

**THE  
MEDICO-SOCIAL RESEARCH  
BOARD**

**An Bord Taighde Pobal-Liachta**

**ANNUAL REPORT 1982**

**THE MEDICO-SOCIAL RESEARCH  
BOARD**

**An Bord Taighde Pobal-Liachta**

**ANNUAL REPORT 1982**

**73, Lower Baggot Street,  
Dublin 2 . Ireland.**

## THE MEDICO-SOCIAL RESEARCH BOARD

### *Chairman*

BRENDAN HENSEY, D.Econ.Sc., DPA (NUI).

### *Members*

GEOFFREY BOURKE, MD., MA., FRCPI., FFCM., FFCMI., DPH., DIH. (Dundee), DCH. Professor of Community Medicine and Epidemiology, University College, Dublin.

ALAN D. H. BROWNE, MAO., MD., FRCPI., FRCOG., Professor of Obstetrics and Gynaecology and Dean of Medical Faculty, Royal College of Surgeons in Ireland. Consultant and Head of RCSI Department of Obstetrics/Gynaecology, Rotunda Hospital, Dublin.

JOHN P. CORRIDAN, MD., DPH., FFCM., FFCMI., DIH. (St. And.), Professor of Social Medicine, University College, Cork.

RORY DOYLE. (From 6th December, 1982)

JOHN J. FENNELLY, MB., FRC.Psych., DPM. Chief Psychiatrist, St. Joseph's Hospital, Limerick.

MICHAEL P. FLYNN, MD., FFCMI., DPH., B.Sc. (Public Health), LM.

MRS. MARY HYNES.

JAMES McCORMICK, FRCPI., FRCGP., FFCM., FFCMI., Professor of Community Health, Trinity College, Dublin 2.

RISTEARD MULCAHY, MD., FRCP., FRCPI., Director, Cardiac Department, St. Vincent's Hospital, Dublin 4.

TIMOTHY V. O'DWYER, MB., MFCMI., DCH., LM., CPH., D.Obst. RCOG., Senior Medical Officer, Department of Health, Dublin 1.

DONAL O'SHEA, BE., C.Eng., MIEI., Chief Executive Officer, North-Western Health Board, Manorhamilton, Co. Leitrim.

BARBARA STOKES, BA., FRCPI., Medical Director, St. Michael's House, Dublin 14.

MRS. ANGELA SEXTON. (Until 6th December, 1982)

SHAUN TRANT, BA., MIS., Head of Planning Unit, Department of Health, Dublin 1.

## THE STAFF OF THE MEDICO-SOCIAL RESEARCH BOARD

### *Director*

Geoffrey Dean, MD., FRCP., FRCPI., FFCM., FFCMI.

### *Secretary*

John O'Gorman, ACIS.

### *Mental Health Studies*

D. Walsh, MB., DPM., FFCM., FFCMI., FRC.Psych.

### *Mental Handicap Studies*

M. Mulcahy, MB., FRCPI., MRC.Psych., DPH.

*Congenital Abnormalities Register (EUROCAT) and Sudden Infant Death*

A. Radic, MB., MFCMI.

### *Perinatal and Child Health Studies*

P. Kirke, MB., MFCM., MFCMI., M.Sc., DCH., D.Obst.

### *Medical Research Assistants to the Director*

R. Hamill, MB., DCH., DPH.

E. Shelley, MB., MRCPI., M.Sc.

### *Sociologists*

A. O'Hare., M.Soc.Sc. (Senior Sociologist)

A. O'Connor, B.Soc.Sc., A. Reynolds, B.Soc.Sc.

### *Research and Administration*

D. Carey, BA., HDE., M. Hand, RGN.,

A. Kingston, B. McGrath, H. McLoughlin  
(Personal Assistant to the Director),

G. O'Mahony (Assistant to the Secretary),

A. Purcell (Supervisor, Hospital In-patient Enquiry Scheme).

### *Secretarial*

B. Lynch, J. Murtagh, J. McCann, M. O'Dwyer.

### *Clerical*

L. Beirne, Y. Dunne, H. Holden, N. McConnell,

R. Phelan, L. Shanahan, M. Sheeran,

M. Sullivan, J. Woods, S. Woods.

### *Housekeeping*

M. Hoey.

### *Maintenance*

L. Johnson.

### *Staff working outside Head Office*

O. Cairns, T. Carr, T. Cleary, B. Costelloe,

E. Cox, C. Delaney, A. Dempsey, N. Forde,

M. Giblin, C. Lennon, M. Moore, A. Morrissey,

M. McCauley, J. McLoughlin, M. McLoughlin,

A. Naughton, J. Smith, U. Stenson, C. Twomey,

C. Tyrrell, A. Whelan, P. Whelan.

## ACTIVITIES OF THE MEDICO-SOCIAL RESEARCH BOARD 1982

	<i>Page</i>
1. Introduction	7
2. General Hospital Services:	
(i) Hospital In-patient Enquiry Scheme.	13
(ii) Long term care in acute general hospitals.	16
(iii) Health board of origin of children discharged from Dublin hospitals.	21
(iv) Hospitalisation for fracture of the femur in Ireland.	25
(v) Screening for heavy alcohol consumption in general hospital in-patients.	28
3. Mental Health Studies:	
(i) National Psychiatric In-patient Reporting System.	30
(ii) Three-County Psychiatric Case Register.	31
(iii) Three-County Schizophrenia study.	33
(iv) Determinants of outcome of severe mental disorders.	34
(v) Mental health services in pilot study areas.	35
(vi) Aftercare and the utilisation of services by discharged psychiatric in-patients.	36
(vii) The sociological dimensions of mental illness in three counties in Ireland.	37
(viii) Social factors affecting first contacts in psychiatric care.	39
(ix) Other studies in mental health.	40
(x) An Irish census-based social class scale.	41
(xi) Alcohol-related problems.	43
(xii) Suicide and attempted suicide.	47
(xiii) Termination of pregnancy of Irish residents in England and Wales.	48
(xiv) Federation of Services for Unmarried Parents and their Children.	50
4. Mental Handicap Studies:	
(i) Records system for mental handicap.	52
(ii) The adult mentally handicapped living at home in Co. Kildare.	54

	(iii) Community based residences for the mentally handicapped.	55
	(iv) Physical and mental handicap.	57
5.	Perinatal Epidemiology and Child Health:	
X	(i) The Neural Tube Defect Study.	58 X
	(ii) Accidents in children.	60
6.	European Economic Community Studies:	
	(i) Concerted action in the European Economic Community in medical and public health research 1982-86.	61
	(ii) Concerted action project on registration of congenital abnormalities.	64
	(iii) The aetiology of accidents and diseases connected with work.	66
	(iv) Information for farmers to prevent occupational respiratory disease.	68
	(v) Radiation and cancer.	70
7.	Sudden infant death study.	71
8.	The health effects of smoking in Ireland.	74
9.	Studies of drug use in post-primary school pupils.	79
10.	Friedreich's Ataxia.	82
11.	Conclusion.	83
	Acknowledgments.	89
	Publications.	92

#### *Financial allocation*

The total amount allocated by the Department of Health for the year ended 31st December, 1982 was £770,000.

## INTRODUCTION

In December 1982 there was one change in the membership of the Board, Mrs. Angela Sexton retired and was replaced by Mr. Rory Doyle. We would like to express our appreciation to Mrs. Sexton for the contribution she made to the Board's work and welcome Mr. Doyle.

During the year the number of persons registered as unemployed in Ireland increased from 140,000 in 1981 to over 180,000 and there is little evidence as yet that the employment situation is improving. The stringent economic situation in Ireland has highlighted the importance of studying the cost-effectiveness of health care. Much of the cost of the health service is hospital cost both, in general and in psychiatric hospitals, and the Board is responsible for the Hospital In-patient Enquiry Scheme (HIPE) which provides the basic information on discharges from the general hospitals and the Board's psychiatric reporting system on discharges from the psychiatric hospitals.

Since 1979 it has not been possible to assign any additional staff to the HIPE scheme, although there has been an annual increase in the numbers of discharges and of forms processed. The scheme, under the direction of Mr. John O'Gorman, the Secretary of the Board, is undoubtedly understaffed at present and working under significant difficulties but, nevertheless, the number of forms processed exceeded the previous year and there was an increase in the proportion of the total discharges analysed. There was also during the year a big increase in the number of requests for information on which research and administration was based, 142 requests in 1982 in contrast with 90 in 1981. The Board has undertaken a number of studies based on the information in this scheme, for instance by Dr. Rosemary Hamill on the number of patients who stayed for long periods of time in beds in acute hospitals and the Health Board area of residence of children treated in Dublin hospitals. We also undertook a study of the number of beds occupied by old people with fracture of the femur and the cost to the hospital

service and a study to ascertain to what extent alcohol abuse may be a factor causing admission to hospital.

The mental health studies of the Board are under the supervision of Dr. Dermot Walsh. There has been a continuing decline in admissions to Irish psychiatric hospitals and units which was first noted in 1977. Admissions for alcoholism and alcoholic psychosis are the greatest contributors to psychiatric hospital admissions, although there has been a slight fall in these admissions since 1978. The Board is repeating the study by Dr. George Duffy to see if there has been a change during the last 10 years in the autopsy rate for cirrhosis of the liver, in comparison with the changes that have occurred in the rates for cirrhosis which have been certified on the death certificates. Our previous study showed that cirrhosis of the liver was under-reported on death certificates by a factor of three times.<sup>1</sup>

The Board is undertaking a number of other studies on mental health, for instance on the sociological background of psychiatric breakdown and studies with Dr. Fuller Torrey of St. Elizabeth's Hospital, Washington, and Dr. Spellman and Dr. Maguire of St. Patrick's Hospital, Castlerea, on psychosis in the west of Ireland and its relationship to inherited, or genetic, factors.

During the year Mrs. Aileen O'Hare made a special analysis of the national census determined social class scales. Morbidity and mortality are strongly related to social class.

The drug of greatest addiction in Ireland is undoubtedly alcohol. This is shown not only by our high admissions to psychiatric hospitals for alcoholic psychosis and alcoholism but by a similar high admission rate for the Irish who emigrated to south-east England.<sup>2</sup> We are undertaking further studies on Irish immigrants in south-east England to see to what extent their high breakdown rates for alcoholism may be related to their occupation and socio-economic group.

There is very strong evidence indicating that the level of alcohol damage in our society relates to the level of total individual alcohol consumption. This places a strong responsibility on government to adopt policies, for instance strict penalties for driving under the influence of alcohol and banning the advertising of alcoholic drinks, aimed at achieving a fall in total consumption.

Since 1980 there has been what can only be described as an epidemic in the use of opiate drugs, in particular heroin and Diconal, in certain areas of Dublin, particularly in the inner



city. In 1982 the then Minister for Health, Dr. Michael Woods, T.D., asked the Board to ascertain the facts about this problem and advise as to what steps might be taken to deal with it. After a preliminary survey, the Board is undertaking studies in certain wards of Dublin. The first report on this study was scheduled for completion in the first half of 1983. It will only be possible to handle this serious problem, so often associated with the underprivileged and unemployed, by a multifactorial approach. This must include taking adequate action to control the small number of doctors who are prescribing unnecessarily such opiate-related drugs as Diconal. We are also completing studies, in collaboration with the Health Education Bureau, the Irish Cancer Society and Dr. Aengus O'Rourke, Trinity College, on drug use. These studies will also include attitudes and practices towards alcohol and smoking. The result of cigarette smoking is still the greatest cause of death in men and women in middle life and is a major factor in causing a high morbidity from many common disorders, including lung cancer, heart attacks and strokes. Dr. Emer Shelley undertook a study of the health effects of smoking in Ireland. Although much has been done by the government to discourage cigarette smoking, there is still a great need to further discourage the habit, for instance by banning advertising and increasing taxation on cigarettes.

Dr. Michael Mulcahy is in charge of the Board's mental handicap studies and during the year he developed the community care records system for mental handicap. He is studying the adult mentally handicapped living at home in Co. Kildare and the need for community based residences or hostels for the mentally handicapped. He is also studying mental handicap due to abnormalities of the X-chromosome, such as the syndrome "fractured X syndrome" which accounts for 6% of all male severe and moderate mental handicap.

Dr. Peadar Kirke is in charge of a study to see if it is possible to prevent neural tube defects, that is anencephaly and spina bifida, in babies by giving the mothers certain vitamins before and during the first few months of pregnancy. It has been suggested in a paper by Smithells and his colleagues that vitamin supplementation might reduce the risk of recurrence of neural tube defects.<sup>3</sup> The Masters of the three Dublin maternity hospitals and the Senior Obstetrician at St. James's Hospital are members of the committee responsible for this study. The study commenced in 1982 and by the end of the year 117 mothers were randomized to receive treatment and a further 126 mothers

have indicated that they wish to join the study. Some years ago there was a similar but incorrect theory that neural tube defects in babies were caused by eating spoiled, or blighted potatoes, a scare which caused many mothers to stop eating potatoes. It is important to establish whether the present vitamin theory is correct and to ascertain which particular vitamins may be involved. Dr. Kirke is also undertaking studies on accidents in children which account for one-third of all deaths in children between the ages of 1-14 years.

The Board is collaborating with the Cardiac Department of St. Vincent's Hospital in the preparation of a handbook for social workers involved in the rehabilitation of patients who have had a heart attack.

During the year the Director of the Board continued as Chairman of the Working Group in Epidemiology, now known as the COMAC, or Concerted Action Committee, in Epidemiology of the European Economic Community. A five-year programme of research has been approved by the Committee for Medical Research of which COMAC Epidemiology is a part. Dr. Alicia Radic of the Board is undertaking studies on congenital abnormalities as part of the concerted action programme. Other major studies approved are on nutrition, in particular the possible effects of salt in causing hypertension and the need for fibre in the diet to prevent bowel cancer, studies on alcohol-related problems in which Dr. Dermot Walsh has played a major part, on cigarette smoking, on the abuse of drugs, on perinatal mortality, on sudden infant deaths, on the aetiology of accidents and diseases connected with work, on information for farmers to prevent occupational respiratory disease, such as farmer's lung, and studies on radiation and cancer, the latter supported by the European Atomic Energy Community (EURATOM). Some of these studies will be described in this report.

The Board continues its research on the epidemiology of sudden infant deaths, or cot deaths, which account for almost half of all deaths in children between the ages of one week and one year. All babies who die within one week and one year in the Eastern Health Board area have had autopsies and the studies include reports, which will be published in 1983, on the epidemiology of sudden infant deaths and on the autopsy findings.

The Director and Dr. Dermot Walsh are members of a committee, chaired by Mr. T. Keyes of the Eastern Health

Board, to study the after-effects of the disastrous fire that caused many deaths and injuries at the Stardust disco in February, 1981. The Board has been studying some background of the physical and sociological consequences of this disaster.

We have continued studies on suicide and attempted suicide or deliberate self-poisoning. A comparison has been made between the situation in Ireland, in England and Wales, and in Denmark where the pattern of self-poisoning or suicide is very different from ours.

The Board is undertaking a profile of Irish residents who go to England to terminate their pregnancies and continues its work with the Federation of Services for Unmarried Parents and their Children. With the Federation, the Board is carrying out a study on Irish unmarried mothers.

The Director has continued his interest into the cause of multiple sclerosis (MS) and, in particular, he has studied the extraordinary chance that four out of eight research workers in another similar disease, swayback disease in lambs, developed a multiple sclerosis-like illness. This was reported in *Brain* in 1949<sup>1</sup> and since then all four research workers have died but their histories have never been followed up, although two of them had an autopsy. He is also continuing his studies to find out why it is that there should be a high prevalence of MS in Italy and Sicily, although previously it was thought the prevalence of MS was low there and, in contrast, a very low MS prevalence in the neighbouring island of Malta, only 60 miles away. The genetic and environmental factors that could account for this difference are now being investigated. He is also ascertaining whether the children of new commonwealth immigrants from Asia, Africa and the West Indies, who had settled in the United Kingdom keep the low risk of MS of their parents or the increased risk of the United Kingdom-born. With the support of the Friedreich's Ataxia Society, another disease of the nervous system, Friedreich's Ataxia, is also being studied by the Director and staff of the Board.

A short account of some of the Board's research work is described in this Annual Report.

#### *References*

<sup>1</sup> Duffy, G. and Dean, G. The reliability of death certification of cirrhosis. *Journal of the Irish Medical Association*, 1971, 64, 417, 393-397.

<sup>2</sup> Dean, G., Downing, H. and Shelley E. First admissions to psychiatric hospitals in south-east England in 1976 among immigrants from Ireland. *British Medical Journal*, 1981, 282, 1831-1838.

