

OFFICIAL STATISTICS AND BLINDNESS IN HONG KONG

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INTRODUCTION

The theme for World Health Day for this year, as designated by the World Health Organisation is "Foresight Prevents Blindness." A number of publicity materials have been issued all over the world. Among them, there was an article on "The Role of WHO" written by Professor G.B. Bietti of Italy (Bietti, 1976).

In this article, prevalence rates of blindness of many countries are quoted including that of Hong Kong. This is an astonishing figure of 1,392 per 100,000 and among the 48 countries quoted, Hong Kong ranks after Yemen, Saudi Arabia and Uganda as the fourth highest in blindness prevalence rate.

Upon looking up the Epidemiological and Vital Statistics Report 1966 (WHO, 1966) where the data on blindness are published, it is found that the Hong Kong data were submitted in 1963 out of estimation, and a total of 50,000 blind persons in Hong Kong were estimated at that time to produce the prevalence rate. In the same report, it is also found that in the 1961 census in Hong Kong, only 856 blind persons were enumerated. There is thus quite a considerable discrepancy between the two figures 856 and 50,000 in the course of only two years.

On 5th March, 1976, there was an exhibition in Hong Kong for the "Prevention of Blindness," organised by the Lions International District 303 (Hong Kong & Macau) and others. A pamphlet was published; giving, inter alia, the causes of blindness in Hong Kong (Table 1), based on the 7,641 persons registered with the Hong Kong

Social Welfare Department. Unfortunately, it did not say how long it took the Social Welfare Department to register these 7,641 persons; nor did it break down these persons according to their sex and age. It tended to suggest, on the other hand, that Vitamin A deficiency was still an important cause for blindness in Hong Kong. Therefore, confusing information about blindness in Hong Kong was reported. The objective of this paper is to review all the official statistics published so far in Hong Kong in order to get a better idea of the prevalence and the causes of blindness.

Table 1

Causes of blindness in Hong Kong put forward by the Prevention of Blindness Exhibition, March 1976.

Causes of blindness	Percentage of total
Cataract	32.3
Degenerative diseases	16.2
Glaucoma	12.6
Uveitis	9.6
Trachoma	9.5
Xerophthalmia/nutrition	8.9
Others	10.9

(Based on 7641 persons on the register of the Hong Kong Social Welfare Department).

Sources of Information

Official statistics of blindness in Hong Kong come from four major sources. The first one is the Medical and Health Department. In 1954, this Department set up an Ophthalmic Service providing services directly to the public. The specialist in ophthalmology, who came to Hong Kong two years earlier, did a

survey of the causes of blindness meanwhile. This was reported in the *British Journal of Ophthalmology* in 1958 (Dansey-Browning, 1958) and later quoted in the WHO's *Epidemiological and Vital Statistics Report* 1966.

From 1954 onwards, the services provided each year by the Ophthalmic Service are reported by the Director of Medical and Health Services in his Annual Reports (Hong Kong Medical and Health Department, 1953-75). These include the number of new patients seen, the number of new blind persons registered and the number of blind persons deregistered after successful operations (Table 2). For ten years from 1963 to 1972, the

causes of blindness were analysed, using the same classification throughout and quoting the survey in 1953 as a baseline for comparison (Table 3). Recently, a new classification for the causes of blindness has been adopted, rendering the statistics for 1973 and 1974 (Table 4); as will be explained later on, not quite comparable with previous years. Moreover, the Ophthalmic Service provides the information of the number of blind persons who are under 15 years old seen in its eye clinics, and analyses their causes of blindness separately (Tables 2, 5 and 6).

The second source is from the Social Welfare Department. It keeps a register of dis-

Table 2
Blind persons registered and deregistered with the Ophthalmic Service,
Hong Kong Medical and Health Department, 1954-1974.

Year+	Blind persons registered		Blind persons deregistered	Total new patients seen
	Total	Under 15		
1954	*	*	*	25,518
1955	*	*	*	30,377
1956	*	*	*	42,432
1957	329	*	*	50,499
1958	*	*	*	60,791
1959	435	*	*	73,846
1960	*	*	*	79,075
1961	634	*	*	76,214
1962	742	*	*	83,852
1963	467	35	*	93,343
1964	423	33	48	93,936
1965	467	30	65	99,403
1966	420	22	63	93,998
1967	345	20	80	91,443
1968	279	15	32	97,053
1969	220	17	19	86,452
1970	226	10	*	82,810
1971	228	11	*	95,894
1972	224	17	*	81,571
1973	904	*	*	82,447
1974	1447	*	*	91,458

+ year refers to calendar year, *not reported.

