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REGISTRATION OF VITAL EVENTS IN THE ENGLISH-SPEAKING CARIBBEAN

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FOREWORD

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REGISTRATION OF VITAL EVENTS IN THE ENGLISH-SPEAKING CARIBBEAN

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In the English-speaking Caribbean, there is a marked difference between the development of population census-taking and the introduction of vital registration. Censuses had a clearly defined origin in the early 1840s when, in accordance with a directive from the British Government, all colonies organised censuses between 1841 and 1844. Following the initial round, regular censuses were taken which, in common with British practice, were on the "ones". By contrast, in the case of vital registration, there was no scheme for the introduction of systems simultaneously in all colonies. Attempts to establish civil registration systems were spread over a long period, commencing in the 1840s.

This paper begins with a discussion of early attempts to assess vital processes, some of which go back to the early slave period and contain some interesting methods for measuring numbers of births and deaths. It then proceeds to outline the origins of vital registration in the region, showing what forms early registration took. General features of modern registration are next covered by describing current practices in a few Caribbean countries. An important issue concerning vital registration is the accuracy of the returns collected and published; and attempts to assess these are outlined. In considering reliability of records of this nature, a significant consideration is the administrative structure under which data are collected, processed and disseminated. Consequently, the administrative systems in force in four countries are described in broad outline. Technical considerations touching on mating, fertility and mortality are treated in a final section.

In examining vital registration, its two-fold functions have constantly to be borne in mind. Although our concern here is primarily with its strictly demographic features, its other functions are equally important. These cover the provision of documents which are basic to several aspects of modern life, that is, copies of the Birth, Death and Marriage Registers maintained by the Registrar General. Copies of Birth Registers establishing the identity of individuals of the country are necessary in all aspects of modern life. Similarly, copies of the Death Registers are essential in settling

issues of inheritance and property in general. Copies of Marriage Registers also constitute basic documents in cases of inheritance and property settlements. Although these lie outside the compass of this paper, it would be inappropriate to promote the statistical aspects of registration without realising their close association with the strictly administrative functions of these systems.

In most countries in modern times, issuing copies of the Registers and the vast body of administration involved in these processes constitute the main function of the Registrar General. It remains doubtful whether Registration Departments now have the necessary skilled personnel and technical resources required to produce the vital statistics generated in the process of registration. Consequently, we should consider whether there should not be a clear separation of the two functions; the purely statistical aspects being made the responsibility of the statistical agency. Here many legal and administrative issues arise, notably regarding types of recording documents to be used and the maintenance of the confidential nature of material recorded in all Registers.

Early Attempts to Measure Fertility and Mortality

Two attempts to measure births and deaths in the slave populations may be noted, both of which relate to later years of slavery. The early plantation system did not call for the registration of births and deaths among slaves. Indeed, with the cheap acquisition of slaves which the Trade made possible there was little concern with vital processes involved in the maintenance of the labour force. But with the emergence of pro-natalist policies towards the close of the 18th century, efforts to stimulate slave reproduction could be administered only if some form of recording of births and deaths were instituted. Thus, to administer the 1792 Jamaican slave law designed to increase fertility, it was essential to keep records of births to slave women. But the maintenance of such records could, in no sense, be described as a registration system.

A true precursor of vital registration, as well as of formal censuses, was the system of

Slave Registration commencing in 1817 and continuing up to the close of the slave regime. Introduced partly to prevent the clandestine movements of slaves between colonies and partly to secure better treatment for them, the system proved of considerable value because of the demographic material it yielded. It was framed to ascertain "all deductions from and additions to the former stock of slaves", and represented a form of population accounting. At the commencement of each triennial (or in some colonies annual) interval, a count of slave populations was made (Roberts, 1977 and Higman 1985). Associated with this was the recording of some basic demographic characteristics such as age, sex, and place of origin, which would provide valuable clues as to the major elements of a slave society. At the close of each triennial (or annual) interval, another count of slaves was made and this, taken in conjunction with the initial count, provided the basis for assessing movements in the populations. Gains as a result of births and immigration were taken into account, while losses experienced as a consequence of deaths, manumissions and emigration were assessed. In respect of migration, only movements from one colony to another were involved. There were no large scale inflows of slaves into the region after the cessation of the slave trade.

