

expenditure in the industrialised countries of about US\$375.50 per head. The average life expectancy in the former is 51 years (lowest 38 years) against a steady 74 years in the latter. The average population covered by one physician is about 4,200 in the low income countries, whereas one physician covers 600 persons in the developed countries.

4.3 A similar analysis on health expenditure as above for the lower and upper middle income groups has not been attempted due to great divergence in per head figures among countries of the same income group. The small population island countries show little agreement in per head health expenditure or other health-related indicators amongst themselves. In the lower middle income group, the health expenditure per head ranges from US\$1.50 to US\$75.00. When correlated with GNP per head, the health expenditure for all income groups shows a low of 0.2 to a maximum of 9.3 per cent, compared with 1.6 to 5.9 per cent in the industrialised countries.

4.4 It is difficult to draw precise conclusions from the above data, except in general terms. The figures for health expenditure relate to Central Government budgets in this study. In small countries, the Central expenditure is in fact the total expenditure, but in countries of larger area and population e.g. India, Bangladesh, Nigeria etc, the figure for Government health expenditure can be substantially enhanced by taking into consideration the expenditure provided for and incurred by the provincial and local governments and authorities.

5. Analysis of Pharmaceutical Data

5.1 The total number of pharmacists in the Commonwealth countries is estimated to be about 251,572 out of which 180,000 are in India and the industrialised countries have 63,511. The average population per pharmacist is estimated as follows:

Low Income Countries	95,000
Lower Middle Income Countries	32,400
Upper Middle Income Countries	8,700
Industrialised Countries	4,000

Twenty out of the 49 Commonwealth countries do not have any pharmaceutical educational institutions. On a regional basis, Asia has 124, of which 116 are in India. The number of schools of pharmacy in Africa are 19, in the Caribbean 7, in the Pacific 1 (Papua New Guinea) and in the industrialised countries 34.

5.2 It is difficult to give a meaningful analysis of the distribution of pharmacies in the Commonwealth, as the number reported by 42 countries are not based on uniform or standard considerations of professional supervision of the retail outlets. On a random basis, however, the total number of pharmacies in the 42 countries (Bangladesh and Nigeria did not give figures) is estimated to be 214,833 out of which India is

reported to have 182,000 and Sri Lanka 5,800 in the low income group and the four industrialised countries have 24,547. Perhaps in a subsequent study, this data can be collected on a more sustained basis.

6. Consumption and Production of Pharmaceuticals

6.1 This study deals with consumption and production in terms of monetary values only, based on local currencies converted into US dollars at approximate rates of exchange in the particular year. No attempt has been made in this study to evaluate the disease patterns as reference can be made to other Commonwealth documents on health. In the present restricted study, it was also not possible to go into details of consumption of pharmaceuticals by therapeutic groups or actual product items, except in a broad and general manner in a reference to production units in the inventory of pharmaceutical manufacturers in Annex 4. The figures for consumption are derived from imports, budgetary provisions and expenditure and such other resources which were available. They should therefore not be taken as absolute values, but as a fair approximation of the total demand and/or market size. Similarly, the production figures, as far as possible, have been obtained and/or estimated in terms of wholesale prices.

6.2 The analysis of consumption and production is briefly related to economic and health-related indicators on the basis of income groups of countries. The detailed analysis is presented by dividing the countries into six groups, five of them on a geographical basis i.e. Asia, Africa, Caribbean, Pacific and Europe, and the sixth group consists of industrialised countries taken together irrespective of geographical placement. To put the industrialised countries together with developing countries in their geographical groups would have created anomalies in the statistical evaluation of the data.

6.3 The total drug consumption was reported and/or obtained from 44 countries and it amounted to about US\$8,651 million. Thus, the overall per head consumption in the Commonwealth is US\$7.65. The developing countries consumed US\$2.66 per head on an average, distributed as follows:

Low Income	US\$ 2.36
Lower Middle Income	US\$ 3.55
Upper Middle Income	US\$10.25

In developing countries, production met 67 per cent of consumption, while in the industrialised countries, production was 113 per cent of the demand. The overall Commonwealth figures showed production meeting 98.5 per cent of the demand.