(Source: Annual Reports of the Hong Kong Medical & Health Department, 1953-1975).

Table 3

Causes of blindness reported annually by the Ophthalmic Service of Hong Kong Medical & Health Department, 1963-1972.
(expressed as percentage of all cases registered in that year)

Cause	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1963-72	1953
Keratomalacia	10.0	10.4	5.0	5.0	4.5	8.6	4.0	5.8	3.5	-	6.2	44.0
Senile cataract	43.0	33.3	39.0	46.0	35.0	31.5	31.3	24.0	45.2	39.7	37.6	16.0
Trachoma	11.0	9.0	9.0	10.0	11.0	9.4	9.5	8.5	6.5	6.2	9.3	11.0
Glaucoma	12.0	13.7	18.0	17.0	14.0	15.4	12.7	22.6	13.7	15.6	15.4	3.5
Injuries (all types)	2.0	2.6	1.0	2.0	1.5	0.7	4.5	1.0	1.3	2.7	1.9	10.0
Syphilis	5.0	7.6	3.0	3.0	4.0	1.1	0.9	0.4	-	1.3	3.2	6.0
Congenital defects	6.0	9.7	10.0	6.0	4.0	4.0	4.0	2.2	3.5	4.0	6.0	4.0
N.S.O.A./Uveitis	7.5	8.0	7.5	4.0	14.0	14.3	16.1	19.1	11.0	20.1	10.8	2.5
Degenerative diseases	3.5	5.7	7.5	7.0	12.0	14.3	16.0	16.4	11.4	9.4	9.2	3.0
Neoplasms	-	-	-	-	-	0.7	1.0	-	2.6	0.5	0.3	-
Meningitis	-	-	-	-	-	-	-	-	1.3	0.5	0.1	-

Source: Annual Reports of Hong Kong Medical & Health Department, 1962-1973).

Table 4

Causes of blindness reported by the Ophthalmic Service of Hong Kong Medical & Health Department, 1973-74.
(expressed as percentage of all cases registered in that year)

Cause	1973	1974
Cataract	23.0	34.3
Glaucoma	25.0	18.3
Corneal leucoma (trachoma)	12.0	10.3
High refractive error (myopia)	5.3	8.0
Phthisis bulbi (unidentified causes)	11.4	7.9
Optic atrophy	4.8	6.0
Uveitis	5.3	4.5
Retinitis pigmentosa	5.3	3.6
Senile macular degeneration	1.5	2.2
Retinal detachment	1.2	1.4
Dysplasia	2.5	1.2
Diabetic retinopathy	1.5	1.2
Retinal vascular accidents	0.2	0.5
Injuries	0.8	0.5
Neoplasms	0.2	0.1

(Source: Annual Report of Hong Kong Medical & Health Department, 1974-75.)

abled persons, dividing them into the following categories: blind, deaf, mentally retarded and physically disabled. According to its Departmental Annual Reports Hong Kong Social Welfare Department 1953-75) the blind register has started in 1953 and the figure published annually is the cumulative total from 1953 after adding the number registered and subtracting the number deregistered in each year (Table 7). In other words, the difference in number between two successive years reflects the net increase in the register only, the information on actual increase or gross gain is lost on the statistical compilation. There are other statistics published by the Social Welfare Department on blindness, such as the number of blind persons on public assistance, the number of blind persons

residing in institutions run by the Department, etc., but these are of no importance to the present study and are therefore not quoted.

The concern of the Education Department is on special education for the blind students. Two special schools are heavily subsidised by this Department on the educational aspect and the total number of students enrolled each year (Table 8) has been published in the Departmental Annual Reports since 1963 (Hong Kong Education Department 1963-75). The partially sighted students are educated in special classes of ordinary schools. No detailed information on this aspect is obtainable from the official reports.

Lastly, in the 1961 Census, an attempt was made by the Census and Statistics Department to enumerate the number of totally blind persons in Hong Kong. Out of 3,129,648 persons in Hong Kong at that time, only 856 were recorded as totally blind (Hong Kong Census and Statistics Department 1964). The criterion for blindness and the figure obtained (Table 9) have been much criticised by the voluntary organisations working for the blind. Although an attempt was made to enumerate the blind persons again in the 1971 Census, the results were not published in the main report (Hong Kong Census and Statistics Department 1972) for unknown reasons. 1976 is the year for doing a by-census in Hong Kong, and the voluntary organisations here have exerted some pressure on the Government to include counting of disabled persons for future planning purposes (Hong Kong Council of Social Service, 1975).

