

A SURVEY ON CANCER IN 17 HOSPITALS IN JAKARTA*

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ABSTRAK

Telah dilaksanakan suatu survai mengenai catatan penderita kanker yang dirawat di 17 Rumah Sakit di Jakarta dalam tahun 1977.

Sejumlah 2056 kasus kanker berhasil ditemukan, 1183 diantaranya wanita.

Hanya 53% dari kasus kanker dianosisnya didasarkan pada pemeriksaan patologi/sitologi.

Sepuluh kanker terbanyak pada pria ialah kanker di paru, hati, nasofaring, kelenjar getah bening, rektum, leukemia, lambung, usus besar, laring dan pancreas.

Sepuluh kanker terbanyak pada wanita ialah kanker leher rahim, payudara, indung telur, paru, hati, nasofaring, rektum, leukemia, kelenjar getah bening dan usus besar.

Kesulitan yang dialami dalam penelitian ini ialah kurang lengkapnya catatan medik rumah sakit, sehingga data seperti suku/keturunan, pekerjaan dan stadium dari kanker sulit diketahui.

Upaya registrasi kanker dan penelitian epidemiologi kanker di Indonesia perlu ditingkatkan.

Tingginya kanker leher rahim pada wanita serta kanker paru dan hati pada pria perlu mendapat perhatian. Skrining dengan sitologi vagina (Pap smear), usaha mengurangi kebiasaan merokok dan vaksinasi hepatitis B (dengan harapan mencegah kanker hati perlu mendapat prioritas dalam usaha penanggulangan kanker di Indonesia.

INTRODUCTION

There is no nation wide cancer registry which can provide accurate data on cancer in Indonesia. Most data on cancer were collected from Departments of Pathology and Medical Record Departments of hospitals or hospital departments. One of them is a survey on cancer patients admitted in 17 hospitals in Jakarta, which was carried out in 1978.

The objectives were to know the relative frequency of the 10 most frequent cancer cases by site in the female and male patient, the basis of diagnosis and some characteristics of the

cancer patients admitted to hospitals in Jakarta.

Jakarta is the capital of Indonesia with a population of about six million in 1977.

METHOD

The cancer data were collected from the Medical Record Department of each hospital, using a form that has been prepared for that purpose¹. The transfer of data was done by a Hospital Record Department staff member under the supervision of a medical doctor. All cancer patients admitted in 1977 were

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included in this survey. The cases were classified according to the ICD (IX-th revision) and grouped according to sex, age, occupation and ethnic group. The 17 hospitals treating cancer patients participating in this survey are listed in Table 1.

in 1977. A report from the Dr.Sutomo Hospital in Surabaya gave a percentage of 2,3% cancer cases².

The female to male ratio was almost 3 : 2 (1183 : 873). The same ratio was also reported from Surabaya, but it was

Table 1: Number of Cancer Cases by sex in 17 Hospitals in Jakarta

No.	Name of Hospital	Number of Patients		All Cases
		Female	Male	
1.	Cipto Mangunkusumo	520	237	757
2.	St. Carolus	117	108	225
3.	Kanker	129	72	201
4.	Sumber Waras	82	109	191
5.	Persahabatan	54	100	154
6.	Husada	54	76	130
7.	Cikini	65	53	118
8.	Gatot Subroto	72	37	110
9.	Fatmawati	28	27	55
10.	Pertamina	13	14	27
11.	Pelni	11	11	22
12.	Islam	7	14	21
13.	Buāi Kemulyaan	13	0	13
14.	Jakarta	7	44	11
15.	Mintoharjo	7	4	11
16.	Koja	2	4	6
17.	Atmajaya	1	3	4
T o t a l		1.183	873	2.056

RESULTS AND DISCUSSIONS

The total number of cancer cases reported was 2056, this was only 1,2% of the total patients admitted (for all cases)

the reverse in Singapore and is was 1 : 1 in some prefectures in Japan.^{3,4}

The distribution of cancer cases by age is shown in Figure 1.

