Estimating Prevalence
of Certain Chronic Childhood Conditions
by Use of a Central Registry

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A CENTRAL REGISTRY for the handicapped is particularly valuable as a source of information for the estimation of prevalence rates of chronic conditions of childhood. These estimates are useful in assessing minimal future educational, institutional, and medical needs in the community, and they can be compared with published rates for other areas or time periods. This discussion is concerned with estimated age-specific prevalence rates of selected conditions based on the experience of a central voluntary registry which has served the Province of British Columbia for more than a decade.

Active registration began in 1952 with the British Columbia Crippled Children's Registry. Since the scope of the registry was not limited to the classic crippling or orthopedic conditions, the term "handicapped" subsequently replaced the word "crippled" in the title of the registry. Limited adult registration has been in progress since 1960, but the registry is still essentially a children's registry. The development of the registry and the various functions which it serves have been previously described (*1*, *2*).

The registry has now accumulated sufficient data for the estimation of minimal prevalence rates of certain childhood conditions. The reliability of these estimates depends on the degree of success achieved in casefinding; complete population coverage is not likely with a system of voluntary registration. This is the reason for using the qualifying term "minimal." The true prevalence rate of a disease is the proportion of a population having the disease at any given time expressed in units of that population, that is, per 1,000 or per 100,000; the term "age-specific prevalence rate" is used when prevalence relates to a defined age group. With the scope of the registry constantly expanding, future estimated prevalence rates of the more important chronic diseases based on registry data are expected to approximate the true prevalence rates of these conditions in the community.

Certain conditions included in the following discussion may be broadly divided into these three groups, each showing different age-specific prevalence and casefinding patterns.

GROUP A. Congenital conditions recognizable in the early years of life, usually at the time of birth. Examples are mongolism, clubfoot, and cleft lip and palate.

GROUP B. Congenital defects often not readily detected at birth or in the early years of life. Congenital heart defects comprising all congenital malformations of the cardiovascular system are examples.

GROUP C. Chronic conditions of children which may have diverse etiologies, occurring in

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the prenatal, natal, or postnatal period. Examples are cerebral palsy, epilepsy, deafness and hearing impairment, and mental retardation. For purposes of comparison with other published rates of mental retardation (rubrics 325.0–325.5 of the International Classification of Diseases), mongolism has also been included in this category.

Effects of the Age Factor in Casefinding

Changing relationship between true and estimated prevalence rates along the age scale. Age variation in estimated prevalence is more related to a time lag between onset and registration and to the length of time the registry has been in operation than to any predisposition of certain age groups. This is particularly true of congenital malformations, since by definition such conditions are present at birth. In fact, were it not for the early depletion of cases caused by the relatively high infant mortality rate usually associated with congenital malformations, either causatively or coincidentally, age-specific prevalence rates of these conditions throughout childhood would approximate their incidence rate at birth.

Characteristically, the true prevalence pattern of a congenital malformation such as congenital heart defect is a rapidly diminishing rate in the early years of life attributable to mortality, followed by a leveling off or slightly diminishing rate along the age scale as the mortality rate among affected children approaches that of the general population of children. However, when prevalence estimates are based on the number of children on the registry, the age-specific pattern is somewhat different, with the preschool-age group (0–5 years) showing a lower rate than the early school-age group (6–10 years). This is true despite the fact that the majority of cases entering the registry are in the preschool-age group. The reason for this anomaly is that there are more cases that are undetected, or at least unknown to the registry, in the community in the preschool than in the early school age group.

In British Columbia the official school age is 6–15 years inclusive. In this paper the 0–5 age group is referred to as preschool (0–1 infancy, 2–5 later preschool), the 6–10 age group as early school, the 11–15 age group as later school, and the 16–20 group as postschool.

