

REVIEW

Contributions to Cancer Prevention of Non-Governmental Organizations 1. Establishment of the UICC and its Activities

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Abstract

The objectives of the UICC declared at the outset were of an essential nature for preventive oncology and have very slowly been carried forward. Activities have rapidly expanded with progress in medicine and biology. Strengthening of the International cooperative network since 1980 has accelerated this trend. Most of the initial aims of the Union have now been achieved, I believe, but there appear many further problems to be resolved in cancer prevention, not only in economically developed areas but also in developing regions. Obtaining finance continues to be a big task with regard to accomplishing the many objectives of the UICC. Personal donations from individuals joining the Roll of Honor have provided part support for many projects, but the efforts of the Finance Committee, in coordination with member organizations, are still keys to maintaining activities and reaching the final goal of effective cancer control.

Asian Pacific J Cancer Prev, **1**, 181-193

Key Words: Cancer prevention - History - UICC - Programmes

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1. Cancer Prevention Activities before 1934

Cancer deaths gradually increased in 19th century Europe in association with the increasing aging of populations. The public and physicians tended to avoid to the actual word – cancer which was considered as a condition inexorably leading to death. Some surgeons, however, tried to resect tumors on the surface of the body such as skin, lip, and sometimes breast lesions. Occasionally, the patients were reported to have good results.

After introduction of anesthesia (1846) and antiseptics (1867), many surgeons rose to the challenge to resect tumors of the breast, uterine, stomach and other inner organs. For example, Theodor Billroth succeeded in surgical resection of a gastric tumor in 1881, but the patient only survived about 3 months. While he continued to operate on cancer patients, three years survival resulted in only 4.7% of 170 cases. William Halsted (USA) established radical mastectomy as a treatment approach in 1891-94 and achieved 3 year survival rates of 20-40% giving some hope to the general public. Vaginal hysterectomy had been conducted in the beginning of the 19th century, and abdominal hysterectomy, which appeared to be more effective and safer than the vaginal method, was established in 1911 by E. Wertheim. This was veritably the dawn of modern surgical treatment. The 3 year survival was, however, only about 20%. X-rays were applied to cancer diagnosis soon after developing of imaging possibilities in 1895. Thus, some cancers could be easily detected at earlier stages. Radium treatment started in 1902, again raising peoples hopes for control of cancer. Effective and safer radiation therapy was developed after 1910. A short history of the early fight against cancer is given in Table 1 (for earlier reviews see Ogata, 1953; Schottenfeld, 1975; Kawakita, 1977; Shimkin, 1977; Ross, 1987; Jetter, 1992; Darmon, 1993).

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Table 1. Short History of the Fight against Cancer before 1934

1700-1800	Cancer deaths had been increasing in Europe in the eighteenth century.	
1822-1893	Vaginal hysterectomy developed	
1881	Billroth C A Theodor	Surgical operations for gastric cancer
1891	Halsted, William S	Radical operations for breast cancer
1903	Janvrin, J E.	Surgery can prolong life with cervical cancers
1892	Winter, George, Gynecologist, Königsberg, Prussia	
	Public education on cervical cancer. Campaign using signals of cancer in 1903	
1903	Childe, Charles Plumley, Portsmouth, England	
	Issued a book on public education about cancer, entitled 'The Control of a Scourge'	

Georg Winter, a gynecologist in Königsberg, East Prussia, urged that women be informed of early symptoms in order to obtain prompt surgical treatment for cervical cancer in 1903. He publicized the danger signals of cancer through the written word in newspapers, and also he trained midwives to teach laywomen what cancer was. This is the first documented case of cancer education for the public. Charles P. Childe, Portsmouth, England, emphasized the importance

of early detection and prompt treatment, as opposed to concealing cancer. He advocated creation of cancer control societies on a worldwide scale, and wrote the first book to educate the public about cancer. The title was "The Control of a Scourge" avoiding the word cancer, but the revised edition in 1926 could be issued as "Cancer and the Public". The book exerted a large influence in Europe and North America, not only on physicians but also laymen. In the days

Table 2. Chronology of Episodes Related to Cancer Prevention

1700	B Ramazzini	Occupational cancer, breast cancer among the nuns
1761	J Hill	Snuff tobacco and nasal polyps (tumor)
1775	P Pott	Chimney sweepers and scrotum cancer
1795	S J von Soemmering	Pipe smoking and lip cancer
1801	T Denman	Treatise; What is cancer? Included prevention aspects.
1822	J A Paris	Arsenic and cancer
1824	E v Siebolt	Pregnancy and cervical cancer
1850	Rigoni-Stern	Breast cancer and menopause, nullipara and hormones
1851	T H Bilharz	Parasites and cancer
1861	J Cohnheim	Germ theory
1866	G Mendel	Mendel's law, genetics
1871	R Virchow	Irritation (Reiz) theory
1879	F H Harting\W Hess	Lung cancer among miners
1888	J Hutchinson	Cosmetic water (arsenic) and skin cancer
1889	A F Fergusson	Epidemiologic survey on cancer
1894	P Unna	Sunshine and skin cancer
1895	L Rehn	Aniline dyes and bladder cancer
	W C Roentgen	X-rays
1896	G T Beatson	Oophorectomy and regression of breast cancer
1900	A Neve	Kangri (burning) cancer in Kashmir, India
1903	M Curie	Radium
1910	P Rous	Chicken sarcoma, viral origin
1911	AR Ferguson	Bilharziasis and bladder cancer
1915	Yamagiwa/Ichikawa	Tar cancer, experimental cancer
1920	R Sasaki	Azodyes and cancer
1925	P Martland	Luminous watch painters and sarcomas
1932	AMB Lassagne	Follicular hormones and experimental cancer
	Kennaway/Kennaway	3,4-Benzpyrene, as a carcinogen
1935	Sasaki/Yoshida	α -Aminoazotoluene as a carcinogen
	J J Bittoner	Milk factor

when there was little knowledge on causation of cancer, early detection seemed to be the best way to save patient lives (Schottenfeld, 1975; Jetter, 1992).

