PROGRESS IN CANCER REGISTRATION A SURVEY OF THE FURTHER DEVELOPMENT OF A CANCER RECORDS BUREAU FROM 1954 to 1956

BY

REGINALD M. VICK, M.Chir., F.R.C.S.

Director, South-western Regional Cancer Records Bureau;
Consulting Surgeon, St. Bartholomew's Hospital, London

This is a progress report showing the rapid development of a cancer records bureau. An earlier article (Vick, 1955) is used for comparison (Table I). These figures are a sufficient indication of the steadily rising number of registrations and of cases followed up year by year.

TABLE I

	1953	1956	Increase
Total No. of cases registered ..	39,179	65,549	26,370
No. of new cases registered ..	6,588	8,867	2,279
No. of cases followed up ..	16,183	22,270	6,087

Each year an annual report has been produced and circulated to everyone concerned in the treatment of cancer in the South-western Region, to all medical schools in Great Britain and Ireland, to the Royal Colleges, to medical schools in the Dominions, to other cancer statistical organizations in the United Kingdom, to the U.S.A. and some of the Scandinavian countries, and to many medical libraries. Copies are also sent to any people interested in cancer research or treatment who ask for them, and further copies are available. The circulation is increasing every year.

Work of the Bureau

Registrar-General.—One of the main functions of the bureau is to register all notified cases of cancer or suspected cases of cancer with the Registrar-General at Somerset House.

Assisted Investigations.—We also maintain a comprehensive register with individual case sheets for survey and research. Many requests are received each year from hospitals and individuals for facts and figures about various types of cancer. During the last year our information has been made available to research scholars from the Anna Fullerton Fellowship and the Chester Beatty Institute, and many queries from other professional people have been answered. We are always willing and ready to provide such information, and with the help of marginal punch cards it can be supplied at short notice.

Improved Methods of Cancer Registration.—We are continuing to make every effort towards 100% cancer registration, and it appears that we are very near our goal. So far as teaching hospitals and radiotherapy departments are concerned, this ideal has long been fulfilled. We are in close co-operation with all hospitals in the region into which patients suffering from cancer are admitted. It is still necessary at times to send out transcribing clerks to some hospitals lacking the requisite clerical staff. Geriatric units and mental hospitals now notify their malignant cases to us.

Death Certificate Returns.—Since the beginning of 1957 a new scheme has been initiated by the Registrar-General, by which we receive each week the relevant particulars of all patients in this region who have been certified at Somerset House as having died of cancer. This scheme is working admirably and is going a long way towards a 100% registration. There are still many patients who die of cancer without ever being treated in hospital and are registered with us on death certification only. A careful scrutiny of these returns has proved helpful in many ways. Often we have been able to identify patients who have been in hospital but have not been registered with us. The number of such patients is not great, but the check on hospitals

has been invaluable. Even after deducting these patients, the number registered on death certification remains high (1,509 in 1956). The collection of information about these patients and their registration takes up a considerable amount of time, and they are now included in our total registration figures.

Incidence of Cancer in the Various Sites Throughout the Body per 100,000 of Population for 1955 (see Table II).—We have prepared a table showing the incidence of cancer

TABLE II.—Cancer Incidence, 1955. Rate per 100,000 of Population (Male, 1,275,641; Female, 1,423,996)