Table 1. True and estimated age-specific prevalence rates of congenital heart defects per 1,000 children in a hypothetical cohort born at the same time

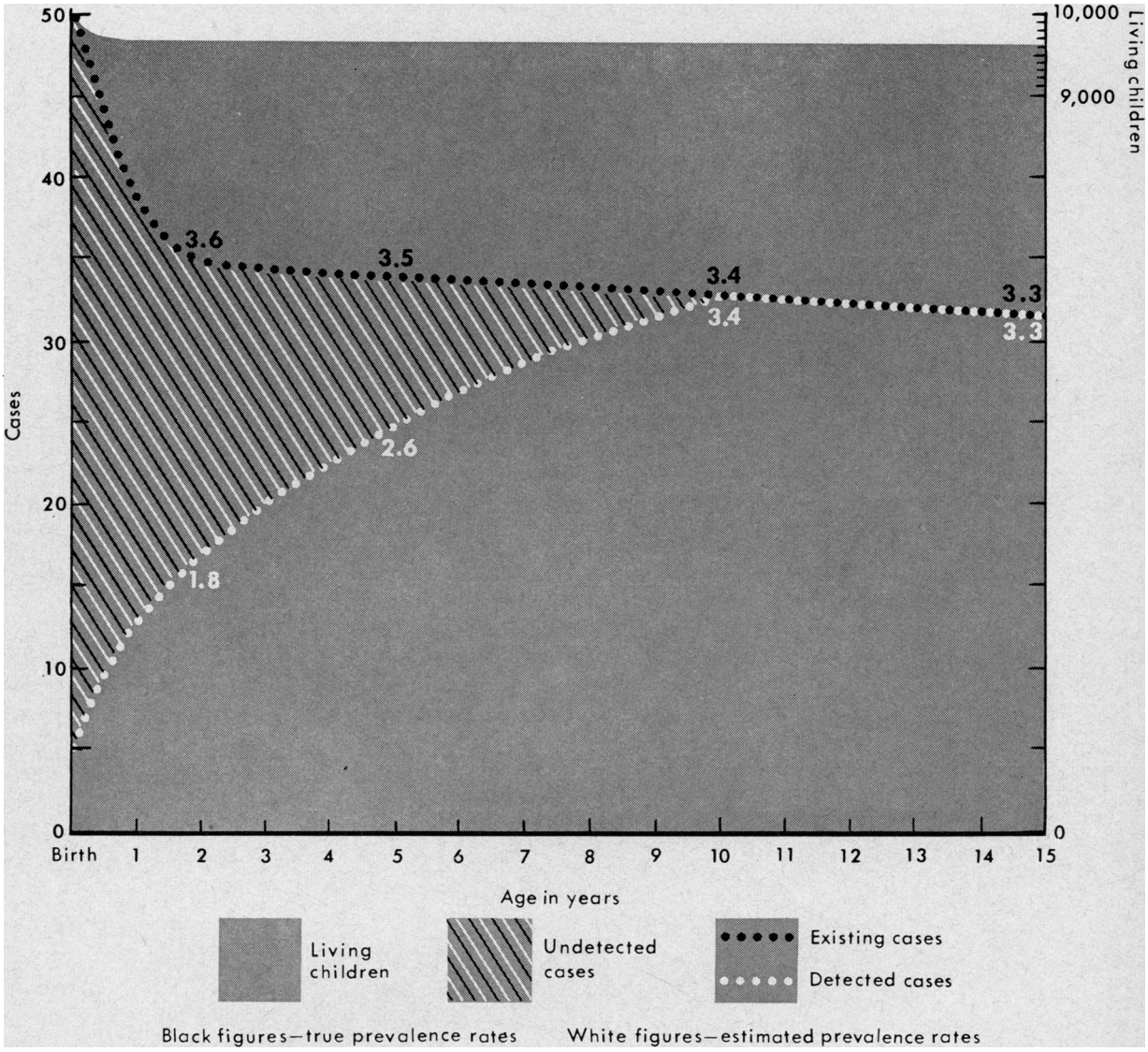
Age	Number of living children [1]	Living children with congenital heart defects			
		Total in community		With detected cases	
		Number	True rate	Number	Estimated rate
Birth	10,000	50	5.0	5	0.5
2 years	9,710	35	3.6	17	1.8
5 years	9,685	34	3.5	25	2.6
10 years	9,660	33	3.4	33	3.4
15 years	9,640	32	3.3	32	3.3

[1] Depletion due to mortality is based on Canadian life tables for 1961.