While this system, established long before the introduction of formal civil registration, yielded some indications of fertility and mortality, it was in no sense analogous to recording of births and deaths. Thus, births represent no more than additions to the stock of slaves, which turns out to be the child population under age 3 at the close of each triennium. This meant that all children born within the triennium and dying before it ended were completely lost to the record; the result was that there was substantial undercounting of both births and deaths.

Since the slave trade had ceased and such inter-Caribbean movements of slaves as did take place were on a very small scale, slave societies of the Caribbean were essentially closed populations. So that if there were tabulations of their age structure at each triennial count, these could constitute the basis for cohort analysis of many types. In fact, the only slave registration system that presented material in a form appropriate for such analyses was that for British Guiana; tabulations of its slave populations have been used as the basis for preparing a life table (Roberts, 1952). Unfortunately, systematic preparations of age data of slaves were not made for other countries, although some are available for Barbados.

The first comprehensive assessment of levels of morbidity and mortality in the West Indies was not based on vital statistics, but is significant because of its information about diseases

current in the region during the closing years of slavery. It covers approximately the same period as slave registration. This is the study conducted by Tulloch and Marshall (1838) on behalf of the British Government in order to assess "the extent and causes of sickness and mortality among the troops in the West Indies...." This is probably the most thorough early attempt to establish levels of mortality and types of diseases in the Caribbean during the 19th century.

Origins of Formal Registration Systems*

Generally, the inception of civil registration in the English-speaking Caribbean represents a process involving the passage of several laws over a period of years, each aimed at reorganising a particular vital registration system. Many of these early laws are outlined in Kuczynski (1953). Acts were passed for the recording of vital events as early as the 18th century, but these were ecclesiastical in form providing for recording of burials, christenings and marriages and yielded little demographic data. In Nevis, for instance, an Act for Regulating Vestries passed in 1705 provided for keeping Registers of Christenings, Marriages and Funerals. This was amended in 1724 and later years. But, it was not until 1869 that compulsory civil registration was introduced in that island. Likewise, St. Christopher passed an Act in 1705 similar to that of the same date for Nevis, and again this was amended on several occasions. Formal registration was not effected until 1859. In the case of Barbados, records of baptisms, burials and marriages had long been kept by the church. It was not until 1889 that an Act was passed introducing civil registration. This was improved in 1891, but it was not until 1924 that registration of deaths became fully effective in this island.

Early laws were passed in Jamaica which encompassed registration of burials, marriages and births. It was not until the 1840s that forms of civil registration directed to the recording of vital events were introduced. The first, passed in 1844, aimed at ensuring voluntary registration of births and deaths by civil authorities. The second, passed in 1847, was designed to improve the system by having the clergy forward quarterly returns to parochial Registrars. These procedures did not yield reliable returns of vital events and the laws were repealed in 1855.

Another early registration law, passed in Trinidad in 1847, should be noted. Although this rested on sounder bases than those formulated in Jamaica around the same time, it yielded little that was of value, as was evident

*Based on R.R. Kuczynski (1953), G.W. Roberts (1957) and S.A. Sinclair (1981)

from material collected and published in accord with it. One reason for its patent unreliability was that the system did not cover the entire island.

Modern Registration Systems

It is of interest to note that the memorandum from the English Registrar General, Graham, to Secretary of State, Grey, in 1848, designed to ensure proper census procedures throughout the colonies, contained a recommendation that registration of births and deaths should also be introduced. Possibly this recommendation was responsible for some of the early registration laws passed before the 1860s.