<sup>3</sup> Smithells, R. W., Sheppard, S., Schorah, C.J. *et al.* Possible prevention of neural tube defects by periconceptional vitamin supplementation. *Lancet*, 1980, i, 339-340.

<sup>4</sup> Campbell, A.M.G., Daniel, P., Porter, R.J., Ritchie-Russell, W. and Smith, H. V. Disease of the nervous system occurring among research workers on swayback in lambs. *Brain*, 1947, 70, 50-58.

## 2 (i)

### **THE HOSPITAL IN-PATIENT ENQUIRY SCHEME**

The Hospital In-patient Enquiry Scheme (H.I.P.E.) is a reporting system which collects information on the medical, social and administrative characteristics of in-patients treated in acute general hospitals in the Republic of Ireland. The Scheme is currently operating at a level of approximately 83% national coverage which involves the collection and analysis of information relating to 374,000 hospital discharges per annum. It constitutes the major source of morbidity data on acute general hospital patients in Ireland and although it is a multi-purpose system serving both researchers and administrators, the contribution it can make to administrative studies of in-patient treatment is becoming increasingly important in the current climate of financial stringency.

The objective of the Board is to achieve 100% coverage for this Scheme so that its value can be exploited to the fullest extent. Since 1979 however, it has not been possible to assign any additional staff to the Scheme and, bearing in mind an annual overall increase in hospital admissions of approximately 2½%, the existing coverage of the Scheme has been maintained only by a series of improvisations including an unwelcome but necessary decision to reduce the range of clerical checking procedures on the input data. An additional problem emerged during 1982. The bulk of the staff employed on the Scheme are engaged in extracting information from hospital case notes and coding it in preparation for computer processing. Forty six staff are employed on this work at present, 26 funded directly by the Medico-Social Research Board and 20 provided by hospitals from their own resources. During 1982 the submission of H.I.P.E. data from the hospitals providing their own clerical staff slowed considerably and several of the major hospitals in the country have now developed significant arrears. The reason for the slow-down in reporting is that because of financial cut-backs hospital administrators have been diverting staff from H.I.P.E. work to other areas of administration. The data is still being supplied to the Medico-Social Research Board but at a

slower rate. Inevitably the interval before results are available for research and administration has been lengthened and this somewhat diminishes the overall usefulness of the system. In general the H.I.P.E. Scheme must be regarded as being under-staffed at present and working under significant difficulties.

At time of writing this report the last of the data for 1981 were being processed and the final position for the year should be as follows:—

**TABLE 1**  
**Coverage of H.I.P.E.**

<b>Health Board Area</b>	<b>% Coverage of H.I.P.E. Scheme</b>
North Western	96.4
Western	92.8
North Eastern	88.5
South Eastern	84.0
Eastern	82.2
Southern	81.8
Mid Western	74.8
Midland	62.6
<b>Total</b>	<b>*83.2</b>

**\*District and Private Hospitals and Maternity admissions are excluded.**

It is anticipated that the same degree of coverage will be achieved in respect of 1982.

From the beginning of 1982 the County Hospital, Wexford, has been submitting its H.I.P.E. data to the Medico-Social Research Board on magnetic tape as a by-product of its own computerised hospital in-patient system. This arrangement is working very well and the question of extending the system to Ardkeen Hospital, Waterford, is now being considered by the South Eastern Health Board. The Federated Dublin Voluntary Hospitals pioneered a similar procedure from January 1981. However, they have encountered a number of technical difficulties in the operation of their system and have, therefore, decided that for the moment all their hospitals, with the exception of the Meath, will revert to the standard M.S.R.B. system from 1st January 1983.

During 1982 there was an upsurge in the number of requests for special analyses from the H.I.P.E. Scheme. One hundred and forty five analyses were provided compared with ninety during 1981 and the requests came from a broad spectrum of

interests. Twenty five examples of the topics covered by these requests are given in appendix 1.

Dr. R. Hamill continued her studies on H.I.P.E. data and a description of her work during the year is contained in the following section of this report.

## 2 (ii)

### LONG TERM CARE IN ACUTE GENERAL HOSPITALS

This study provides a descriptive analysis of the groups of patients who occupy beds in acute hospitals for long periods of time. Stays in acute hospitals beyond 30 days can in most cases be regarded as "excess" or inappropriate use of acute facilities. This is based on the reasoning that patients occupying acute beds for longer than the duration of the acute phase of illness — arbitrarily taken as 29 days — are possibly being detained because of inadequate alternative facilities. Of course, this approach includes some long-stay patients legitimately in need of acute accommodation as well as those patients who occupy beds inappropriate to their needs. It is this latter group which is the cause for concern.

The study is based on H.I.P.E. data for 1980. All geriatric units are excluded from the analysis.

The breakdown of all patients treated in acute general hospitals in 1980 is given in Table 1. It would appear from this that the elderly exerted the greatest demand on acute facilities. They constituted the 22% of the discharges occupying 37% of the bed-days but only make up 10.7% of the country's population. Their greater morbidity is also reflected in their higher admission (and discharge) rates from hospital, particularly for those over 75 years of age. Table 2 shows that only about 5% of all patients spent 30 days or more in hospital. However, they used up 30% of the bed-days. More than 90% of these patients were discharged between 30 and 100 days.

"Excess" bed-use refers to the portion of bed-days expended on patients beyond the expiry of the short-stay phase of treatment, i.e. 29 days. This provides a more precise measure of the load placed on hospital resources by long-term illness. It is shown in Table 3 that almost 15% of all bed-days were expended as "excess" use, i.e. about 1/7 of the total bed-days were taken up in the care of patients many of whom could probably have been cared for in some kind of non-acute accommodation. Most of the "excess" use (54%) was attributable to patients over 65 years of age but a substantial proportion (40%) occurred in the



15-64 year age group, therefore this age group should not be excluded from further consideration of this problem.

About 1/3 of the bed-days in the district hospitals were taken up by "excess" bed-use. This confirms that these hospitals function to a large extent as units for long-term care rather than acute units. Of more concern is the fact that about 1/5 of the bed-days in the regional hospitals were also taken up by "excess" bed-use which means that these hospitals are under severe pressure from long-term illness.

Long-stay patients were also analysed according to specialty. Table 4 identifies malignant diseases and cardiovascular diseases as the main medical reasons for admission to hospital.

"Excess" or prolonged bed-use is a serious problem in Irish hospitals accounting for one seventh of the bed-days in acute general hospitals. This must severely hamper the capacity of the hospitals to treat acute illness. It must be borne in mind that "excess" bed-use is only part of the wider problem of inappropriate bed-use which raises the question as to whether individual patients in hospital at any stage either require to be there or are in the most appropriate place to receive the treatment they require. To answer this fully a different approach involving surveys at hospital level would be required. Even this would only deal with one aspect of the problem since it is likely that there are some people in other institutions or at home who could more appropriately be placed in an acute hospital.

Using what data is available, the H.I.P.E. Scheme can provide an estimate of the demand for extended care by certain groups of patients and the pressure they exert on acute hospitals. This study should form the basis for further research to ascertain the amount of long-term care of different kinds that should be provided for a defined population.

**TABLE I**  
**H.I.P.E. 1980**  
**Discharges from acute general hospitals.**

	Age						
	0-14	15-64	65+	All	65-74	75-84	85+
Number of Discharges	48,907	173,779	63,078	285,764	38,906	20,405	3,767
Bed-Days	279,918	1,336,855	954,434	2,571,207	548,956	337,149	68,329
Average Stay (Days)	5.7	7.7	15.1	8.99	14.1	16.5	18.1
Number of Deaths (%)	176 (0.4%)	2,375 (1.4%)	5,269 (8.4%)	7,820 (2.7%)	2,639 (7.4%)	2,093 (10.3%)	538 (14.3%)
Average Stay	13.6	21.1	22.3	21.7	20.1	23.6	28.0
Discharges/1,000 pop.	47.4	87.9	174.5	84.8	167.6	191	167.7
Bed-Use	764.8	3652.6	2607.7	7025.2	1499.9	921.2	186.7
Bed-Use/10,000 pop.	7.4	18.5	72.2	20.9	64.6	86.2	83.1

TABLE 2  
H.I.P.E. 1980

Discharges from acute general hospitals—length of stay 30 days or more.

	Age						
	0-14	15-64	65+	All	65-74	75-84	85+
19 Number of Discharges (% of Total)	927 (1.9%)	5,836 (3.4%)	6,817 (10.8%)	13,580 (4.6%)	3,724 (9.6%)	2,573 (12.6%)	520 (13.8%)
Bed-Days	52,723	318,146	400,574	771,443	207,843	157,174	35,557
Average Stay	56.9	54.5	58.8	56.8	55.8	61.1	68.4
Number of Deaths (%)	13 (1.4%)	393 (6.7%)	910 (13.3%)	1,316 (9.7%)	429 (11.5%)	380 (14.8%)	101 (16.8%)
Average stay of those who died	122.9	87.5	86.6	87.4	78.4	70.0	110.6

**TABLE 3**  
**H.I.P.E. 1980**

Discharges from acute general hospitals. Percentage of bed days that could probably have been spent in non-acute accommodation.

	Age						
	0-14	15-64	65+	All	65-74	75-84	85+
M	8.1	13.5	18.1	14.5	16.1	20.9	24.4
F	10.7	8.9	24.3	14.9	20.5	27.4	33.6
T	9.2	11.1	21.3	14.7	18.2	24.5	30.0

**TABLE 4**  
**H.I.P.E. 1980**

Conditions for which patients stayed in hospital for 30 days or more. All ages.

Specialty: General Medicine.

	I.C.D.	Average Stay No. (Days)		Bed- Days
Malignant Neoplasm (All sites)	140-209	653	68	44,504
Cerebrovascular Disease	430-438	474	60.4	28,624
Other Forms of Heart Disease	420-429	547	50.7	27,710
Ischaemic Heart Disease	410-414	403	45.9	18,413
Cerebral Paralysis	344	165	85.0	13,728
Multiple sclerosis, Epilepsy, Paralysis Agitans	340, 342, 345	152	63.0	9,552
Pneumonia	480-486	364	60.1	21,862
Diabetes Mellitus	250	208	50.8	10,566
Tuberculosis (All sites)	010-019	186	77.6	14,438
Chronic bronchitis, Emphysema, Asthma	490-493	158	52.6	8,315
Other Respiratory Disorders	519	352	53.6	18,867
Arthritis and Rheumatism excluding Rheumatic Fever	710-718	246	52.0	12,786
Hypertensive Disease	400-404	125	49.0	6,149
Mental Disorders	790-796	167	64.3	10,742
Senility and ill-defined Diseases	290-315	112	64.0	7,165
Other Diseases		2,386		153,363
<b>Total</b>		<b>6,698</b>		<b>406,784</b>

## HEALTH BOARD AREA OF ORIGIN OF CHILDREN DISCHARGED FROM DUBLIN HOSPITALS

This study presents the geographical distribution of the homes of children referred to Dublin hospitals in 1980 and also looks at the medical conditions for which they were hospitalised. This study was undertaken because it was thought that long travelling distances may effect the frequency with which parents are able to visit their children in hospital even though the hospital itself may encourage and welcome open visiting.

H.I.P.E. Scheme data on approximately 10,500 children discharged from hospitals in one large centre—Dublin—whose homes were outside Dublin city and county and Co. Wicklow (Dublin region) were analysed. They accounted for almost 28% (Table 1) of all children discharged from Dublin hospitals. Eighty-two percent (82%) of the children came from the remainder of the Eastern Health Board area, the North Eastern, South Eastern and Midland Health Board areas (Table 2) with a total of 3,553 children from counties Meath and Kildare. This is not an unexpected finding in view of the geographical location of Dublin City and it is possible that other large centres such as Cork and Galway experience similar influx of patients from outside their catchment areas. In addition, although counties Meath and Kildare each has a County hospital neither of them has specifically designated paediatric beds. The referral rates to Dublin from each health board area are also shown. Almost all children who were hospitalized from County Kildare in 1980 were treated in Dublin hospitals and more than 40% of children hospitalised and resident in the Midland Health Board area were sent to Dublin hospitals.

The total numbers of children hospitalized from each health board area in 1980 are shown in Table 3. The overall hospital admission rate was 8.5% of the childhood population. This represents an increase over previous years—6.5% in 1977, 7.4% in 1979 and is very similar to the paediatric admission rate of 7.9% for Scotland (S.H.I.P.S. 1979). Overall, there was very little variation in the hospitalization rates of the eight health

board areas. This is in contrast with wide variations seen in the referral rates to Dublin (Table 2).

The operation rate for all paediatric admissions (0-14 years) in 1980 was 43% which is almost identical to the corresponding rate of 44% for Scotland. However, children who are sent to Dublin hospitals have higher operation rates. The operation rate for the referred group in this study was 53.7% which is significantly higher (Chi-squared test;  $\chi^2 < .001$ ) than the operation rate of 45% for children resident in the Dublin region.

The operations carried out on children referred to Dublin are shown in Tables 4-6. These represent approximately three quarters of the operations performed. Minor ear, nose and throat and minor general surgical operations account for more than 50% of the operations for County Kildare children and a substantial proportion (47%) of the operations on children from the North Eastern, South Eastern and Midland Health Board areas.

In comparison, children who came from the Southern, Western and Mid-Western Health Board areas underwent more complex surgery while minor E.N.T. surgery accounted for a much smaller proportion (13%) of the operations.

The referral rates to Dublin vary considerably among the four Health Board areas in the Eastern half of the country, despite similar hospitalization rates. Parental choice is undoubtedly a factor in some of these cases but the referral pattern also reflects the degree of availability of paediatric services throughout the country.

TABLE 1

H.I.P.E. 1980

Children (0-14 years) discharged from Dublin Hospitals.

Total Number Discharged	No. and % from outside Dublin city, county and County Wicklow
38,170	10,515 (27.6%)

**TABLE 2**

- (a) Children discharged from Dublin Hospitals in 1980 from outside Dublin city and county and Co. Wicklow by Health Board area of residence.  
 (b) % of all children hospitalised in each Health Board area who were referred to Dublin hospitals.

Health Board Area of Residence	(a) No. of Children and % of total from each Health Board	(b) % from each Area referred to Dublin Hospitals
Eastern (Co. Kildare only)	2,342 (22.2%)	91.0%
North-Eastern	2,578 (24.5%)	32.1%
South-Eastern	1,645 (15.6%)	16.9%
Midland	2,014 (19.1%)	41.3%
Western	442 ( 4.2%)	6.0%
North-Western	550 ( 5.2%)	10.9%
Mid-Western	509 ( 4.8%)	5.5%
Southern	348 ( 3.3%)	3.0%
No fixed abode/overseas	87 ( 0.8%)	

**TABLE 3**

Population of children <15 years of age resident in each health board area\* and the number and percentage hospitalised from each health board area in 1980.\*\*

Health Board Area of Residence	Total Population	Number (%) Hospitalised
Eastern	355,705	30,549 ( 8.5%)
(Eastern: Co. Kildare only)	(33,744)	(2,574) ( 7.6%)
North-Eastern	89,164	8,022 ( 8.9%)
South-Eastern	115,760	9,728 ( 8.4%)
Midland	62,639	4,874 ( 7.7%)
Western	97,666	7,355 ( 7.5%)
North-Western	60,615	5,061 ( 8.3%)
Mid-Western	93,106	9,314 (10.0%)
Southern	155,233	11,799 ( 7.6%)
Overseas		255
No fixed abode		169
<b>ALL</b>	<b>1,029,888</b>	<b>87,126 ( 8.5%)</b>

\* Census of Population of Ireland 1979 Volume II

\*\* H.I.P.E. 1980

**TABLE 4**

**Surgical operations carried out in Dublin hospitals on children (1-14 years) from County Kildare.**

Minor E.N.T. surgery	329
Orchidopexy, inguinal hernia, circumcision, appendicectomy	176
Ophthalmic surgery	85
Operations on skin and subcutaneous tissues	58
Treatment of fractures	58
Operations on joints/tendons	36
Application of prosthetic and other apparatus	20
Other E.N.T. surgery	14
Repair of palate	14
Anaesthesia for unspecified procedures	13
Other	172
<b>TOTAL</b>	<b>975</b>

**TABLE 5**

**Surgical operations carried out in Dublin hospitals on children (1-14 years) from the North-Eastern, South-Eastern and Midland Health board areas.**

Minor E.N.T. surgery	1,244
Ophthalmic Surgery	417
Orchidopexy, inguinal hernia, appendicectomy, endoscopies	276
Application of prosthetic and other apparatus	84
Operations on joints/tendons	84
Treatment of fractures	81
Cardiac surgery	78
Urinary cystography	60
Operations on skin and subcutaneous tissues	59
Anaesthesia for unspecified procedures	57
Other	824
<b>TOTAL</b>	<b>3,264</b>

**TABLE 6**

**Surgical operations carried out in Dublin hospitals on children (1-14 years) from the Southern, Mid-Western, North-Western and Western Health Board areas.**

Minor E.N.T. surgery	115
Cardiac surgery	85
Ophthalmic surgery	69
Major urinary-tract surgery	60
Plastic surgery	56
Urinary cystography	47
Application of prosthetic and other apparatus	42
Operations on skin and subcutaneous tissue	35
Neurosurgery	34
Dental surgery	33
Treatment of fractures	31
Other	272
<b>TOTAL</b>	<b>879</b>



## HOSPITALISATION FOR FRACTURE OF THE FEMUR IN IRELAND

Fractures in the elderly, particularly fractures of the neck of the femur, are a major cause of medical and social disability. In the western world generally, the proportion of the population over 65 years of age is steadily increasing and it is the increase in the number of old people that is the major factor responsible for the increase in numbers of fracture of the femur. The Director undertook a study based, in the main, on the Hospital In-patient Enquiry Scheme of fractures of the femur in Ireland in 1980. The study showed that this fracture was uncommon in young people and between the ages of 25 and 44 was three times more common in men than in women. Over the age of 65, however, fracture of the femur was by far the commonest fracture and twice as common in women between the ages of 65 and 74 and four times more common in women over the age of 75 than in men.