Prevalence of Blindness

Theoretically, a population census serves as the best opportunity to enumerate the total number of blind persons in a community. Unfortunately, in the 1961 census, the criterion used was too rigid in asking for "totally blind" and the enumerators were not ad-

Table 5

Causes of blindness in children under 15 years old reported annually by the Ophthalmic Service of Hong Kong Medical and Health Department, 1963-1972.
(expressed as percentage of total blind children registered in that year)

Cause	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1964-72	1954
Keratomalacia	*	15.2 (5)	15.2 (5)	32.0 (7)	15.0 (3)	6.6 (1)	5.9 (1)	10.0 (1)	9.0 (1)	- (0)	13.7 (24)	74.5
Congenital defects	*	51.5 (17)	51.5 (15)	64.0 (14)	65.0 (13)	80.0 (12)	64.7 (11)	60.0 (6)	73.0 (8)	41.0 (7)	58.9 (103)	20.0
N.S.O.A. Uveitis	*	33.3 (11)	33.3 (10)	4.0 (1)	20.0 (4)	13.4 (2)	23.5 (4)	30.0 (3)	- (0)	59.0 (10)	25.7 (45)	5.5
Neoplasms	*	- (0)	- (0)	- (0)	- (0)	- (0)	5.9 (1)	- (0)	18.0 (2)	- (0)	1.7 (3)	-
Percentage of children among all cases registered	7.5 (35)	7.8 (33)	6.4 (30)	5.2 (22)	5.8 (20)	5.4 (15)	7.7 (17)	4.4 (10)	4.8 (11)	7.6 (17)	6.2 (175)	*

* not reported. Figures in () indicate the number of cases.

(Source : Annual Reports of Hong Kong Medical & Health Department, 1962 - 1973.)

Table 6

Causes of blindness in Children under 15 years old reported by the Ophthalmic Service of Hong Kong Medical & Health Department 1973-1974.

(expressed as percentage of total blind children registered in that year)

Cause	1973	1974
Dysplasia	15.6	30.0
Cataract	23.0	22.5
Bupthalmos	15.5	5.0
Retinitis pigmentosa	15.5	5.0
Optic atrophy	7.6	17.5
Uveitis	15.5	2.5
High refractive error	3.7	5.0
Retinal detachment	3.6	7.5
Keratitis	-	2.5
Neoplasm	-	2.5

(Source: Annual Report of Hong Kong Medical & Health Department, 1974-1975.)

equately briefed for looking for disabled persons. The figure of 856 was immediately commented to be too low to be true because the Social Welfare Department had 2,703 blind persons on its register and the Medical and Health Department alone certified 634 new cases of blindness in that year.

How the 1963 estimation that there were 50,000 blind persons in Hong Kong giving rise to a prevalence rate of 1392 per 100,000 was based was not known. Official statistics tend to suggest that this is an unlikely figure for Hong Kong. This conclusion is arrived by considering the number of cases seen or registered annually and the causes of blindness in Hong Kong.

For the first ten years, the number of new patients seen each year in the Government Ophthalmic Service has increased from 25,000 to 90,000 and then it remains steady at this level in spite of the fact that more clinics have opened and more doctors have joined this service in recent years. This indicates that

the Ophthalmic Service has now a more or less static catchment area in Hong Kong and is considered to cover chiefly people in the lower socio-economic groups because only a token fee of \$2 (20p) is charged and even that can be waived if necessary.

There is mutual co-operation between the Medical and Health Department and the Social Welfare Department for the blind persons. The former, upon diagnosing a blind person, refers him to the Social Welfare Department for registration whereas the latter sends its clients to the former for assessment and treatment, when registered. This accounts for the fact that the numbers of new cases seen and registered by the two Departments are more or less the same in the past years.

It appears from the official statistics that there were comparatively more cases seen and registered in the last two years. The reason was given in the Annual Report of the Medical and Health Department for the year 1973-1974. The increase was attributed to the introduction of Disability Allowance in that year. Before that, disabled persons could seek only public assistance because of poverty. Since then, blindness *per se* entitles the disabled person to a definite allowance.