Site	Males		Females		Total Rate per 100,000
	No.	Rate per 100,000	No.	Rate per 100,000	
Lip	58	4.55	5	0.35	2.33
Tongue	41	3.22	17	1.19	2.15
Salivary glands	14	1.10	30	2.11	1.63
Floor of mouth	47	3.68	12	0.84	2.19
Pharynx	37	2.90	18	1.27	2.04
Pharynx, unspecified	9	0.71	13	0.91	0.81
Oesophagus	98	7.68	85	5.97	6.78
Stomach	532	41.71	421	29.56	35.30
Small intestine	9	0.71	2	0.14	0.41
Large intestine, except rectum	287	22.50	470	33.01	28.04
Rectum	287	22.50	239	16.78	19.48
Biliary passages and liver	62	4.86	75	5.27	5.07
Pancreas	129	10.11	95	6.67	8.30
Peritoneum	19	1.49	19	1.33	1.41
Nose, nasal cavity, middle ear, and accessory sinuses	16	1.25	13	0.91	1.07
Larynx	58	4.55	8	0.56	2.44
Thoracic organs	856	67.11	134	9.41	36.67
Breast	8	0.63	1,092	76.69	—
Cervix uteri	—	—	218	15.31	—
Corpus uteri and other parts	—	—	238	16.71	—
Ovary, Fallopian tube, and broad ligament	—	—	250	17.56	—
Unspecified female genital organs	—	—	69	4.85	—
Prostate	368	28.85	—	—	—
Testis	22	1.72	—	—	—
Unspecified male genital organs	24	1.88	—	—	—
Kidney	51	4.00	34	2.39	3.15
Bladder	203	15.91	104	7.30	11.37
Malignant melanoma of skin	14	1.10	31	2.18	1.67
Other neoplasms of skin	527	41.31	358	25.14	32.78
Eye	13	1.02	5	0.35	0.67
Brain and nervous system	76	5.96	69	4.85	5.37
Thyroid and endocrine glands	19	1.49	34	2.39	1.96
Bone (including jaw bone)	29	2.27	13	0.91	1.56
Other unspecified sites	78	6.11	82	5.76	5.93
Lymphosarcoma and reticulosarcoma	35	2.74	36	2.53	2.63
Lymphadenoma and reticulosis	60	4.70	44	3.09	3.85
Multiple myeloma	10	0.78	16	1.12	0.96
Leukaemia	60	4.70	40	2.81	3.70
	4,156	325.80	4,389	308.22	—

This Table speaks for itself and gives some interesting information. For example, it shows that the highest incidence figure for the year under any site is for carcinoma of the female breast (1,092), followed closely by carcinoma of the lung (990). The huge preponderance of males with cancer of the lung is shown. Many other facts are demonstrated by these statistics.

as shown above, but we have improved on former tables by dividing the incidence under the headings of male and female. In compiling this table, the figures for normal registration and death-certificate registration are joined. Next year we propose to produce a morbidity table as well. The figure of 2,699,637 has been taken as the population of the South-western Region, consisting of 1,275,641 males and 1,423,996 females.

Special Contributions.—Each year we publish special contributions from experts, and in the current report we have notes from Mr. G. G. Lennon, professor of obstetrics and gynaecology of the University of Bristol, on the present position as regards cancer of the cervix, uterus, and ovaries. There is also a commentary by Dr. Tudway, radiotherapist in charge of the radiotherapeutic department of the Bristol United Hospitals, detailing the present position of radiotherapy in the treatment, both curative and palliative, of patients suffering from cancer. We make use of the *International Statistical Classification of Disease* (World Health Organization). Then follow 39 tables dealing with cancer in the various sites in the body, giving details of the number of cases treated, the actual treatment, and its results. Each table shows the *five-year survival rate* under sites for all

the years from 1945 to 1951, and gives comments on the cases treated in 1951, the last year in which it is possible to show a five-year survival rate. We also show the *overall five-year survival rate of all cases for the years 1945 to 1951 for purposes of comparison* (Table III). Next year it is proposed to give the five-year survival rate for cases not treated at all. As usual, the tables dealing with cancer of the breast and of the cervix have been set out in four stages (Manchester staging). The figures for cancer of the uterus are shown under "early" and "late."