Fracture of the femur in old people was more common in Ireland than in England and Wales and, for women aged over 75 years, it accounted for 8% of all hospital bed-days. The cost of hospitalisation for fracture of the femur over the age of 65 in Irish hospitals is calculated to be at least 4½ million pounds (Irish) in 1980. This is only the hospital bed cost and does not include private fees or the cost of care and treatment after discharge from hospital.

The study showed that fracture of the femur is strongly associated with marital status and the risk of fracture was twice as high in single as in married men and higher in single women than in married women. TABLE 1. The highest rates over the age of 75 were found in the Western and North-Western Health Board areas in women and in the North-Western Health Board area in men. TABLE 2.

Besides causing a high morbidity, fracture of the hip is responsible for a large number of deaths over the age of 65. A significantly lower percentage of females aged 75 years and over died in hospital in Ireland, 10.1% in 1980, than in England and

Wales, 21.1% in 1978. Very few fractures of the femur resulted from road accidents. Slightly more fractures occurred in the winter than in the summer but the mortality was significantly higher in winter and this also occurs in England where Bastow has shown that the very thin elderly women had a much higher mortality in the winter than the well-nourished.<sup>1</sup>

Fractures of the hip generally result from two forms of weakening of the bone, osteomalacia, due to softening of the bone from lack of sufficient vitamin D, and osteoporosis, a decalcification of the bone. A study by Our Lady's Manor Geriatric Research Committee, Dalkey, Co. Dublin, of which the Director is a member, showed that in the relatively small number of old people studied the diet is often low in vitamin D and their blood vitamin D levels are depressed.<sup>2</sup> This study requires confirmation in other groups of old people in urban and rural areas.

Osteoporosis can be detected by X-ray of the spine and its further development can be prevented by hormone, calcium and fluoride therapy. Mr. William Quinlan is studying the incidence of osteoporotic fracture, or wedge compression, of the spine in the female population over the age of 65 years as a means of detecting those likely to suffer a hip fracture. This study is being funded by Winthrop Laboratories.

Fracture of the hip is a major cause of morbidity and mortality. It is particularly common in elderly women, especially if they are single, and there is a greater mortality in the winter months. These fractures can be to a great extent prevented as long as good care is provided for old people, which should include early diagnosis of osteoporosis and osteomalacia and adequate old-age pensions for those without sufficient financial means so that they can obtain a good diet and keep warm. Perhaps supplementary vitamin D should be routinely added to a staple article of diet. The old often require support by the social services which should include, wherever necessary, meals on wheels or help from such services as "the friendly neighbour service" and subsidised fuel. Perhaps most important of all, particularly for the single living alone, are caring neighbours, friends and relatives.

#### References

- <sup>1</sup> Bastow, M.D., Rawlings, J. and Allison, S.P. Undernutrition, hypothermia and injury in elderly women with fractured femur: An injury response to altered metabolism. *Lancet*, 1983, 1, 143-145.

<sup>2</sup> McKenna, M. Metabolic bone disease in an Irish nursing home for the elderly. Awaiting publication.

**TABLE 1**

**Ireland**

**Fracture of Femur by Marital Status**  
**Patients discharged from hospital in 1980. Rates per 100,000 population.**  
**(National Census 1979).**

Age	MALE			FEMALE		
	Single	Married	Widowed	Single	Married	Widowed
65-74	325.7	168.1	364.6	735.1	456.1	533.0
75+	886.7	480.1	696.8	1919.5	1742.7	1665.0

**TABLE 2**

**Republic of Ireland**

**Discharges for Fracture of the Femur 1980 by Health Board Area.**  
**Rates per 100,000 population in area of residence. (National Census 1979).**

Health Board Area	65-74 years		75+ years		Total Number
	Male	Female	Male	Female	
Eastern	195.4	501.6	596.0	1726.0	707
South Eastern	270.7	476.4	614.8	1524.6	264
Southern	196.9	605.5	659.7	1557.6	414
Mid Western	353.7	498.5	551.8	1858.2	251
Western	318.6	627.5	646.9	2044.3	387
Midland	42.0*	666.6	849.4	1824.4	157
North-Western**	253.8	697.1	880.9	2042.2	252
North-Eastern	244.5	661.5	804.5	2024.2	241
<b>Total</b>	<b>232.9</b>	<b>550.8</b>	<b>644.0</b>	<b>1739.9</b>	<b>2,673</b>
No fixed abode plus visitors					19
					<b>2,692</b>

\* Three discharges only.

\*\* Includes 60 patients from Manorhamilton Hospital not included in the 1980 HIPE reporting system and 28 patients treated in Altnagelvin Hospital in Northern Ireland.

## SCREENING FOR HEAVY ALCOHOL CONSUMPTION IN GENERAL HOSPITAL IN-PATIENTS

Alcoholism and alcoholic psychosis accounts for more admissions to psychiatric hospitals in Ireland than any other diagnostic category and accounts for over a quarter of all admissions.<sup>1</sup> In addition to its social consequences, heavy alcohol consumption can lead to many medical problems. Alcohol causes diseases such as cirrhosis of the liver, cancer of the larynx and cancer of the oesophagus. Alcohol may damage other body tissues leading to disease of the heart, muscles, nerves or stomach and contributes to mortality from road traffic accidents and suicide.

When the physical signs of alcohol-related disease are present in patients admitted to hospital the medical staff are likely to take a careful history of alcohol consumption. The patient may then be counselled about his or her drinking habits and the presence of the physical consequences of past excessive intake may encourage future moderation or abstinence. Other patients may be admitted to hospital with diseases which are, or seem to be, unrelated to their heavy alcohol consumption. Medical staff may not take in-depth histories of the patient's drinking habits and the patient may not admit to his or her true consumption. Their alcohol-related social problems may not come to light during their hospital stay. The opportunity for counselling is then missed.

Surveys of general hospital in-patients suggest that many with drinking problems go unrecognised. In other countries the prevalence of alcoholism among general hospital patients has been found to be much higher than in the general population.<sup>2</sup> This is likely to vary according to the hospital's catchment area and case mix. The proportion of patients admitted to general hospitals in Ireland who have medical and/or social problems which are alcohol-related is unknown.

Fiscal, legislative and social measures are important in the prevention of alcoholism. Early detection by screening tests or through case-finding may also be useful.<sup>3</sup> This may be done by means of interviews and questionnaires, and laboratory tests.

The best known is the Michigan Alcoholism Screening Test (MAST), a shortened version of which has been widely used in American hospitals. Laboratory tests include the measurement of liver enzymes such as serum gamma glutamyl transpeptidase (GGPT) which has been reported as raised in 60%-80% of alcoholics. Increased size of red blood cells or macrocytosis, demonstrated by an increase in the mean corpuscular volume (MCV), in the absence of anaemia can be a useful though non-specific pointer towards excessive alcohol consumption.

During 1982 a survey was carried out to estimate the incidence of heavy alcohol consumption among 400 consecutive admissions to Sir Patrick Dun's Hospital, Dublin. With the patient's consent, a questionnaire was administered by the Medical Registrar, Dr. Kevin Ward, or by a medical student who was specially trained. A small number of demographic and hospital administrative details was recorded. A smoking history was taken and current tobacco consumption estimated, based on the Medical Research Council's questionnaire on Respiratory Symptoms (1976). The shortened version of MAST was then administered. The patient's discharge diagnosis was recorded together with the results of some laboratory tests where these were available, including the haemoglobin, MCV and GGPT.

The data collected is now being analysed by the Medico-Social Research Board. The results should provide a useful estimate of the incidence of heavy alcohol consumption among those admitted to one general hospital in Ireland.

#### *References*

- <sup>1</sup> O'Hare A., Walsh D. Activities of Irish psychiatric hospitals and units, 1979. Medico-Social Research Board, Dublin, 1981.
- <sup>2</sup> Jarman C.M.B., Kellett J.M. Alcoholism in the general hospital. *British Medical Journal*, 1979, ii, 469-472.
- <sup>3</sup> Editorial. Screening tests for alcoholism. *Lancet*, 1980; 2: 1117-8.

### 3 (i)

#### **NATIONAL PSYCHIATRIC IN-PATIENT REPORTING SYSTEM**

The "Activities of Irish Psychiatric Hospitals and Units 1979" was published in 1981 and the report for the following year, 1980, appeared early in 1983. These latest reports show a continuing decline in the number of admissions to Irish psychiatric hospitals and units. The decline occurred in 1977, although there was a slight increase the following year. Admissions for alcoholism make the greatest contribution to psychiatric hospital admissions, even though these have, like admissions generally, fallen in the last two years. For the first time a separate section has been provided in the activity report for 1980 showing the activities of the general hospital psychiatric units. They appear to be treating the full range of psychiatric illness with a bias towards the less serious or non-psychotic conditions.

Data is now being processed on the 1981 census of patients in psychiatric hospitals and units and on the activities, i.e. admissions and discharges, for 1981. For both these reports there will be a longer delay before publication than we would have liked. This is because the volume of work has increased greatly and, because of the recession and economic cutbacks, we are unable to increase staff.

### 3 (ii)

#### THE THREE COUNTY PSYCHIATRIC CASE REGISTER

A detailed report of the activities of three Irish psychiatric services as revealed by the psychiatric case register covering Counties Carlow/South Kildare, Westmeath and Roscommon has been published.<sup>1,2</sup>

A summary of the findings of the inter-county comparison revealed an inverse relationship between socio-economic disadvantage and hospitalised prevalence of psychiatric illness. It also showed considerable variation in the development of those extra-hospital services providing an alternative to hospitalisation. These were best developed in the most eastern county and least in the west. The community services attracted patients suffering from milder illnesses than those hospitalised but were also providing alternatives to hospital care for persons with the more serious psychotic illnesses. Most patients in whatever form of care, in-patient or community, in the three counties were long-term.

Overall the evidence from the Three County Case Register prevalence study, taken in conjunction with similar data from the St. Loman's Hospital, Dublin, case register,<sup>3</sup> lead to the conclusion that a great deal of psychiatric illness dealt with by the psychiatric services is essentially chronic and long-stay. This does not mean that patients are not being helped by the psychiatric services; on the contrary, although remaining in care, the great majority of these patients were helped considerably by being in psychiatric care. Both registers indicate that the primary health care services are not receiving patients back to their care following specialist treatment. This may be because Irish general practitioners are not anxious to involve themselves in caring for the chronically psychiatrically ill, whether neurotic or psychotic, or because the psychiatric services are inclined to keep patients once they come into their services.

The Three County Case Register has been used to study psychiatric morbidity among the elderly and a report on this work will shortly be available.<sup>4</sup>

Further work on material from the Three County Case Register is in progress.

*References*

<sup>1</sup> Blake, B., Halpenny, J.V., O'Brien, P.F., O'Hare, A. and Walsh, D. Specialist Care of Psychiatric Illness in Three Irish Counties. *Irish Journal of Psychiatry*, 1982, 2, 1, 20-26.

<sup>2</sup> Walsh, D., O'Hare, A., Blake, B., Halpenny, J.V. and O'Brien, P.F. The Treated Prevalence of Mental Illness in the Republic of Ireland — The Three County Case Register Study. *Psychological Medicine*, 1980, 10, 465-470.

<sup>3</sup> Walsh, D., Butler, S. and Starks, S. The St. Loman's Psychiatric Service: An Exercise in Parsimony. *Irish Journal of Psychiatry*, 1981, 1, 1, 9-22.

<sup>4</sup> O'Hare, A. Mental Illness in Old Age — Administrative and Clinical Characteristics from an Irish Perspective. *Proceedings of Third European Symposium on Social Psychiatry*, Helsinki, 1982, (in press).



### 3 (iii)

#### THE THREE COUNTY SCHIZOPHRENIA STUDY

The fieldwork of this project which was concerned with establishing the incidence and prevalence of psychiatric illness by using a standardised approach has now been completed. Preliminary findings concerning the relationship between social class and schizophrenia deriving from this study have been published.<sup>1</sup>

Further reports from the study are in course of preparation.

#### *Reference*

<sup>1</sup> O'Hare, A. and McHugh, B. A sociological dimension of mental illness in three counties of Ireland: selected characteristics of incidence patients. *Irish Journal of Psychiatry*, 1982, 2, 1, 8-19.

### 3 (iv)

#### **DETERMINANTS OF OUTCOME OF SEVERE MENTAL DISORDERS**

The Board's staff are taking part in a joint collaborative enterprise with eleven other centres throughout the world co-ordinated by the World Health Organisation in studying, by standardised methodologies, the incidence of schizophrenic illness. In addition to the major object of the study, we are participating in one of several sub-studies, the "Disability" sub-study. Because there is evidence suggesting that the outcome for schizophrenic patients is less favourable in Ireland than elsewhere, we have been anxious to explore the reasons for this. The "Disability" sub-study has provided an ideal vehicle for such an investigation. Briefly it is concerned with measuring the rate at which disabilities and impairments develop in schizophrenic patients following the onset of illness and in studying the social influences which appear to influence the extent and severity of the disabilities. A general description of the study has been prepared and will shortly be published.<sup>1</sup>

The field work for this study is now complete and the analysis of the schedules utilised in the study are being processed by the World Health Organisation in Geneva. The World Health Organisation will be producing a major publication presenting the global results and general conclusions from the study. At the same time we will be publishing the results of the Irish centre independently.

#### *Reference*

<sup>1</sup> O'Connor, A. Measuring Social Disability in Irish Psychiatric Patients — A W.H.O. Study. *Irish Journal of Psychiatry* (in press).

### 3 (v)

#### **MENTAL HEALTH SERVICES IN PILOT STUDY AREAS**

This study which is taking place in 21 centres in 19 countries in the European region of the World Health Organisation has now been completed. The Board is participating through the utilisation of the St. Loman's Hospital, Dublin, catchment area as the Irish centre. The study is concerned with a descriptive, comparative and analytic account of psychiatric services throughout Europe. The findings of the project will be published by the World Health Organisation. The Medico-Social Research Board has been entrusted with the writing of a chapter concerned with the comparative aspects of the services.

## **AFTERCARE AND THE UTILISATION OF SERVICES BY DISCHARGED PSYCHIATRIC IN-PATIENTS**

This study, which was supported by the Board, was a prospective one-year follow-up of the utilisation of aftercare by 216 in-patients following discharge. It was carried out by Dr. Petrina Keane and Professor T. J. Fahy on case material from St. Loman's Hospital, County Dublin. The results of the study have recently been published. Briefly the findings indicate that patients with severe and disabling psychiatric illness who are socially disadvantaged make most claim on the aftercare services. A further finding of great importance, which has been corroborated by our own case register studies, is that general practitioners play little part in the aftercare of discharged psychiatric in-patients.

### *Reference*

<sup>1</sup> Keane, P. and Fahy, T.J. Who Receives the Aftercare? Utilisation of Services by Discharged In-patients. *Psychological Medicine*, 1982, 12, 891-902.

## **A SOCIOLOGICAL DIMENSION OF MENTAL ILLNESS IN THREE COUNTIES IN IRELAND**

A major study of the "Incidence of Mental Illness and the Community Incidence and Prevalence of Schizophrenia in Carlow/South Kildare, Westmeath and Roscommon" was carried out by the Board from 1974 to 1977. The study had a sociological and psychiatric dimension, and the information was collected by interview in the same three counties, or study areas, in which the psychiatric case registers operate. The first report on this study has been published.<sup>1</sup> Others to follow include an analysis of patients' early childhood experiences and their role behaviour prior to first contact with the psychiatric services compared with matched controls.