However, there had been a relatively long history of studying causal factors of cancer, as shown in Table 2. The risk factors in humans suggested the existence of some carcinogens and possible ways of preventing cancer occurrence by avoidance.

Three causation theories on cancer were initially discussed (Long, 1965; Kawakita, 1977; Yamagiwa, 1981; Yoshida, 1981), that is, the irritation theory from many clinical experiences with workers exposed to chemical compounds, like scrotal cancer among chimney sweeps, and skin cancer among sailors and farmers long exposed to sunshine, among others. The endocrino-neurotic theory was derived from observation of breast cancer among nuns or nulliparous individuals and other cancers, while childhood cancers suggested some inborn errors might play roles. The irritation theory attracted a great deal of attention since, if true, cancer might be avoidable by removing the responsible factors. However, the relatively low incidence of cancer and insufficiencies in study systems hindered further research. The physicians interested in cancer control strongly wished to have exact data on cancer statistics to work out preventive strategies. Several countries already had mortality statistics which showed a rising trend in cancer deaths, that is between 1880 and 1890, with a 1.6 times increase in the rate in England, 2.0 times in Prussia and 2.5 times in Italy. The cancer patterns were, however, not the same between the areas. The statistics were not exactly comparable, because diagnostic standards were not unified at that time. William Farr (UK) created the Registrar General in London to collect and analyse vital statistics. With great foresight, he advocated

establishing international standards of deaths and diseases. J. Bertellion and Farr worked up a draft for the International Classification of Death (ICD) at the end of the 19th century, which was adopted at an international meeting in 1899. With this, statistical figures of deaths between countries could be more accurately comparable, with clearly increasing trends observed throughout Europe.

Representatives of physicians in European countries agreed that was an urgent need to build cancer clinics and research institutes and organize international meetings to exchange information on cancer. Promotion of new knowledge on cancer for anti-cancer activities was a high priority. Thus, cancer clinics and research organizations were gradually founded in Europe, the USA and Japan, as shown in Table 3.

2. Foundation of the International Society for the Study of Cancer (ISSC) and the Union International Contra Cancrum (UICC)

Finally, the International Society for the Study of Cancer (ISSC) was founded in 1906 in Heidelberg, Germany, where the first international assembly on cancer was held. The policy of the Society was laid down as follows:

- 1) To create cancer research institutes, cancer hospitals and an organization to fight against cancer
- 2) To establish International Standards of Cancer Statistics
- 3) To establish an International Notification Office for inquiries about cancer research
- 4) To issue an International Journal of Cancer Research
- 5) To hold International Conferences on Cancer Research and to prepare an International Committee
- 6) To disseminate knowledge on what cancer is to the general public

Table 3. Cancer Hospitals and Anti-cancer Associations

France	1893 Anti-cancer League in France was started and closed soon 1895 Cancer Research Association in Paris. One volume of a cancer journal issued 1896 Hospital for cancer, Paris 1911 French Cancer Society established
Germany	1900 Institute for Cancer Research planned in Berlin (1904 founded) 1901 Charity hospital for cancer 1906 Heidelberg Cancer House established
England	1901 Cancer Research Fund, London 1902 Imperial Cancer Research Fund established
USA	1884 New York Skin and Cancer Hospital 1901 Hospital in Buffalo, N.Y. (later Roswell Park Memorial Center) 1902 General hospital for the treatment of cancer and allied diseases (later Sloan-Kettering Cancer Center) Cancer Department in the Rockefeller Foundation Research Institute 1907 American Association of Cancer Research established
Japan	1908 Japanese Cancer Association founded by Prof. T. Aoyama, President (later Japanese Foundation for Cancer Research)

Table 4. Toward Founding of the UICC

1892	Geographic distribution of cancer in Great Britain, Haviland
1899	International Classification of Deaths (ICD), J Bertillon, W Farr
1900	ICD adopted as a basis of medical statistics in many countries
1906	International Society for the Study of Cancer was founded in Heidelberg
1910	International meeting Paris, Cancer registration started in France (one prefecture)
1913	International meeting Brussels
1922	Amsterdam meeting. Report of experimental tar cancer in rabbits and mice by Dr. Yamagiwa and Ichikawa promoted creation of an international information exchange organization
1923	International meeting Strassbourg, France world
1926	International Cancer Symposium Lake Mohonk (N.Y.) USA
1928	International Cancer Conference, London, UK
1933	Official International Cancer Conference Madrid, Spain L'Union Internationale Contre le Cancer (UICC) approved and the Meeting became the First UICC Congress
1934	Business office set up in Paris
1935	Second International Cancer Congress, Paris President of the UICC; Justine Godart (Lawyer, Minister of Health, France) Secretary-General; J Bandaline (MD, Spain)

The next international assembly was held in Paris, France, in 1910, and the third in Brussels, Belgium, in 1913 (see Table 4). However, there were little advances in oncological studies and control activities to be reported at these conferences. Some members were therefore reluctant to participate.