TABLE III.—Summary of Registrations According to Anatomical Site (1945-51) Showing Five-year Survival Rates

Site of Malignant Growth	Total Cases Treated	Patients Alive	5-year % Overall Survival, 1945-51	5-year % Survival of 1951 Patients
Lip	494	298	60	66
Tongue	301	74	24	33
Mouth (excluding tongue) ..	338	80	23.6	22.8
Salivary glands	138	91	66	74
Nasopharynx and tonsil ..	129	22	17	14
Hypopharynx and extrinsic larynx	154	6	3.8	None
Nose and nasal sinuses ..	127	33	26	20
Intrinsic larynx	272	57	21	23
Oesophagus	339	10	2.9	1.5
Stomach	615	88	14	21
Colon (excluding rectum) ..	945	280	29.6	44.5
Rectum	897	211	23.4	35
Pancreas	103	5	4.8	4
Thoracic organs	874	45	5	31.8
Breast (stage I)	1,760	1,152	65	72
" " (II)	1,247	472	37.9	31.9
" " (III)	445	116	26	22.6
" " (IV)	662	52	7.8	9
Cervix (stage I)	243	156	65	71
" " (II)	271	115	42	35
" " (III)	313	61	19	14
" " (IV)	129	13	10	14
Uterus (early)	462	327	77	82
" (late)	189	41	21	17
Ovary	485	136	28	33.6
Female genital organs ..	259	91	35	28
Prostate	605	126	20	15
Testis	146	80	54	50
Male genital organs ..	127	66	53	47
Kidney	147	40	27	20
Bladder	476	119	25	31
Malignant melanoma ..	171	80	47	37
Eye	44	31	73.8	83
Brain and C.N.S. ..	182	59	38	36
Thyroid gland	123	37	30	43
Bone	222	46	20.7	28.5
Lymphosarcoma and reticulosarcoma	186	50	26	33
Lymphadenoma and reticulosis	261	66	25	15
Leukaemia	206	30	14	19

Comments on some of the five-year survival rates shown in Table III, 1951 only

Lip.—Marked preponderance of males. Over the years 1945 to 1951 no fewer than 102 unrelated deaths. No mention of any growth being present at time of death.

Tongue.—Incidence tending to fall. Positive Wassermann reaction recorded in only 5 cases.

Salivary Glands.—24 parotid glands involved. Only 3 sub-mandibular.

Oesophagus.—Appalling mortality recorded. 32 radical operations performed.

Stomach.—No fewer than 288 patients untreated in 1951. 94 gastrectomies, with a survival rate of 21%.

Large Intestine (excluding Rectum).—Results of radical surgical treatment improving. 155 patients treated by radical surgery, with 44.5% survival rate. Most common site—pelvic colon.

Rectum.—137 cases treated by radical surgery, with 35% survival rate. Steady improvement in figures.

Pancreas.—Again very high mortality. Only 3 pancreaticotomies recorded in 1951.

Thoracic Organs.—Steady increase in incidence, only 22 radical operations, with 7 survivors.

Breast.—Stage I: 326 cases treated. Five-year survival rate rising each year. In 1951, 72%. Stage II: Survival rate down to 31.9%. Stage III: Survival rate down to 22.6%. Stage IV: Survival rate down to 9%. The relatively large number of cases in stage I is very satisfactory.

Cervix.—Stage I: 71% survival rate in 1951. Stage II: Only 35% survival rate. Stage III and Stage IV: Only 14% survival rate.

Uterus.—No less than 82% survival rate in early stage, dropping to 17% in late cases.

Prostate.—Under this heading we have to include many cases diagnosed clinically only and treated with hormones.

Testis.—50% survival rate and 68% in seminoma cases.

Kidney.—20% survival rate.

Bladder.—3% survival rate. 48 malignant papilloma and 45 carcinoma.

Two examples are given (Tables IV and V) of the way in which the statistical tables are shown in the report, together with the comments on the cases treated in the year 1951.