The findings show that incidence rates for women contacting the psychiatric services in the three study areas were higher than those of men at 260, compared with 212, per 100,000 population aged 15 and under 65 years. A higher incidence for women is a common finding in western societies and is interpreted by sociologists as relating to the woman's role which is seen as less fulfilling and more confined than that of men. An unexpected finding was that in two of the three study areas the rates for depression were higher for men than women. In both those areas the community-based services were not as well developed as in the third area, possibly making it difficult for married women (and the majority were married in our study and from rural areas) to attend for treatment. Alternatively, female patients may consult with their general practitioner or may not be receiving treatment for their depression.

Incidence rates in the study were highest in the age group 45 to under 65 years. For schizophrenic patients, the age of first contact is high and suggests a delay between the onset of illness and contact with care. An inverse relationship existed between morbidity and social class (based on occupation) with lower social class patients over-represented. In one of the study areas there was an eight-fold difference in rates between the lower and upper social classes. In that area adverse socio-demographic

factors appear to contribute to the high rates for the elderly, lower social class and possibly schizophrenic patients.

*Reference*

<sup>1</sup> O'Hare, A. and McHugh, B. A sociological dimension of mental illness in three counties of Ireland: selected characteristics of incidence patients. *Irish Journal of Psychiatry*, 1982, 2, 1, 8-19.

**SOCIAL FACTORS AFFECTING FIRST CONTACT WITH  
PSYCHIATRIC CARE**

Aideen O'Connor, B.Soc.Sc., a member of the Board's staff, has been accepted by University College, Dublin, to write a M.Soc.Sc. thesis on "Social factors affecting first contact with psychiatric care".

The subject of this thesis was prompted by her observations during the fieldwork of previous studies of the length of time that elapsed between the early manifestations of mental illness and the decision to look for psychiatric treatment. Much of the literature on how people behave when ill has revealed that the decision to look for treatment is rarely taken alone but in consultation with others—family, friends, colleagues—whose advice and opinions are sought before approaching a professional.

Her intention is to interview a group of schizophrenic patients and their relatives in order to examine the social context within which the decision to look for psychiatric treatment was taken. Schizophrenia is considered an appropriate illness for this kind of investigation because its often insidious onset leads to delay in seeking treatment.

**OTHER STUDIES IN MENTAL HEALTH**

The Board has recently concluded with Dr. Fuller Torrey of St. Elizabeth's Hospital, Washington, and Drs. P. Spellman and M. Maguire, St. Patrick's Hospital, Castlerea, a study on "Endemic Psychosis in Western Ireland". This study examined in depth the prevalence of psychotic illness, and schizophrenia in particular, in a circumscribed region of western Ireland. The study revealed an extremely high prevalence of psychiatric illness in this particular area. The results will be published shortly.

In collaboration with the psychiatrists from St. Patrick's Hospital, Castlerea, and the Department of Medicine, University College, Galway, we are embarking on a study of the histocompatibility lymphocyte antigen (HLA) (these are genetic characteristics of the blood's lymphocytes) make-up of families in which two or more members are affected with schizophrenia. One of the objectives of this study is to determine if the schizophrenic members of such families are more alike genetically than those not so affected and, if so, what specific portions of the HLA system are affected. The HLA status of all first degree relatives of affected members will be examined in an attempt to establish whether or not there is any relationship between the inheritance of HLA characteristics and of schizophrenia.



### AN IRISH CENSUS-BASED SOCIAL CLASS SCALE

The social class/prestige scales, notably the British Registrar General's Scale and the Hall Jones Prestige Scale, currently used for Irish research purposes were reviewed and considered unsuitable for epidemiological research, as they do not refer to the demographic characteristics of the Irish population as used for the national census.<sup>1</sup>

During 1982, at the initiative of the Medico-Social Research Board, a group of interested people, from the Department of Health, the Coronary Care Unit, St. Vincent's Hospital, Elm Park, the Economic and Social Research Institute, the Agricultural Institute (An Foras Talúntais), the Social Science Department of University College, Dublin and the Health Education Bureau met and developed an interim social class scale of six mutually exclusive categories based on combinations of the broad occupational groupings used by the Central Statistics Office (CSO) in the 1981 census. There are three non-manual and three manual classes in the Scale as follows:

1. Higher Professional, Higher Managerial and Proprietors
2. Lower Professional and Lower Managerial
3. Intermediate Non-manual
4. Skilled Manual
5. Semi-skilled Manual
6. Unskilled Manual
7. Not Known.

Social classes are defined as essentially "economic groups" into which people can be objectively placed because of their differing access to life changes and different characteristics of life style. The criteria used to place people into these six classes were drawn from recent work in this field by Goldthorpe,<sup>2</sup> Whelan,<sup>3</sup> Rottman, Hannan *et al*<sup>4</sup> and from the Farm Management Survey.<sup>5</sup>

The Central Statistics Office (CSO) agreed to make 1981 national census information on social class available to *bona fide* researchers for such variables as age, sex, marital status, educational attainment and fertility patterns. The availability of glossaries used by the CSO to code occupations into the six class categories has been requested. The Scale is not a fully ordinal one because of the current structure of the census classification.

As a consequence a working party is to be established by the Board to:— (1) examine how the collection and coding of CSO occupational data could be improved, and (2) liaise with the CSO in achieving desired objectives prior to the next census. It is hoped that the CSO will include a description of this new Social Class Scale and output from it in their relevant published volume from the planned 1986 Census. The MSRB plan to use the Social Class Scale in their analyses of incidence data from the Three County Psychiatric Register Study and also in conjunction with the Federation of Services for Unmarried Parents and their Children in the study of "Selected Characteristics of Women who have Illegitimate Births in Ireland in 1983".

#### References

<sup>1</sup> O'Hare, A. A note on a proposed census-based Irish Social Class Scale for epidemiological health research. *Economic and Social Review*, 1982, 13, 3, 205-216.

<sup>2</sup> Goldthorpe, J.H. *Social Mobility and Class Structure in Modern Britain*, Oxford, Clarendon Press, 1980.

<sup>3</sup> Whelan, C.T. Employment conditions and job satisfaction: the distribution, perception and evaluation of work rewards. Dublin, ESRI, Paper No: 101, 1980.

<sup>4</sup> Rottman, D.B., Hannan, D.F. and Hardiman, N. Wiley, M.M. The distribution of income in the Republic of Ireland: a study in social class and family-cycle inequalities. Dublin, ESRI, Paper No. 102, 1982.

<sup>5</sup> An Foras Talúntais. *Farm Management Survey*, 1980, Dublin, 1981.

## ALCOHOL-RELATED PROBLEMS

The Medico-Social Research Board has been monitoring alcohol consumption and its effects. The studies reveal that co-incident with the recent decline in alcohol consumption in Ireland the indices of alcohol-related damage such as admissions to psychiatric hospitals for alcoholism, prosecutions for drunkenness, and prosecutions for drunk driving and mortality from cirrhosis of the liver have all declined. (Figures 1-5). This recent decline contrasts with the steep rise in all these problems which were associated with the rapid increase in alcohol consumption in Ireland between 1966 and 1979. Thus there is very strong evidence indicating that the indices of alcohol damage relates to alcohol consumption in Ireland. This places a strong responsibility on governments to adopt policies towards alcohol which will ensure that its consumption will not increase but will fall.

In association with the Finnish Foundation for Alcohol Studies, the Addiction Research Foundation of Ontario, Canada, the Social Research School of Public Health, University of California, the Neuropsychological Institute of Poland, Warsaw and the World Health Organisation, the Medico-Social Research Board (Dr. Dermot Walsh) are co-authors of a book entitled "Alcohol, Society and the State, Volumes 1 and 2". In conjunction with the Commission of the European Communities, the Board has reviewed alcohol problems and the approach to them in the European countries. The findings of the review have recently been produced in book form.<sup>2</sup> In collaboration with the World Health Organisation we have produced a volume in the "Public Health in Europe" series entitled "Alcohol-related Medico-social Problems and their Prevention".<sup>3</sup>

### *References*

<sup>1</sup> Makela, K., Room, R. and Single, E. et al. Alcohol, Society and the State 1 and 2. Toronto: Addiction Research Foundation, 1981.

<sup>2</sup> Davies, P. and Walsh, D. Alcohol Problems and Alcohol Control in Europe. London: Croom-Helm, 1983.

<sup>3</sup> Walsh, D. Alcohol-related Medico-social Problems and their Prevention. Copenhagen: World Health Organisation, 1982.

Figure 1

IRELAND 1965-1981. LITRES ALCOHOL PER CAPITA 15+.

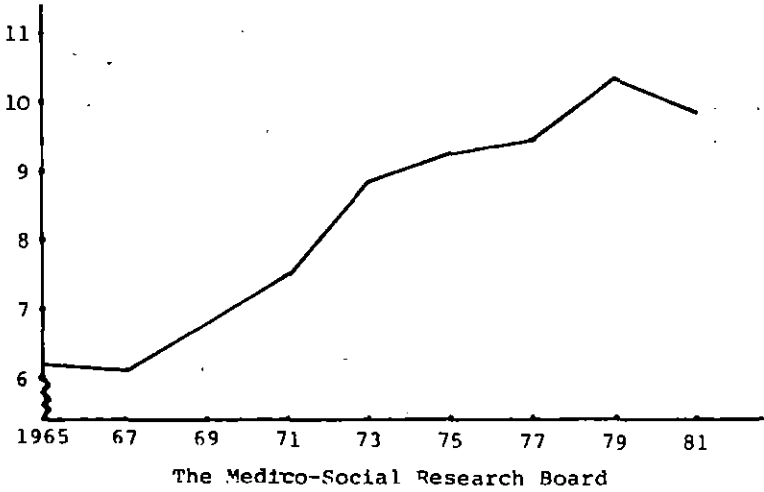


Figure 2

PSYCHIATRIC HOSPITALS  
IRELAND 1966-1980. ALL ADMISSIONS.  
ALCOHOLISM. NUMBERS.

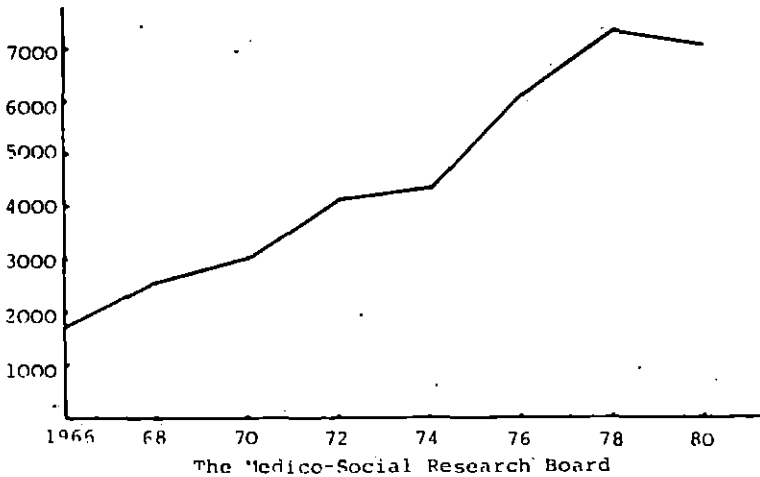


Figure 3

PSYCHIATRIC HOSPITALS  
IRELAND 1966-1980. ALL ADMISSIONS.  
ALCOHOLISM. RATES/100,000.

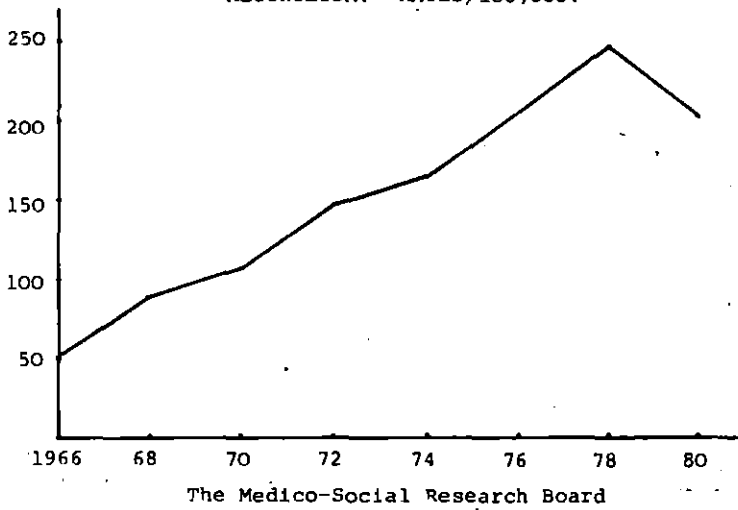


Figure 4

IRELAND 1966-1981. CIRRHOSIS. DEATHS. RATES/100,000.

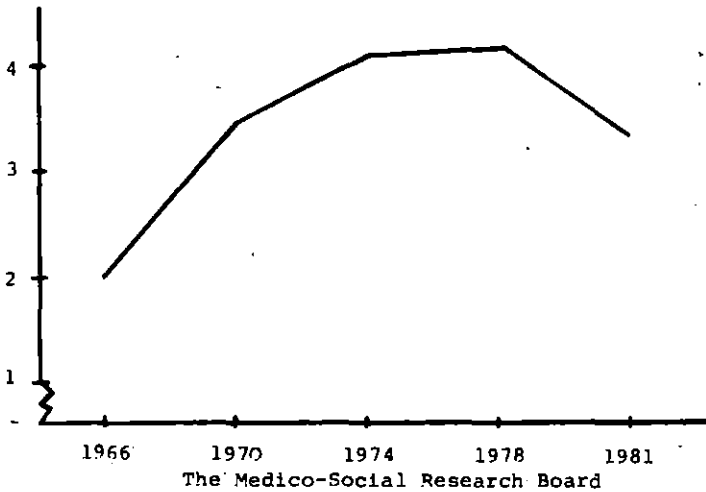
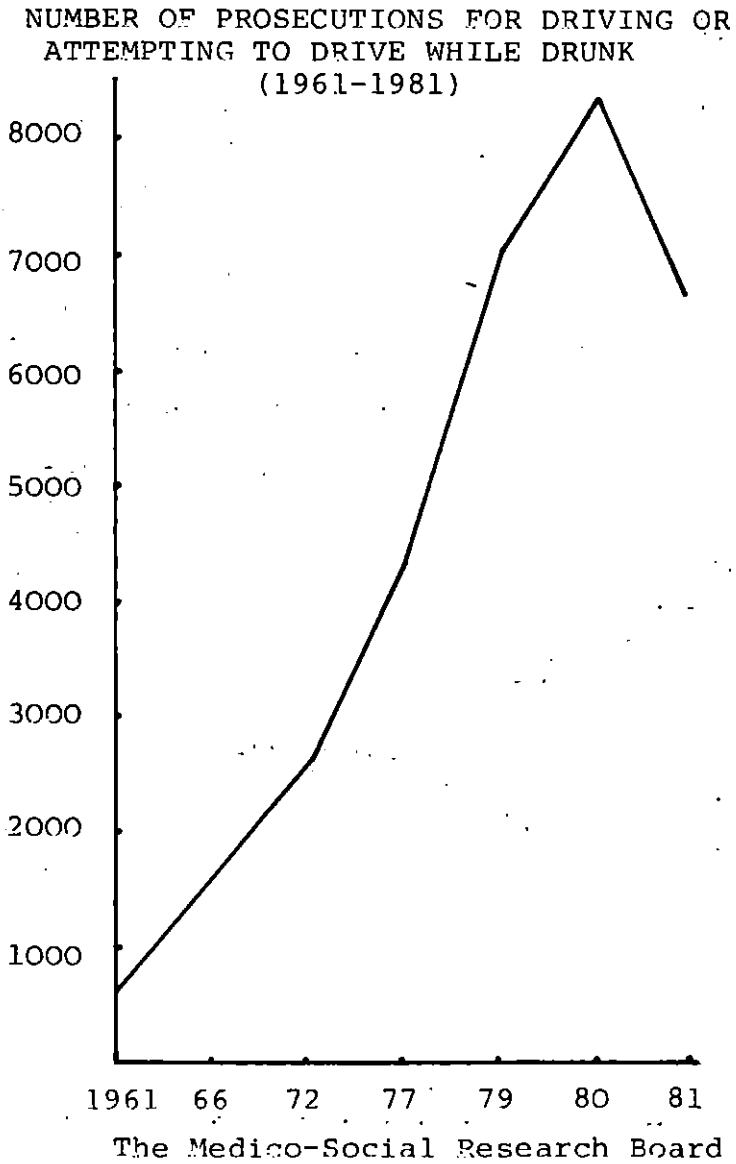


Figure 5



### **SUICIDE AND ATTEMPTED SUICIDE**

Together with the coroners of Dublin City, Dublin County and the County of Kildare, the Board has completed the field-work of a five-year retrospective survey of coroners' inquests in these three jurisdictions. The coroners have scrutinised their records and provided accurate data on all deaths they have believed to be suicide. The data are currently being processed and the results will be published as soon as possible.