After World War I, it was appreciated cancer deaths had continued to increase and many scientists and physicians argued for an international meeting to exchange information, especially on outcomes of research projects. The report that tar was carcinogenic in experimental animals of rabbit and mice by Yamagiwa and Ichikawa and others greatly stimulated the members of the Research Committee at Amsterdam in 1922. They wished for transfer of cancer information in detail, more quickly, otherwise research would be hindered (UICC, 1990). In England, chemical carcinogen studies related to occupational cancer were accelerated after Yamagiwa's first report in 1915.

An International Conference on Cancer was held at Strassbourg, France, in the memory of Louis-Pasteur a Centenary after his birth in 1923. At this meeting, the plans to establish an International Organization for Cancer Prevention with multiple functions were eagerly discussed. After 3 years in 1926, an International Cancer Symposium (ISSC meeting) was held at Lake Mohonk, N.Y., USA, sponsored by American Society for the Control of Cancer and other organizations. A group of 109 cancer authorities from European countries also attended along with many American participants. Recent advances in radiation treatment and other new scientific findings drew eager attention. Another objective was to discuss cancer control

strategies. The committee finally agreed to issue 15 statements on practical facts or sound working opinions, in a campaign as to what man should do at that time to avoid cancer:

- 1) Cancer is not contagious or infectious
- 2) Cancer is not hereditary
- 3) Early detection is the best assurance of cure
- 4) The public must be taught the earliest signals of cancer.

These statements were widely distributed by the mass media and had a major impact, not only on physicians but also laymen. However, many doctors were still reluctant to think about cancer problems, because of the meagre knowledge on natural history, causative factors and also almost no effective treatments at that time. So progress in cancer control activities was slow, even in Western Societies.

The next International Conference on Cancer was held in London in 1928, where the etiology of cancer, especially occupational cancer was the focus. Resultant studies identified a number of chemical carcinogens in the 1930s in the UK. At the meeting itself, it was strongly emphasized that an International Organization on Cancer be established to exchange information and promote scientific interactions across communities to avoid duplicate studies with non-effective use of employees and funds, and clarify the suspected evidence found in local settings, and finally to stimulate new directions in research. The necessity for standardized cancer statistics was also reconfirmed for various uses in the fight against cancer.

In May 1933, an official International Cancer Conference was held in Madrid, where J. Bandaline, France, issued a

motion to establish the International Organization on Cancer to achieve cancer control in the world. The motion was unanimously accepted with applause at this assembly. The business office of the organization was settled at Paris in 1934 and the organization was named *Unio Internationalis Contra Cancrum (UICC)* – the International Union against Cancer. The UICC was actually set up at the 2nd International Cancer Congress at Paris in 1935 with the participation of representatives of 43 countries and 67 national cancer organizations. The previous international meeting at Madrid in 1933 was then named the first International Cancer Congress.

The first President selected was J. Godart, a lawyer and former Foreign Minister of France, and the Secretary-General was Bandaline, a physician, himself. The UICC is a Non-Governmental Organization with the aim of promoting international collaborative activities for research, treatment and prevention of cancer.

3. Activities of the UICC up until the 1970s

Programs for activities of the UICC were adopted in 1935, considering the prevailing international situation concerning cancer;

- 1) To issue an International Journal named *Acta Unio Internationalis Contra Cancrum*, trimestrally. This was the first international journal on cancer in the world.
- 2) To establish a nomenclature for tumors.
- 3) To collect cancer statistics using international standardized methods.
- 4) To decide the place of the second International UICC Congress.

The second Congress of the UICC was organized at Brussels, Belgium, September 1936, representatives of 43 countries participating. They recognized no effective medical treatments to save cancer patients and cautioned against creating too great expectations from therapy amongst the public. Exact cancer statistics were to be highly evaluated, if they could be obtained. Thus they would contribute a basis not only for estimating the actual size and extent of cancer problems, but also useful for comprehending etiology, diagnosis, treatment and prevention of cancer. The Union appealed to Governments, cancer institutes and insurance companies to collect exact cancer statistics by new methods, and also to generate actual figures for cancer patients at the population level. Morbidity statistics were also thought essential, if not easy to obtain. Harold Dorn (USA) started a cancer patient survey in ten urban areas of the USA in 1937-39 and 1947-49. His intensive efforts first clarified the actual incidence and prevalence of cancer in several regions, and also the mortality rates could be figured from his observations. The work was continued by the staff of the National Cancer Institute, USA, because cancer registration could be established on this occasion. Johannes Clemmesen

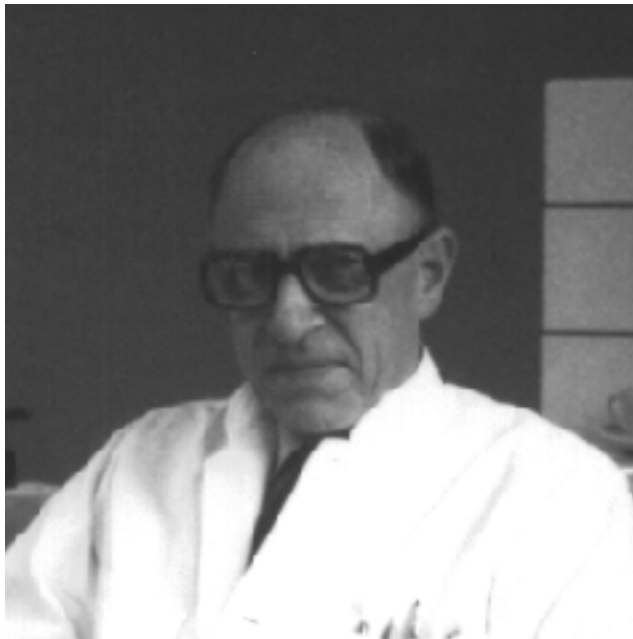
also founded a Cancer Registry in 1943-49 for the whole of Denmark, a remarkable feat at that time. Thus, epidemiologic features of cancer began to be visualized in patterns and figures (Aoki and Kurihara, 1994).