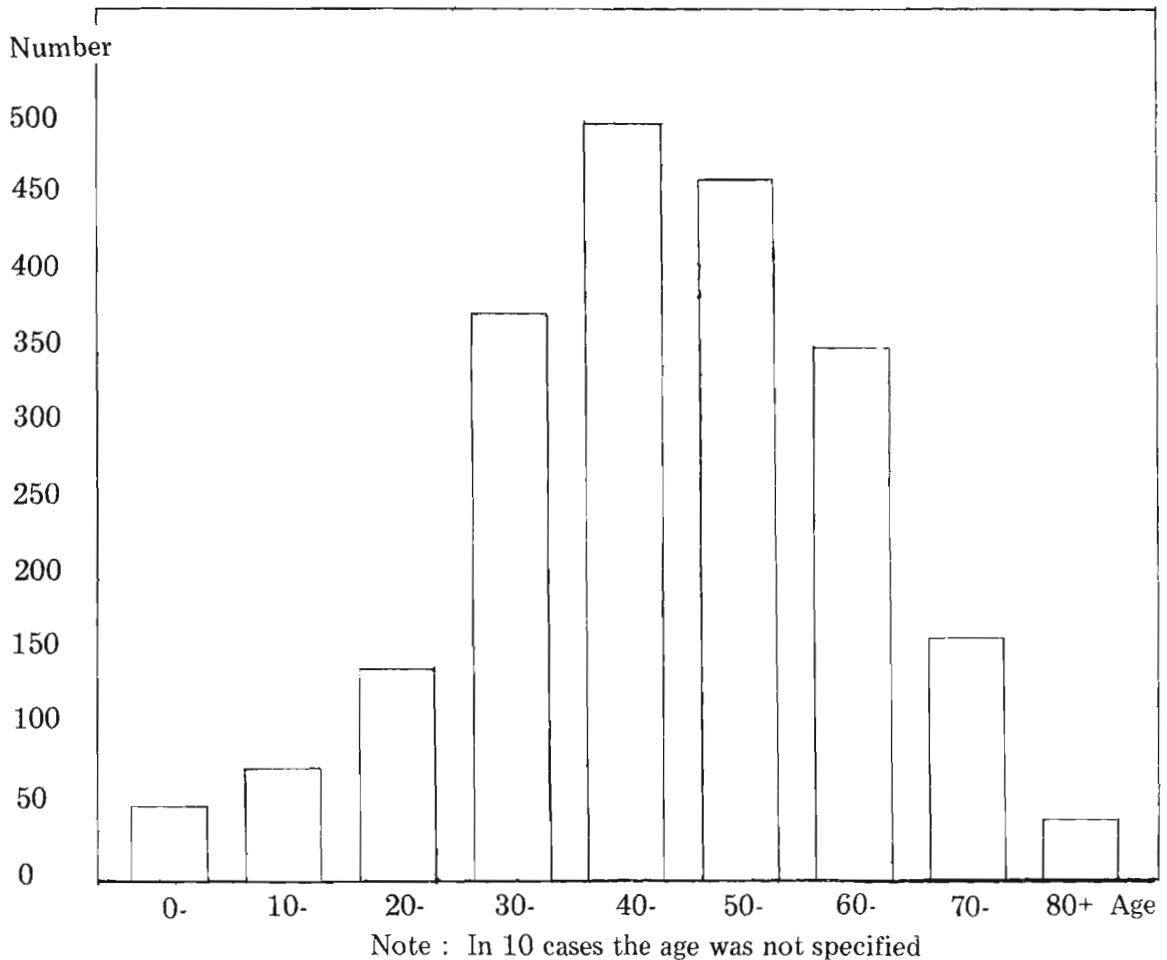


Figure 1.: The distribution of cancer cases by age.

The age ranged from several weeks to over 80 years, with a preponderance of cases between 30 to 59 years and a peak at 45 to 50 years. A 5 year study in the Dr. Sutomo Hospital in Surabaya showed almost the same result i.e. a peak at 45 to 54 years. These peak ages were much younger compared to those in the more developed countries.

This difference in age is probably, partly, due to the difference in the demographic composition and life expectancy of the

population.