The manner in which the residue of undetected cases decreases along the age scale with a resulting increase in estimated prevalence rates based on detected cases is depicted in table 1 and the chart, which describes the experience of a single hypothetical cohort of live births. The top line in the chart represents the total number of living children in the cohort at different ages based on recent actuarial data. The middle line represents the actual number of living children with the condition at different ages, showing a marked early decline resulting from depletion due to mortality to the age of 2 years and a subsequent leveling off. The bottom line represents the number of children known to have the condition at different ages. Since the relative decline in the total number of children along the age scale is small, the middle and bottom lines also reflect trends in true age-specific prevalence rates per 1,000 children based on the actual number of cases and estimated age-specific prevalence rates per 1,000 children based on the number of detected cases.

The discrepancy between true and estimated prevalence rates narrows steadily to the age of 10 years when it is assumed for simplicity that no undetected cases are left in the community. At this "saturation" point along the age scale

Diagram of hypothetical data in table 1



the true prevalence rate and the estimated prevalence rate are identical, and it is clear that the reliability of the estimated prevalence rate at any age as a reflection of the true rate at that age or at any younger age increases as the "saturation" age is approached. Beyond the "saturation" age the prevalence rate can be expected to decline slightly with age as a result of continuing mortality, assuming that persons with congenital heart defects are at a disadvantage in relation to the remainder of the population.

The importance of the length of time the registry has been operating is that the majority of children with congenital malformations are registered early in life and many affected children who were born prior to the inception of the registry will have undergone surgical repair before registration commenced, with a resulting loss of incentive to be registered. This lack of registration is the main reason for the discrepancies at older ages which will be discussed subsequently.

The estimated age-specific prevalence patterns of chronic conditions which may be present at birth or acquired later in life are a little different from that described for congenital heart

defect. However, the importance of the time lag between the onset of the condition and registration and of the age of the registry as determinants of estimated age-specific prevalence patterns applies to these conditions as well, and again, the age groups of most intensive registration do not correspond with those with the highest estimated prevalence rates.

Two important conclusions from the foregoing exposition are the following:

1. Since certain age groups of the general population are poorly represented in the registry caseload of any one condition because of a more or less constant casefinding pattern, an overall estimated prevalence rate of the condition based on children of all ages is bound to be understated.

2. Since, barring the effects of migration to the community, the true prevalence rate of a congenital malformation can only decline along the age scale, a peak estimated rate based on known cases in an older age group is usually the closest approximation of the true rate, not only at that age but at all younger ages.

Casefinding and estimated prevalence patterns. Under each condition table 2 shows the percentage age distribution at the time of registration of children who entered the registry in the period 1952–64, compared with the distribu-

Table 2. Percent distribution of children by age with specific conditions at registration (1952–64) compared with distribution of surviving children under 21 years at end of 1964

Age group (years)	Group A						Group B, congenital heart defect	
	Clubfoot		Cleft lip and palate		Mongolism			
	At registration (N=1,210)	End of 1964 (N=1,011)	At registration (N=961)	End of 1964 (N=803)	At registration (N=639)[1]	End of 1964 (N=609)	At registration (N=2,177)	End of 1964 (N=1,627)
Preschool 0–5	88.2	33.6	85.0	38.0	73.6	28.9	67.1	20.2
Infancy 0–1	77.8	11.5	77.5	11.2	52.1	5.1	42.7	3.9
Later preschool 2–5	10.4	22.1	7.5	26.8	21.5	23.8	24.4	16.3
School 6–15	10.8	59.2	13.7	55.2	22.2	54.8	30.5	65.4
Early school 6–10	7.3	38.3	8.4	38.5	15.3	31.0	20.3	37.0
Later school 11–15	3.5	20.9	5.3	16.7	6.9	23.8	10.2	28.4
Postschool 16–20	1.0	7.2	1.3	6.8	4.2	16.3	2.4	14.4
	Group C							
	Cerebral palsy		Epilepsy		Deafness and hearing impairment		All forms of mental retardation	
	At registration (N=1,512)	End of 1964 (N=1,230)	At registration (N=1,339)	End of 1964 (N=1,050)	At registration (N=1,474)	End of 1964 (N=1,149)	At registration (N=4,429)[1]	End of 1964 (N=4,054)
Preschool 0–5	58.1	17.2	31.1	8.6	33.7	8.4	40.2	11.6
Infancy 0–1	19.9	.6	8.0	.3	8.7	.6	18.6	1.3
Later preschool 2–5	38.2	16.6	23.1	8.3	25.0	7.8	21.6	10.3
School 6–15	35.8	59.1	54.9	60.4	59.4	60.0	53.1	58.1
Early school 6–10	23.4	29.3	32.1	29.2	34.8	27.1	31.3	25.7
Later school 11–15	12.4	29.8	27.3	31.2	24.6	32.9	21.8	32.4
Postschool 16–20	6.1	23.7	9.5	31.0	6.9	31.6	6.7	30.3