The third International Cancer Congress by the UICC was held in Atlantic City, NJ (USA) in September 1939. However, the events were suspended by the outbreak of World War II. In 1945, when this had finally ended, J. Godart, President of the UICC had succeeded in remaking contact with the surviving members of the Executive Committee, despite the chaos like conditions in Europe. He appointed J.H. Maisin (Belgium) as Secretary-General and tried to resume activities. However, cancer research was lifeless in most countries, except USA, as the basic socio-economic conditions were too devastated to allow financial support. The President Godart therefore decided to ask the members of the USA to organize the next International Cancer Congress. The Secretary General also pleaded with the American Association for Cancer Research (AACR) to support participation in the meeting in the USA. The AACR generously accepted the proposal and decided to hold the meeting at St. Louis, USA in October 1947, providing some grants for participants from other countries. The President of this meeting was E.V. Cowdry, physician.

H. Truman, President of the USA at the time, addressed Congress by telegram, arguing that the USA should donate quantities of essential isotopes for medical and biological research around the world. This message strongly encouraged the scientific community. In line, the UICC created the



Photograph 1. Dr Harold F. Dorn



Photograph 2. Dr J. Clemmesen

International Committee on Cancer Research with responsibilities including governing the use of isotopes for international collaborative studies. The Committee had greater autonomy than previously and tried to act independently to foster co-study projects at the international level.

The fifth International Cancer Congress was held in July 1950, in Paris (President A. Lacassagne). Many presentations on morphology and biochemistry of cancer cells, carcinogens and carcinogenesis were hotly discussed. Sessions on professional education for cancer were also run for the first time, in parallel with the scientific side of the Congress.

In 1953, Secretary-General Maisin was appointed as new President of the UICC at a business meeting held in Bombay, India, while H. Dorn (USA) (Photograph 1) was nominated as the new Secretary-General.

It deserving of attention that cancer prevention became one of the main themes of the sixth International Cancer Congress, Sao Paulo in 1954, reflecting the background in Central and South American countries with their relatively low socioeconomic conditions. The increasing interest on public education and training for professionals was obvious and the scientific, clinical and social evolution in the world after World War II dearly required a modification of the constitution of the Union. Changes were made aimed at promoting more effective projects and response to requests from developing countries covering any level of cancer activities. It was decided at the Executive Committee that the Union should hold an International Congress every four years, with at least one intervening council meeting. The Council meetings were necessary for coping with the many queries raised by the members organizations around the world. At the beginning, the Union was still lacking in staff and funding and it was not easy to respond to many requests.

COUNCIL FOR THE COORDINATION OF
INTERNATIONAL CONGRESSES OF MEDICAL SCIENCES
*under the auspices of World Health Organization
and
United Nations Educational, Scientific and Cultural Organization*

SYMPOSIUM
ON GEOGRAPHICAL PATHOLOGY
AND DEMOGRAPHY OF CANCER

Session held at
Regent's Park College, Oxford, England
July 29 to August 5, 1950
Chairman - Prof. J. H. MAISIN

Editor - Dr J. CLEMMESSEN
Scientific Secretary to the Symposium

Figure. Symposium Handout

However, support from the American Cancer Society and other anti-cancer organizations gradually resolved this problem.

About 2,500 delegates from 64 countries attended the 7th International Cancer Congress at London in 1958. New developments in biochemistry and virology of cancer, carcinogenesis, chemotherapy and electron microscopy powers attracted a large number of participants. Under the leadership of Pierre Denoix, France, the TNM classification was then established for clinical stages of cancer, which permitted more exact comparisons of international cancer data. It was an epoch making work, because one of the main tasks of the UICC set out in 1934 was thereby accomplished. It was simple and of easy use in practical medicine. The abbreviations T, N, M, standing for:

- T, primary cancer: size and extension
- N, lymph node metastasis
- M, remote metastasis

This ingenious classification has often been revised, responding to the requests of the members of the TNM Committee of the Union.

Mitsuo Segi, Tohoku University, Japan had carried out a cancer patient survey in Miyagi Prefecture covering a population of 1.6 million in 1951 to 1953, to generate data for incidence and mortality rates, and then started cancer registration. This was the third cancer registry in the world. Segi furthermore, worked out a new standardization of cancer statistics using the 1950 World population, the answer to another task of the UICC in 1934. This standardization made international comparison of cancer statistics more scientific. He issued a monograph "Cancer Mortality for Selected Sites in 24 Countries (1950-57)" in 1960, which was distributed throughout the world without fee and went on then to issue

an additional 5 volumes (the last one contained the statistics for 1966-67 in 1972). These publications were of great help to oncologists and public health workers, and his work has been continued by Japanese epidemiologists up to the present.

In 1961, the Secretariat office moved from Paris to Geneva, as the office was too small to conduct activities effectively, in response to international requests. One main reason for the move was that there were many international organizations such as WHO (1948) and other governmental and non-governmental organizations in Geneva, with which the UICC had been collaborating. J.F. Delafranye, Executive Director of the Counsel International des Organizations des Sciences Medicales (CIOMS) was nominated as the director of the secretariat of the UICC, Geneva. He greatly contributed to the Union until 1983. Fellowship programs started in 1961, with the Eleanor Roosevelt Cancer Fund.

