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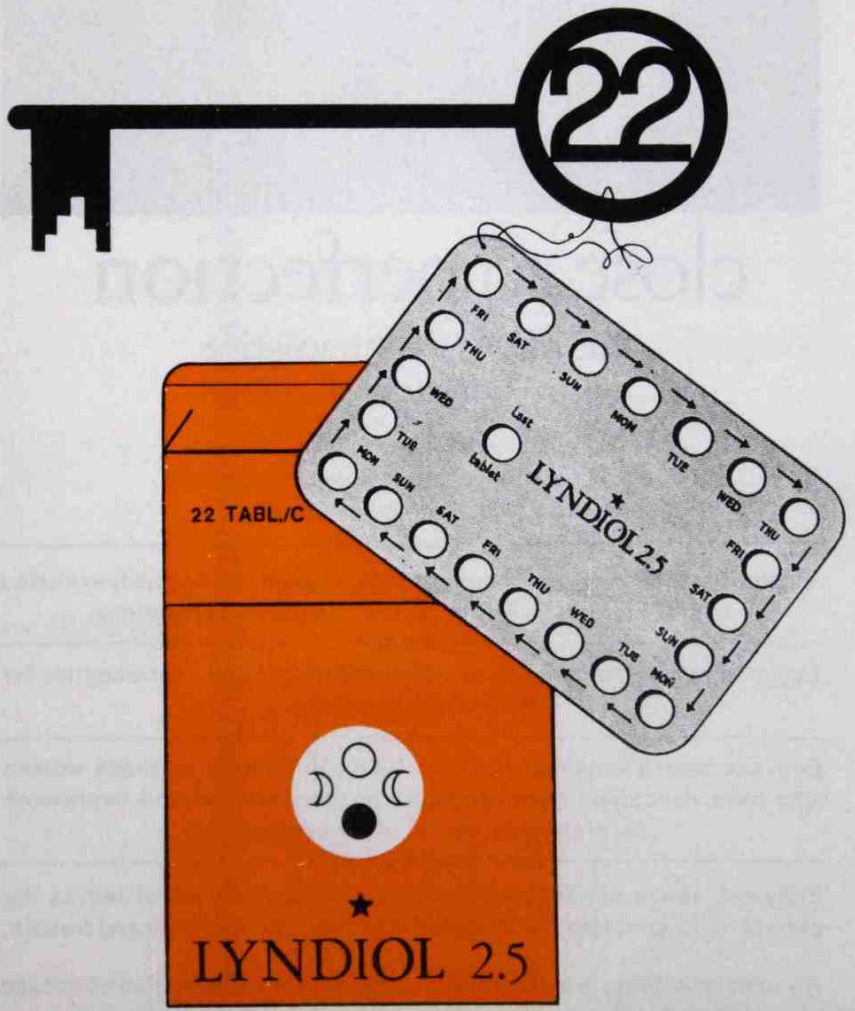


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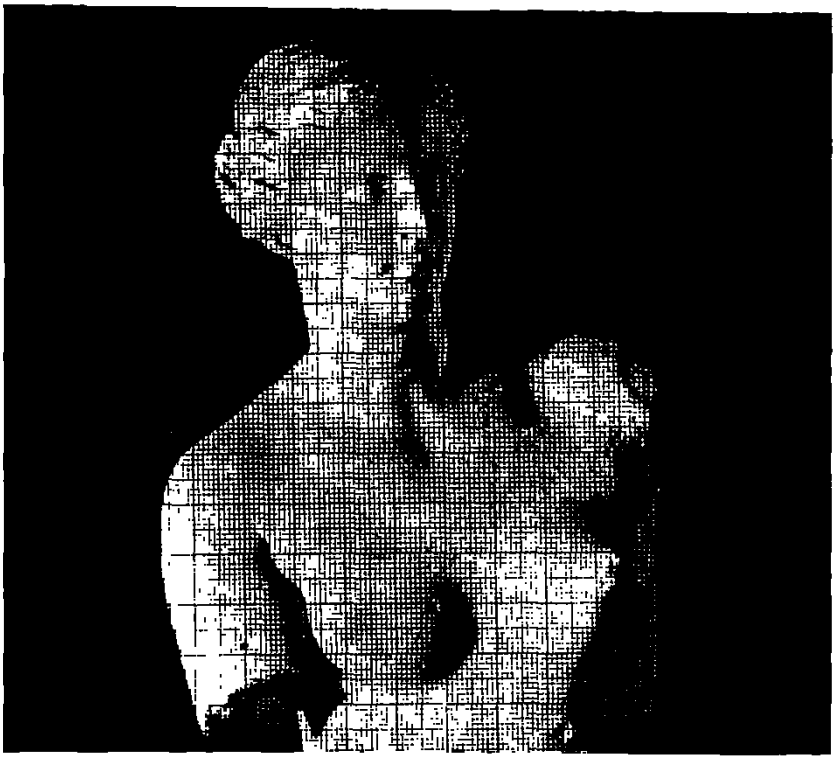

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# Editorial

*Medical students in Hong Kong are often criticized as bookwormish and narrow-mined. While such comments are usually built on erroneous informations, it must be admitted that some students are interested in little other than textbook knowledge.*

*The practice of medicine, despite its incessant strife for scientific acumen, essentially rests its mystique on the personal encounter between the doctor and the patient. That the attitudes, viewpoints and ideals in life of the doctor may easily influence the course of a disease needs no emphasis even to the inexperienced novice. To prepare oneself for a fully qualified physician, one must cultivate early in student days the thirst for new knowledge, compassion for suffering souls, honesty in intellectual pursuit, and piety before the solemnity of life. The healer must remember that the ultimate ambition of medicine is not just protraction of survival but the restoration of happiness physically, psychologically and spiritually.*

*Y. C M.*

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Since the publication of the last issue the following donations were received (up to 15th December, 1968) and for which it is gratefully acknowledged.

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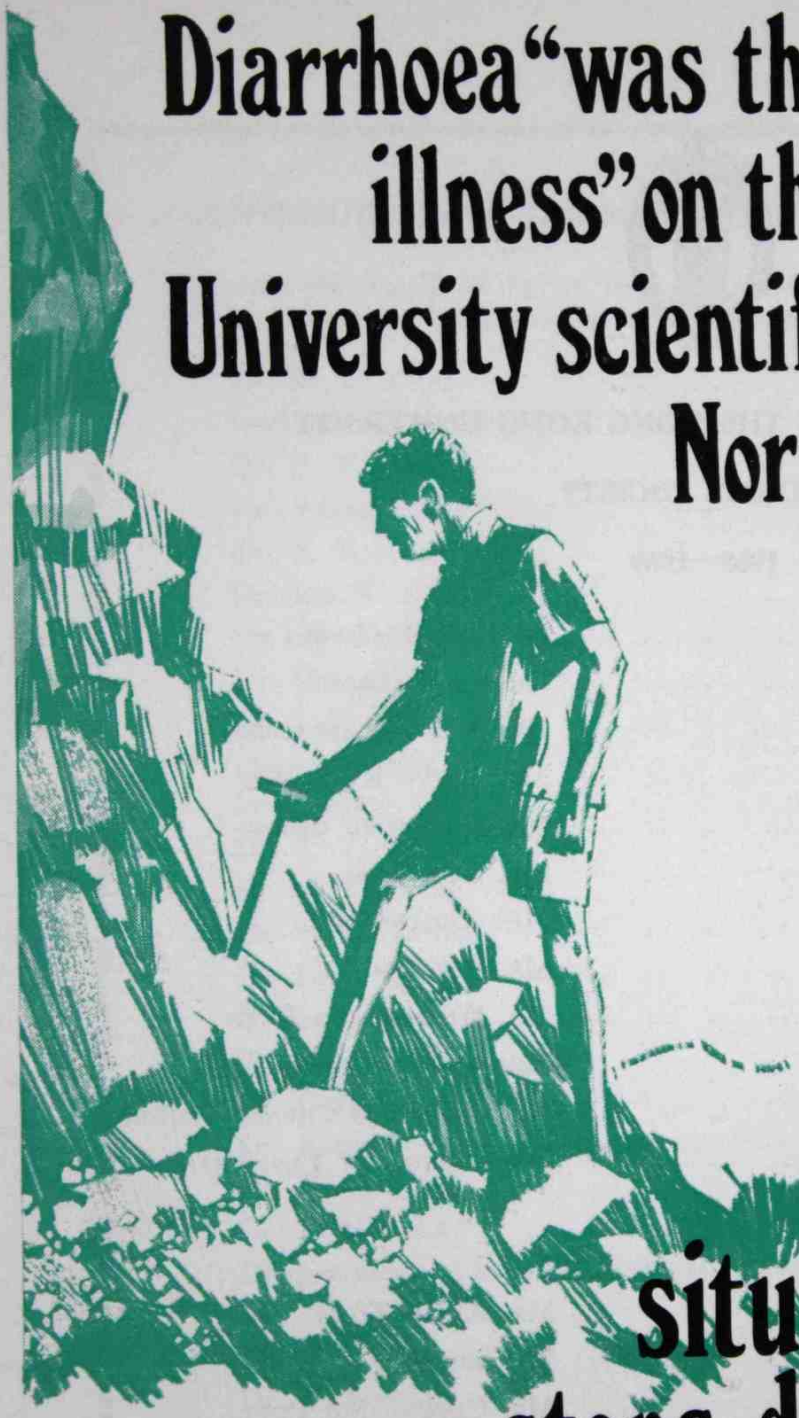