[1] Excludes children registered in 1958 when the majority had been in institutions for a number of years. A total of 790 children with mongolism and 5,201 with mental retardation of all forms were registered between 1952 and 1964.

NOTE: Numbers in column heads are totals of all children under 21.

Table 3. Age distribution of the Province's population under 21 years in 1964 and in the median period 1956–60

Age group (years)	Estimated number in 1964	Percent	
		1964	1956–60
0–5	227, 200	32. 3	36. 0
0–1	73, 800	10. 5	12. 7
2–5	153, 400	21. 8	23. 3
6–15	343, 900	49. 0	47. 1
6–10	180, 100	25. 7	26. 4
11–15	163, 800	23. 3	20. 7
16–20	131, 300	18. 7	16. 9
Total	702, 400	100. 0	100. 0

tion of all surviving children at the end of 1964. One column shows the age distribution of children entering the "pool" at any given time; the other, the age distribution of surviving children accumulated in the "pool" at a given time. Since children move along the age scale while on the registry, the age distribution of the accumulated number can be expected to change as the registry itself ages. The distribution on entering, on the other hand, follows a more or less constant pattern from year to year. (In the earlier years of the registry's operation, the proportion of older children entering the registry was slightly greater, but basically the pattern has remained the same.)

By comparing table 2 with the percentage age distribution of the total nonadult population of the Province (table 3), it is possible to determine which age groups are contributing disproportionately to the number of children entering the registry as well as which age groups were disproportionately represented in the live caseload of the registry in 1964. Since estimated age-specific prevalence rates are based on the live caseload, the age groups which are represented to a greater extent than would be expected on the basis of their numbers in the general population are the age groups showing the highest estimated prevalence rates shown in table 4.

Table 2 shows that the preschool age group is the most important for casefinding of group A conditions—clubfoot, cleft lip and palate, and mongolism. (In this paper the registration of a case is considered a casefinding event.) Almost 90 percent of the children initially registered with clubfoot or with cleft lip and palate are in this age group, and most of these are registered as infants. In mongolism, infancy is also the most important casefinding period of life, but a substantial number of children are initially registered with this condition between the ages of 2 and 5. This may be an indication of difficulty in the early detection of this condition or a reluctance to report it at birth, or both.

Table 4. Estimated age-specific prevalence rates per 1,000 based on registered children resident in British Columbia at the end of 1964 [1]

Age group (years)	Group A			Group B, congenital heart defect (N= 1,515)	Group C			
	Clubfoot (N=934)	Cleft lip and palate (N=753)	Mongolism (N=574)		Cerebral palsy (N= 1,155)	Epilepsy (N=997)	Deafness and hearing impairment (N= 1,077)	All forms of mental retardation (N= 3,848)
Preschool 0–5	1. 46	1. 31	0. 75	1. 31	0. 89	0. 38	0. 42	2. 02
Infancy 0–1	1. 53	1. 22	. 41	. 75	. 08	. 04	. 09	. 69
Later preschool 2–5	1. 43	1. 36	. 92	1. 58	1. 28	. 55	. 57	2. 66
School 6–15	1. 57	1. 19	. 91	2. 90	1. 98	1. 77	1. 90	6. 51
Early school 6–10	1. 92	1. 58	1. 01	3. 11	1. 88	1. 64	1. 64	5. 54
Later school 11–15	1. 20	. 76	. 81	2. 66	2. 09	1. 92	2. 18	7. 58
Postschool 16–20	. 46	. 35	. 68	1. 69	2. 06	2. 29	2. 51	8. 76
Under 21	1. 33	1. 07	. 82	2. 16	1. 64	1. 42	1. 53	5. 48

[1] Correction for residence accounts for the difference between the numbers in the column heads of this table and the corresponding numbers in the column heads of table 2. The percentage age distribution of the corrected numbers is roughly the same.