These 2056 cases were then classified into 45 different groups by site, according to the ICD (IX th revision) in 3 digits.

Not all cases diagnosed has been verified by laboratory methods. Only 1096 cases (53%) were confirmed, namely 747 by histopathological, 202 by cytological and 147 by hematological examination.

The 10 most frequent sites for both sexes are listed in Table 2.

Table 2. The 10 Most Frequent Cancer Cases by Site and Age, Both Sexes

No.	ICD IX	Site	Age										Total
			0-	10-	20-	30-	40-	50-	60-	70-	80+	N.S	
1	180	Cervix Uteri	--	--	10	109	136	105	56	8	8	3	432
2	162	Lung etc.	--	4	5	15	50	66	57	19	6		222
3	155	Liver etc.	3	4	10	46	39	55	36	16	2	3	214
4	174	Breast*)	1	2	5	47	56	45	18	6	2	--	182
5	147	Nasopharynx	2	5	13	34	60	44	11	4	--	--	173
6	154	Rectum etc.	--	--	6	18	17	19	17	5		2	84
7	208	Leucaemia	7	11	16	8	18	8	5	4	--	--	77
8	200	Lymphoid etc.	1	4	6	17	20	18	3	6	1	--	76
9.	183	Ovary etc.	--	7	10	9	18	15	6	1	1	--	67
10.	153	Colon	--	--	9	7	5	10	11	6	2	--	50
T o t a l			14	37	90	310	419	282	220	75	22	8	1577

*) Breast Cancer Cases in Male : 2

Cancer in these 10 sites represent more the 3/4, (1577/2056) of all cancer cases reported (divided into 45 groups). Cancer of the cervix was still the most frequent malignant tumor, followed by cancer of the lung. In Surabaya (Dr. Sutomo hospital) cancer of the cervix was followed by cancer of the liver. In Singapore, lung cancer was in the first place, followed by stomach cancer (in 1968-1977). This was also true in Finland (1966-1970). Breast cancer was the most frequent cancer in U.S.A. (Conn) and Canada (Alberta) and it was the second in U.K. (Birmingham) in 1968-1972 (skin cancer not included)⁵.

The 10 most frequent cancer cases in the female is presented in Table 3.

The total number of cases in the female was 1181, which was divided into 39 groups by site. The 10 most frequent cases represent 4/5 (979-1181) of all cases in the female. Cervix cancer which was still high in this survey tend to decrease in other more developed countries, but breast cancer is increasing (Japan, Singapore). In other developing countries like China (Shanghai) and India (Bombay), cervix cancer was also the most frequent cancer in the female, but it was only in the 7th place in U.S.A. (Conn), in the 4th place in Canada (Alberta) and in the 3rd place in Birmingham, England (1968-1972, skin cancer not included)⁵.

Table 4 present the 10 most frequent cancer cases in the male.

Table 3. The 10 Most Frequent Cancer Cases in the Female by Site

No.	ICD IX	Site	Number Of Cases
1	180	Cervix Uteri	432
2	174	Breast	180
3	183	Ovarium & Adnexa	6
4	162	Trachea, Bronchus & Pulmonum	64
5	155	Liver & Bile Duct (Intrahepatal)	57
6	147	Nasopharynx	48
7	154	Rctum, Rectosigmoid & Anus	40
8	208	Leucaemia Not Specified	37
9	200	Lymphosarcoma & Reticulum Cel Sarcoma	30
10	153	Colon	24
T o t a l			

Total cases in females 1181, in 39 Groups by site.

Table 4. The 10 Most Frequent Cancer Cases in The Male By Site

No.	ICD IX	Site	Number Of Cases
1.	162	Trachea, Bronchus, Pulmonum	158
2	155	Liver, Bile Duct, (Intrahepatal)	157
3	147	Nasopharynx	125
4	200	Lymphosarcoma & Reticulum Cel Sarcoma	46
5	154	Rectum & Rectosigmoid & Anus	44
6	208	Leucaemia Not Specified	40
7	154	Gaster	35
8	153	Colon	26
9	161	Larynx	20
10	157	Pancreas	19
T o t a l			670

Total Cases in Males : 873, In 35 Groups By Site.