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# STUDIES OF THE GROWTH IN HEIGHT (SUPINE BODY LENGTH) OF HONG KONG CHINESE PRE-SCHOOL CHILDREN, AND SUBSEQUENT PATTERN OF GROWTH

K. S. F. Chang, C. K. Ng, S. T. Chan,
and W. D. Low

The phenomenon of growth is a matter of great interest to human biologists, to medical education, and to all concerned with the optimal health of the community. Growth is one of the best indices of child health that we have, of the nutritional adequacy and medical care, and of the social and economic conditions of the population, in the clinical sense. Apart from the above, it is important in the studies of the biology of human evolution, variability, and adaptability with which the International Biological Programme (IBP) is concerned (Tanner, 1966). People of different socio—economic classes and populations (races) differ in size, physique, and shape. The all important question is how this came about, or in other words, how they grew during childhood so as to attain their characteristics. It is also pertinent to mention in this context that the teaching of human growth and development has been emphasized in the curriculum of basic medical sciences recommended by the Royal Commission on Medical Education (1968).

Growth in the first 5 years (pre-school period) has been very much less studied in all populations than growth in the subsequent school years, for a number of reasons. Since growth is very rapid in these early years, it is necessary to measure children at short intervals: monthly in the first 6 months, 3 monthly from 7 months to the second year; and 6-monthly from 2 to 5 years. These are arduous tasks, which involve a great deal of time, expenditure, patience, and persistence. Children at these ages do not like strangers to handle them, and often react and resist violently; and mothers' willingness to cooperate is not easy to obtain. And yet, information on growth in these early years is so basic to our understanding, appreciation, and interpretation of growth in subsequent years. For example, height at the first one to three years is highly correlated with adult height, half of which is attained shortly after two years of age. And the rapid growth in this period is particularly vulnerable to disturbing factors which may be psychological, environmental, nutritional, or hormonal in origin; the growth or metabolic debt incurred is liable to build up as time passes and leave behind marks of some permanent effects.

We have obtained data of growth and development (skeletal maturation) of 5194 pre-school children, and 29837 children of school age, stratified in socio-economic groups (SEGs), namely high (SEG1), middle (SEG2), and low (SEG3) groups. These have been detailed in previous communications (Chang et al, 1963, 1967). One serious drawback in our data is the lack of high socio-economic group in our pre-school samples. Without exception, the hand and wrist X-ray films were taken of every child studied.

The purpose of this communication is to present first of all the results of our studies of the growth (supine height) in the pre-school ages of southern Chinese in Hong Kong, and then the general pattern from school age to maturity basing on our large samples. In addition to chronological time scale (CA), we have also considered growth in relation to the physiological time scale of development in terms of skeletal maturation or skeletal ages (SA), assessed by the Greulich and Pyle standards. The X-rays were assessed twice by the same individual (Low), and averaged. We are quite confident that these standards are reasonably adequate and reliable for our purpose of population study. Finally, an attempt is made to compare the growth of our population with European populations (the American and English i.e. London) which are different from ours in cultural, genetic, geographic and nutritional backgrounds. It should be remembered, however, that these comparisons are based on mean values, and since means are estimations and liable to some variation they can indicate the trend and not define the differences. Detailed reports of growth in the components of height (leg length, sitting height, trunk length, and head and neck length); and longitudinal velocities basing on our large interlocking longitudinal series of school age will be presented in later communications.

## THE PRE-SCHOOL CHILDREN AND MEASUREMENT

Two series of children were studied: a cross-sectional series comprising 2587 boys and 2607 girls, to obtain norms of attained or 'distance' growth in body length (height); and a small longitudinal series starting with 338 male and female babies. The latter series, unlike our school age series, suffered a severe attrition because of timing difficulties. An account of the children, their socio-economic background and stratification, has been given in previous communications (Chang et al., 1967).

The ages of the children were calculated from their birthdays to the dates of examination. In the cross-sectional series, the children were classified into the following age groups: 0.5 month age group (2 weeks old); monthly age groups from 1 to 7 months; 3-monthly age groups from 9 to 24 months; and 6-monthly age groups from 24 to 60 months. For example, the 2-month age group comprises all children from 1.6 to 2.5 months old; the 7-month age group all children from 6.6 to 7.5 months old; the 9-month age group all children from 7.6 to 10.5 months old; the 24-month age group all children between 22.6 and 25.5 months old; etc.

The means of the age groups were then interpolated to exact mean ages, and the measurements of the body length were correspondingly interpolated. In the longitudinal series, the children were followed at 3-monthly intervals from 0.5 to 24 months old; and at 6-monthly intervals from 24 months to 36 months old.

The body length was measured by placing the baby or child on his back along the long axis of a specially constructed measuring table, which consists of a flat horizontal board with a metric scale fixed to one side, a rigid vertical head board firmly set at one end, and a sliding vertical foot plate at the other end. The head of the child was held firmly against the head plate by an assistant; the child's knees were kept fully extended by the left hand of the examiner while his right hand brought the sliding foot plate to the child's heels and soles. The measurement was read to the nearest millimeter. The assessment of skeletal age has already been reported (Chang et al, 1967).

For the general account of the subsequent pattern of growth of our children during the school-age period, we make use of our large 3-year interlocking longitudinal samples (Chang 1967), part of which (the first year cross-sectional study) has been published (Chang et al, 1963).

## MEAN DISTANCE GROWTH

Tables 1 and 2 *present the smoothed means and relevant statistics of supine height of the total samples (combined SEGs) of our pre-school children from 0.5 month to 60 months (5 years). Socio-economic differentials (SEG2 and SEG3), included in these tables, will be considered in another section of this paper.

The means of the total samples are inadequate in the sense that it is heavily biased by the predominance of the SEG3 samples. Weighted mean are therefore also given by taking into account the socio-economic distribution which is better represented in our large school-age samples. According to the latter, the high socio-economic group (SEG1) represents about 22%, the middle (SEG2) 32.5%, and the low (SEG3) 45.5% of the total samples. Since we do not have SEG1 in our pre-school samples, the means in the first 5 years are weighted by calculating

(0.325 x SEG2 means + 0.455 x SEG3 means) divided by (0.325 + 0.455):

The boys' means exceed those of the girls throughout the first 5 years except perhaps at 0.5 month. The curves show a directional trend of increases in sexual differences between 0.5 month to 2 or 2.5 years; and a decrease with age thereafter.

The variability of body length at each age level, measured as standard deviations (SD) and relatively as coefficient of variation (CV), does not show obvious sexual bias.

## MEAN VELOCITY

From 0.5 month to 36 months, velocity means are obtained from the raw longitudinal data and then adjusted with cross-sectional data. The longitudinal programme was stopped by the end of the third year. From 3 to 5 years of age, velocity is obtained by successive subtraction of the mean values given in Tables 1 and 2. Velocity derived in this way is adequate in practice at these early ages, though somewhat biased and lacking an expression of variability which can only be obtained from analysis of individual increments.