In 1962, the 8th International Cancer Congress was held in Moscow, USSR, with about 5,000 participants from 70 countries listening to more than 1,000 presentations. The proceedings were issued in Russian, English and French. Marked progress in Russian oncological achievements was thereby publicized, and the UICC, literally, became an international organization, thereafter including the USSR regions as well as the Western block.

In 1963, M.J. Shear (USA) was nominated as Secretary-General, after the early death of Dorn, and R.M. Taylor (Canada) succeeded him from 1966 to 1974.

In 1964, the International Agency for Research on Cancer (IARC) was established in Lyon, France, at the request of



Photograph 3. Mitsuo Segi

General de Gaule, President of France, who had donated 0.5% of the total budget in France to the fight against cancer. The IARC is managed by the WHO with UICC support. The objectives of the IARC were to include both basic research and epidemiology of cancer. The idea was that the IARC and the UICC should co-operate to control cancer across the World, and the epidemiology division was therefore moved from the UICC to the IARC. J. Higginson (USA), President of the Committee of the UICC was nominated as the first President of the IARC. He specialized in geographic pathology.

A Surgeon General Report on Smoking and Health was issued in January, 1964, causing a furor, not only among specialists but also the general public. Anti-smoking movements then started in the USA, Western Europe and Australia, but for various reasons not in the Asian countries. In 1966, the 9th International Cancer Congress (President, Tomizo Yoshida) was held in Tokyo. About 4,000 participants from 63 countries attended and there were more than for 1,500 presentations covering advances in molecular biology, genetic oncology and risk factors for various cancer sites. Takamune Soda (Director of the NIH, Japan) and Mitsuo Segi held a Satellite meeting on cancer registration, inviting 47 delegates from 26 countries. W. Haenszel and S.J. Culter proposed at the meeting to establish an International Association of Cancer Registration (IACR) to exchange information and promote cancer registration. The IACR was approved internationally and the first President was E. Pederson (Norway) with representatives elected from five regions of the world. Segi was selected from the Asia region: The IARC in principle supports the activities of WHO, IARC and UICC, avoiding duplication. Another satellite meeting for Asian oncologists attending the Tokyo Congress was sponsored by Kunio Ota, Tokyo University, Secretary-General of the Tokyo Congress. At this meeting, Asian scientists strongly wished to have opportunities to regulatory exchange information within Asia. Ota who had raised fund, held a cancer meeting in Japan inviting 76 oncologists from Asian countries in 1973. Members of the WHO, UICC and IARC were also invited. This was the first meeting of the Asian Federation of Organizations for Cancer Control (AFOCC). Since then, congresses have been held every two years. The name was changed to the Asia-Pacific Federation of Organizations for Cancer Control (APFOCC) in 1979, at the Bombay meeting, because members were also accepted from the Oceania region. The APFOCC has been closely linked to UICC activities, as a branch organization, playing a special role in holding satellite meetings.

The 10th International Cancer Congress was held in Houston, USA, in 1970, with the multidisciplinary treatment of cancer as one of the main topics, people expecting major progress in therapy. At the 11th International Congress in Florence, Italy in 1974, immunotherapy attracted the most participant attention. But the importance of cancer prevention, and public and professional education was also eagerly

discussed. It was noted that the satellite meeting on cancer prevention and international collaboration of volunteer organizations was highly successful. Volunteer groups thus began to hold meetings in parallel with the scientific sessions, concentrating on risk factors related to lifestyle such as smoking, drinking, diet and other behavior which can be controlled by changing attitudes of the public by lay organizations. In 1974, G.P. Murphy (USA) was elected as Secretary General. He then served admirably in this position for 26 years.

In 1978, the 12th International Cancer Congress with more than 8,000 participants was held in Buenos Aires, Argentina. Immunotherapy, interactions between genetic and ecological factors, and cell membranes were the main topics. The participants from Latin American countries, however, paid particular attention to cancer prevention. This was logical since it was considered superior for countries with low income to promote low cost approaches rather than high cost medical treatments. Several effective methods were noted and recommended for spread.

The UICC International Congresses are listed in Table 5. Their organization was one of the main tenets of the UICC. Many practical achievements were thereby accomplished, besides the scientific presentations and mutual exchange of information, understanding and building of friendship bridges were major outcomes. The epidemiology programme of the UICC was to back up the IARC activities, but the field was so huge and many activities were requested by the member organizations which needed more manpower and financial resources. So the Union resumed epidemiological projects avoiding duplication with the IARC. As for the TNM system, it has gradually been accepted and adopted in many countries. Policies of clinical therapeutic trials have also rapidly been developing on local, national and international levels, promoted by the UICC.

Professional education has been improved and new methods introduced and manuals of clinical oncology have been published and distributed. The UICC has established a multidisciplinary system as the best policy of management of cancer patients. Rehabilitation programmes were also transferred to many member organizations. Cancer prevention campaigns were further carried out at the occasions of cancer meetings in the world.