Apparently, the Secretary of State was corresponding with Governors of the West Indian colonies about the introduction of sound registration in all colonies in the 1860s (Roberts, 1957). Playing a significant part in this process was a letter of 27 April 1867, summarising existing registration practices in the colonies. A study of this document led the English Registrar General to prepare a memorandum dated March 1868, which did for registration in the colonies what his memorandum of 1847 did for the organisation of censuses in the region. The following were proposed as the basis for sound registration practices:

1. Civil registration of marriages, births and deaths should apply to all classes and religious persuasions.
2. All registration forms should avoid 'needless multiplication of statement and clearly establish the identity of persons recorded and assist medical and statistical inquiries in useful research'.
3. Registration Districts should be formed and registrars appointed to each district.
4. All registers should be kept in duplicate or certified copies of them made, and one set should be retained by the registrar while the other should be sent to the central office where 'the superintending authority' should be located and where alphabetical indices and abstracts should be prepared.
5. The registration of births, deaths and marriages should be enforced by suitable penalties. Registration, it was stressed, was for 'all ranks of society without interference with the institutions and rites of religionists of any class'. In conclusion, it was observed that Ceylon had an excellent system in force which was 'worthy of imitation'.

The foregoing conditions were incorporated in all registration laws framed in the Caribbean from the 1860s. But before taking up the topic of registration of births and deaths, which is the focus of this paper, it is necessary to note that early attempts were made to register

marriages. Under the slave regime, marriage among slaves was not countenanced. Indeed, there was a law in British Guiana which prohibited such marriages (Wallbridge, 1943). The tone in which one clergyman replied to a question about the number of marriages solemnised among slaves in Grenada illustrates the general position of the church on marriage among slaves: "The legal solemnisation of marriage between slaves in this island is a thing unheard of and, if I might presume to offer my sentiments, would in their present state of imperfect civilisation lead to no beneficial result. Their affection for each other, if affection it can be called, is capricious and short lived; restraint would hasten its extinction and unity without harmony is mutual torment" (Parliamentary Papers, 1825). Ameliorating laws of 1826 provided for slave marriage, but it was not until 1838 that serious attention was paid to introducing marriage in all classes of these populations. Lord Glenelg's important despatch of 1838 laid the basis for marriage in the region, but, unfortunately, its realistic proposal for legalising slave unions already in existence did not meet with the approval of the church and were soon removed from early marriage laws (Roberts, 1957; Roberts and Sinclair, 1978).

Kuczynski gives the dates of the introduction of vital registration in West Indian colonies as follows:

Trinidad	1 January	1848
Antigua	1 August	1856
Virgin Islands	5 November	1858
St. Kitts	1 January	1859
Nevis	1 August	1869
Dominica	2 April	1861
Montserrat	12 February	1862
Turks & Caicos	2 January	1863
St. Vincent	1 July	1874
Grenada	1 January	1866
Tobago	30 January	1868
British Guiana	1 January	1869
St. Lucia	January	1869
Jamaica	1 April	1878
Barbados (Births)	1 January	1890
Barbados (Deaths)	1 January	1925

It seems safe to conclude that registration introduced prior to 1868, that is the date of the memorandum from English Registrar General George Graham, were defective, and yielded no reliable demographic data. By the early years of this century, however, effective and reasonably reliable vital registration was in force throughout the English-speaking Caribbean.

Some General Features of Modern Registration

Some form of annual publication of vital events was instituted in almost all colonies. Initially, the most notable of these came from

Jamaica, where the first Registrar General, S. P. Smeeton, set up a reliable registration system, the principal feature of which was a series of comprehensive Annual Reports commencing in 1878. These presented tabulations on births, deaths and marriages and incorporated interesting textual analyses. His particular interest in high rates of illegitimacy and their complement, low rates of marriage, led him to construct valuable infant mortality rates by legitimacy. He made many attempts to reduce high levels of illegitimacy, which he termed a "hydra-headed evil".

Tracing Annual Reports on early registration in Caribbean countries is difficult. Apart from Jamaica, British Guiana, Grenada and Barbados, early Reports are not easily accessible. Again, in many cases, these Reports constitute parts of standard official publications--Blue Books, Gazettes or records of Legislatures, such as, the Minutes of the House of Assembly in the case of Barbados.