During a European collaborative workshop on attempted suicide in the countries of the Commission of European Communities held in Dublin in 1977 Danish participants remarked that attempted suicide or deliberate self-poisoning, (often a cry for help), in Denmark was relatively uncommon compared with other European countries and that when it did occur it happened among older people than in the other countries. Stimulated by this observation, the Board embarked on a comparative study of suicide and attempted suicide in Denmark, Ireland and the United Kingdom. The results, which have now been presented for publication, confirmed the Danish observations relating to attempted suicide and also show that completed suicide is more than twice as common in Denmark than in Ireland and the United Kingdom.

**TERMINATION OF PREGNANCY OF IRISH RESIDENTS  
IN ENGLAND AND WALES**

The Board continues the series of reports relating to the numbers and characteristics of women normally residing in Ireland whose pregnancies are terminated in England and Wales.<sup>1,2,3</sup> The accompanying graph indicates the continual rise in their numbers since the introduction of legal abortion in England and Wales in 1967.

*References*

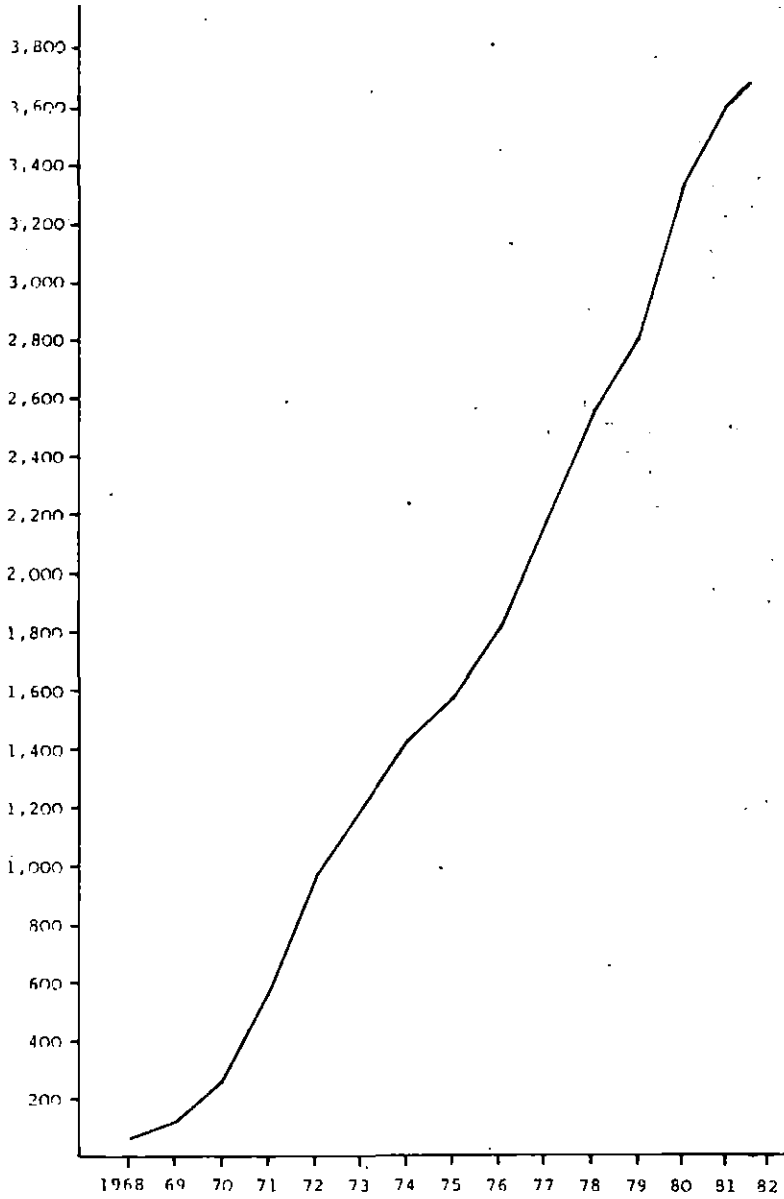
<sup>1</sup> Walsh, D. Abortions Among Irish Women in England and Wales, 1978. Irish Medical Times, 1979, 23, 20-21.

<sup>2</sup> Walsh, D. Pregnancy Terminations in England and Wales on Irish Residents, 1979. Irish Medical Times, 1982, 16, 1, pp. 1, 2 and 8.

<sup>3</sup> Walsh, D. Pregnancy Terminations in England and Wales on Irish Residents, 1980. Irish Medical Times, 1982, 16, 15, 20.



Irish Residents - Legally Induced Abortions in England  
and Wales 1968-1992



**FEDERATION OF SERVICES FOR UNMARRIED  
PARENTS AND THEIR CHILDREN**

The third edition of the Directory of Services in Ireland for Unmarried Parents and their Children was completed in 1982. It contains comprehensive information on:

- the role of the Federation;
- the legal aspects of illegitimacy and adoption procedures;
- services provided by relevant social work agencies for unmarried mothers and
- available medical care, financial entitlements, accommodation and provision of care for children.

As for previous editions of the Directory, the Board financed the summer employment of a social science student to work under the supervision of Aileen O'Hare, sociologist with the Board, in the collection and compilation of data.

Considerable information now exists on the range of services available to unmarried parents and their children in Ireland but in the absence of data on clients, their use of, and attitude to, existing services it is impossible to ascertain to what extent these services are meeting need. Accordingly, when a student was employed by the Medico-Social Research Board for the summer of 1982 her brief was to contact the member agencies of the Federation to determine the feasibility of collecting client-based information. The agencies co-operated in allowing an examination of their record systems and were in agreement that a core set of standard data gathered by each agency would greatly improve the quality of available information and allow for inter-agency comparisons. The Federation decided that the logical starting point for obtaining a profile on Irish unmarried mothers was to obtain information from hospitals where mothers were confined. A research proposal was drawn up to gather descriptive information on selected characteristics of unmarried mothers delivered of their babies in hospital during

1983. The Irish maternity hospitals and maternity units in large general hospitals have agreed to co-operate and it is envisaged that this will cover 90%-95% of all illegitimate births. Considerable public relations work and preliminary planning has been carried out by Margaret Dromey, Information Officer of the Federation. A person in each hospital, generally the social worker, has agreed to complete the questionnaires — using a unique number for each record — which will be returned to the Federation at quarterly intervals.

The field work will take place from January 1st to December 31st, 1983. It is envisaged that the data will be processed at regular intervals throughout 1983 and that the analysis and report of the findings will be completed in 1984. The Health Education Bureau has agreed to part-fund the study. Aileen O'Hare will be the research supervisor for the study.

#### 4 (i)

### **RECORD SYSTEM FOR MENTAL HANDICAP — REVIEW PROCEDURES**

A record system for mental handicap was established under the Board's direction in 36 community care areas during 1979-80. The record system had a twofold purpose:

- (1) to facilitate a National Census of the Mentally Handicapped which was conducted by the Board in 1981.<sup>1</sup>
- (2) to make available a readily accessible, accurate, common source of information on mentally handicapped persons. The information thus available would be used for providing statistics at local level, facilitating planning of local services, as a source of information for routine enquiries and to assist other departments, e.g. social welfare.

The record systems were used for the initial purpose of the Census of Mental Handicap in 1981 and the Mental Handicap Division of the Board has since been engaged in a statistical analysis of the information. The main part of this study is now completed. In order to evaluate the usefulness of the record systems for service delivery and planning, all community care areas have since been visited by a member of the Board's staff. Informal discussions were held with those responsible for maintaining the system in each community care area and a report of the findings has been compiled for each Director of Community Care and Medical Officer for Health. This report finds that very positive attitudes towards the record system exist in most areas.

The practical everyday uses of the system vary from area to area and the extent to which the system is being used to plan future services is difficult to gauge. The provision of a readily accessible source of statistical data on the mentally handicapped was widely perceived by those interviewed as the system's greatest advantage.

Since the investigation found that each community care area is to a certain extent unique, it is felt that a standardised

updating procedure is not feasible. The report outlines a number of possible updating procedures from which each area must choose the one most appropriate to its needs. Specific suggestions are made for the Eastern Health Board region where the problem of updating is deemed to be greatest. In general, regular use of the record systems, and the establishment of an efficient communication network between key personnel in community care, are recommended to enable satisfactory care to be provided for the mentally handicapped in the area.

*Reference.*

<sup>1</sup> Mulcahy, M., O'Connor, S. and Reynolds, A. Census of the Mentally Handicapped in the Republic of Ireland, 1981, Irish Medical Journal (in press).

#### 4 (ii)

### THE ADULT MENTALLY HANDICAPPED LIVING AT HOME IN COUNTY KILDARE

This survey is designed to complement the findings of similar studies carried out in two other community care areas of the Eastern Health Board. Interviewing of a family member in each family in County Kildare which has a mentally handicapped adult living at home with them commenced in the latter half of 1982 and it is expected that the task of interviewing all such persons will be completed in the Spring of 1983. The earlier surveys revealed very large gaps in our community services for the adult mentally handicapped. It was important to confirm this by extending the size of the sample to include a further community care area and to include a rural area, as opposed to the inner city and suburban areas which were represented in the first surveys. The design of the present survey is similar to that used earlier.<sup>1,2,3,4</sup>

The Board wishes to acknowledge the help of the community care team in Kildare and all the agencies providing services on a day basis for mentally handicapped persons from that county. We wish to thank particularly Mrs. R. Ferrier and the Eastern Health Board who are jointly funding this survey. Without their valuable help it could not have been undertaken.

#### *References*

<sup>1</sup> Walsh, J. and Mulcahy, M. Service Requirements of Adult Mentally Handicapped Persons Living in the Community. *Irish Medical Journal*, 1982, 75:1, 13-15.

<sup>2</sup> McConkey, R. and Walsh, J. An Index of Social Competence for Use in Determining the Service Needs of Mentally Handicapped Adults. *Journal of Mental Deficiency Research*, 1982, 26, 47-61.

<sup>3</sup> McConkey, R., Walsh, J. and Mulcahy, M. Mentally Handicapped Adults Living in the Community — a survey conducted in and around the City of Dublin. *Mental Handicap, Apex*, 1982, 10:3.

<sup>4</sup> McConkey, R., Walsh, J. and Mulcahy, M. The Recreational Pursuits of Mentally Handicapped Adults. *International Journal of Rehabilitation Research*, 1981, 4, 493-499.

#### 4 (iii)

### COMMUNITY BASED RESIDENCES FOR THE MENTALLY HANDICAPPED

The Board is interested in the need to provide residential care for mentally handicapped persons. The move towards community as opposed to large institutional care has generated much discussion. At first group homes accommodating 20 to 25 persons were favoured, for example, in the United Kingdom. More recent reports in the literature recommend that community-based residences should be on a domestic scale accommodating only a small number of people.<sup>1,2,3</sup>

It can be anticipated that as a result of these recommendations many such domestic scale residences for the mentally handicapped will be provided during the next decade. It is important at this stage to evaluate existing residences of this type with particular reference to certain aspects, e.g. staffing and supervision.

In 1978 Dr. Geoffrey Carroll of the Board's staff, carried out a survey of the existing hostels for the mentally handicapped in the Republic of Ireland.<sup>4</sup> During 1982 the Board commenced planning a major survey of community-based residential accommodation for the mentally handicapped in Ireland, and also plans to compare this development in Ireland with similar developments within the European Economic Community (EEC).

Preliminary meetings have been held with the representatives of Stewart's Hospital, Dublin, and the Brothers of Charity Services who between them operate the majority of hostels for the mentally handicapped in Ireland. Discussions at these meetings pinpointed areas which require further research.

An application has been made to the Committee for Medical Research (CRM) of the EEC for support for a symposium to plan an evaluation programme for domestic scale community based residences for the mentally handicapped in the countries of the European Community.

### *References*

<sup>1</sup> Committee of Enquiry into Mental Handicap Nursing and Care, H.M.S.O., London, 1979.

<sup>2</sup> European Conference on Habitat and Living Environment, Recommendations, I.L.S.M.H., 1981.

<sup>3</sup> Government Working Party. "Services for the Mentally Handicapped", Dublin, 1980.

<sup>4</sup> Carroll, G. Care in Community Residences for Mentally Retarded Adults in Ireland. Submitted for degree of M.Sc. (Social Medicine), University of London, 1979.



#### 4 (iv)

### PHYSICAL AND MENTAL HANDICAP

Epidemiological information about physical handicap is much less available than for mental handicap. A report by the National Economic and Social Council states:— “there is no comprehensive source of information available at present whereby data on the number, distribution and forms and extent of physical handicap may be obtained”.<sup>1</sup> During the course of the setting up of the community care based record systems on mental handicap many of the Directors of Community Care and Medical Officers of Health expressed an interest in a parallel system which would deal with physical handicap.

Following discussions with the Department of Health and the National Rehabilitation Board (NRB) a committee was set up under the chairmanship of Mr. Denis Doherty, then Programme Manager, Community Care, North Western Health Board\*, to investigate the feasibility of introducing a similar record system for physical handicap. Through the work of this committee and in particular that of Dr. P. K. Murphy, Director of Community Care, and Medical Officer of Health, Eastern Health Board — Area 3 and, with the assistance of Miss Sile O'Connor of the Board's staff, a record system was started. Several meetings of the committee took place during 1982 at which the Medico-Social Research Board (MSRB) was represented. It was agreed that co-ordinating and advising on the evolution of the record system for physical handicap should best be left to the NRB rather than to the MSRB. However, until the system is fully established the MSRB will continue to be represented on the steering committee.

\*At present the Chief Executive Officer of the Midland Health Board.

#### *Reference*

<sup>1</sup> Faughnan, P. and O'Connor, S. Major Issues in Planning Services for Mentally and Physically Handicapped Persons. National Economic and Social Council, Report No. 50. Government Publications, Dublin, 1980.

## THE NEURAL TUBE DEFECT STUDY

The paper by Smithells and his colleagues published in 1980<sup>1</sup> suggesting that vitamin supplementation around the time of conception might reduce the risk of recurrence of neural tube defects (especially anencephalus and spina bifida) among high risk mothers is of considerable interest in Ireland because of the relatively high frequency of these birth defects in this population. The Masters of the three Dublin maternity hospitals and the Senior Obstetrician in St. James's Hospital suggested that further work on this problem should be undertaken and they established the Dublin Neural Tube Defect Study Group. The members of the study group are: Dr. I. Dalrymple, Rotunda Hospital; Dr. N. Duignan, Coombe Hospital; Professor H. Elwood, Queen's University, Belfast; Professor E. Guiney, Children's Research Centre, Crumlin, Dublin (Chairman); Dr. T. Hanratty, St. James's Hospital; Dr. P. Kirke, Medico-Social Research Board, (Director of the Project); Dr. D. MacDonald, National Maternity Hospital. Professor J. Scott, Trinity College, Dublin and Dr. L. Daly, University College, Dublin, are scientific advisers to the group.

One of the first tasks of the group was to determine the risk of recurrence of neural tube defects (NTD) in the four maternity hospital populations. A retrospective study was carried out by Dr. Patricia MacCarthy to measure the risk of recurrence of NTD among mothers who gave birth to an affected baby in the study hospitals during 1970-1975<sup>2</sup>. During this period 129,238 live births and stillbirths occurred in these hospitals and 840 had a NTD, giving a prevalence rate at birth of 6.5 per 1,000 total births. The recurrence rate of NTD in the subsequent pregnancies of these mothers was 5.5%.

As reported in previous Annual Reports (1980 and 1981), the study group initiated a randomised clinical trial to test the efficacy of vitamin supplementation around the time of conception in reducing the risk of recurrence of NTD in mothers with a previous history of an affected baby. Recruitment to the study commenced in January 1982 and by the end of the year 117

mothers were randomised to receive treatment; a further 126 mothers have indicated that they wish to join the study over the next two or three years.

*References*

<sup>1</sup> Smithells, R.W., Sheppard, S., Schorah, C.J., *et al.* Possible prevention of neural tube defects by periconceptional vitamin supplementation. *Lancet* 1980; *i*: 339-40.