4. Strategy of the UICC since 1980

During the interim meeting of the Council 1980 at Oslo, Norway, the organization of the activities of the UICC was discussed, emphasizing the basis of practical scientific evidence, in consideration of the experience of the previous years. To provide the focus for future efforts, nine programmes were established: Smoking and Cancer, International Collaborative Activities on Cancer, Campaigns, Voluntary Organizations and Public Education, Epidemiology and Prevention, Detection and Diagnosis, Treatment and Rehabilitation, Professional Education, Tumor Biology and Fellowship and Personal Exchange. Separate projects for

Table 5. UICC International Cancer Congresses

1st	MADRID, Spain	1933	Oct 30
2nd	BRUSSELS, Belgium	1936	Sept 20-26
3rd	ATLANTIC CITY, USA	1939	Sept 11-16
4th	ST LOUIS, USA	1947	Sept 2-7
5th	PARIS, France	1950	July 16-22
6th	SAO PAULO, Brazil	1954	July 20-28
7th	LONDON, UK	1958	July 5-12
8th	MOSCOW, USSR	1962	July 22-28
9th	TOKYO, Japan	1966	October 23-29
10th	HOUSTON, USA	1970	May 22-29
11th	FLORENCE, Italy	1974	Oct 20-26
12th	BUENOS AIRES, Argentina	1978	Oct 5-11
13th	SEATTLE, USA	1982	Sept 8-15
14th	BUDAPEST, Hungary	1986	August 17-26
15th	HAMBURG, Germany	1990	August 17-22
16th	NEW DELHI, India	1994	Oct 30-Nov 5
17th	RIO DE JANEIRO, Brazil	1998	August 24-28
Scheduled:			
18th	OSLO, Norway	2002	

management of particular subjects were included, covering these 9 programmes. Collaboration and co-operation between the various programmes were envisaged and recommendations were considered as to how this could be facilitated. Details of the individual programmes are described below.

The secretariat office became very busy carrying out clerical work to realize the programmes and also to provide administrative material, and execute decisions made at the Council meetings. These latter were now held 2 or more times between each International Congress. There were all too few staff in the Geneva office to manage the affairs of all the World. Deldfrenye was retired in 1983 and A. Englund, chaired the secretariat for about one year. G.P. Murphy (USA), Secretary-General became very busy in the management of the UICC after 1985 and the activity of the Union then changed. In 1984, P. Selby was appointed as Executive Director of the UICC, Geneva office. He started to reorganize the management system of the Geneva office, introducing computer-assisted processing. The clerical system worked more effectively, although the expenditure increased.

Structure of the UICC Administration in the 1990s

The UICC is a non-Governmental, non-profit and non-political organization devoted to all aspects of the World-wide fight against cancer. Its members are national cancer societies and leagues, cancer research institutes, cancer hospitals and other associations interested in cancer control. More than 250 members in about 90 countries are now

Table 4. Officials of the UICC

Presidents	
1935-1953	Mr J. Godart (France)
1953-1958	Professor J.H. Maisin (Belgium)
1958-1962	Dr V. Khanolkar (India)
1962-1966	Professor A. Haddow (UK)
1966-1970	Dr N.N. Blokhin (USSR)
1970-1973	Dr W.U. Gardner (USA)
1973-1978	Professor P. Denoix (France)
1978-1982	Professor U. Veronesi (Italy)
1982-1986	Professor A. Junqueira (Brazil)
1986-1990	Professor C.G. Schmidt (WGermany)
1990-1994	Professor S. Eckhardt (Hungary)
1994-1998	Dr N. J. Gray (Australia)
1998-2002	Professor E. Robinson
Secretaries-General	
1935-1953	Professor J.H. Maisin (Belgium)
1953-1963	Dr H. Dorn (USA)
1964-1966	Dr M.J. Shear (USA)
1966-1974	Dr R.M. Taylor (Canada)
1974-2000	Dr G.P. Murphy (USA)
2000-	Professor L.J. Denis (Belgium)
Executive Directors	
1961-1983	Dr. J F Delafresnaye
1983-1984	Dr. H Englund
1984-1988	Dr. P. Selby
1989-1999	Mr. A. J Turnbull
2000-	Ms. I. Mortara

registered in the Union. The administrative body (Executive Committee) consists of a President, Secretary-General, Treasurer, Chairman of the Finance Committee and a President-Elect. Candidates for these offices are elected by voting at the Council Meeting every four-years. The Councils are themselves elected by the Council members and Delegates of the members' organizations. The 9 Program chairmen are also elected from candidates proposed by member organizations. The Editor of the International Journal of Cancer and Chairman of the GLOBALink (Internet) are also members of the Council.

There are 7 committees other than the Executive Committee, the Governing board of the International Cancer Foundation and the Roll of Honor Board of Governors. Each Committee chairman and each Program chairman are expected to play a significant role in the UICC activities.

The Executive Committee provides all agenda at the council meetings and general assemblies, and should approve the various measures proposed. Adoption of the agenda is achieved at the Council Meetings. The Geneva office, the Headquarters of the UICC, is responsible for all secretarial work, and co-ordination of all UICC activities; that is, programmes, special projects, relations with members, meetings of various administrative bodies, finance, information and collaboration with hundreds of volunteer



Photograph 4. The UICC Office in Geneva

experts around the World.

The budgets is made up of unrestricted and restricted funds, the former being the members' annual dues, personal and other contributions, and the latter comprise various funds donated to specific programmes or projects of the UICC.

The financial situation of the UICC improved, after annual dues for the 16 major countries were regulated by the WHO system, and also after generous support from the American Cancer Society, NCI (USA), the UICC National Committee of Japan, the European countries and other grants from international sources. However, it is still not sufficient to allow all program activities to be carried out and also cover office expenditures so that the Financial Committee, consisting of lay experts and physicians, continues efforts to raise funds from different sponsors. The successive Presidents, Secretary-Generals and Executive Directors are listed in Table 6.