One of the virtues of colonialism was that it made it incumbent on all Departments and Agencies of Governments to issue Annual Reports on their operations. By the early years of this century, Annual Reports on Vital Statistics were available for all West Indian territories. However, it seemed that responsibility for the preparation of such Reports ceased with the passing of colonial status. The failure to issue Annual Reports after the 1960s, constitutes one of the most unfortunate aspects of vital statistics systems in the region.

Special attention should be directed towards developments in the two largest countries, Trinidad and Tobago and Jamaica. In the case of the former, the establishment of the Central Statistical Office in the 1950s played a very important role in ensuring the continuation and appreciable expansion of the range of vital data collected and published. The essential feature here was the separation of the civil registration system into two elements, the administrative and the statistical, by the introduction of a new set of forms designed to collect material strictly for statistical purposes. This has resulted in Trinidad and Tobago having the most comprehensive demographic statistics in the Caribbean.

Development in Jamaica proceeded somewhat differently and was especially influenced by the creation of the Development and Welfare Organisation in the 1940s. This Organisation was responsible for financing and organising the first two sets of modern censuses of the region--the 1943 census of Jamaica and its dependencies and the 1946 census of other territories of the region. Another of its functions, the modernising of vital statistics, began with a scheme to

improve registration in Jamaica. The sound system established by S. P. Smeeton had continued virtually unchanged and the aim was to expand the range of data collected, notably in the case of fertility, to begin registering still births and to prepare more elaborate tabulations of demographic data. These were made possible by amendments to the registration laws, under which age of mother and order of birth would be entered at registration and by the use of data processing equipment. Thus, from the 1950s, Jamaica produced a considerably expanded series of Annual Reports embodying many types of demographic data not previously collected in the Caribbean. The last of these Reports was published in 1961; although tabulations for 1962 were prepared, they were not incorporated into a Report. The decline in the quality and reliability of the country's vital statistics dates from this year.

In the early 1970s, the Census Research Programme of the University of the West Indies designed a marksensing scheme for processing the country's vital statistics. Special documents were designed and printed with financial backing from USAID. The material in the registers were transferred to the marksensing documents for births and deaths for a three year period 1969-71 by trained staff provided by the Census Research Programme. Within nine months, the tabulations for the three year period were ready. This scheme proved very economical and satisfactory in every respect. It was proposed to the Government of Jamaica, but, curiously, on the recommendation of the Director of Statistics, it was not accepted. Since then, a collection of fertility tabulations covering the years 1977-82 has been published, but nothing on mortality.

Smaller islands of the Eastern Caribbean also benefited from the Development and Welfare Programme for improving vital statistics. It proved possible in all cases to increase the range of fertility data collected by entering in the remarks column of birth registers the age of mother, age of father and birth order. These additions in the 1950s made possible the expansion of the amount of demographic data available for nearly all populations of the Caribbean. Publications of Annual Reports based on this material appeared up to the mid 1960s.

The situation in Belize (British Honduras) has not materially improved in modern times. Its vital statistics remain of limited range and reliability. Still, from the historical standpoint, its 1894 Report is of especial interest as it contains the first life table prepared for a West Indian population. It consisted of a single column (1.); this was "compiled by the Colonial Surgeon by means of Dr. Farr's formula from the census enumeration of 1891 and the

deaths registered during 1891-4" (Report on Vital Statistics, 1894).

Reliability of Vital Statistics in the Caribbean

It is safe to conclude that by the late 1940s, systems of vital registration in force in the larger countries and in most of the smaller ones had attained a fair degree of reliability. Writing in 1953, Kuczynski summed up the position thus:

"In many British colonies in America, birth and death registration seems to have been fairly complete for several decades and in the last two decades omissions have been numerous probably only in Bahamas, Bermuda and British Guiana. The degree of completeness in the United States or in Canada, though the accuracy of the entries, especially as regards the age of the deceased and the cause of death is less satisfactory."

The first attempts to assess the reliability of vital registration systems in the West Indies were made in 1960 as part of the censuses organised in that year. Two tests were planned. The first, covering Eastern Caribbean countries, was designed to match census records of births occurring in the year preceding the census with corresponding records of births from vital registration systems. Special Infant Cards were prepared in respect of children born in the year preceding the census and on these were entered characteristics of infants and of their parents which would facilitate matching the two sets of records (Population Census 1960, 1967). Such comparisons would have made possible the estimation of degrees of under registration (Chandra Sekar and Deming, 1949).