However, a substantial percentage of children enter the registry with these conditions over the age of 5 years (table 2). This indicates the presence in the community of a number of unregistered cases in preschool children who can be expected to be registered at a later age and explains the higher estimated prevalence rates in the early school-age group in table 4 compared with the preschool rates. The early school-age group includes children who were registered as preschoolers as well as more recently registered older children. For reasons already explained, the peak rates in the early school-age group were the most meaningful estimates of the true prevalence rates among all children up to that age group in 1964.

The estimated age-specific prevalence rates of the group A conditions decrease noticeably beyond age 10 (table 4). Although mortality may be a contributing factor, the main reason is that, in addition to limited casefinding beyond that age, the majority of surviving young children who entered the registry with these conditions during the early years of its operation were not old enough by 1964 to be in the two oldest age groups. As the period of operation of the registry is extended, the later school-age group and the postschool-age group will show higher estimated rates than the rates based on the 1964 caseload.

The majority of group B children entering the registry with congenital heart defects are in the preschool-age group. However, the school-age groups account for a far greater proportion of the total number of children at registration than those in group A (table 2). The reason is that congenital heart defects may be of a more occult nature and, consequently, regular medical examinations in the schooling period play a far more important role in casefinding than for group A conditions.

The early school-age group again shows the highest estimated prevalence rate of 3.11 per 1,000 (table 4), and this rate was the closest approximation of the true rate among children up to that age in 1964. Because the proportion of unregistered cases in the community in the preschool-age group is far greater than in the group A children and because of the importance of the early school-age group in casefinding, the disparity between the preschool rate and the early school rate shown in table 4 was much greater for congenital heart defects. For this reason it is particularly important to exclude the preschool population in estimating the prevalence of this condition among children.

Since mortality due to congenital heart disease among children 11 or older is relatively low and since as many as 10 percent of the cases entering the registry are of children in the later school-age group, the lower estimated rate of 2.66 in this age group in table 4 as compared with the rate of 3.11 in the early school-age group is contrary to expectation. Again, however, cases previously registered while the children were of preschool age were the main source of registered cases in school children at the end of 1964 when the oldest survivors were only about 12 years old. As the residue of unregistered cases in children 11 or older is absorbed, and registered early school-age children move into the later school-age group, the peak estimated rate will shift to the right of the age scale.

The school attendance period is of special importance in casefinding of the conditions in group C. With the exception of cerebral palsy, this period does not show the relatively low percentages at registration in table 2 which are characteristic of the group A conditions. The schooling period is a highly competitive stage of the child's life and the handicaps caused by mental subnormality, hearing impairment, and epilepsy do not easily escape notice during this time.

Because of further demands on adolescents with these conditions which arise when they try to find employment, the postschool-age period is also of relatively greater casefinding importance than with group A and group B conditions. With the exception of cerebral palsy, the estimated prevalence peak for these conditions at the end of 1964 in table 4 was in this 16–20 year age group. Cases among those past school age include a large number of children who entered the registry in previous years while they were of school age as well as children who entered more recently when they were past 15 years.

Although the school-age period is important in cerebral palsy casefinding, the majority of children entering the registry with this condition are preschoolers. Unlike the congenital

malformations, however, cerebral palsy shows the highest percentage of children initially registered between the ages of 2 and 5 years instead of during infancy. This registration age is the reason for the estimated prevalence peak at the end of 1964 (table 4) in the later rather than the early school-age group, as is true of the congenital malformations. With the continuing operation of the registry, the postschool-age group will probably show the highest estimated prevalence rate for cerebral palsy, as the preschool- and school-age children registered previously enter this age group and their numbers are augmented by cases found in postschool-age children.