The velocity declines rapidly in both sexes in the first 6 months, especially in the first 3 months; and then gradually more slowly (Fig. 1). The velocity of the first 3 months is about twice that of the second 3 months (3 to 6), which in turn exceeds the succeeding 3 months (6 to 9 months) by 1.5 times. In other words, the velocity of the first 3 months is about 3 times that of 6 to 9 months, which is a considerably greater deceleration than in European children. From 9 to 12 months, 12 to 15, and 15 to 18 months, the velocity per month is about 1.1 cm, 1.0 cm, and 0.9 cm respectively. From 2.5 to 5 years of age, the velocity is around 1.5 to 2 cm per 3 months.

Figure 2 presents the velocity differentials in the first 5 years of Hong Kong Chinese, Brush (Simmons, 1944), Boston (Stuart, 1959), and English (Tanner, 1966) children for comparison. In the first 3 months, Chinese children grow faster than the English (Brush and Boston data unavailable). From 3 months to 5 years, the growth rate of our children (except at certain ages in relation to the English children) is slower than the European children, especially from 3 to 15 months; during which our infants' curves decelerate much more sharply than theirs. By 4 years the curves of the 4 populations are less widely apart.

If the velocity is converted to cm per year as shown in the table below, the boys grow faster than the girls in the first 2 years, and the girls faster in the succeeding 3 years. Compared with their difference in mean attained heights, the growth velocity of the two sexes is closely similar.

* *Refer to back for Tables.*

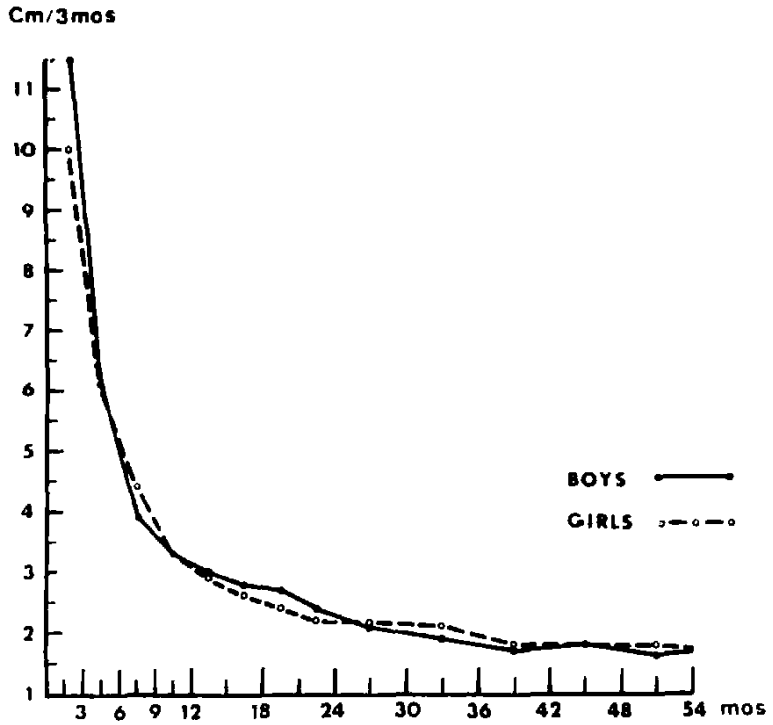


Fig. 1 *Age trend of supine height velocity of Hong Kong Chinese pre-school children.*

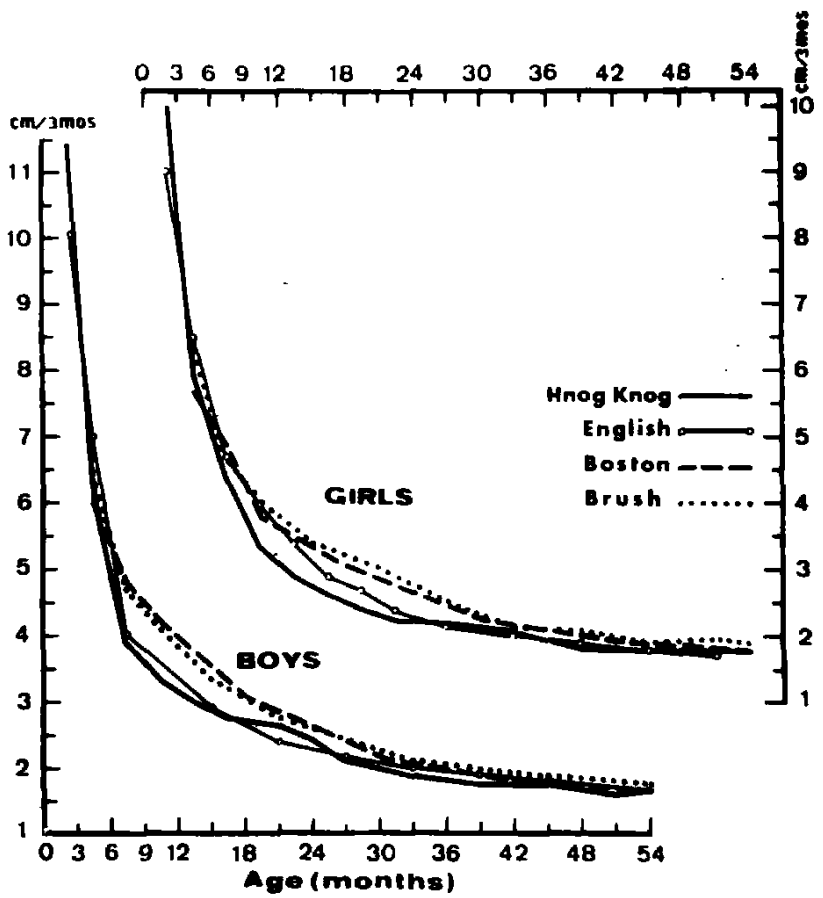


Fig. 2 *Supine height velocity of Hong Kong Chinese, American, and English, pre-school children.*

| CA yrs. | Boys (cm/yr) | | Girls (cm/yr) | |
|---|---|---|---|---|
| | Velocity | Weighted* velocity | Velocity | Weighted* velocity |
| 0.5 mos-1 | 24.60 | 24.72 | 23.52 | 23.73 |
| 1-2 | 10.53 | 10.86 | 10.07 | 10.08 |
| 2-3 | 8.00 | 7.92 | 8.50 | 8.46 |
| 3-4 | 6.98 | 7.00 | 7.26 | 7.20 |
| 4-5 | 6.40 | 6.66 | 7.00 | 6.90 |
| Total | 56.51 | 57.16 | 56.35 | 56.37 |

$$* \text{ Weighted velocity} = \frac{0.325 \times \text{SEG2 velocity} + 0.455 \times \text{SEG3 velocity}}{0.325 + 0.455}$$

## SOCIO-ECONOMIC COMPARISON

### Mean distance growth

The boys of SEG2 are taller than SEG3 boys at all ages in the first 5 years, except at 2, 6, 7, and 9 months, during which the means of SEG3 catch up with SEG2 and even exceed them slightly. The differences between the two groups range from -0.76 to 2.6 cm; the range is less (-0.76 to 0.85 cm) before 15 months, and greater (1.40 to 2.60 cm) after that age. The differences are significant at 5% level from 1.5 to 3 years.

In the girls, the SEG2 are taller than SEG3 throughout the first 5 years, except at 0.5 months. The differences range from -02. to 2.3 cm; the range is greater after 9 months (1.11 to 2.3 cm) than before (-0.2 to 0.9 cm). The differences are significant from 9 months to 4 years (at 1% level at 42 months, and at 5% level at other ages).

The SEG3 is more variable in height (supine) than the SEG2 in both sexes; we are not sure, however, if this is entirely due to difference in sample sizes.

It is useful to note the pattern of change in the differences between the SEGs as indications of environment-age interaction in the rate of growth. If the SEG differences stay put, that is to say if they keep constant, the range of change is zero, which means that no change in relative velocity has occurred. If the change is slight, the differences may be regarded as constant, for the small change could be due to measuring or technical errors or to such variables as season and part of the day when the measurements were taken. Large differences and range of change, on the other hand, would indicate a change in relative growth rate between the SEGs during the period concerned.