4. Programmes of the UICC

1) Smoking and Cancer Programme

This programme started in 1976 in response to the accumulating evidence, since the 1964 Surgeon General Report on Smoking and Health, USA of the cancer risk with tobacco consumption. Main activities of the programme were to organize workshops in different regions envisaged of the World, and to produce useful publications for the public and professionals. The objectives can be listed as follows:

- (a) To reduce smoking rate in all age groups of the population. As practical methods, health warnings, tax, manipulation, restriction of smoking opportunities,

political pressure, public education, emphasis on rights of non-smokers have been stressed considering the control background. Encouragement is given to continue non-smoking to those attempting to quit the habit and help to cease, all forms of smoking.

- (b) To maintain liaison with other health organizations and authorities to facilitate effective work.
- (c) To reduce environmental pollution of industrial, social and personal origins.
- (d) To cooperate with WHO and other health associations.
- (e) To develop model campaigns and workshops in local areas of the World, with emphasis on training experts, discussion of regional problems and linking international and local experiences. However, avoidance of direct intervention in local problems is important.
- (f) To publish a Guidelines for Smoking Control's Series, issued since 1980, mostly every 2 years.

2) CICA (Committee on International Collaborative Activities) programme

This programme is one of the targets listed at the start of the UICC. The first challenge was to encourage creation of cancer centers. The second was then to support multi-disciplinary treatment of cancer. The Directory of Cancer Organizations was issued and this has subsequently been regularly revised. Guidelines for Developing a Comprehensive Cancer Center were published and updated and the International Cancer Patient Data Exchange System (ICPDES) was put in place, supported by Europe, USA and other countries. These contribute to rapid exchange of information on cancer, and assist international collaborative studies on cancer problems. Encouragement and support of the development of national and regional cancer organizations have also been continued, the committee provide help to implement national cancer plans. The idea of establishing the International Academy of Oncology was presented by the Program Chairman Lee Clark around 1980. However, it had to be suspended at the Council Meeting in 1984, the main reason being the financial problems.

3) COPES (Campaign, Organizations, Public Education and Patients Support) programme

This focuses activities on socio-medical, and preventive action by volunteers, mainly laymen, with assistance in developing campaigns, including fund raising, how to organize anti-cancer groups, and how to educate the public. The patients support project was included later. Anti-cancer work by volunteers was strongly recommended at the Council Meeting of the Sao Paulo Congress in 1954. The American Cancer Society has had much experience in this area and is interested in expanding international activity in the fight against cancer. In 1966, L.W. Adams (American Cancer Society) made great efforts in cancer campaign, and public education in the developed and developing countries, as chairman of the International Cancer Prevention Program of

the UICC. Since 1970, volunteer staff have been dispatched to support anti-cancer work around the world. Response to distribute brochures and leaflets has been good even from those not actually attending meetings. R. Taylor, the Council of the UICC, emphasized that it was indispensable in cancer prevention for lay volunteers to serve in the cancer control activities beyond medical treatments. The Smoking and Cancer Program started in 1974 stimulated cancer education activities in schools and workplaces with COPES adding more strength to this area.

The COPES program was officially recognized at the Council Meeting at Seattle in 1982. The aims were to: (1) raise funds; (2) contribute to cancer education by type of cancer; (3) promote school education on cancer; (4) realize public and professional education; (5) highlight smoking and cancer; (6) concentrate attention on prevention; (7) stimulate the mass media; (8) support early detection of cancer; (9) back up rehabilitation by non professional volunteers, and hospice care support for terminal stage patients. These are all indispensable in social medicine, but difficult for medical staff to cover. The ACS established a foreign desk in Zürich, Switzerland for supporting international affairs, including the UICC. Guidelines for Voluntary Cancer Organizations (a guidebook for Teachers) were published and translated into 13 languages. These projects needed cooperation between laymen and professionals. The Union also publishes material involving Doctors in Health Education for Cancer Control in this programme.

The COPES Program becomes larger year by year, being a major focus of most International Cancer Meetings. In 1988, a patient support project was included to revive and strengthen the programme. Now there is a vast amount of knowledge, educational materials, guidelines and other publications available from the UICC. It should be noted that the American Cancer Society has been supporting the UICC with large amounts of funds and personnel, including leading ACS volunteers. North and West European and Oceanian countries have also made contributions. However, unfortunately, there seems to be little interest in the COPES program in Japan.

4) Epidemiology and Prevention Programme

In 1950, the UICC organized a meeting on geographic pathology, and cancer epidemiology at Oxford, UK. The many important presentations and discussions exchanged and formed, a basis for the Epidemiology and Prevention Programme to collect morbidity and mortality data for cancers by site in various ethnic groups and regions of the world. This programme moved from the UICC to the IARC in 1964 with the chairman Dr. Higginson as described above. However, as smoking and cancer became an increasingly major problem and the Union made more efforts in anti-smoking, the smoking and cancer programme was started in 1974 in collaboration with national and international cardiology and pneumology associations. The UICC had supported the epidemiological activities of the IARC. But,

there were so many subjects that could not be included that a separate Epidemiology and Prevention Program was again set up in the Union in 1978. Evidence of smoking effects including the hazardous influence of passive smoking were accumulated by the chairman T. Hirayama, this fact greatly promoting anti-smoking campaigns. The first UICC Conference on Cancer Prevention in Developing Countries were held at Nagoya, Japan, in 1981, (see the Composite Figure below) and henceforth meetings focusing on epidemiology and prevention supported by the UICC increased at the regional and international levels. The second meeting on Cancer Prevention in Developing Countries was held in Kuwait in 1983, under the Chairmanship of Professor Yussef T. Omar.