Estimated Prevalence Rates by Condition

Mongolism. Because the mortality rate among children with mongolism has been on the decline over the last few decades, the prevalence of mongolism in the population at large has been rising steadily. Penrose (*3*) in 1949 reported a rate of 0.27 per 1,000 children under 15 years of age in London, with the age group 10–14 showing a higher rate of 0.46 per 1,000. In 1962 Goodman and Tizard (*4*) reported a rate of 0.82 per 1,000 children under 15 years in Middlesex County with the rate being as high as 1.14 in the age group 10–14. Table 4 shows that the rate at early school age or younger in British Columbia was at least in the neighborhood of 1 per 1,000 at the end of 1964.

Assuming that the mortality rate among infants with mongolism will continue to decline, the prevalence rate may be expected to rise in the future. Nevertheless, the prevailing high mortality rate currently associated with mongolism is indicated by the fact that 20 percent of all infants with mongolism who entered the registry between 1962 and 1964 inclusive were dead by the end of 1964. It is mainly this high mortality rate which accounts for the difference between the estimated incidence rate of mongolism at birth in British Columbia of 1.46 per 1,000 live births (*5*) and the estimated prevalence rate among early school-age children of 1.01 per 1,000 in table 4. As mortality continues to decline, the disparity between the two rates will be reduced.

Congenital heart defects. The estimated overall school-age prevalence rate of congenital heart defects in British Columbia of 2.90 per 1,000 in table 4 compares with a rate of 1.97 reported by Robinson and co-workers (*6*) in San Francisco in 1946–47 and a rate of 2.03 reported by Gardiner and Keith (*7*) in Toronto in 1948–49. More recently Rose and co-workers (*8*) reported a rate of 2.57 per 1,000 in Toronto in 1961–62. The relatively high estimates for British Columbia in 1964 and for Toronto in 1961–62 suggest a decline in infant mortality in recent years. If there is indeed a decreasing trend in mortality, the prevalence rate might be expected to continue to rise. The prevailing high mortality rate is indicated by the fact that 30 percent of all infants registered in British Columbia with this condition in 1963–64 were dead by the end of 1964.

Clubfoot and cleft lip and palate. As a result of improved methods of early surgical correction, the prevalence of these conditions as serious handicaps to children has markedly declined in recent years. Prevalence rates of these conditions are therefore of less significance, and meaningful published data are negligible. However, for epidemiologic purposes, it is important to record all persons born with these conditions. Milham (*9*) has recently shown that underreporting of cleft lip and palate at birth is more widespread than is generally believed and states that an accurate determination of incidence of congenital malformations may be of importance in studying the pathogenesis of these conditions.

Children born in British Columbia with these deformities reported on the Physician's Notice of a Live Birth or Stillbirth are routinely registered whether the defect is surgically corrected or not. The registry is therefore a central record of all persons reported at birth as well as of those registered later in life who were missed at birth. By relating the live and dead cases (that is, cases of those who died following registration) to their birth years, it is possible to derive more reliable estimates of incidence at birth than is available from information derived exclusively from vital records.

Based on information from the Physician's Notice of a Live Birth or Stillbirth in British Columbia, the incidence rate per 1,000 live births of clubfoot was 1.86, and of cleft lip and palate, 1.41 in the cohort of live births occurring in

the period 1954 through 1958. The survivors of this cohort were between the ages of 6 through 10 years old by the end of 1964. The estimated prevalence rates in table 4 of 1.92 for clubfoot and 1.58 for cleft lip and palate in this age group at the end of 1964 exceeded the incidence rates based on vital records. The true prevalence rates of these conditions could only be higher than their true incidence rates at birth as a result of an improbable large-scale migration of affected children into the Province, since a relatively high infant mortality rate is associated with both clubfoot and cleft lip and palate. An indication of this high mortality is the fact that about 15 percent of all infants registered with these conditions since 1952 were dead by the end of 1964. A recent study of registry cases of persons with these conditions who have died revealed that they differed from their live counterparts mainly in a greater frequency of occurrence of multiple congenital malformations. In most instances, death was caused by an associated malformation.

The reason for the anomalous relationship between the estimated prevalence and incidence rates just discussed is that only about 75 percent of the cases of clubfoot or cleft lip and palate on the registry at the end of 1964 in children who were born in British Columbia in 1954 through 1958 were originally reported at birth. The incidence rates of these conditions in this cohort based on the registry caseload in 1964 were 2.39 per 1,000 live births for those with clubfoot and 1.84 per 1,000 for cleft lip and palate, in each instance about 30 percent higher than the previously mentioned rates based on vital records.