The bracketed figures in the Table below represent the range of differences between SEGs 2 and 3* within specified growth periods. The figures outside the bracket represent the amount of difference between the figures within the bracket, from which changes in socio-economic differences may be noted. It can be seen from the Table that the changes in SEG differences are small in the second and third periods (0.5 to 0.7 cm), and in the fifth period (0.2 to 0.6 cm); but large in the first (early pre-school) and in the fourth (adolescent spurt) periods; but particularly in the first period (before 2 or 3.5 years), during which the socio-economic difference may be said to be largely established, for the SEG curves of height from then on through the school ages maintain their relative positions.

| Boys | | Girls | |
|---|---|---|---|
| Age period | SEG2—SEG3 (cm) | Age period | SEG2—SEG3 (cm) |
| Before 2 | 1.84 (-0.01-1.83) | Before 3.5 | 2.50 (-0.2-2.3) |
| 2- 5 | 0.71 ( 1.80-2.60) | 3.5- 5 | 0.12 (2.18-2.3) |
| 6-11 | 0.50 (1.10-1.60) | 6-10 | 0.50 (2.60-3.1) |
| 12-16 | 1.70 (0.90-2.60) | 11-15 | 1.00 (2.50-3.5) |
| 17-20 | 0.60 (1.20-1.80) | 16-20 | 0.20 (1.80-2.0) |

* It is unfortunate that no meaningful comparisons can be made with SEG1 because we have no data of this group in the crucial first 5 years.

**Relative sexual effect of socio-economic influence**

The total amount or increment of growth and of development (SA) is calculated from 3 months to 19 years in the boys and 18 years in the girls. The age of 3 months is taken as the beginning because there is no standard of skeletal maturation prior to it, and growth in height is therefore taken as starting from there. The values at 3 months are taken as zero, and the total increment is taken as 100%; and fractions of that figure may be computed for height and SA at all age levels. The results of the attained percent of total growth and of development (SA) are plotted in Figure 3. The wider distances between the SEG2 and SEG3 curves of the girls than those of the boys indicate that the socio-economic effect is greater in the girls than in the boys.

Further, we calculated the mean height of SEG3 as percent of the mean height of SEG2 at all ages; and of SEG2/SEG1 and SEG3/SEG1 at school ages. The results confirm that the socio-economic influence is more obvious in the girls than in the boys at all ages; with the exception of SEG2/SEG1 at the ages of 11 and 13 years, and the SEG3/SEG2 at 2 and 16 years, which show a male excess over the female, but these are ratios of immediately contiguous SEGs. The mean ratio differences of all the ages combined between the female and the male are significant at 1% level. The socio-economic influence on SA is significantly greater in girls than in boys in the SEG3/SEG1 and SEG3/SEG2 comparisons at the ages of 6 to 14 years (the sexual mean differenc[illegible] are significant at 1%[illegible] at other ages nor in [illegible]. The SA per se is more often affected by socio-economic conditions in boys generally and less often in girls. Relatively the SEG effect is slightly greater on SA than on height.

The above finding of greater socioeconomic influence in the girls than in the boys is extraordinary and unexpected; it is at variance with all other studies with the exception, as far as we know, of the pre-school studies by Douglas and Blomfield (1958, 1962) who reported that girls were more profoundly affected than boys in both growth and health by unfavourable circumstances. We found this first in our pre-school children with disbelief and thought that it must be due to inaccuracy, for infants and toddlers are difficult to measure because of their active resistance. We turned therefore to scrutinize our large school age data; to our surprise the result is the same. The explanation that comes readily to mind is to regard this unusual phenomenon as one of the consequences of our social and cultural pattern which favours the male offsprings at the expense of the female, especially among the less privileged.

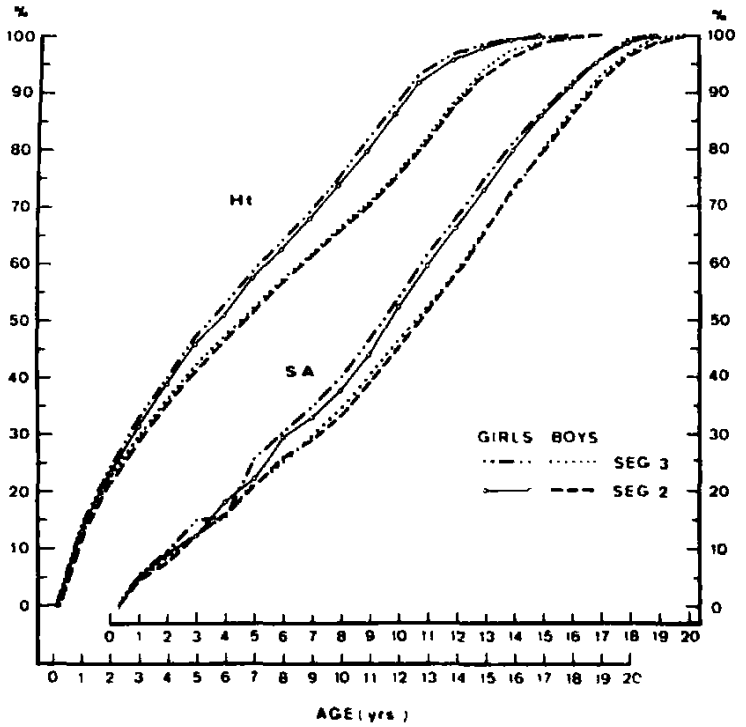


Fig. 3 *Attained percent of total growth (height) and of total development (SA) of Hong Kong Chinese children.*

**Growth velocity** (Tables 3 and 4)

In the boys, the velocity of SEG3 exceeds that of SEG2 slightly in the first 3 months; and then the SEG2 surpasses the SEG3 from 3 months to 2 years. From the age of 2 to 5, the velocity of the two groups is about equal at first and then it fluctuates.

In the girls, SEG2 exceeds SEG3 in velocity in the first 6 months; and then falls behind from 9 to 15 months. From 15 months to 2.5 years, SEG2 surpasses SEG3, after which the velocity of the two groups is about the same.

If the yearly velocity is considered cross-sectionally or longitudinally, SEG2 exceeds SEG3 in the boys in the first 2 years; and in the first 3 years in the girls. If the total velocity of SEG3 in the first 3 years is calculated as percentages of that of SEG2, the percentages in boys are 95.41 (cross-sectional) or 97.13 (longitudinal); and in the girls 94.76 or 96.71. A three to five percent difference at this stage of rapid growth implies relatively greater consequences than a higher percentage at later ages.

## HEIGHT IN RELATION TO PHYSIOLOGICAL OR DEVELOPMENT AGE REPRESENTED BY SA

**Mean height by SA grouping**

The children are grouped according to their skeletal maturation into 3 monthly skeletal age (SA) groups in the first 2 years, half-yearly SA groups from 2 to 4 years, and yearly SA groups from 4 to 5 years, and mean heights at these skeletal ages are obtained (hereafter referred to as Ht-SA; in contrast to height at chronological ages, hereafter referred to as Ht-CA).

The variabilities (SD and CV) of the Ht-SA means are considerably greater (SD: 3.53-7.89 cm; CV: 3.9-7.4%) than those of Ht-CA (SD: 2.22-5.18 cm; CV: 3.3-4.43%) in the first 8 years in the boys, and in the first 4 years in the girls (SD: 3.41-5.86 cm; CV: 4.5-7.7%; against SD: 2.19-3.83 cm and CV: 3.3-4.1% of Ht-CA). After these years, the Ht-SA means are less variable than the Ht-CA means.

Figure 4 shows the height of our pre-school boys and girls by SA and CA grouping for comparison. In the boys, the Ht-CA curve is above their Ht-SA curve in the first year, due to SA being ahead of CA, and therefore shorter onwards to 5, the Ht-SA curve is above the Ht-CA curve, and the distance between the two curves increases with age. This is due to SA retardation; and so by SA grouping, the CA duration per SA is longer for growth. It may be noted also that the slope of the Ht-SA curve is steeper than Ht-CA curve.