The total number of cases in the male was 873 (in 53 groups by site). These 670 cases (in 10 groups) represented almost 3/4 of all cancer cases reported in the male.

In Jakarta, lung cancer was the most frequent cancer in the male, which was also true in most other countries.

Some difficulties has been encountered in completing the questionnaire, because some of the medical records were missing at that time, and most of the records do not include information about ethnic origins and occupation of patient. It was also not possible to know the stage of the cancer.

The 10 most frequent cancer cases by ethnic origin is presented in Table 5.

The ethnic origins were not specified in 448 cases (28%). In this table, we can still see the relatively high frequency of cancer cases in people of Chinese ethnic origin, and these ethnic groups are only a small part of the population in Jakarta (about 10%). This high frequency in the Chinese fits with reports from Singapore.

Table 6 shows the 10 most frequent cancer cases by occupation.

The occupation of patients were not specified in 930 cases (59%), while the occupations mentioned were not specific and distinct. The available data on occupation is not suitable for an epidemiological analysis.

**Tabel 5 : The 10 Most Frequent Cancer Cases By Ethnic Origin
(3 Most Frequent)**

No.	Site ICD IX	Java- nese	Sumat- trans	Chi- nese	Others	NS*	Total
1.	Cervix Uteri	186	22	110	23	91	432
2.	Lung etc.	99	23	50	10	40	222
3.	Liver etc.	97	18	33	8	58	214
4.	Breast	49	8	18	4	103	182
5.	Nasopharynx	81	18	26	9	39	173
6.	Rectum etc.	26	3	15	6	34	84
7.	Leucaemia	28	6	15	7	21	77
8.	Lymphosarcoma etc.	24	8	5	6	33	76
9.	Ovarium etc.	45	2	12	—	8	67
10.	Colon etc.	6	3	14	—	27	50
	Total	641	111	298	73	454	1.577

* 454 Cases Ethnic Origin Not Specified (29%)

Table 6 : The 10 Most Frequent Cancer Cases By Occupation

No.	Site ICD IX	House Wife	Office Work- er	Pri- vate Work- er	La- bour	Scho- lar	Far- mer	Med. Doctor	O- thers	N.S.*	Total
1.	Cervix Uteri	162	14	21	—	—	—	—	19	216	432
2.	Lung etc.	—	33	28	6	—	—	—	16	139	222
3.	Liver etc.	—	38	13	7	—	—	—	22	134	214
4.	Breast	18	17	11	—	—	—	—	10	126	182
5.	Nasopharynx	—	20	21	—	—	21	—	34	77	173
6.	Rectum etc.	—	8	7	2	—	—	—	2	65	84
7.	Leucaemia	—	8	9	—	9	—	—	6	45	77
8.	Lymphoid	—	11	8	—	2	—	—	2	53	76
9.	Ovarium etc.	23	3	3	—	—	—	—	2	36	67
10.	Colon	2	—	2	—	—	—	3	4	39	50
	Total	205	152	123	15	11	21	3	117	930	1.577

* 930 Cases : Occupation Not Specified (59%).

SUMMARY

A survey of medical records of cancer patients in 17 hospitals in Jakarta has been carried out in 1977. A total of 2056 cases has been reported which was 1.2% of all patient admitted. The ratio of male to female patients was 3:2. Only 53% of the cases has been verified by pathological examination. The age distribution ranged from several weeks to over 80 years, with a peak at 45 years.

The most frequent cancers in the female are located in the cervix, breasts, ovaries, lungs liver, nasopharynx, rectum, leucemia, lymph glands and colon, while in the male, the most frequent cancers are located in the lungs, liver, naso-pharynx, lymph glands, rectum, leukemia,

stomach, colon and pancreas.

Efforts to improve cancer registration and initiate epidemiological research should be continued.

Priorities for cancer control programs in Indonesia, should include routine Pap smear examination in high risk women, smoking control and vaccination against hepatitis B (to prevent liver cancer)

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