TABLE IV.—Malignant Growths of Colon (excluding Rectum)

	Total Cases			Treatment				Cases Not Treated
				All Cases		Survivors		
	Regd.	Treated	Alive	Radical Surgery	Palliative Surgery	Radical Surgery	Palliative Surgery	
1945	27	17	10	11	6	6	4	10
1946	99	54	16	39	15	13	2	45
1947	121	78	27	63	15	25	2	43
1948	184	121	35	64	57	33	1	63
1949	315	205	47	122	83	46	—	110
1950	373	248	69	158	90	65	4	125
1951	369	222	76	155	67	69	7	147
Total	1,488	945	280	612	333	257	20	543

Analysis of All Treated Cases (1951 Only)

Age { Oldest, 88. Female; resection; dead
Youngest, 35. Female; resection; survivor
Sex { Male, 96. Female, 126
Biopsy { Positive in 152 cases

Sites { Pelvic colon 86
Caecum 35
Transverse colon 32
Splenic flexure 22
Hepatic 11
Ascending colon 18
Descending 18

Type { Resection 33 .. 48 .. 81
Hemicolectomy 30 .. 32 .. 62
Paul-Mikulicz 7 .. 13 .. 20
Colostomy 4 .. 35 .. 39
Other 2 .. 18 .. 20

Five-year survival rate of treated cases = 44.5%
Overall five-year survival rate (1945-51) = 29.6% (treated cases)

TABLE V.—Malignant Growths of Breast (Stage I)

	Total Cases		Treatment						
	Regd. Cases	Treated	All Cases				Survivors		
			Alive	Surg.	Surg. + X Rays	X Rays	Surg.	Surg. + X Rays	X Rays
1945	136	136	83	16	109	11	10	68	5
1946	192	192	123	23	162	7	16	103	4
1947	178	178	122	14	150	14	9	104	9
1948	279	278	168	26	232	20	15	144	9
1949	344	333	197	62	234	37	41	144	12
1950	319	317	222	79	219	18	55	155	10
1951	330	326*	237	96	218	10	74	160	3
Total	1,778	1,760	1,152	316	1,324	117	220	878	52

* 2 patients treated by hormones only (aged 81 and 82): dead. 2 patients untreated (aged 81 and 89): both still alive.

Analysis of All Treated Cases (1951 Only)

Age { Oldest, 89. No biopsy; no treatment; still alive.
Youngest, 30. Surgery and x rays; positive biopsy; survivor

Sex { No males
Biopsy { Positive in 275 cases. Not recorded in 13 cases treated by x rays or hormones, or in 38 others

Pathology { Duct carcinoma .. 12
Paget's disease .. 4
Colloid carcinoma .. 1
Sarcoma 1

7 cases of bilateral carcinoma
1 case of carcinoma of ovary also
1 case of carcinoma ventriculi also
Local mastectomies 103
Oophorectomy 1 (alive)
Adrenalectomy and oophorectomy .. 1
Remainder radical mastectomy

Unrelated death 3
Five-year survival rate of treated cases = 72%
(This is the highest five-year survival rate recorded for this site in our reports.)
Overall five-year survival rate (1945-51) = 65% (treated cases).

Summary

An account is given of the rapid development of a cancer records bureau.

In view of the number of cancer records bureaux being opened throughout the country, it is hoped that this communication may be of assistance to those who are in the process of organizing such centres.

An analysis is given of the figures under each site, showing the methods of treatment and the five-year survival rate for the years 1945 to 1951.

A more detailed analysis is given of the cases registered in the year 1951, the latest year in which we can record a five-year follow-up. The best five-year survival rates for 1951 are 82% for early carcinoma of the uterus, 71% for stage I cervix, and 72% for stage I carcinoma of the female breast.

A new feature in the report is an *incidence table for the year 1955*. This shows the incidence of cancer at each site throughout the body and the number of cases per 100,000 of population, and the figures are shown for males and females separately. The table has roused considerable interest.

My thanks are due to the officers of the South-Western Regional Hospital Board for their unfailing help, and to the cancer records officers, without whose assistance this report could not have been compiled.

REFERENCE

Vick, R. M. (1955). *Brit. med. J.*, 1, 660.

A COMPREHENSIVE DOMICILIARY MEALS SERVICE

BY

Lord AMULREE, M.D., F.R.C.P.