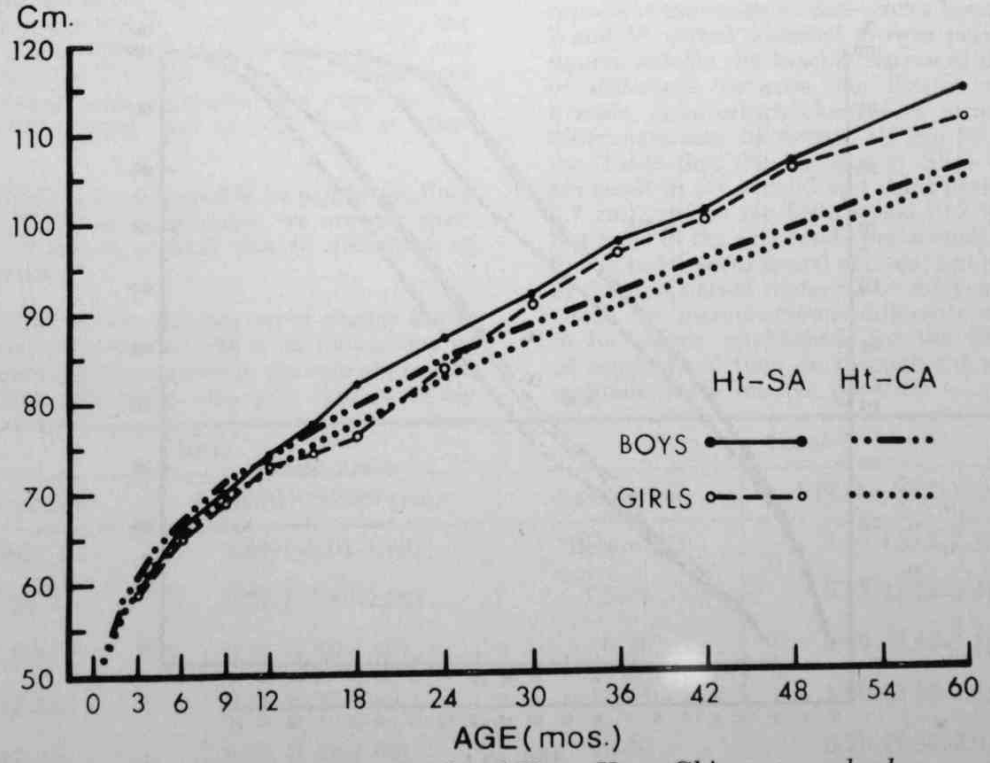


Fig. 4 *Age trend of supine height of Hong Kong Chinese pre-school children by chronological age (Ht-CA) and by skeletal age (Ht-SA) grouping.*

The Ht-SA trend in the girls is like that of the boys in the first year; but after the first year it shows certain peculiarities which may be due to sampling error, or perhaps to their peculiar maturational progress, for which the G-P standards based on the Cleveland girls may not be so suitable. The Ht-SA growth is peculiar in that it shows a decrease of rate from 1 to 1.5 years, and again between 4 and 5 years of age. On the other hand, it is a well known fact that girls are generally more variable than boys.

The boys' Ht-SA curve is above that of the girls. It may bs eeen from the curves that at the same SA, the boys are taller than the girls; and conversely, at the same height, the girls are more mature than the boys.

Figure 5 shows the extension of the Ht-SA curves of the boys and girls beyond the pre-school ages to 20 years. The boys' curve shows an obvious inflection at 5 SA and another at 11 SA; in the girls' curve the inflections are situated at 4.5 SA and 10 SA. The first inflection is due to the sudden shortening of chronological duration per SA (see table below); and the second inflection reflect the adolescent height spurt.

**The duration of CA per SA**

| SA | Boys (mos) | Girls (mos) | SA | Boys (mos) | Girls (mos) | SA | Boys (mos) | Girls (mos) |
|---|---|---|---|---|---|---|---|---|
| 0-1 | 12.0 | 13.0 | 7- 8 | 9.1 | 8.1 | 14-15 | 6.8 | 11.0 |
| 1-2 | 13.7 | 13.0 | 8- 9 | 9.5 | 8.5 | 15-16 | 6.8 | 12.3 |
| 2-3 | 19.2 | 20.6 | 9-10 | 9.5 | 9.2 | 16-17 | 6.3 | 17.0 |
| 3-4 | 26.6 | 22.1 | 10-11 | 8.9 | 9.2 | 17-18 | 9.9 | |
| 4-5 | 14.3 | 14.1 | 11-12 | 9.1 | 8.7 | | | |
| 5-6 | 9.1 | 6.2 | 12-13 | 11.6 | 10.0 | | | |
| 6-7 | 9.0 | 10.1 | 13-14 | 12.8 | 11.2 | | | |

The socio-economic influence is hardly perceptable in height by SA grouping in the first 5 years, because socio-economic differences in SA are not sufficiently sustained or significant in these early years, as far as our series of SEG2 and SEG3 boys and girls are concerned (Chang et al, 1967). After 5 years, the SEG difference is clear though slight.

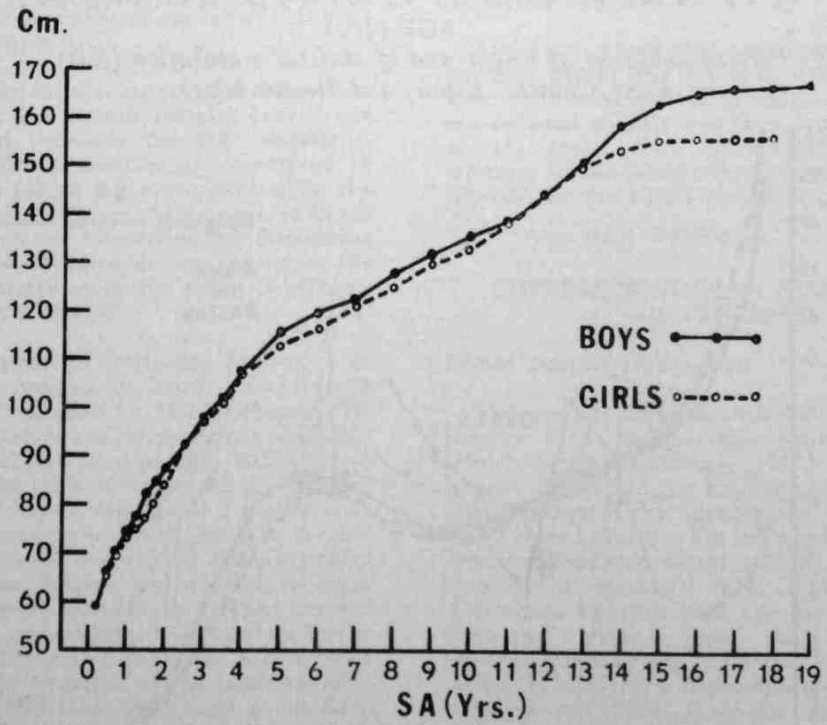


Fig. 5 *Height trend of Hong Kong Chinese children by skeletal age grouping.*

**Percent velocities of height and of development (SA)**

The total increment from 3 months to 17 years in the boys and 16 years in the girls is calculated. The terminal years of 17 and 16 are taken for the sake of comparison with the available data of the Brush series. The attained values at 3 months are therefore taken as zero, and those at 17 or 16 years as 100%. The percent velocities of height and SA are calculated at each age level; they are presented in Figures 6 and 7. In the boys, the SA percent velocity is smaller or less advanced than that of height before 7.5 years; and after that age the reverse obtains. The trend of SA and height percent velocities are contrary to each other before 8.5 years: while the SA percent velocity is increasing though fluctuatingly, and the height percent velocity is decreasing. After 8.5 years, the trend of SA curve shows a general conformity to the height adolescent spurt, but it begins to accelerate much earlier than height and spreads over a longer duration, and it decelerates much less than neight as aspected. In the girls, the percent velocity curves of SA and height behave like those of the boys generally, apart from the usual advanced timing of the female sex.