The question is what is a new case in an official register. If a register is kept for paying disability allowance, then every possible means will be sought to avoid repetition. If a register is kept for merely providing information, then the chance is that repetition does occur from time to time unless much effort is spent on correcting it. In the Annual Report of the Social Welfare Department for the year 1957-58, the number of blind persons on the register was reported to be 1,394, but this figure was adjusted in later years to be 1,366, showing that effort being spent occasionally to rectify the mistake due to repetition. This also accounts for in some years, such as 1972-

Table 7

Blind persons on the register of the Hong Kong Social Welfare Department, 1953-1975.

Year+	Total on register at the end of the year	New cases registered in that year	Net increase in the register
1953-54	600	600	600
1954-55	700	*	100
1955-56	900	*	200
1956-57	1100	*	200
1957-58	(1394)	*	294
1958-59	1735	*	341
1959-60	2051	385	316
1960-61	2703	763	652
1961-62	3226	660	523
1962-63	3767	699	541
1963-64	4032	435	265
1964-65	4280	246	248
1965-66	4586	307	306
1966-67	4951	365	365
1967-68	5023	*	72
1968-69	5155	*	132
1969-70	5386	*	231
1970-71	5552	*	166
1971-72	5725	*	173
1972-73	5696	*	- 29
1973-74	6060	*	364
1974-75	7001	*	941

+ year refers to financial year from 1st April to 31st March, *not reported, () figure later adjusted to 1366, reason not explained.

(Source: Annual Reports of the Hong Kong Social Welfare Department, 1953-1975.)

73, there was no net increase in the register at all, remembering that that year was prior to the introduction of Disability Allowance.

The Ophthalmic Service keeps no permanent register for blind persons. What it keeps is a record of cases seen in one year. Thus, double counting in different years may occur especially if the blind persons are referred to it for different purposes. In the past, they were referred for registration purpose. Since 1973, they have been referred for disability allowance purpose. The figures 904 in 1973 and 1,447 in 1974 may be partly

accounted by the fact that there are old registered cases coming forward to claim the new allowance provided, although the disability allowance itself would bring many unregistered cases into light.

At this stage, let us assume that the figure 7,001 on the register of the Social Welfare Department on 31st March, 1975 is true, this would produce a prevalence rate of 160 per 100,000 as the mid-year population in Hong Kong in 1975 is 4,366,600. Table 10 gives the blindness prevalence rates of some of the countries published by WHO in the Epide-

Table 8

Blind students enrolled in special schools in Hong Kong, 1963-1975.

Year	Number enrolled at the end of the year				
	Preparatory	Primary	Secondary	Technical	Total
1963-64	22	146	27	8	203
1964-65	30	145	26	6	207
1965-66	28	142	29	-	199
1966-67	21	142	34	-	197
1967-68	26	121	47	-	194
1968-69	12	119	59	-	190
1969-70	32	100	52	-	184
1970-71	25	98	48	-	171
1971-72	31	89	61	-	181
1972-73	22	87	65	-	174
1973-74	11	113	77	-	207
1974-75	19	89	58	-	166

(Source: Annual Reports of Hong Kong Education Department, 1963-75.)

Table 9

Blind persons enumerated in the 1961 Hong Kong census.

Age groups	Male	Female	Total
0 - 4	1	-	1
5 - 9	16	24	40
10 - 14	42	46	88
15 - 19	25	30	55
20 - 24	35	29	64
25 - 34	61	57	118
35 - 44	56	50	106
45 - 54	70	50	120
55 - 64	56	59	115
65 & over	50	97	149
Total	412	444	856

(Source: Hong Kong Census Report 1961, Vol. II)

miological and Vital Statistics 1966 (WHO, 1966). We see that rates for developed countries are in the region of 50 to 250 per 100,000 and developing countries, 250 to 1000 per 100,000, taking Yemen and Saudi Arabia as the exceptional cases. We find no grounds to justify the estimated prevalence rate of 1392 per 100,000 for Hong Kong in 1963. Even though there is a high possibility of under-

registration of blind persons in Hong Kong, the prevalence rate of 160 per 100,000 is considered to be more appropriate and can be served as the low estimation. Three things will support this argument, the causes of blindness in Hong Kong, the occurrence of blindness in children and the statistical definition and classification of blindness in Hong Kong.

Table 10

Blindness prevalence rates of some countries published by WHO in 1966.