New projects were started in 1985, such as the evaluation of primary cancer prevention project in coordination with the IARC, the nutrition and cancer project, support of local cancer

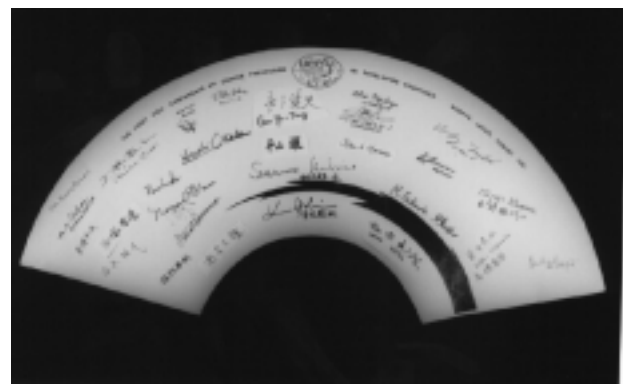
prevention activities, conference on cancer prevention in the developing countries, to issue cancer mortality statistics in the world all started out from Segi's work. Recently, assessing Chernobyl accident effects on East European Countries became one of the projects. Many monographs have been published as an outcome of this programme. However, more projects are necessary, considering the world situation. Overcoming obstacles in finding funding and trained staff in each region of the world is thus a high priority.

5) Professional Education Programme

Education on cancer in undergraduate medical school has long been considered insufficient in general and a comprehensive education programme is needed with incorporation of new knowledge and recent advances in



Composite Figure. Left. Dr Kunio Aoki, Organiser of the Nagoya Meeting, Below right, a Fan signed by Participants, Below, the Meeting Hall.



biology, medical treatment and epidemiology of prevention on a regular basis, providing periodical updates for physicians to study. The UICC has in fact published a "Manual of Clinical Oncology" and revised editions have been issued on a regular basis. The Union has been dispatching experts to train participants in local, regional and international cancer meetings in mainly developing countries since 1983. Courses on nursing oncology have also been started and now constitute major international events.

6) Fellowship Programme

One of main targets of the Union was to exchange information and technology, and also train specialists. For the funding sponsors were need and the Eleanor Roosevelt International Cancer Fellowship was started in 1961, for highly qualified senior researchers to expand their experience in cancer information and technology, for a period of one year. Now the name had changed to the American Cancer Society UICC International Fellowship for Beginning Investigators (ACSBI). International Cancer Research Technology Transfer (ICRETT) fellowships are for junior researchers to visit an institute of another country for four weeks. The scheme was created in 1976 and the grants are supported by a variety of cancer societies and institutes.

The Yamagiwa-Yoshida Memorial International Cancer Study Grants for advanced training in experimental methods were originally for periods of up to 3 months starting in 1972. Recently the maximum period has been extended to 6 months. International Fellowships for Cancer Research also used to be given for travel grants for exchange visits of basic and clinical oncologists, but this has been discontinued.

Several new Fellowship grants are now offered, as follows: The International Oncology Nursing Fellowship (IONF) by Trish Green since 1990, and the Translational Cancer Research Fellowship (TCRF) by NOVARTIS, Switzerland. The purpose is to translate technology into clinical applications, including vaccine projects. As for cancer society staff and accredited volunteers, there are two Asia-Pacific Cancer Society Training Grants (APCASOT) given by Australia. Latin American Copes Training and Education Fellowships (LACTEF) are also provided by the UICC and the ICF.

7) Detection and Diagnosis Programme

There have been four projects within this Programme. The first was the TNM classification already mentioned. The second was a collaborative controlled clinical trial by international institutes, the UICC promoting these clinical studies by the members' organizations. The third was an evaluation of mass screening programmes for cancers of the cervix and the breast among others. Mass screening of cervical cancer was confirmed to be effective for reducing cancer deaths, but results for breast cancer were equivocal. Stomach cancer screening appeared to be efficacious only in

Japan. Screening for other sites such as the colon, lung and prostate is still a subject for further evaluation and indeed many workshops and symposia at regular interval. The fourth programme concerns development of new methods of diagnosis and treatment. This project is particularly important for practical oncology and various therefore attracts a great deal of attention from clinicians.

8) Other Programmes

Programmes related to basic science and medical treatments are shortly described here.

1. Tumor Biology Programme

The UICC has been organized many workshops and symposia on exchange information and technology transfer, mainly in the developing countries. They were of great help in the days of rapidly changing modern biology. Many scientists in developing areas have been granted to learn modern technology.

2. Treatment and Rehabilitation

To keep abreast of new developments in cancer treatments, the Union concentrating on published monographs and guidelines. Multidisciplinary therapy on cancer by site had been conducted in the Developing Countries, including identifying etiological factors and developing uniform treatments at reasonable cost. These projects have been supported by many resources, because the treatment are the main attention for the physicians and laymen. Reach to recovery project has strongly been promoted especially in the rehabilitation course of breast cancer patients with mastectomy. Many projects have been accomplished within the COPES programme with numerous publications distributed to members and supporting organizations.

Special projects, requested on the basis of new developments have been executed by distinguished experts, obtaining special funds and grants from the member organizations. The results continue to be distributed to appropriate bodies to contribute to the ongoing world-wide effort for cancer control.

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