<sup>2</sup> MacCarthy, P.A., Dalrymple, I.J., Duignan, N.M., *et al.* Recurrence Rates of Neural Tube Defects in Dublin Maternity Hospitals. *Irish Medical Journal*, 1983; 76:2. 78-9.

## ACCIDENTS IN CHILDHOOD

Accidents constitute the most important public health problem in the 1-14 year age-group in Ireland as in other developed countries. In the three-year period, 1976-1978, accidents resulted in the deaths of 415 Irish children (1-14 years) and accounted for one-third of all childhood deaths. In 1980 accidents were responsible for 13,600 (19%) of the 73,000 admissions of 1-14 year olds to Irish hospitals which were reported to the Hospital In-patient Enquiry Scheme.

The main epidemiological features of accidents in childhood in Ireland were first presented in a paper published in 1980.<sup>1</sup> This paper was concerned mainly with accidental deaths occurring during the period 1965-1974. A further epidemiological study of childhood accidents commenced in 1982. In this study trends in accident mortality in Ireland since 1950 will be examined and Ireland's experience will be compared with that of other European countries. Recent trends in hospitalisation following accidents will also be examined using the Hospital In-patient Enquiry data. A report on this study will be prepared for publication in 1983.

The main purpose of this research is to increase public and professional awareness of the extent and nature of the childhood accident problem in Ireland as a first step towards developing strategies for prevention.

### *Reference*

<sup>1</sup> Brannick, T. and Kirke, P. Childhood accidents in Ireland. *Irish Medical Journal*, 1980; 73:6, 220-26.

**CONCERTED ACTION BY THE EUROPEAN ECONOMIC  
COMMUNITY IN MEDICAL AND PUBLIC HEALTH  
RESEARCH 1982-1986**

During 1982 the Director of the Board was Chairman of the Working Group in Epidemiology of the EEC, now known as the Concerted Action Committee (Comité Action Concerté, COMAC), in Epidemiology. A five-year programme of research was approved by the Committee for Medical Research (CRM) whose meetings the Director also attends. Two major concerted action projects which have been approved and which are now taking place are concerted action on congenital abnormalities and twins and concerted action on nutrition. The concerted action on congenital abnormalities and twins, known as EURO-CAT, is under the direction of Dr. Josephine Weatherall and the Irish participation in the study is under the supervision of Dr. Alicia Radic of the Medico-Social Research Board. COMAC/Epidemiology has approved plans for the maintenance and improvement of the EUROCAT Register's standards by the interchange of register staff and by the development of paediatric pathology and perinatal epidemiology by means of workshops and also by workshops for statisticians and the preparation of illustrated guides of congenital abnormalities. CRM has also approved specific research projects on the reporting of limb defects, on congenital heart defects, on multiple congenital malformations, on the trends in the prevalence at birth of neural tube defects and of the specific use of registers to determine preventable malformations.

Other studies proposed by COMAC/Epidemiology and approved by CRM are those on chromosomal non-disjunction; on the evaluation of ultrasonography; on perinatal mortality statistics; on early foetal loss; on the sudden infant death syndrome and on neural tube defects in relation to the nutritional status of the mother.

A major concerted action has also been approved on nutrition and, in particular, the effect of diet and salt intake on hypertension and the effect of fibre intake on the digestive tract. Professor

John Kevany of Trinity College, Dublin has taken a major part in planning this very important programme and is a member of the small programme management group.

COMAC/Epidemiology also plans studies on the abuse of stimulants and drugs, which are divided into three groups, tobacco, alcohol and opiates. The tobacco research will include tobacco consumption in the countries of the Community, smoking habits in various age, social class and area of residence groups, and, in particular, the evaluation of health education and strategies to discourage smoking in EEC member states. Dr. Dermot Walsh of the Medico-Social Research Board has prepared a proposal for studies on the disadvantages and advantages of alcohol consumption within the countries of the Community and, in particular, the standardisation of information about alcohol consumption in the various social class and other groups and its effects on health, e.g. in such matters as admissions to psychiatric hospitals for alcoholism, road traffic accidents, the development of cirrhosis and suicide. It is also proposed that there should be collaboration with the Pompidou group in the studies of the rapidly increasing problems related to the use of hard drugs such as heroin.

COMAC/Epidemiology is also preparing plans under the title of "Upgrading Epidemiology" and "Upgrading Occupational Health". In order to upgrade epidemiology in the countries of the EEC, Professor John Pemberton, Emeritus Professor of Social Medicine, Queen's University, Belfast, has been commissioned to prepare a paper describing the present position of epidemiology in the EEC countries. This will include a description of present training in epidemiology, both at undergraduate and postgraduate level, a description of the career prospects and the possibilities for recruitment and whether there are any improvements necessary in this area. He will also study the possibilities for undertaking epidemiological research of both infectious and non-infectious conditions in the Community countries. He will ascertain the prospects for obtaining money for research and, lastly, he will report on what notice is taken in member states of the findings of epidemiological research and how this research can be better disseminated and implemented.

COMAC/Epidemiology will also be making a considerable contribution to the work of the other three COMACS, Health Service Research, Biology and Bioengineering.

The Medico-Social Research Board has been able to make major contributions to the structure and planning of the pro-

posed concerted action programme of the Committee for Medical Research of Directorate-General XII (Science, Research and Development) and of Directorate-General V (Employment, Social Affairs and Education), through the study on "The aetiology of accidents and diseases connected with work". The Board hopes to continue its contribution to these important programmes in the years to come. Some of the EEC projects in which the Medico-Social Research Board and its staff took part during 1982 are described in this Annual Report.

**6 (ii)**

**CONCERTED ACTION PROJECT ON REGISTRATION OF  
CONGENITAL ABNORMALITIES.  
EUROCAT**

The EEC Council Decision of 17 August 1982 has approved the extension of the concerted action project on registration of congenital malformations for another five years, i.e. until the end of 1986. The participating centres send information on congenital malformations to Brussels. The 17 areas in ten countries had 288,482 births in 1981 and 4,748 congenital abnormalities were reported. In Dublin there were 25,931 births and 677 reported congenital abnormalities and in Galway 3,334 births with 56 reported congenital abnormalities.

Following the selection of the centres the next phase of the concerted action will be the application of the registers to specific research projects. The proposed studies are on:

- (a) Improved reporting of limb defects.
- (b) Congenital heart defects.
- (c) Multiple congenital malformations.
- (d) Trends in the incidence at birth of neural tube defects.
- (e) Use of registers to determine preventable malformations.

Special research projects based on the system include:—

1. Parental origin of non-disjunction of the chromosome in Down's Syndrome.

This study is proposed by Professor N. Nevin of Queen's University, Belfast. The purpose is to discover the parental origin of the abnormality to identify possible environmental factors responsible for the non-disjunction.

2. Identification of abnormalities of the X chromosome in X linked human disease (including congenital malformations).



3. A study in the use of ultrasound (and possibly other non-invasive techniques) in antenatal period.
4. The prospective recording of personal and social information during pregnancy.
5. Assessment of consumer opinion of genetic counselling services.

It is hoped that the Dublin registry will take part in some, if not all, of these studies.

## THE AETIOLOGY OF ACCIDENTS AND DISEASES CONNECTED WITH WORK

Following earlier EEC studies on farmer's lung in Ireland undertaken by the Medico-Social Research Board and on respiratory diseases in agriculture undertaken in France, a group of epidemiologists and clinicians from eight of the EEC countries was set up to examine the problem of respiratory disease in agricultural workers in the countries of the EEC. The group organised a comparative study of death certification within the countries of the Community which has already been reported.<sup>1,2</sup>

The present study is an extension of this work and is directed towards producing methods of obtaining information about health problems related to occupational activity. It is studying disease patterns from data which has already been routinely collected. The methodology previously developed to examine between-country differences in mortality has been expanded to include diseases other than respiratory disease, other occupational groups and social classes besides agricultural workers and has been expanded to cover a period of time. It has been necessary to examine between-country variations in the composition of these groups. Differences in classification of occupation, social class and socio-economic groups are being investigated.

The group has already explored a method of studying variations in death certification and coding practices to examine possible explanations for between-country differences in death from respiratory diseases. This method has been expanded to cover other diseases, including cardiovascular disease. Details of specific cases have been circulated to the doctors in each country to investigate between-country differences underlying the production of mortality data statistics. Other methods for the preparation of case histories, for example the inclusion of autopsy data in the history, are also being examined.

Cancers of various sites are of special interest in terms of occupation and life style. Cancer of the colon and rectum, thyroid, melanoma, and cancer of the uterus and prostate have

been selected for this study. Coronary heart disease has been used as an example of a non-cancer disease. The cancers chosen represent common and less common ones, as well as those where an aetiological agent related to the environment or occupation is known already and where such aetiological clues are not yet available. Occupational groups will be studied such as administrators and managers and, in comparison, unskilled manual workers. The study will make comparisons over the years 1955 to 1975.

#### *References*

<sup>1</sup> Heller, R.F. and Kelson, M.C. Respiratory disease mortality in agricultural workers in eight member countries of the European Community. *International Journal of Epidemiology*, 1982, 11, 2, 170-174.

<sup>2</sup> Dean, G. Respiratory disease and heart attacks among rural workers in Ireland and other countries of the European Economic Community. *Irish Medical Journal*, 1982, 75, 9, 338-342.

## **INFORMATION FOR FARMERS TO PREVENT OCCUPATIONAL RESPIRATORY DISEASE**

This study is to ascertain the structures within the countries of the Community that are being used or can be used to help the training and education of farmers and agricultural workers about the specific dangers to health in their profession. Particular emphasis is placed on the dangers of respiratory disease due to the inhalation of dust containing allergens, for instance farmer's lung and poultry worker's lung, and also from the inhalation of insecticides and other sprays.

Previous work has shown that farmer's lung is particularly common in the West and the North West of Ireland.<sup>1,2</sup> A campaign was organised in Ireland in collaboration with the Irish Farmers' Association, the Health Education Bureau, the West and North-Western Health Boards, television and newspapers warning all farmers about the dangers of inhaling the dust from mouldy hay which can result in allergic alveolitis. A study was undertaken in collaboration with the North-Western Health Board to ascertain the effectiveness of this campaign and the report on this study has been published.<sup>3</sup>

The study was undertaken in Counties Donegal, Leitrim and Sligo, on 100 randomly chosen farmers. Twenty-seven of the 100 farmers complained of symptoms while forking mouldy hay. It was found that there was a high level of awareness of the causes of farmer's lung and how the inhalation of the dust from mouldy hay can be avoided.

In order to obtain the sources of information of health education in other countries of the Community, help was sought from the Joint Committee on Social Problems Affecting Agricultural Workers (Directorate General for Social Affairs). The representatives of the various countries are providing information from their countries about the methods used for the education of farmers to avoid respiratory disease. This study of the methods used in education in other countries of the Community will, it is hoped, result in an improvement in methods of

education for Irish farmers of the dangers of respiratory disease arising from agricultural work.

*References*

<sup>1</sup> Joyce, J.C. and Kneafsey, D. Farmer's lung. *Journal of Irish Medical Association*, 1955, 37, 220, 313-315.

<sup>2</sup> Shelley, E., Dean, G., Collins, D., Dinah, F., Evans, J., McHardy, J. Farmer's Lung: A study in North West Ireland. *Irish Medical Journal*, 1979, 72, 6, 261-264.

<sup>3</sup> O'Brien, J. and Dean, G. Farmer's lung disease: An evaluation of health education in the North-West of Ireland. *Irish Medical Journal*, 1982, 75, 10, 359-361.

## RADIATION AND CANCER

The primary aim of this study was to determine if variations in the very low levels of naturally occurring background radiation were associated with variations in cancer rates. The study was funded by the European Atomic Energy Community (EURATOM) and carried out under the aegis of the Board by Ms. Shane Allwright, Department of Community Health, and Dr. Ian McAulay, Department of Physics, Trinity College, Dublin.

The radiation mapping produced in the first year of the study identified three counties of high average natural background radiation (Waterford, Wexford and Wicklow) and five counties of low average background (Meath, Westmeath, Kildare, Carlow and Kilkenny).

Detailed radiation mapping of these eight counties enabled us to calculate average radiation values for each District Electoral Division (DED) within these counties. (There are between 50 and 120 DED's per county).

All cancer deaths that occurred in these eight counties between 1971 and 1976 (inclusive) were assigned (by computer analysis of the home addresses of the deceased) to the appropriate DED. DED's are the smallest unit of area for which data are available for demographic analysis. Because the numbers of deaths occurring in individual DED's were small, DED's were aggregated according to their average background radiation levels and age and sex standardised cancer mortality rates were calculated for these DED groups.

No association was apparent between cancer mortality rates and level of natural background radiation.

## THE SUDDEN INFANT DEATH STUDY

Cot deaths, or what are described as sudden infant deaths, account for 40% of all deaths in infants between the ages of one week and one year occurring in Dublin. Since the commencement of the study on 1st April 1979 until the end of 1982, there were 492 deaths of infants aged 1 week to 1 year recorded in Dublin city and county.

The registered causes of death were:

	No.	%
Sudden Infant Death Syndrome (SIDS)	195	39.6
Congenital Malformations	174	35.4
Infections	71	14.4
Prematurity and complications of birth	28	5.7
Accidents	20	4.1
Tumours	3	0.6
Non-accidental injury	1	0.2
<b>Total</b>	<b>492</b>	<b>100.0</b>

Analysis of deaths in the post-neonatal period for the first three years of the study showed that 56.5% of babies died unexpectedly. The causes of unexpected deaths were: SIDS 86%; accidents 8%; acute infections 4%; and congenital heart disease 2%.

More detailed analysis of deaths due to SIDS revealed the characteristic distribution of age at death (53% between two and four months), increased mortality during the winter months and an excess of male babies. These characteristics are present in all the epidemiological studies on SIDS published so far. Other factors associated with SIDS in other studies, such as low birth weight, low maternal age and low socio-economic group were absent in the Dublin study. Although in all cases of SIDS no definite cause of death was found on autopsy, 71% of mothers of SIDS babies stated that their babies suffered some ill health before death and 40% of these mothers were worried enough about this to call a doctor. The remainder thought the symptoms were sufficiently minor (usually snuffles) as not to warrant a

doctor's visit. Only 29% of all mothers of SIDS babies thought that their babies were healthy from birth to death.

A paper entitled "Post-neonatal mortality in Dublin with special considerations of Sudden Infant Death Syndrome" has been submitted by the Board to the Irish Medical Journal.

### **The pathological examination of victims of sudden infant deaths 1979-1982**

In the period 1st April, 1979 to 31st March, 1982, 102 infants ranging in age from three weeks to 12 months were admitted following sudden and unexpected death to the Children's Hospital, Temple Street. By arrangement with the coroners for Dublin city and county and Wicklow county, autopsy examination was carried out on these infants by Dr. Seamus Cahalane at Temple Street Hospital, Dublin, according to a standardised protocol. The objectives of the study were to decide the cause of death and to attempt a definition of the minimal pathological investigation required to diagnose sudden infant death.

Blood, cerebro-spinal fluid and vitreous humour from the eye were removed in the casualty department as soon as death had been confirmed. A total body X-ray was carried out before proceeding to autopsy. Material for virological and bacteriological examinations was taken. Virological studies (carried out in the Virus Reference Laboratory, University College, Dublin, under the supervision of Professor Irene Hillary) involved tissue culture and serum antibody studies. Organ weights and measurements were carried out and blocks taken for histological study.

On completion of the investigations, each case was reviewed and assigned to a cause of death category. There were three such categories: Group 1, sudden infant deaths with definite evidence of disease, considered insufficient to cause death; Group 2, with subtle evidence of disturbed metabolism or disorder; Group 3, sudden infant death with no pathological evidence of previous illness. Whenever possible, parents were interviewed, and counselling offered.

### **Results**

Eight of the 102 cases admitted dead were excluded from the SIDS category on the basis of autopsy findings. These included four with serious congenital malformations, three with acute infections and one case of strangulation. The 94 cases of SIDS were classified as described above, in the following order: Group



1 — 31% (29); Group 2 — 39% (37); Group 3 — 30% (28). Thus in Groups 1 and 2 (70%) there is some evidence of pre-existing abnormality and this correlated remarkably well with the clinical history of symptoms. The histological findings leading to the above groupings involved microscopic examination of upper and lower respiratory system, heart, liver, kidneys, adrenals, pancreas, thymus and central nervous system. It was concluded that bacterial and virological studies should be limited to cases where there was an indication for such investigation from the history or gross findings. There were a number of autopsy observations occurring in a high proportion of deaths with sufficient regularity to enable an experienced pathologist to offer a likely diagnosis of sudden infant death on gross autopsy alone.