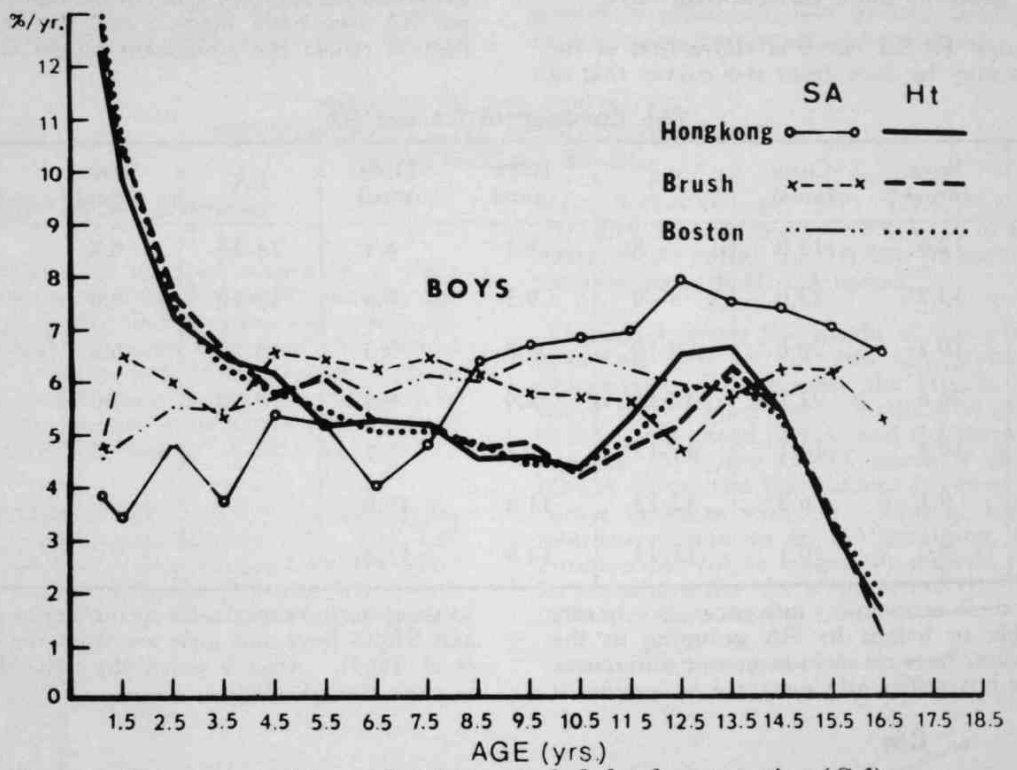


Fig. 6 *Percent velocities of height and of skeletal maturation (SA) of Hong Kong Chinese, Brush, and Boston boys.*

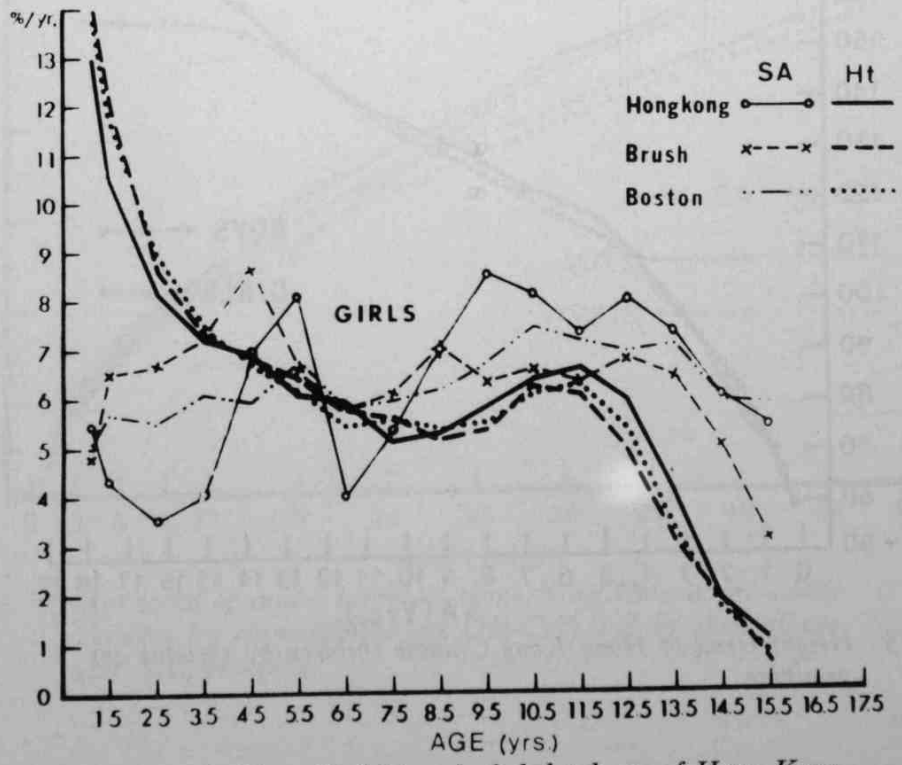


Fig. 7 *Percent velocities of height and of skeletal age of Hong Kong Chinese, Brush, and Boston girls.*

It is convenient to compare at this juncture the percent velocities of height and of development (SA) of the Brush (Simmon's, 1944) and Boston (Stuart, 1959) series with our series since they are included in the same figures. It may be noted that in the first 3 (boys) or 4 years (girls), the percent height velocity of our children is below that of the Americans; and that from 3 to 11 years in boys and from 4 to 9 years in girls, the curves of the 3 populations fluctuate irregularly in a loosely intertwining manner, sometimes one is higher and sometimes the other. During the spurt period (11 to 15 years in boys, and 9 to 13 years in girls), the Chinese height curves are above the Americans. It is important to realize in this context, however, that: (a) these curves, based on cross-sectional data, can only indicate roughly the racial differences in the timing of the spurt; and (b) it is not warranted to compare the magnitude of the spurts, because mean heights (unlike SA), which are different in the three populations at 17 years in boys and 16 years in girls, are treated equally as 100%.

In percent velocity of SA, the Chinese curves are below the American curves in the first 8 years in boys and girls (except between 4 and 6 in the latter). After these ages our curves lie above theirs. It is interesting to note that before 8 years of age, the Brush curves are above the Boston curves, and the Boston above the Chinese curves; and that after 8 this order is reversed. This would seem to suggest that the trend of development is positively vectorial in the first 8 years; and that when the skeletal maturation is well on its way, it shifts towards a negatively vectorial trend. It seems to be one of the maturing homeostatic adjustments of the body, like the mid-year balancing of assets and liabilities of the banking system.

The percent SA velocity curves of the American children, unlike the growth velocity curves, are quite horizontal, because the SA standards, based on the Brush samples are contrived to equate SA with CA in 1:1 ratio; even then, the SA percent velocity curves do manage to break through the imposed limitations by fluctuating here and there. Applied to our samples, the SA standards behave more like stages of maturation, independent of CA.

One further point of intriguing interest is to enquire which progresses faster, development (SA) or height (Growth). We calculated the ratio of percent velocity of SA over that of height (SA percent Vel./Ht percent Vel. x 100%) at each age level (the table of results not given here). They show that before the age of 8 in our boys and 7 in our girls (in the Brush series at the age of 4, and the Boston series at 5), SA progresses more slowly than height; and after these ages, SA progresses faster than height. If the percent velocities of SA and of height of our boys in the first 8 years and of our girls in the first 7 years are averaged, the progress of SA is about 36% behind height; and after these ages about 50% faster than height. It seems evident that while SA proceeds pari passu with growth in length and is definitely related to it, it involves in fact more than just growth in linear dimension but also changes in size, shape, thickness and breadth, and other maturational features of the various ossification centres. In other words, while SA is a pace-maker of growth in length, it is at the same time a pace marker of development as well. This concept of the two aspects of skeletal maturation may be relevant in some of the considerations of the relative effects of socio-economic conditions, nutrition, and illness on growth and development, but not quite in the sense of dissociation nor without regard to the age of the child or children concerned. In general, these two processes tend to be advanced or retarded together. We are not certain, however, if our method of comparing SA with growth in length is entirely legitimate, for SA is three-dimensional while length is one-dimensional; but we thought that comparison on the basis of percentages should remove these difficulties.

## CORRELATION COEFFICIENT BETWEEN HEIGHT AND SA

Heights and SA's are normalized first by log transformation for pre-school children and by T-score for school children before correlating them. The results are shown in Figure 8. The r's are highly significant in both sexes at 1% level at all ages except at 0.5, 7, and 31 months in the girls where they are significant at 5% level. The general conformity of their curves with the growth curves during adolescence show clearly a close relation between SA and growth velocity or intensity, which indicate that the two processes are responding to the same hormonal influence.