Because of special features of birth registration in the region, the matching tests could not be satisfactorily concluded. The high proportions of illegitimate births and the absence of names of infants, both legitimate and illegitimate, from many birth registers were of special interest here. The failure of parents to have names of their infants recorded at the time of registration has been noted since the initial years of vital registration in the Caribbean. What lies behind this strange practice is not easily determined, especially as it leads to awkward situations in adult life when documents of identity are required. Even when names of infants are given in the registers, children often grow up using other names. When the latter were given to interviewers collecting information for the special Infant Cards, another source of difficulty in the matching process was created. Also, in accordance with English practice, names of fathers of illegitimate children are not entered in the registers; this proved a serious hindrance in conducting matching operations. Such problems made it impractical to

carry out matching operations and this test was abandoned.

The second series of checks compared tabulations of births occurring in the year preceding the census with corresponding tabulations derived from registration systems. Despite the known deficiencies of the census as a source of reliable data on births (see Glass, 1951), these checks proved successful and tended to establish the reliability of West Indian registration systems as of 1960. They involved comparisons between characteristics of births according to vital statistics and corresponding data from births listed as occurring during the year preceding the census. These tests were conducted for four populations--Jamaica, Trinidad and Tobago, Barbados and St. Vincent. The first two were the largest demographic units of the region, while the others represented medium and small units respectively. One reason for selecting Trinidad and Tobago was that its substantial East Indian element made possible the administration of tests for this important racial group. Thus, two populations were contributed by this country--East Indian and non-Indian--while the three others contributed one each. For many phases of the tests, there were five populations to be examined. Details of these tests are given elsewhere (Roberts, 1975): here, a brief summary of findings is given.

One test compares numbers of births according to census returns with numbers derived from vital registration. Differences between the two sets are small. In the case of Trinidad and Tobago, the registration count exceeds that from the census by 2.1 percent, whereas for the other three countries the census counts exceed those derived from registration. The two are virtually the same for Barbados; the difference being 0.25 percent. The difference is highest (3.56 percent) for St. Vincent, while for Jamaica it is 1.45 percent.

Another test centres around sex ratio at birth. "For three of the populations there is an excess of male births; both sources of data, however, indicate an excess of females over males for St. Vincent. Only in the case of Jamaica can it be said that the difference observed is significant...."

Comparisons of age distributions of mothers between the two sources constitute the third aspect of the tests. "In each case it can be said that the distribution according to the 1960 census conforms closely to the corresponding data from vital statistics. Only among women under age 20 do appreciable differences appear and here the numbers of births are comparatively small, with the exception of East Indians and illegitimate groups generally. Both distributions bring out the essential differences

between legitimate and illegitimate patterns". Differences between the two sets of distributions reveal an upward age displacement in the data originating from censuses, and this is another feature pointing to reliability of the demographic data for the region.

Further examination of the age displacement is called for. Differences in average ages between the two should be of the order of half a year. Comparisons in terms of mean ages and median ages establish that for all the populations involved the displacement is in the expected direction and of acceptable magnitude.

Another test, resting on comparisons of birth orders, shows that "For each of the five populations involved there is a strong degree of concordance between the two distributions."

The general conclusion reached as a result of these tests is that there is a very strong agreement between the two sources of data; this extends to the East Indians of Trinidad and Tobago, and to the two elements of births for the other (non-Indian) populations--the legitimate and illegitimate components.

If, as seems reasonable to assume, findings based on the five populations investigated are fully representative of the situation in respect of other countries involved in the 1960 census, then we may conclude that vital registration around the period of 1960 was, throughout the Caribbean, of acceptable accuracy.