Chairman, Invalid Meals for London

AND

ALISON PALFERY, A.M.I.A.

Honorary Almoner and Survey Secretary, Invalid Meals for London

Modern trends in medicine and in social work are directed towards securing maintenance in their own home for as many people as possible who require some help in managing their daily life. Most people prefer to live in their own homes and among their own belongings, and are happier there than sharing any communal life. Patients are now discharged from hospital at an earlier stage of convalescence than formerly, and old people are not pressed into institutions and homes to the same extent as in former years. But to ensure this maintenance it is necessary to supply some form of direct service to assist people to retain independence. Much has been written, and much is known, of the Home Nursing Service and the Home Help Service, and their importance is generally realized. Next after these important services must rank that of supplying a satisfactory midday meal for those who need it. Domiciliary meal services, colloquially known as "Meals-on-Wheels," have been started in many parts of the country, but no considered policy is behind their establishment, and the benefits obtained, though considerable, have not proved as great as they might have been.

Persons Requiring Meals Service

It may be useful here to consider what are the basic requirements for a domiciliary meals service, and also for

what persons should such a service be designed. Roughly, there will be two types of persons requiring the service; the one will require a meal to be delivered for a short time, and the other for a long time, if not permanently. The first group will comprise persons who have recently been ill, either in their own home or in hospital, and who need a well-chosen meal to assist them in their convalescence. When that is complete they should be able to resume a normal life and to cope with their own feeding as they did before they were ill. Some few of these may require a special diet for some specific medical condition, but most will need a well-balanced, attractive, and nourishing "normal" meal. These people will need a meal on at least five days a week, but an ideal service should cover seven, although it is often possible for relations or friends to assist at the week-ends; but the extent to which this is generally possible can be determined only by an inquiry into the needs of a cross-section of the population. These meals should be supplied only on the production of a medical certificate, which can be given either by the doctor at the hospital or by the patient's own doctor, and which should state the type of meal required and the approximate time for which it should be delivered.

The second category of persons requiring a meal can be subdivided into two classes. The first will include those who suffer from some disease requiring a special diet—diabetic, gastric, salt-free, reducing, low-residue, high-protein, and the like. These people may be young or old and will require their special meal for many months, if not to the end of their lives. Meals should be available on at least five days a week, and a medical certificate, signed either by the patient's own doctor or by a hospital specialist, will need to be produced. This second category will include old people who by reason of increasing infirmity are no longer able to buy and prepare food for their own consumption. Many of these persons will need their meal on at least five days a week, but some of the less frail may be content with a meal on one, two, or three days a week. They are capable of doing some cooking and food preparation, but find the strain of doing this daily beyond them, and are delighted by the occasional relief: similar people who can afford it may go to a restaurant for their meals once or twice a week.

These meals may be called "normal," for they do not require to be based on a special diet, but they should be properly balanced, and the menus chosen by someone with a knowledge of nutritional principles. Too often old people suffer from malnutrition because they are careless in their choice of food, or unwilling or unable to prepare suitable meals for themselves. The addition of a few suitably chosen meals during the week can make a big difference to their health. From what has been said, therefore, it becomes clear that a domiciliary meals service should provide a carefully prepared meal, chosen by someone with knowledge of nutritional values and experience in planning a well-balanced diet.

It may be as well to mention here that there will also be a number of patients requiring meals who do not need the meal supplied to their home, but who are fit enough to travel a distance for it. For these a small restaurant may with advantage be attached to each kitchen. The persons served here would need to produce a medical certificate similar to that required for those who need a meal delivered to their home. A review of patients served should be carried out periodically and a renewal of medical certificate obtained. Otherwise some people will continue to receive meals when the need for them has passed.

Kitchens

The numbers of kitchens for preparing these meals will be determined by the distance the vans carrying them will need to travel. Meals should be served between 11 a.m. and 1.30 p.m., otherwise the recipient is either too hungry or not hungry enough. In any large built-up area, therefore, such as London, a number of kitchens will be required.