At the pre-school ages, test of partial correlation between height and SA with CA held constant have been done (not yet in school ages). The r's are reduced slightly but they remain significant at 1% level. The correlations are slightly stronger in the higher than in the lower SEGs throughout the whole period of growth.

* See next page for Fig. 8

## CHINESE-EUROPEAN (CAUCASIAN) DIFFERENCE

### Mean height difference

The average Chinese children are all the way shorter than the average American children (Brush series, Simmons, 1944; Boston series, Stuart, 1959), and the English children (Tanner, 1966) except at the ages before 3 or 6 months. See Tables 5 and 6. On the whole, the Chinese-American differences are greater than Chinese-English differences. The Chinese-European differences increase with age up to 11 years in boys and 9 years in girls. After these ages the general trend of the differences is to decrease with age, but with a slight rise in the penultimate year or so. Note that the decrease of the differences drop a little more between 12 to 14 years in boys, which indicate an earlier onset of

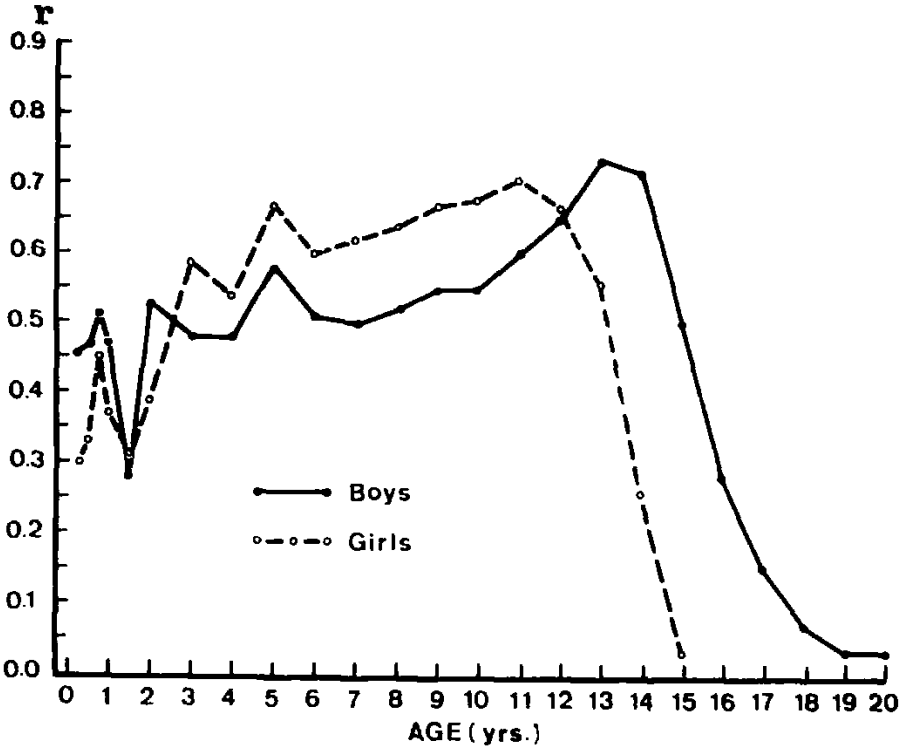


Fig. 8 *Correlation coefficient between height and skeletal age of Hong Kong Chinese children.*

Chinese adolescent growth spurt. In the girls, the Chinese-American differences continue to decrease after 9 years; but the Chinese-English differences decrease a little more between 10 to 12 and then increase a little, indicating a later onset of the adolescent spurt of the English girls.

The Table below sets out the cross-sectional increments summed up over a number of years in various growth periods for population comparisons:

**Boys:**

| Age (yrs.) | Height increment (cm) | | | | Chinese in % of: | | |
|---|---|---|---|---|---|---|---|
| | Brush | Boston | London | Chinese | Brush | Boston | London |
| 0.25- 4 | 43.90 | 43.25 | 41.93 | 38.68 | 88.11 | 89.43 | 92.25 |
| 4-11 | 41.96 | 40.57 | 40.30 | 38.01 | 90.59 | 93.69 | 94.32 |
| 11-14 | 18.90 | 19.50 | 18.80 | 20.02 | 105.92 | 102.66 | 106.49 |
| 14-17 | 11.78 | 12.34 | 13.60 | 11.31 | 96.01 | 91.65 | 83.16 |
| 11-17 | 30.68 | 31.84 | 32.40 | 31.33 | 102.12 | 98.40 | 96.70 |

**Girls:**

| Age (yrs.) | Height increment (cm) | | | | Chinese in % of: | | |
|---|---|---|---|---|---|---|---|
| | Brush | Boston | London | Chinese | Brush | Boston | London |
| 0.25- 4 | 45.10 | 43.75 | 42.40 | 38.81 | 86.05 | 88.71 | 91.53 |
| 4- 9 | 32.04 | 30.40 | 30.20 | 29.27 | 91.35 | 96.28 | 96.92 |
| 9-12 | 18.90 | 18.52 | 18.70 | 18.80 | 99.47 | 101.51 | 100.53 |
| 12-16 | 11.24 | 11.57 | 12.90 | 12.86 | 114.41 | 111.15 | 99.69 |
| 9-16 | 30.14 | 30.09 | 31.60 | 31.66 | 105.04 | 105.22 | 100.19 |

In the first 4 years, the increments of Chinese boys are about 12%, 10.5%, and 8% less than those of Brush, Boston, and English series respectively; and the Chinese girls are less by about 14%, 11.3%, and 8.5% respectively. From 4 to 11 years, the increments of our boys are about 9.4%, 6.3%, and 6% less than those of Brush, Boston, and English series respectively; the total increments of our girls from 4 to 9 years are less by about 9%, 4%, and 3% respectively. During the spurt period, increments of our boys (11 to 14 years) are about 6%, 3%, and 6% more than Brush, Boston, and English respectively; while the increments of our girls (9 to 12 years) are 1.5%, 0.53% greater than Boston and English girls respectively, but 0.53% less than the Brush girls. The total increments between 11 and 17 years in boys and between 9 to 16 years in girls of the 4 populations are very close to each other. It may be noted from the general picture given above that the largest population differences occur in the first 4 years of the first decade, and that the differences in the second decade lie primarily in the timing of the adolescent growth spurt rather than in magnitude.

### Walford transformation of height

Figure 9 presents the logarithmic regression lines of height according to Gray's modification (Gray, 1948) of Walford's transformation (1946) in which the natural logarithm of heights at age h are plotted against those at age h+1.

At the ages from 2-9 years in Hong Kong boys and 3-10 in Brush and Boston boys the curves are approximately straight lines, illustrating that during this period growth proceeds at a stable rate. The curves further demonstrate three phases during the entire period of growth:

(1) Before the age of 2 years in Chinese boys and before 3 years in American boys, the rate of growth is much greater in the Americans than in Hong Kong Chinese, but decreasing rapidly, judging by the angle of inclination of the growth lines being less than 45°.

(2) From the ages of 2-9 years in Chinese boys and 3-10 years in American boys, the velocity decreases at a steady rate.

(3) After the ages of 9 years in Chinese boys and 10 years in American boys, growth accelerates up to 13 or 14 years in the two ethnic groups, and then decreases until it reaches zero when the curves touch the 45° line at around 18 years in Chinese and American boys.