Collection of Vital Statistics

There are strong grounds for contending that the major issue centering around vital statistics in the West Indies, at present, is the actual collection of data--what may be described as the field work of the systems. Unless the efficiency of this aspect of registration is assured, it makes little sense developing elaborate schemes for tabulating material and for their analysis. Evidence from four countries suggests that much remains to be done in order to ensure reliable and prompt collection of data; these countries are Jamaica, St. Lucia, Dominica and Barbados.

Jamaica. Here the system is now experiencing considerable strain, a condition which to some degree derives from the fact that regular tabulations of vital events have been discontinued. A fundamental weakness of the existing system centres around the grossly inadequate payments made to District Registrars for the registration of vital events. These paltry payments, introduced many decades ago, are patently inadequate and thus constitute a serious disincentive to the efficient functioning of all Registrars. Linked to the low fees paid to District Registrars are the low charges fixed for providing

copies of Birth, Death and Marriage Registers to the public. If these charges, which also date back several decades, were revised upwards, they would ensure a considerable source of revenue for the Government and serve to finance a thorough upgrading of the entire registration system. Moreover, the general impression conveyed is that much less in terms of personnel and resources is devoted to the collection, processing and publication of vital statistics than is devoted to dealing with economic statistics generally. In short, it may be inferred that there has been marked deterioration in the system since 1960.

Two Acts passed in recent years in Jamaica should be noted. They, in no way, advance the processes of vital registration, but their main provisions should be indicated because these emphasize that the Government places much greater store on aspects of registration linked to issues of births to unmarried mothers than to strictly statistical aspects of the process. One is "An Act to remove the legal disabilities of children born out of wedlock and to provide for matters connected therewith or incidental thereto." It deals with legal conditions of the status of children and how their paternity is determined, and with inheritance of property. It is wholly centred on children, although it could possibly have appreciable influence on the family. Indeed, one of its provisions, "the relationship between every person and his father and mother are or have been married to each other..." could conceivably have far-reaching impact on prevailing family structures. It is of interest to note, however, that nowhere in the act is there any reference to the family as the fundamental unit in which the child is involved.

Secondly, within the past three years an Act has been passed, again involving births to unmarried mothers, which seems to involve very delicate issues touching on paternity. In effect, it gives the unmarried mother the right to have entered in the birth register the name of any man as the father of her child, with, evidently, no consultation with him. Fortunately, this has not been implemented as yet.

It is tempting to speculate whether the operation of these two laws will invalidate the three-fold family typology now employed in current analysis of mating and fertility in Caribbean populations.

St. Lucia. There seems to be a satisfactory division of function in respect of the management of the several processes of vital registration. Here again, the publication of Annual Reports on Vital Statistics ceased in the 1960s and there was a gap before the Department of Statistics assumed the responsibility for

publishing these data. At present, the processing of demographic data is being very efficiently done by the Department of Statistics, in conjunction with appropriate officers of the Ministry of Health. Unfortunately, the production of tabulations on cause of death remains unsatisfactory.

As in so many other Caribbean countries, the collection of data calls for close examination. While there does not seem to be serious inadequacies in the payments made to District Registrars, it appears that the Registrar General's Department, the agency responsible for this phase of the system, does not command the resources required for proper training and supervision of personnel operating in the field.

Dominica. Again, it is convenient to discuss the position in terms of processing and issuing of vital statistics, on the one hand, and the collection of data on the other. Unlike the situation in St. Lucia, that in Dominica does not enjoy the same advantages of proper supervision from the Statistical Department. Collection and issuing of such data seem to devolve wholly on the officials of the Ministry of Health. Indeed, they have had to assume these duties, since, with the cessation of publication of Annual Reports on Vital statistics by the Registrar General, this was the only way in which that Ministry could secure data required for the efficient discharge of its responsibilities. But the material prepared, largely committed to departmental files, is inferior to that prepared and published for St. Lucia.

Here, also, the responsibility for collecting the data rests with the Department of the Registrar General. Once more, limited resources in terms of finance and qualified personnel inhibit the development of a proper programme of data collection. It appears that shortage of resources makes it impossible for officers of the Department to conduct training sessions for District Registrars and to supervise their work after they have been appointed.