### **Conclusion**

The incidence of sudden infant death is not known in this country and cannot be known in the absence of a uniform policy regarding the post-mortem investigation of unexpected and unexplained post-perinatal infant deaths. The present study proposes a minimal degree of post-mortem investigation which could be applied nationally given the small population and the structure of our Public Health Services. A paper entitled "The pathological investigation of sudden infant deaths" has been submitted to the Irish Medical Journal.

## THE HEALTH EFFECTS OF SMOKING IN IRELAND

The Research Working Party on Smoking and Health was founded in 1978. While representing the Medico-Social Research Board on the Working Party in 1979 and 1980, Dr. Emer Shelley commenced a study of the health effects of smoking in Ireland. Miss Anne Cleary, working with the Health Education Bureau, undertook a complementary study of current Irish smoking habits, smoking control measures which may be adopted at national level and of smoking cessation techniques. This joint study has now been completed. It is being edited by Professor Geoffrey Bourke of the Department of Community Medicine and Epidemiology, University College, Dublin, a member of the Medico-Social Research Board, and Dr. Ian Graham, of the Irish Heart Foundation. It is hoped to publish the results of the study in 1983 under the title "Smoking and Health — The Facts in Ireland".

From studies in other countries there is evidence that coronary heart disease (CHD) is the chief cause of the excess mortality among cigarette smokers, particularly in middle age. CHD, together with other diseases of blood vessels including stroke, account for more than half the excess.

Respiratory diseases such as lung cancer, chronic bronchitis and emphysema cause the next largest proportion of excess deaths. Smoking has also been shown to be significantly associated with cancer of the mouth and other cancers of the upper gastro-intestinal tract. The actual number of deaths caused by these cancers is small but the risk of smokers getting them has been estimated as five to ten times the risk of non-smokers. Cancer of the pancreas and cancer of the urinary tract, especially cancer of the bladder, have also been shown to be associated with smoking. Smokers have an increased incidence of peptic ulcer (gastric and duodenal), delayed ulcer healing and an increase in deaths due to this cause.

The number of deaths from diseases that are often smoking-related in Ireland in 1977 is shown in Figure 1. The total number of deaths caused by CHD increased from 7,262 in 1968 to 8,846

in 1977. In men aged less than 65 years the number of deaths from CHD increased after 1968 but then appeared to stabilise. The number of deaths from CHD in men aged 45 to 64 as a percentage of total deaths in that age group increased from 31.7% in 1968 to 38.2% in 1977. Though the number of deaths from CHD in men aged 45 to 64 years has not continued to increase throughout the 1970s, CHD has increased as a proportion of all deaths in this age group due to a decrease in the number of deaths from some other causes.

The number of deaths caused by cancer of the trachea, bronchus and lung has increased steadily for men and women in recent decades (Figure 2). The increase in lung cancer in Ireland in the 1950s and the 1960s followed the great increase in cigarette smoking, particularly among men, between the mid-1940s and the early 1950s. The number of deaths due to this cause in men and women under 65 years from 1950 to 1978 are shown in Figure 3.

In addition to premature death, smoking is associated with chronic diseases such as stroke, blood vessel disease and chronic bronchitis and emphysema which result in a large burden of sickness and disability in the community and cause many hospital admissions.

There is increasing evidence that the effects of smoking are not confined to those who smoke. The growth of the foetus in mothers who smoke during pregnancy is slower when compared with that of non-smoking mothers. Passive smoking is inhalation by non-smokers of air in which tobacco has been smoked and would be expected to have the greatest effect on the health of those who share the home or work environment with a smoker.

It is hoped that a presentation of the evidence of the effects of smoking in the Irish context will be used by policy makers and by health educators in their efforts to reduce tobacco consumption and the resultant ill-health in Ireland.

FIGURE 1: Number of deaths from diseases which are often smoking-related in Irish men and women aged 15 years and over, 1977.

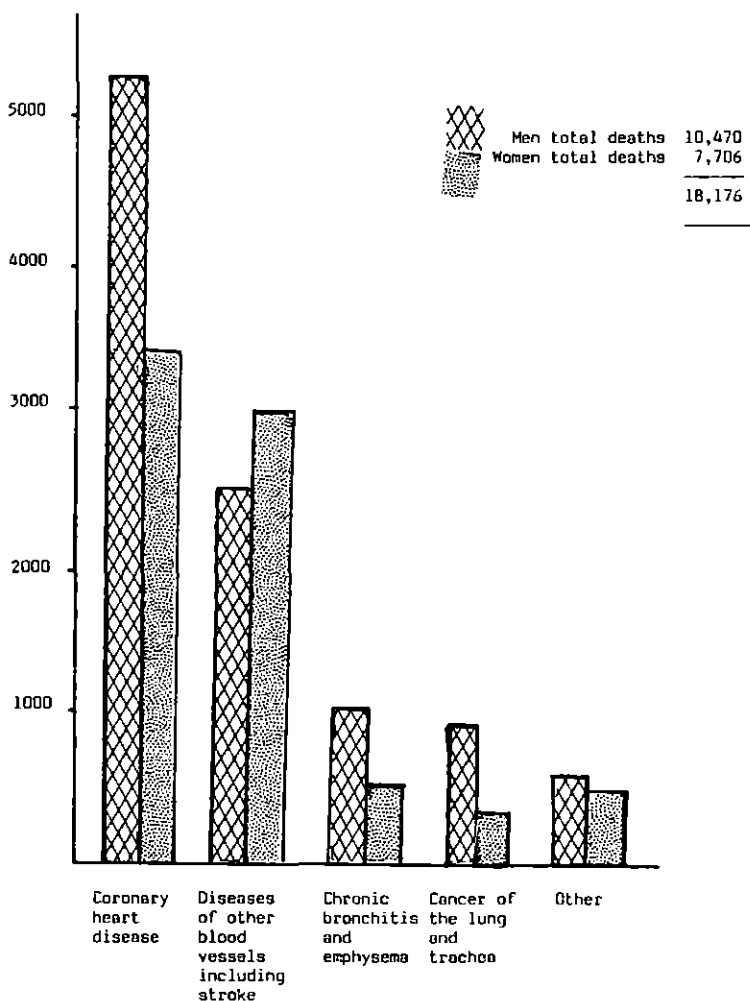


FIGURE 2: Deaths from lung cancer in Ireland among men and women of all ages.

I.C.D. Code 162

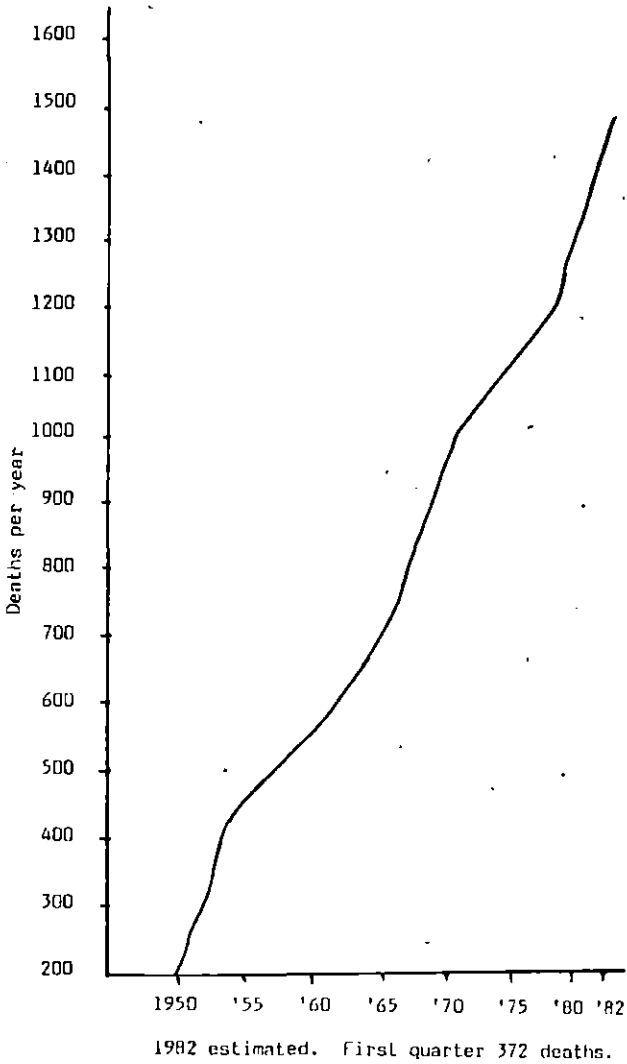
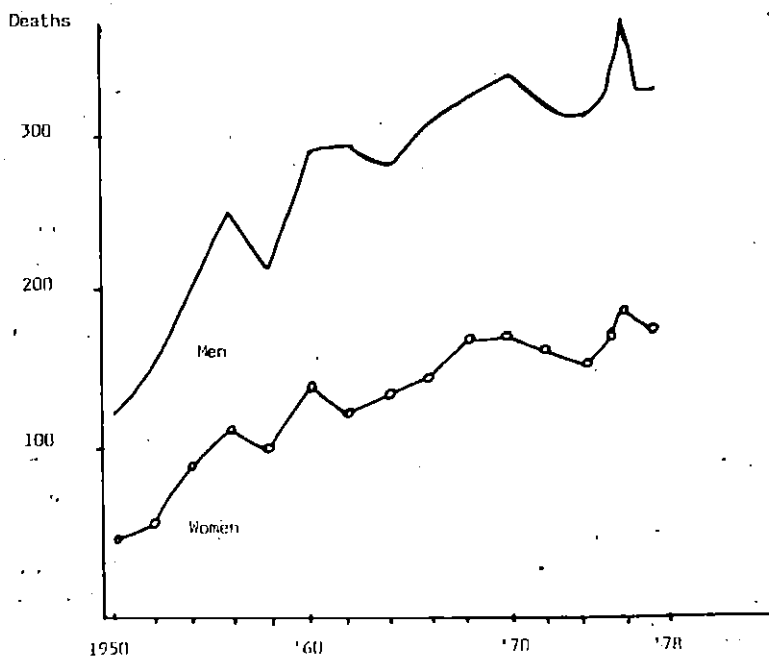


FIGURE 3: The number of deaths caused by lung cancer in Irish men and women aged 16 - 64, 1950-1978.



## STUDIES OF DRUG USE BY POST-PRIMARY SCHOOL PUPILS

In 1970 and 1971, a survey was carried out on the consumption of cigarettes, alcohol and drugs by pupils attending a random sample of post-primary schools throughout the country. Availability, use and knowledge of illegal drugs were reported separately for post-primary schools in Dublin and for schools in the remainder of the country.<sup>1,2</sup>

A decade later the Medico-Social Research Board, the Health Education Bureau, the Irish Cancer Society and the Department of Community Health, Trinity College, Dublin, carried out a similar survey.

The survey was designed to cover a representative sample of post-primary school pupils. A self-completed questionnaire was used to obtain the data. School-attenders were assured of the confidentiality of their responses and there was no means of identifying an individual respondent or school from the questionnaire.

Dr. Aengus O'Rourke, Senior Lecturer at the Department of Community Health, Trinity College, Dublin, was in charge of the research. The data was processed by Mr. Keith Wilson-Davis, who also analysed the results of the 1970-71 survey. In collaboration with them, the Medico-Social Research Board was responsible for reporting on the section of the survey on the use of drugs.

### Dublin Schools

The findings of the survey of post-primary school pupils in Dublin city and county have been published.<sup>3</sup> The sample consisted of ten secondary, four vocational, one comprehensive and one community school. A total of 5,178 questionnaires were analysed.

An increase in contact with drugs since the 1970 study was found. More of the students said that they had been offered what they thought was an addictive drug, that their friends used

drugs or that they had been to a party where drugs had been taken (Table 1).

The percentage of students who said that they had taken a drug other than one prescribed by a doctor had also increased since 1970 (Table 2). The most commonly used drug was marijuana. It was taken by 485 pupils or 9.4% of the group surveyed who said they had used it. A further 50 pupils or 1% of the study population said they had taken heroin. Over 60% of those who had taken a drug said they received it from a friend and 15% said they obtained it from a dealer or a pusher.

Drug use was more frequent among boys and among those who were over 16 years of age. Those who had ever taken an unprescribed drug were more likely to describe themselves as regular smokers or regular drinkers. There was no significant difference between the social classes in the proportion of all the pupils who stated they had ever used an unprescribed drug. The more pocket money received by a pupil the more likely he or she was to have taken a drug. There was no evidence that contact with and use of drugs was confined to a minority of schools or to particular types of schools or localities.

### **Schools Outside Dublin**

This survey has been completed and the results will be reported in 1983. Analysis shows that there has been a two- to three-fold increase since 1971 in the percentage of pupils who said that they had been offered an addictive drug, that their friends used drugs or that they had been to a party where drugs were used. The frequency of positive responses to these questions was approximately half that observed for pupils of Dublin schools 1980-81.

When compared with the 1970-71 survey the increase in answering that a drug had been taken was four-fold for girls and eight-fold for boys under 16 years of age. There was a three-fold increase for boys and girls aged 16 years or more. Only one-third to one-half the pupils in the schools outside of Dublin, compared with the Dublin schools 1980-81, said they had taken an unprescribed drug. The drugs used, the source of the drugs and the characteristics of the drug users were very similar to the Dublin study.

An increase in the availability and use of drugs by young people in both Dublin and the provinces is evident from the surveys. The pupils' knowledge of drugs was, however, poor. These surveys showed a need for drug education for young



people and their parents and teachers based on the information from these studies. Reports are also being prepared by Dr. Aengus O'Rourke and Dr. Desmond O'Byrne on the use of and the attitudes to tobacco and alcohol by second-level pupils in Ireland.

#### References

<sup>1</sup> Nevin, M., Wilson-Davis, K., O'Rourke, A., Dean, G. Drugs — A report of a study in Dublin post-primary school children, 1970. *Journal of the Irish Medical Association*. 1971, 64, 406, 91-100.

<sup>2</sup> Kirke, P., Gough, C., Wilson-Davis, K., O'Rourke, A., Dean, G. Drugs — A study of Irish rural post-primary school children, 1970-71. *Journal of the Irish Medical Association*. 1973, 66, 9, 231-237.

<sup>3</sup> Shelley, E., O'Rourke, F., O'Rourke, A., Wilson-Davis, K. Drugs — A study in Dublin post-primary schools. *Irish Medical Journal*, 1982, 75, 7, 254-259.

TABLE 1

Number and percentage of boys and girls aged less than 16 years and aged 16 years and over, who stated they had been offered what they thought was an addictive drug, with comparable percentages from the Dublin 1970 study.\*

	Under 16 years			16 years and over		
	Number	%	1970%	Number	%	1970%
Boys	546	23.1	6.5	281	38.7	15.8
Girls	160	11.0	4.0	168	26.1	9.8
Total	706	18.5	5.4	449	32.8	13.2

\*82 (1.6%) respondents did not answer this question.

TABLE 2

Respondents who had ever taken drugs other than those prescribed by a doctor.\*

	Under 16 years			16 years and over		
	Number	%	1970%	Number	%	1970%
Boys	276	11.7	1.4	183	25.2	5.9
Girls	67	4.6	1.2	97	15.1	3.7
Total	343	9.0	1.3	280	20.0	4.9

\*This question was not answered by 137 respondents (2.7%).

## FRIEDREICH'S ATAXIA

The Board is undertaking a study on Friedreich's Ataxia in Ireland with financial support from the Friedreich's Ataxia Society of Ireland.

Friedreich's Ataxia comprises a syndrome that includes several sub-types and the symptoms generally commence in childhood. Frequently more than one member of a family may be affected and the disorder is inherited either as a recessive or as a dominant genetic defect. The symptoms usually start with impairment of gait, poor co-ordination and frequent falling, later followed by difficulty in speech (dysarthria) and unsteadiness of the arms and head. By the end of the second decade of life, most sufferers require assistance in walking. They, or other members of the family, may suffer from scoliosis and a pes cavus deformity of the feet. Many Friedreich's Ataxia patients later develop heart disorders.

By the end of 1982, 42 families in whom one or more members were suffering from Friedreich's Ataxia had agreed to take part in the study, with the approval of their doctors. The study has begun by obtaining a personal and family history, including the drawing up of a family tree, for each of the affected families.

Friedreich's Ataxia has various forms and is due to inherited or inborn errors of metabolism. When these errors of metabolism are better understood, it is hoped that it will be possible to prevent the development of symptoms.