Mental retardation. The prevalence of mental retardation is difficult to assess, and comparisons are often misleading because of differences in criteria. It was reported by the World Health Organization (*10*) in 1954 that English educational practice aimed to make provision for 1 percent of school children in special schools. As casefinding continues throughout childhood the estimated prevalence rate increases with age, and the peak rate of 8.76 per 1,000 is approximately equivalent to 1 percent of the postschool-age population (table 4).

Cerebral palsy. Martin (*11*) in 1960 found an overall prevalence rate of 0.63 per 1,000 children under 15 years of age in Manitoba, with the age group 5–9 years showing the highest rate of 1.57. These rates compare with a rate of 1.55 per 1,000 children under 16 in British Columbia in 1964 and a rate of 1.88 per 1,000 children between the ages of 6 and 10 (table 4). Bowley and Gardiner (*12*) quote approximate figures of 1.3, 1.9, and 2.0 per 1,000 school children taken from three different British estimates. These rates compare with an overall school-age estimated rate in British Columbia of 1.98 per 1,000, the highest rate being 2.09 between ages 11 and 15 (table 4).

Epilepsy. The British Ministry of Education (*13*) in 1958 reported a rate of 2 per 1,000 children with epilepsy examined in medical inspections in Great Britain. The overall school-age rate is 1.77 per 1,000, and the postschool-age rate is 2.29 per 1,000 (table 4). As has already been explained, the relatively high rate in the postschool-age group is partly a result of the late registration of children who were missed in the schooling period, but there is reason to believe that the true prevalence rate is higher in the postschool-age group than in younger age groups because onset of the condition is frequently late. The College of General Practitioners in Great Britain (*14*) has published data indicating that the incidence of "first fits" is higher between the ages of 15 and 24 years than between 5 and 14 years.

Deafness and hearing impairment. Bowley and Gardiner (*12*) have estimated the number of children who need education in special schools because of partial loss of hearing and deafness to be between 1 and 2 per 1,000 school children. The overall school-age rate of 1.90 per 1,000 approximates the upper limit of this estimate, while the postschool-age rate of 2.51 exceeds it (table 4).

Summary and Conclusions

A little more than a decade since its inception, the registry had accumulated sufficient data by 1964 for estimating minimal age-specific "prevalence" rates of certain chronic diseases of children. These rates are merely the number of children in certain age groups on the registry at the end of 1964 expressed per unit population in those age groups. They are not prevalence rates in the strict sense of the word because the

registry cannot claim complete coverage of the population of British Columbia; also the age factor in casefinding and the length of time the registry has been in operation impose certain limitations.

The age groups showing the largest number of children on the registry per unit of population did not correspond to the age groups of most intensive casefinding for any particular condition. This disparity is because a certain number of children were missed while they were in the age groups of most intensive casefinding and were subsequently registered when they were older. The later age group therefore included these previously missed children as well as those who were registered at an earlier age and had since advanced along the age scale. At the end of 1964 the oldest age groups showed low estimated prevalence rates of some congenital conditions owing to the fact that children in these age groups were older than the registry itself and had undergone surgical repair before registration began. As the operation of the registry continues, registered children will move along the age scale with a resulting further shift in estimated age-specific prevalence peaks of some conditions to older age groups.

With the exception of epilepsy which frequently has a late onset, the relatively low estimated prevalence rates in certain age groups are the result of a relatively greater proportion of unregistered cases in the community in those age groups and are not indicative of true age-specific prevalence patterns. For this reason these underrepresented age groups should be excluded from prevalence estimates. "Prevalence" rates in British Columbia based on the number of children on the registry agree with other published rates.

The prevalence of certain congenital conditions is closely related to infant mortality and to incidence at birth. High infant mortality rates continue to be associated with mongolism and congenital heart defects. Consequently, the incidence rates of these two conditions at birth are considerably higher than their prevalence rates in the population. However, there is evidence that mortality associated with these conditions is constantly declining with a corresponding rise in their prevalence on the population.