Barbados. Vital registration in this island differs fundamentally from others in the Caribbean. There has been a long ecclesiastical tradition of maintaining registers of baptisms, burials and marriages, but these had no civil basis until the Acts of 1889 and 1924. Up to the 1960s, tabulations were prepared by the Registrar General in collaboration with the Ministry of Health which was responsible for coding cause of death.

We await with interest accounts of the working of the recently introduced revision of vital statistics in the island. According to one account, a result of this innovation has been the appearance of two versions of vital events. In

any case, complete revision of a registration system is a complex and lengthy undertaking which may take many years to perfect.

Concluding Consideration

Legal considerations. Many of these systems have been in existence for more than a century and the question can be raised whether the laws on which they rest, some of which have admittedly undergone many amendments, do not call for extensive revisions. It is not only in the context of improving vital statistics that such questions have to be raised. As has already been noted, two Acts passed in Jamaica within recent years have little to do with statistical aspects of registration, being directed towards births to unmarried women and to some paternity issues to which such births give rise. Still, the possibility remains that ultimately such laws may have consequences for the statistical material collected at registration.

A further legal consideration turns on whether the countries of the region should aim at or envisage a common legal basis for registration. The varying dates at which registration commenced in the several countries emphasize the differing details in the processes of registration obtained in the region. Proposals for devising common systems have never been advanced and it is debatable whether any appreciable advantages are to be gained by action in this direction.

Nevertheless, there is much to be done to improve vital registration systems from the legal standpoint. For instance, new instruments better suited than those now in use for the recording and processing of data on registration can be introduced. Again, legal measures are required to give the administrators of civil registration more control over fees to be paid to district registrars for collecting information on births and deaths and over charges that the public has to pay for obtaining copies of the registers.

Considerations of Fertility and Mating. No treatment of improving vital registration in the region can ignore a basic feature of Negro populations of the Caribbean--their low rates of marriage and the complementary high levels of births to unmarried mothers. These have frequently been discussed by Registrars General, Census Commissioners and other administrators in the region. In many instances, it is the "immoral" aspects of bearing children out of wedlock that have engaged the attention of early administrators of the systems. For example, the Reports of the first Registrar General of Jamaica, S. P. Smeeton, are replete with discussions deploring "this hydra-headed evil". High levels of illegitimacy and low rates of marriage have been investigated on several occasions. A Commission appointed in 1904 to investigate the

workings of marriage and registration laws advocating the legalization of common law unions (Jamaica Gazette, 1904). Again, a Committee headed by Edith Clarke and charged with investigating the prevalence of concubinage, which reported in 1941, came up with a similar recommendation.

Realistic treatment of these aspects from the demographic standpoint came first from censuses. Probably under the influence of recommendations of the Committee on concubinage, the 1943 Census of Jamaica introduced the family type, common law, an approach continued in the 1946 census and appreciably refined in the census of 1960. Census material on family types and associated topics has considerably advanced our understanding of mating patterns and their association with fertility in the region.

The foregoing inevitably invite the question whether complementary advances in data to be collected from vital registration can be envisaged and whether they are operationally practicable. Let us consider issues of marriages. Caribbean populations involve two such types--those signifying the establishment of families and those signifying the legalising of common law or visiting unions long in existence. It is difficult to see how such a separation can be effected in the administration of marriage ordinances. From the strictly legal standpoint, it is doubtful whether legal provisions which could give effect to such separation can be introduced; this will necessitate establishing whether parties to an impending marriage have up to that time been involved in either a common law or visiting relationship. At the same time, such an approach cannot be abandoned as wholly impractical for the clergy in St. Lucia have long followed the practice of entering on each marriage certificate the names and ages of children born to the woman before marriage (Roberts, 1987). In most cases, this practice makes it possible to determine whether the marriage establishes a family union or signifies the legalising of a union already in existence. For, if there are no children before the marriage, there is a high probability that a family is being established. On the other hand, where there are children entered on the marriage certificate, it is certain that the woman has been in a visiting or common law relationship previously. Moreover, this practice in St. Lucia throws light on the question, "At what stage in the development of the family life cycle does marriage, on the average, take place?"