Country	Prevalence rate per 100,000	Method of Information Collection	Year of Information Collection
Belgium	51	Registration	1963
Poland	65	Estimation	1959
Finland	76	Special Survey	1962
France	107	Census	1946
Sweden	130	Estimation	1965
Brazil	147	Census	1940
England & Wales	205	Registration	1963
U.S.A.	214	Estimation	1960
Ireland	233	Estimation	1949
Indonesia	239	Census	1930
Rhodesia	332	Census	1962
China	450	Estimation	1947
Tunisia	450	Special Survey	1960
Sri Lanka	470	Estimation	1963
Tanzania	569	Estimation	1955
Malawi	724	Estimation	1955
Iran	750	Estimation	1960
Hong Kong	1392	Estimation	1963
Saudi Arabia	3000	Estimation	1961
Yemen	4000	Estimation	1960

(Source: Epidemiological and Vital Statistics Report of WHO, 1966.)

Causes of Blindness

Bietti (1976) drew attention to a very marked distinction between the causes of blindness in the developing world and those in the more industrialised countries. For the former, the three major causes are trachoma, onchocerciasis and xerophthalmia, the last term being used to embrace the three main ocular manifestations of vitamin A deficiency - hemeralopia, xerophthalmia and keratomalacia. In contrast to the above, in the more developed countries of the world the most frequent causes of blindness are accidents (at work, on the road, among children, and so forth), glaucoma, diabetes and vascular diseases, cataract and degeneration of the ocular tissues, especially of the retina.

From Table 3, it can be seen that in the 1953 survey, the major causes in Hong Kong were keratomalacia (standing for vitamin A deficiency), senile cataract, trachoma, injuries (all types), syphilis and congenital defects, with keratomalacia accounting for as many as 44% of all the cases seen. This suggests that malnutrition was the major problem at that time, probably indicating the effect of the Second World War.

For the decade from 1963 to 1972, senile cataract rose up to be the major cause followed by glaucoma, accounting for 37.6% and 15.4% respectively. Trachoma has dropped from 11.0% in 1963 to 6.2% in 1972 and syphilis from 5.0% in 1963 to 1.3% in 1972, indicating that the importance of in-

fectious diseases as a cause of blindness is on the whole diminishing. On the other hand, blindness due to uveitis and degenerative diseases are on the upward trend. Injuries on the whole remain around 2.0% in this period as contrasted with 10.0% in 1953. This, to a certain extent, reflects the effect of a law passed in 1958 prohibiting the treatment of any eye conditions by incompetent hands so that all eye injuries, unlike other injuries, must be treated by registered medical practitioners in Hong Kong. Keratomalacia has disappeared as a cause of blindness at the end of this period.

The causes of blindness reported in 1973 and 1974 have to be treated with some reserve because as pointed out earlier on, some "old" cases may be included again. Trachoma goes back to the 1953 level of 11%, but the two major causes are still cataract (N.B.: it is no longer qualified by the word senile in the new classification) and glaucoma. Congenital defects and degenerative diseases are getting more important, whereas injuries account for less than 1% and keratomalacia disappears completely in the classification.

The different classifications of causes of blindness used in Hong Kong render exact comparison in the past years impossible, but on the whole, the changing pattern of the causes can be discerned. In 1953, malnutrition and infectious diseases were important. In 1963, senile cataract became the major cause followed by glaucoma. This remains true in 1974. Trachoma is the only infectious cause of some importance but vitamin A deficiency has disappeared completely. Blindness caused by congenital and degenerative diseases are increasing, but injury as a cause is rather insignificant.

Thus, in 1953, Hong Kong had a blindness pattern resembling those of the developing countries. In 1974, it has definitely a pattern similar to the developed world, or even better,

in that blindness by accidents is not a major cause here.

Blindness in Children

The information on this aspect is incomplete but some generalisations can still be made from the official statistics in Hong Kong. The most important gap is that since 1973, the Ophthalmic Service of the Medical and Health Department has not reported the numbers of blind children registered with it each year.

For the period from 1963 to 1972, out of the 3,299 blind persons registered with that service, 210 were children under 15 years old. Throughout that period, the percentage of children among blind persons registered with the Ophthalmic Service varied from 4.4% to 7.8% with an average of 6.4%.

Looking at the problem from another angle, the number of blind children registered with the Ophthalmic Service reduced from around 30 in 1963 to around 15 in 1972. That the numbers of blind children are diminishing over the years is further supported by the numbers of blind students enrolled with the Education Department (Table 8). In 1964, the number of students in primary classes (six years) was 146. In 1975, it is only 89. The vacancies are there but there are not enough blind students to fill them.