## CONCLUSION

In this Annual Report some of the research that has been taking place during the year has been highlighted. By their very nature a number of these studies will continue in 1983. Health depends on social factors and the way we live our lives to a much greater extent than it does on medical care and the increase in unemployment and the lack of employment opportunity poses a particular threat to mental health. Ireland has the highest birth rate in Europe and the task of providing useful employment to an increasing population presents a particularly difficult task but it must be faced if social disorder is to be avoided. Such disorder is already apparent in some Dublin central city areas.

During 1983 the Board will be paying particular attention to the cost effectiveness of health care, both in hospital and in the community. The proportion of the health budget spent on research and development is minute and, with the information systems available to the Board, a great deal of further important study could be undertaken into ways which could increase the cost effectiveness of the health service in Ireland.

The Board has long been concerned with problems relating to the use and abuse of licit and illicit drugs. A new problem has arisen since 1980 and that is a sudden increase in the use of heroin which quickly leads to addiction. The Ministers for Health in the previous and present governments asked the Board to study this problem as a matter of urgency and in particular to ascertain the size and nature of the problem in the central Dublin area and also to what extent the problem is developing in other parts of the city and in other areas. A very serious problem has, undoubtedly, arisen in certain wards of north and south central Dublin, particularly affecting young people between the ages of 15 and 24 years, although some start taking heroin at an even younger age and quickly become addicted. The price on the streets is £10 for a single shot of heroin and, as some addicts take ten packets or more a day,

the money required for the habit can only be obtained by theft. Other opiate-related drugs are used, in particular the drug Diconal. Diconal, which can also be injected, sells for £6.50 a tablet and is obtainable on prescription. It should be relatively easy to control the sale of the drug in Ireland, except perhaps from one or two sources when it is really required. Although heroin addiction is still relatively uncommon in Ireland as a whole, the study on post-primary school children, both in Dublin and outside of Dublin,<sup>1,2</sup> shows a three-fold increase in the number of children who have used heroin since a similar study 10 years earlier. The problem of serious drug abuse, in particular the use of opiates but also other drugs, such as glue sniffing, is strongly associated with unemployment and bad living conditions. It is a problem that can only be dealt with by community action and by close collaboration between, for example, the Departments of Justice, Finance, Customs and Excise and Health, including the Health Education Bureau, and the various treatment agencies. The Churches can also provide major assistance with these serious social problems. Research to ascertain the size and nature of the problem is required so that the appropriate action can be taken.

The most common drug of abuse in Ireland is, however, alcohol. As has been described in this report, it is the most frequent reason for admission to Irish psychiatric hospitals. The amount of alcohol-related problems in a community depends to a great extent on the amount of alcohol consumed by the community. There has been a fall in the litres of alcohol consumed per head since 1979, which has been associated with a fall in the number of admissions for alcoholism to the psychiatric hospitals, a fall in certified death from cirrhosis of the liver and in the frequency of prosecutions by the police for driving or attempting to drive while drunk. (Figures 1-5, pages 44-46).

A further reduction in total alcohol consumption is likely to accentuate this fall and this could best be encouraged by increased taxation on alcohol. Other measures which would also be of value include further health education by the Health Education Bureau on the dangers of the abuse of alcohol, the restriction of advertising to the point of sale and much stronger action to deter persons from driving a motor vehicle while under the influence of alcohol. The Board will continue in 1983 to monitor the effects of alcohol on health and will in particular

consider the problems associated with the increasing use of alcohol by young women.

Cigarette smoking makes a major contribution to ill-health from the most common diseases, heart attacks, strokes, bronchitis, lung cancer and others, and of premature death. Fortunately, there has been a gradual fall in the percentage of the population who are smoking and those who do smoke are smoking less but the fall is all too slow. There is still a rapid increase in the number of lung cancer deaths, particularly among women. The Director is a member of a committee which includes representatives from the Health Education Bureau, the Irish Cancer Society and the Irish Heart Foundation, which advises what further action can be taken to reduce ill-health resulting from cigarette smoking. Again, as with alcohol, an increase in cigarette taxation and the abolition of advertising will almost certainly reduce consumption. The biggest fall in the proportion who smoke is among the upper socio-economic group and among farmers and agricultural workers. Table 1.

In a time of economic depression the medical and social care of the elderly is of great importance and the Board hopes to take part in a study in 1983 of the services which are provided in Ireland for the medical and social care of elderly people. The proposed study is part of an integrated proposal which was approved by the Committee for Medical Research of the EEC for a concerted action programme and funds for the central planning phase have already been approved. The study would include a survey of a representative sample of elderly persons designed to document their physical, mental and social functioning, their domestic and family situation and relationships, the use of services and the receipt of informal care and the occurrence of problems in their daily living.

Studies of the problems of unmarried parents and their children and the factors that influence an increasing number of young women to go abroad for pregnancy termination will be continued.

In a number of countries, including the United States of America, there has been a marked fall in the number of deaths from ischaemic heart disease and strokes. This is thought to be due, in the main, to a change in the way of life and the control of raised blood pressure by newer medicines. The changes in the United States in heart attack deaths (coronary mortality),

**TABLE 1**  
**Prevalance of cigarette smoking in the Irish population (16+ years) JNMR\* 1972-1981**

Smokers	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81
Total	43%	43%	41%	40%	38%	39%	36%	36%	35%
Men	49%	48%	45%	45%	43%	44%	40%	41%	39%
Women	37%	38%	37%	34%	34%	34%	31%	31%	32%
16-24 years	48%	42%	39%	38%	38%	40%	33%	35%	33%
25-34 years	42%	45%	45%	41%	40%	44%	41%	41%	43%
35-44 years	44%	44%	41%	41%	38%	37%	41%	36%	35%
45-54 years	49%	51%	48%	45%	42%	42%	35%	39%	40%
55+ years	37%	37%	36%	37%	36%	34%	32%	33%	30%
ABC1	37%	37%	35%	34%	30%	32%	28%	29%	29%
C2	45%	46%	45%	42%	41%	40%	39%	41%	38%
DE	51%	50%	47%	45%	46%	47%	45%	46%	46%
F	35%	35%	35%	34%	32%	31%	29%	28%	26%

ABC1. Middle class. Employers, managers, professional men and their families; clerical workers and other less well-paid non-manual workers and their dependents.

C2. Skilled manual workers, other than those in agriculture and their dependents.

DE. Semi-skilled and unskilled manual workers (other than those in agriculture), unemployed pensioners and their dependents.

F. Farmers and agricultural workers and their families.

\*Source: Joint National Medical Research Survey.  
 Irish Marketing Surveys Limited.

strokes (cerebrovascular mortality) and *per capita* consumption of various products is shown below. (Tables 2, 3 and 4).

**TABLE 2**  
United States

**Decline in Age-Specific Coronary Mortality, 1963 to 1981.\***

Age Group year	Decline per cent
35-44	44.8
45-54	38.3
55-64	38.0
65-74	37.0
75-84	30.0
≥85	25.6

**TABLE 3**

**Decline in Age-Specific Cerebrovascular Mortality, 1963 to 1981.\***

Age Group year	Decline per cent
35-44	46.1
45-54	42.3
55-64	52.9
65-74	53.2
75-84	49.7
≥85	44.4

**TABLE 4**

**Change in per Capita Consumption of Various Products, 1963 to 1980.\***

Product	per cent change
Cigarette tobacco	-27.1
Fluid milk and cream	-24.1
Butter	-33.3
Eggs	-12.3
Animal fats and oils	-38.8
Vegetable fats and oils	+57.6
Fish	+22.6

\*Figures for calculating percentage changes obtained from the U.S. Department of Agriculture.

While there has been a fall over the last few years in the death rate from stroke in Ireland, perhaps because of better control of raised blood pressure, until recently heart attack mortality

was increasing. The numbers for 1979 suggest that a turning point may have been reached. There were 9,065 deaths in 1978 and 8,347 in 1979. (Code ICD 410-414). The fall was mostly in the age groups 75+ years. (Table 5.)

TABLE 5  
Ireland  
Ischaemic Heart Disease Deaths (I.C.D. codes 410-414)

Age Group	Male			Female		
	1977	1978	1979	1977	1978	1979
-24	2	3	1	2		
25-44	109	95	109	22	25	21
45-64	1,505	1,537	1,513	489	467	435
65-74	1,761	1,859	1,824	920	919	930
75+	1,995	2,051	1,862	2,041	2,109	1,652
<b>Total</b>	<b>5,372</b>	<b>5,545</b>	<b>5,309</b>	<b>3,474</b>	<b>3,520</b>	<b>3,038</b>

The year 1983 is likely to be one of deep soul-searching in Ireland, because it is beginning to be realised that many of the existing problems have resulted from a refusal in the past to face up to the economic and social realities of our society.

*References*

- <sup>1</sup> Shelley, E.B., O'Rourke, F., O'Rourke, A. and Wilson-Davis, K. Drugs — A study in Dublin post-primary schools. *Irish Medical Journal*, 1982, 75, 7, 254-259.
- <sup>2</sup> Walker, W.J. Changing U.S. life style and declining vascular mortality — A retrospective. *New England Journal of Medicine*. 1983, 308, 11, 649-651.



## ACKNOWLEDGEMENTS

We would like to thank Mrs. Eileen Desmond, T.D., Dr. Michael Woods, T.D., and Mr. Barry Desmond, T.D., for the interest and encouragement they showed in our work during their terms of office as Minister for Health and Mr. Fergus O'Brien, Minister of State at the Department of Health. We would also like to thank Mr. Dermot Condon, Secretary of the Department of Health, and members of the departmental staff for their close collaboration with our research.

We have continued our work in co-operation with the Irish Medical Association and the Medical Union. We would like to acknowledge the liaison we have had with the World Health Organisation, with the Committee for Medical Research of the European Economic Community, the Medical Research Council of Ireland, the Central Statistics Office, the Economic and Social Research Institute, the Irish Heart Foundation, the Irish Cancer Society, the Health Education Bureau, the Multiple Sclerosis Society, the Blood Transfusion Service Board and many other boards, societies and institutes.

Our work would not have been possible without the help we have received from our many friends, medical and non-medical, who have assisted us in our various research projects.

## APPENDIX 1

### HOSPITAL IN-PATIENT ENQUIRY SCHEME SAMPLE OF SPECIAL ANALYSES PREPARED IN 1982

1. Statistical information on Cork/Kerry cancer patients treated in Dublin hospitals. Requested by the Southern Tumour Registry.
2. Analyses of road traffic accident cases. Requested by An Foras Forbartha.
3. Prevalence of scoliosis. Requested by the Institute for Industrial Research and Standards.
4. Analyses of cases of acute myocardial infarction and cerebral infarction. Requested by the Central Statistics Office.
5. Computer tape compiled containing information on cases of calculus of kidney, ureter, and other parts of urinary system reported from Irish hospitals 1980. Requested by Trinity College, Dublin.
6. Analyses of neurosurgical cases. Requested by Western Health Board.
7. Cases of Friedreich's Ataxia reported 1976-1981. Required for study sponsored by Friedreich's Ataxia Society of Ireland.
8. Listing of cases of tuberculous meningitis reported 1979-1980. Requested by Dublin Medical Officer of Health.
9. Analyses of specified cancers — requested by US researchers.
10. Age and sex analyses of cases of systemic lupus erythematosus reported in 1980. Requested by Lupus Support Group.
11. Analysis of cases of sprue and steatorrhoea 1970-1978. Requested by a Galway based consultant.
12. Analysis of cases of primary biliary cirrhosis. Requested by the University of Sheffield.
13. Analyses of cases of brucellosis 1977-1980. Requested by a researcher in the Midland Health Board.
14. Age and sex analysis of patients resident in Dublin treated at a major Dublin hospital. Requested by the hospital authorities.
15. Analysis of cases of leukaemia 1978-1980. Requested by a North Eastern Health Board hospital.
16. Analyses of cases of emergency appendicectomy 1979-1980. Requested for a Dublin/London research project.
17. Analyses of cases with specified eye conditions. Requested by a Western Health Board consultant.
18. Analyses of specified conditions. Requested by Leo Laboratories Ltd.
19. Number of sigmoidoscopies per annum by Health Board. Requested by the Institute for Industrial Research and Standards.
20. Analysis of 1980 cases with vertebrogenic pain syndrome and displacement of intervertebral disc. Requested by the Health Education Bureau.
21. Analyses of admissions to hospital 1974-1980 for specified conditions related to obesity. Requested by Human Nutrition Unit, Trinity College, Dublin.
22. Analysis of cases of cholecystectomies reported in 1980. Requested by School of Pharmacy, Trinity College, Dublin.
23. Various analyses requested by the National Economic and Social Council.
24. Analyses of emergency admissions 1977-1980. Requested by the Department of Health.

25. Various analyses requested by the medical staff of the M.S.R.B. for studies relating to accidents in children, fracture of the femur, meningococcal meningitis and bed blocking in acute general hospitals.

## PUBLICATIONS 1982

- Communicating Medical Research. G. Dean  
Paper read at the 12th World  
Congress of Neurology, Kyoto,  
September, 1981. Published in  
The Times Health Supplement  
26.3.82, page 9.
- Multiple Sclerosis. In: Epidemiology of E. Shelley  
Diseases. Edited by D. L. Miller and  
and R. D. T. Farmer. Blackwell  
G. Dean  
Scientific Publications, Oxford.  
pp. 347-354. 1982.
- Multiple sclerosis among Asian immi- G. Dean  
grants to England and Multiple  
sclerosis in southern Europe —  
Sicily and Malta. In: Multiple  
Sclerosis East and West. Ed. by Y.  
Kuroiwa and L. T. Kurland. Kyu-  
shu University Press, Fukuoka,  
Japan. 1982.
- Service requirements of adult J. Walsh  
mentally-handicapped persons liv-  
ing in the Community. Irish Med-  
ical Journal, 1982, 75, 1. 13-15.  
M. Mulcahy
- Drugs — A Study in Dublin Post- E. Shelley,  
Primary Schools. Irish Medical F. O'Rourke,  
Journal. 1982, 75, 7, 254-259. A. O'Rourke and  
K. Wilson-Davis

- Respiratory disease and heart attacks among rural workers in Ireland and other countries of the European Economic Community. *Irish Medical Journal*, 1982, 75, 8, 338-342. G. Dean
- The key to the mystery of multiple sclerosis. *Irish Medical Times*. 29 October, 1982. pp. 26/27. G. Dean
- Farmer's Lung Disease: An evaluation of health education in the North West of Ireland. *Irish Medical Journal*, 1982, 75, 10, 359-361. J. O'Brien and G. Dean
- Porphyria variegata. *Acta Dermatovener (Stockholm) Suppl.* 100: 1982, 81-85. G. Dean
- Specialist care of psychiatric illness in three Irish counties. *Irish Journal of Psychiatry*, 1982, Vol. 2, 1, 20-26. B. Blake, J. V. Halpenny, P. F. O'Brien and A. O'Hare
- A note on a proposed census-based Irish social class scale for epidemiological health research. *The Economic and Social Review*. 1982, Vol. 13, 3, 205-216. A. O'Hare
- Irish psychiatric case registers, their contribution to community health care. In *Medical Information Europe 1982*. Eds. R. R. O'Moore, B. Barber, P. L. Reichertz and F. Roger. Springer-Verlag, Berlin. 713-719. 1982. A. O'Hare

- A sociological dimension of mental illness in three counties of Ireland: Selected characteristics of incidence patients. *Irish Journal of Psychiatry*. 1982. Vol. 2. 1, 8-19. A. O'Hare and B. McHugh
- An early survey by L. S. Clifford of mental deficiency in Ireland. *Irish Journal of Psychiatry*, 1982, 2.1. M. Mulcahy
- An index of social competence for use in determining the service needs of mentally handicapped adults. *Journal of Mental Deficiency Research*, 1982, 26, 47-61. R. McConkey and J. Walsh
- Mentally handicapped adults living in the community — a survey conducted in and around the city of Dublin. *Mental Handicap Apex*. 1982. 10, 3. R. McConkey, J. Walsh and M. Mulcahy
- Foetal alcoholism. *Health Education Bureau Yearbook and Diary*. 1982. M. Mulcahy
- Maternal screening trial for inborn errors of metabolism. *Irish Medical Journal*. 1982, 75. 8. 274-275. F. B. Harte, O. Molloy and S. F. Cahalane
- Medical graduates of the seventies. *Irish Journal of Medical Science*. Suppl. 1. 1982, 151. D. A. Kelly, M. Nolan, E. Shelley and J. Rudd
- Who receives the aftercare? Utilisation of services by discharged in-patients. *Psychological Medicine*, 1982, 12, 891-902. P. Keane and T. J. Fahy

**An analysis of short-stay hospital cases. R. Hamill**  
**Irish Medical Journal, 1982, 75,**  
**12, 472-474.**

