection
 - Cervical cancer: guidelines, vaccination research, screening and treatment approaches
 - Breast and colorectal cancer: guidelines, screening, early diagnosis and treatment approaches
- Understanding the role of environmental pollutants in human cancer burden
 - Revised estimates of global cancer burden; research to fill knowledge gaps; IARC Monograph evaluations of priority agents
- Diet, obesity, physical activity and cancer
 - Research to provide the evidence-base for recommendations; participation in developing advice and guidelines
- Global burden of cancer estimates
 - Consistency in estimates; coordination and sharing of tasks and activities

44. Whilst the growing cooperation between IARC and WHO is encouraging, there is room for improvement. Notably, a 'first reflex' for WHO to consider the Agency in areas relating to cancer would ensure accuracy and efficiency of messages. It is recommended therefore that in all major WHO documents that relate to cancer there is collaboration with IARC at the earliest stage of planning to permit sufficient time for reflection and exchange of views. On a more practical level, the prominence and visibility of IARC in joint activities and in WHO media communications, such as its web site, should be enhanced.

45. Little external financial resource has been attracted to date for joint IARC-WHO activities. IARC is successful in obtaining voluntary contributions for its research, but predominantly through competitive research grants. This should remain a priority, given it highlights the quality and reputation of the organization's research. In addition, IARC has a well-developed Medium-Term Strategy, which it should adhere to. However, opportunities could be sought with Participating States for voluntary contributions for research projects pertaining to specific WHO priority areas where the evidence-base for cancer control is lacking.

46. A recommendation at the UN high-level Summit to broaden the mandate of existing funding sources, such as those of philanthropic donors and publicly mandated funds and development programmes to encompass research on cancer control, including cancer prevention, could be helpful in this regard.

47. The Agency should also use its place within the WHO family to increase its profile among WHO Member States and through this explore the possibility of welcoming new Participating States to the Agency.

48. The UN high-level summit on NCD presents a unique opportunity to IARC as increased emphasis is placed on cancer by WHO Member States. There may be new opportunities for the Agency to expand its research role within the context of its current mission in areas such as cancer surveillance (morbidity, mortality, survival and risk factors), understanding the causes and prevention of cancer as well as implementation research.

ANNEX

Specific on-going joint projects and collaborations between IARC and WHO units

Chronic Diseases and Health Promotion (CHP) Department

Collaborations with the SCR, QAS and ICE Groups on:

- Development and updating WHO guidelines and technical advice on cervical cancer prevention and treatment: *“Comprehensive Cervical Cancer Control: A guide to essential practice”*; *“Cervical Cancer Screening in Developing Countries”*; *“Planning and implementing cervical cancer prevention and control programs: A manual for managers”*
- Consultations on early detection and control of breast cancer
- Technical assistance and collaboration on the evaluation of national screening programmes in low- and middle-income countries
- Integration of breast and cervical cancer screening into a comprehensive cancer control programme in Albania and Belarus
- Assessing the implementation of colorectal cancer screening programmes in Europe
- Cooperation on the implementation and/or evaluation of colorectal cancer screening in Albania and Thailand

Nutrition for Health and Development (NHD) Department

Collaborations with the NME Section on:

- Representing the Agency on the Steering Committee of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) whose role is to produce evidence-based recommendations in micronutrients intake and nutrition policies

Tobacco Free Initiative (TFI) Department

Collaborations with the ENV and IMO Sections on:

- Production of four volumes on tobacco control in the *“IARC Handbooks of Cancer Prevention”* series
- Joint WHO/TFI-IARC Working Group on mandated lowering of tobacco toxicants
- Publication of the Monograph reviews of the carcinogenicity of tobacco smoking and second-hand smoking, and of smokeless tobacco products (IARC Monographs Vols. 83 and 89) and recent update of these assessments (IARC Monograph Vol. 100E)

Public Health and Environment (PHE) Department

Collaborations with the ENV and IMO Sections on:

- The *“Global Initiative on Radiation Safety in Health Care Settings”* project
- Participation in an expert group for revision of the *“WHO Guidelines for Iodine and Thyroid Blocking in Nuclear and Radiological Emergencies”*
- Collaboration on the *“Agenda for Research on Chernobyl Health”* (ARCH) project, coordinated by the Agency
- Preparation for the WHO sponsored conference to mark the 25th anniversary of the Chernobyl accident
- The INTERPHONE study on mobile phone use and cancer risk, coordinated by IARC
- Participation in the International Expert Groups on Indoor Air Quality Guidelines, on the Presence of Hexavalent Chromium in Drinking Water (both organized by WHO-EURO) and on the WHO DDT Risk Assessment Consultation
- Participation in the Interagency Working Group on sound management of industrial chemicals with special emphasis on asbestos in the Asia-Pacific region
- Participation of PHE staff on a number of Monograph reviews, e.g. on Asbestos, on Extremely Low Frequency and Static Fields and on the upcoming Monograph on Radiofrequency Fields
- Participation in a number of expert meetings of the WHO's *“International Programme on Chemical Safety”* (IPCS) including hosting several *“International Chemical Safety Cards”* (ICSC) peer-review meetings
- Participation in the *“International High-Level Expert Conference on Chemical Safety and Rotterdam Convention: Policies and Practices in Russia”*

Reproductive Health and Research (RHR) and Immunization, Vaccines and Biologicals (IVB) Departments

Collaborations with the ICE, SCR, ICB and CIN Groups on:

- Participation in the development of WHO guidelines and recommendations on comprehensive introduction of HPV vaccination and testing
- Participation in a number of WHO meetings and working groups and organization of joint meetings to define strategic objectives and coordinate work on HPV vaccine introduction and surveillance, HPV monitoring and cervical cancer screening in developing countries
- Providing technical assistance to cervical cancer screening and HPV vaccination projects in sub-Saharan Africa (with WHO AFRO)
- Collaboration on monitoring the impact of HPV vaccination programmes through regular HPV surveys embedded in screening programmes and through registry-based monitoring of cervical cancer incidence rates; Bhutan, a country where 90% of adolescent girls aged 12–18 years had received HPV vaccine in 2010 offers a special opportunity
- Collaboration with the Global Laboratory Network with the aim of harmonizing laboratory testing procedures worldwide for HPV screening and monitoring the impact of HPV vaccinations

- Collaboration with the WHO department of HIV/AIDS on developing potential strategies to estimate incidence/burden of HIV-related cancer in East Africa through linkage of cancer registry and HIV registry datasets

Health Statistics and Health Information Systems

Collaborations with the CIN Section on:

- Participation in the GBD Cancer Expert Group
- Collaboration in the estimation of the global burden of Indoor Air Pollution, Occupational Cancer, and Foodborne Diseases – participation in the Foodborne Disease Burden Epidemiology Reference Group (FERG)
- Participation of senior scientists from GBD in GLOBOCAN meetings and publications
- Use of GBD mortality estimates to complement cancer specific data where there were regional gaps in registry coverage, for production of the latest GLOBOCAN estimates
- GBD provides advice on the application and calculation of disability weightings to produce estimates of Disability Adjusted Life Years Lost (DALYs) based on GLOBOCAN data