The Ophthalmic Service did not provide an analysis of causes of blindness among children until 1964 and so there was data for nine years only instead of ten. Only four causes were given:- keratomalacia, congenital defects, non-specific optic atrophy/uveitis and neoplasms. In 1954, keratomalacia was the major cause accounting for 74.5%. In 1964, the major cause was congenital defects, accounting for about half the total number of cases. In recent years, congenital defects account for an even greater proportion of blindness among children whereas keratomal-

acia or vitamin A deficiency has disappeared completely.

Thus, from the official statistics there is a decline in blindness in children in Hong Kong, and the most important cause nowadays is due to congenital defects.

Statistical Definition and Classification of Blindness

The definition for blindness used in the 1961 Hong Kong Census was total blindness meaning no perception of light and this accounted for only 856 persons were enumerated. Other than that, the definition of blindness used in Hong Kong is having residual vision of 3/60 or less in the better eye (Hong Kong Social Welfare Department 1973). This is not comparable with the definition now used in many countries - having residual vision of 6/60 or less in the better eye.

Thus, the estimated blindness prevalence rate of 160 per 100,000 has to be taken with the particular definition for blindness in Hong Kong into consideration. For international comparison of blindness prevalence rates, that figure has to be enlarged but certainly it will not be as large as 1392 per 100,000, which is nine times as large. Perhaps, doubling it will produce a fair estimation and this is 320 per 100,000, putting the Hong Kong rate above U.K. and U.S.A. but below China and Sri Lanka.

Adopting different definitions of blindness is in fact a serious problem hindering international comparison of blindness for prevalence and aetiology. In 1972, WHO called a special study group, headed by Professor G.B. Bietti, to lay down guidelines for the prevention of blindness (WHO, 1973). This study group produced, inter alia, a definition of loss of vision and a method of recording causes of visual impairment and blindness.

The definition of loss of vision proposed divides visual impairment and blindness into six categories, taking visual acuity in both eyes as well as visual field loss into consideration. As to the classification of causes of blindness, the study group modifies that accepted by the General Assembly of the International Association for Prevention of Blindness at New Delhi on 4 December 1962 but retains the twofold scheme. The 1962 classification requires each case to be entered with respect to both the aetiological factor and the site (topography) and type (nature) of affection, but in 1972, the Study Group recommends the two schemes to be aetiological and anatomical and each eye has to be entered separately.

Evidence shows that Hong Kong has attempted to improve the statistical definition and classification of blindness recently, but it appears that such an improvement does not follow the current international development. To avoid making error such as the 1963 estimation of blindness prevalence rate, it is strongly recommended that official statistics for blindness in Hong Kong should adopt the recommendations of the 1972 WHO Study Group from now on.

Conclusion

The official statistics for blindness in Hong Kong for over the past twenty years was studied and gained a better picture of the situation of blindness in Hong Kong. It was noted that the prevalence rate could not be as high as 1392 per 100,000, and also that the pattern has changed from that resembling developing countries to that of the developed world. There are less blind children nowadays as compared with 20 years ago because vitamin A deficiency ceases to be a problem here. The major factor that renders Hong Kong statistics not comparable internationally is the unique statistical definition and classification of blindness. The recommen-

dation therefore was to adopt the definition and classification accepted internationally. One important problem which the 1972 WHO Study Group has not deliberated is at what period of life the person becomes blind. For social welfare purpose, it is sufficient to present the ages of the blind persons as they are, but for preventive purpose, all these ages have to be converted to the times when blindness occurred. Moreover, one has to be cautious about the effect of pooling up the data collected over a long period of time. The Hong Kong example shows that people tend to believe that vitamin A deficiency is still an important cause of blindness in this place at the moment because it accounts for 8.9% of the 7641 persons in the Register of the Social Welfare Department. In fact, this 8.9% represents a present inclusion of past events and such a misleading factor should be avoided by people presenting statistics for information to the public.

SUMMARY

WHO designated 1976 as the year for the prevention of blindness and attention is drawn to the prevalence rate and causes of blindness in Hong Kong. The former as released by WHO is as high as 1392 per 100,000 and the latter tends to suggest Vitamin A deficiency is still an important cause here. This article reviews all the official statistics on blindness published in Hong Kong over the past twenty years and seeks to suggest an appropriate prevalence rate for Hong Kong and demonstrate the changing pattern of causes of blindness in Hong Kong. It concludes that Hong Kong should adopt a statistical definition and classification of blindness accepted internationally and suggests that in the presentation of statistics, the misleading factor of present inclusion of past events should be avoided.

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