Another issue to be considered centres on determining the time of formation of common law and, possibly, visiting type unions. Recommendations for legalising common law unions, advanced by many bodies, may be a first step in this direction. Here, the time of commencement

of the union may be taken as the time when the parties assumed common residence. In the case of the much more numerous visiting type union, there does not seem to be any event which can be taken as marking its commencement. In fact, the firm establishment of such a union may constitute a process; it may emerge from a rather loose relationship over a period of years. So that, although the assumption of a common residence may be taken to mark the beginning of a common law union, there does not seem to be any comparable event which can be taken to fix the time of formation of a visiting union. Whether it is realistic to expect that data on the time of commencement of visiting and common law unions can be retrieved from any form of official recording document remains doubtful. Here, also, the only satisfactory approach to securing such information may be through specially ordered surveys.

The Position of the Male in Fertility Analysis. As in most populations, there is, in the analysis of fertility, a concentration on the performance and characteristics of females. Still, the position of males remains relevant, and the possibility of collecting comprehensive data on male performance and characteristics of fathers should not be ignored. The role of the male in processes of family formation and fertility constitutes a tantalising aspect of reproduction in these populations. The recording of age of father in many of these populations, dating from the 1950s, has advanced our knowledge of paternity, but much more may be accomplished. The question of material about fathers involved in visiting unions is of particular complexity. Moreover, the dual household affiliation of these fathers poses many interesting issues; but, the pursuit of these through the collection of new types of data at birth registration seems unrealistic. These can be effectively examined only by means of appropriate field enquiries.

Considerations of Mortality. Two topics may be taken up here. One centres around current rates of infant mortality. Extremely low rates of this kind that are now reported from most Caribbean populations have given rise to questions about the reliability of recording of infant deaths. It has been suggested that infant deaths in these populations are being incorrectly treated as still births. A more likely consideration is that when an infant dies soon after birth it is easier for authorities to ignore the event altogether and fail to register it as a birth or as an infant death. Current medical practice in hospitals in the West Indies may throw light on the treatment of infant deaths and thus help to settle whether current returns of these events are reliable.

However, there is another aspect of infant mortality rates to be considered. Detailed

analysis of the trends in these rates in St. Lucia have tended to lend credence to current low rates of infant mortality and to mortality among children in general. In fact, the steady downward trend in these rates since the 1950s is the dominant feature of mortality in St. Lucia. Between 1960 and 1980, declines in q_1 values have been at the staggering rate of 10% per year, higher even than the comparable rate of decline for infant mortality, which is 6% per year. Associated with these reductions in mortality have been a virtual disappearance of deaths from gastroenteritis from the records of cause of death. It is, in fact, possible that the control of deaths among children achieved by medical authorities in the Eastern Caribbean has been much greater than is generally realized--that low levels of infant mortality represent genuine advances in disease control (Roberts, 1987).

Another topic relating to mortality is cause of death. Reliability of material of this nature rests on three factors. The first is the basic one that the events of deaths are being accurately recorded. Secondly, much of the reliability of such data rests on what doctors enter on the certificates of cause of death: unless this is in accordance with current rules of nosology, they cannot be effectively coded. The

Third condition is that the personnel engaged in coding cause of death are properly trained to perform such duties. Again, medical interests are closely interwoven with this topic.

Conclusion

Manifestly, many problems faced in the collection of data on Caribbean populations cannot be effectively tackled from the standpoint of vital statistics alone. It remains true that only through properly organised field enquiries can data appropriate to many demographic situations be collected and closely analysed. But, this should not be taken to indicate that data collection at the level of vital statistics has as yet been exploited to the maximum. It is highly possible that additional demographic data may be secured from judicious questions added to the Registers especially among populations of the Eastern Caribbean. Clues as to what form such questions may take may conceivably be obtained by careful comparisons between types of data now being collected at vital registration with the range of data obtained from recent censuses. Probably no large-scale additions are possible, or indeed desirable, but the possibility of some advances in the field of data collection at vital registration should not be ruled out.

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