The importance of the registry as a source of information for determining incidence rates of congenital conditions at birth has been discussed.

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Program Notes

Low-Cost Drugs for Private Patients

The District of Columbia initiated a low-cost drug program on November 1, 1966. The program is to enable rheumatic fever and rheumatic heart disease patients under private medical care to purchase drug prophylaxis at lower costs. Private physicians will decide which of their patients should participate.

Dr. Murray Grant, D.C. director of public health, said that patients with diagnosed cases of rheumatic fever without heart involvement need to continue daily antibiotic prophylaxis until age 21; patients with cardiac involvement should continue daily prophylaxis until age 40.

Training Home Health Aides

The first group of home health aides to be trained by the Maryland State Department of Health under the Medicare Act has graduated, Dr. DeWitte T. Boyd, assistant commissioner for community health services, reported. Eight women received diplomas after satisfactorily completing the 2-week course.

The aides are trained to assist public health nurses in the care of patients confined to their homes by illness or disability. They may serve meals, assist in patients' rehabilitation, provide personal care, and assist in housekeeping. They are employed by local health departments and are paid while in training.

Neurological and Sensory Sciences

A division of neurological and sensory sciences has been established at the Temple University Health Sciences Center in Philadelphia, Pa. The new division consists of the departments of neurology, neurosurgery, ophthalmology, and otorhinology of the Temple University Hospital and School of Medicine.

Dr. Robert M. Bucher, dean of the school of medicine, said that all four departments are concerned, in one way or another, with the central nervous systems and its end organs, the eyes and ears. The combination, it is hoped, will result in improved patient service, education, research, and graduate training.

Disregard of Safety in New Cars

A higher percentage of occupants of newer models of automobiles than of older models risk their lives by failing to wear their seat belts.

Researchers at the Cornell Aeronautical Laboratory, Inc., Buffalo, N.Y., found that only 30 percent of the people in 1965 model cars were wearing seat belts in accidents under study. Thirty-seven percent of the occupants of 1961–62 models were wearing their belts in the accidents studied.

Baby-Safe Homes

One objective of a program in Charleston, S.C., is to make the home "baby safe." The Public Health Service and the Charleston County Board of Health recently announced renewal of a contract for the program that provides accident-prevention instruction to preschool and school-age children in Charleston.

Prevention of burns, cuts, and fractures is taught in the schools and in the homes through songs, games, and playlets in which participation of children is stressed. Nurses, especially trained in prevention techniques, visit individual homes to instruct mothers. Older children are taught accident-prevention methods in special classes.

Rehabilitation of "Glue Sniffers"

Results of an experimental program by the Denver Juvenile Court to develop new techniques for rehabilitating young glue sniffers show that "there are enough discernible differences in the results among the experimental groups to warrant further refined testing and evaluation."

Dr. Ellen Winston, U.S. Commissioner of Welfare, made this statement in announcing extension of a Federal grant for the project for an additional 8½ months. Results of the project to date, she said, "have already provided schools, police and other public and private agencies with a better understanding of the problems associated with 'glue sniffing.'"

New York Ambulance Standards

A New York State law, which became effective January 1, 1967, requires profit-making ambulance services in the State to meet minimum standards in staffing, personnel training, equipment, and service.

"Before this law," said Dr. Hollis S. Ingraham, State health commissioner, "a person could buy a battered station wagon and have it licensed as an ambulance without equipping it with so much as a Band-aid."

Cervical Cancer Reduction

Every year a screening program for cervical cancer in Monroe County, N.Y., is adding an estimated 300 years of life to its female residents, according to a New York State Health Department study.

Life expectancies of two groups of women were compared, using an elaborate mathematical formula. One group had not been tested at all for cancer of the cervix; members of the other group had had Papanicolaou tests between 1960 and 1965. Average life expectancy salvaged was estimated, judging from cervical cancer rates in the past.

The study showed that the program saved the most years of life per dollars expended among women aged 45–54 years and among women living in the areas of high risk—the central parts of Rochester, for example.

Items for this page: Health departments, health agencies, and others are invited to share their program successes with others by contributing items for brief mention on this page. Flag them for "Program Notes" and address as indicated in masthead.