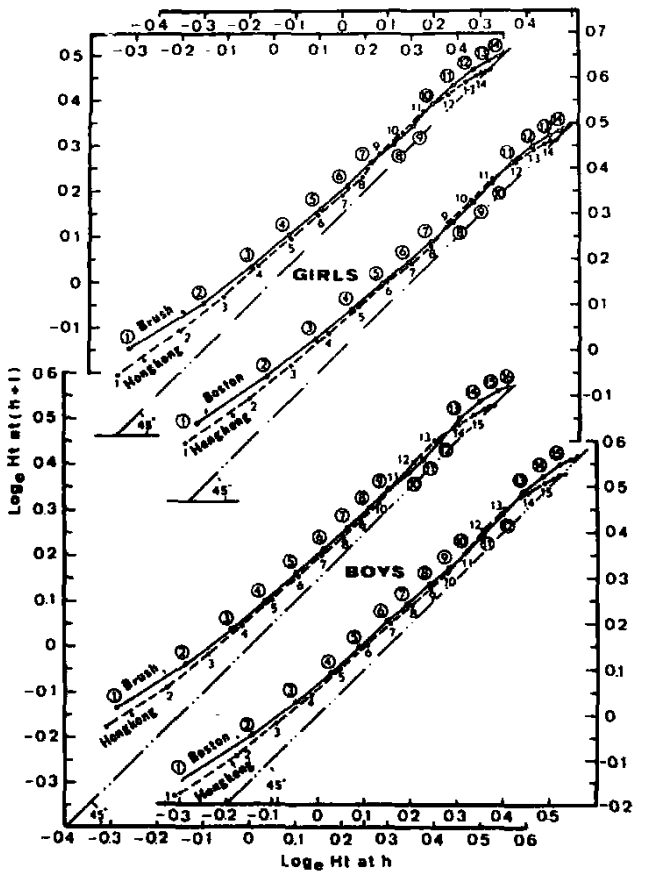


Fig. 9

*Walford transformation of height of Hong Kong Chinese, Brush, and Boston children. The figures on the curves indicate years of age; those circled are the ages of either Brush or Boston series.*

The difference of the height values between the Brush boys at the age of 5 years and Hong Kong boys at the age of 6 years is slight; the same holds for the differences between the Boston boys from 6-14 years and Hong Kong boys from 7-15 years. In other words, the mean heights of Hong Kong boys at h years are about the same as those of the American boys at h-1 years in the above mentioned age levels. Similar characteristics but at different ages can be observed in the girls' curves.

The American curves in the first 3 years are much higher than the Chinese curves in the first 3 or 4 years, indicating that the rate of growth for the same height is much greater in the Americans than in the Chinese. After these years, the overall differences in growth rate are quite small though the American lines are still above the Chinese lines. All three groups seem to stop growing at about the same ages: 18 years in boys, and 16 in girls. These results would suggest that differences in the final adult heights are determined to a large extent in the early or pre-school years of life. Although growth of the Chinese and of the Americans terminates on the average at about the same ages, their curves give the contrary impression: the American curves appear to be prolonged, while the Chinese curves flatten out and appear to terminate earlier. This impression is conspired by the following characteristics in their pattern of growth: (a) the cumulative effect of a greater growth potential of the Americans (and English) than the Chinese, by which their growth is advanced and their curves appear as if projected beyond the Chinese curves, and (b) the cumulative effect of the slower growth of the Chinese in the pre-adolescent years, together with the earlier occurrence of their adolescent spurt, give their curves a foreshortened or telescoped appearance, increasingly so as they approach the terminal years.

### Walford transformation of skeletal maturation

Figure 10 presents the logarithmic regression lines of the skeletal maturation of Chinese and Boston children for comparison (the Brush series are omitted to save space). From the figure, the following may be noted: (1) The American curves lie well above the Chinese curves in the first 3 or 4 years of age, indicating that for the same SA, the American yearly SA increment is much greater than that of our children. (2) The Chinese curves change irregularly from 4 to 8 years of age. (3) From 8 years onwards, the Chinese curves are nearly straight lines (in Boston series from 3 years onwards), indicating sustained stable progress in skeletal maturation. (4) The SA of Chinese boys is retarded in the first 12 years relative to Boston boys by less than one SA in the first 7 years and increasing to about one SA from 7 to 12 years. Actually, the skeletal maturation of our boys has started to hasten after the Boston boys from 8 years of age onwards until the gap is closed by 14 and 15 years, and then even exceed the Americans. The Chinese girls are less retarded in SA than the Chinese boys; they approximate the SA of the Boston girls from 10 years onwards even though the SA of the Boston girls exceed the G-P standards at these ages. On the whole, the results presented above tally with those of other aspects we have studied.

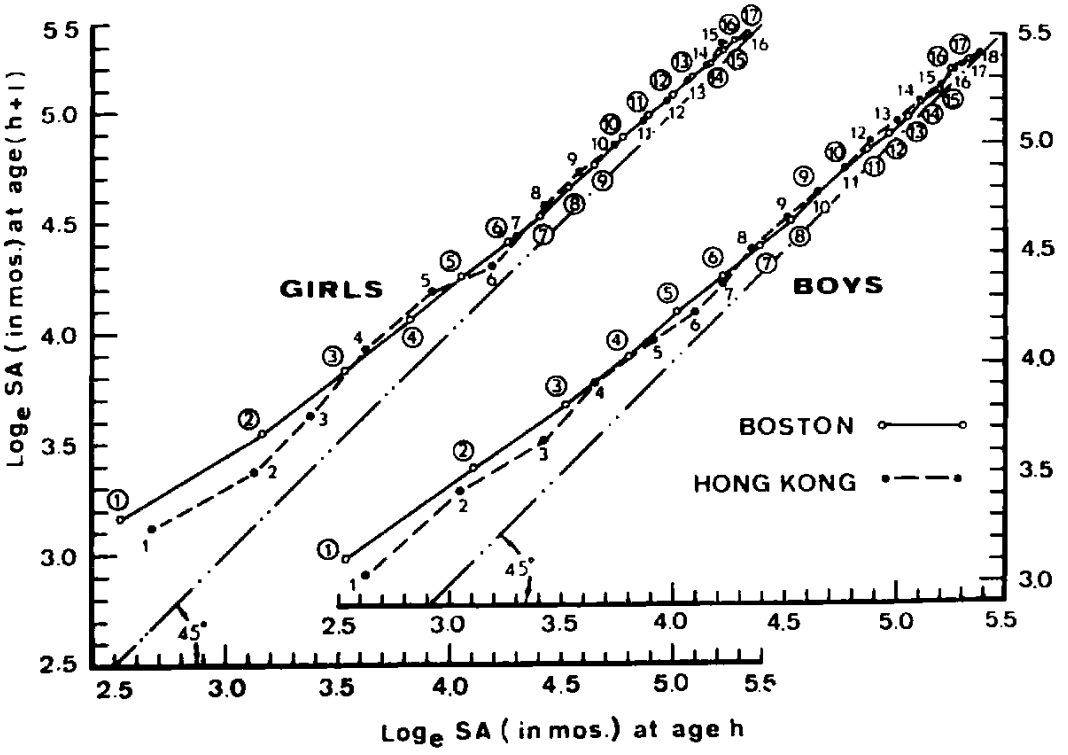


Fig. 10 *Walford transformation of skeletal maturation (SA) of Hong Kong Chinese, and Boston children. The figures on the curves indicate years of age; those circled are the ages of Boston series.*

**Comparison of height according to SA grouping**

SA of the Boston series; and then adding successively the adjusted velocities starting with the mean heights of our children at 3 months of age. If the relationship between growth and

**pre-school girls**

| ombined | | | | |
|---|---|---|---|---|
| Weighted mean | SD | CV | | CV |
| | | | Wtd | * |
| 51.42 | 1.88 | 0.037 | 0.037 | |
| 53.47 | 2.40 | 0.045 | 0.045 | 0.18 |
| 57.13 | 2.13 | 0.037 | 0.037 | 0.30 |
| 59.71 | 2.20 | 0.037 | 0.037 | 0.50 |
| 61.90 | 2.19 | 0.036 | 0.035 | 0.41 |
| 63.84 | 2.10 | 0.033 | 0.033 | 0.37 |
| 65.63 | 2.19 | 0.034 | 0.033 | 0.88 |
| 67.15 | 2.34 | 0.035 | 0.035 | 1.05 |
| 69.68 | 2.46 | 0.035 | 0.035 | 0.31 |
| 72.66 | 2.73 | 0.038 | 0.038 | 0.14 |
| 75.45 | 2.62 | 0.035 | 0.035 | 0.005 |
| 78.14 | 2.96 | 0.038 | 0.038 | |
| 80.83 | 2.78 | 0.035 | 0.034 | |
| 83.15 | 2.76 | 0.033 | 0.033 | |
| 87.44 | 3.27 | 0.038 | 0.037 | |
| 91.32 | 3.70 | 0.041 | 0.041 | |
| 94.96 | 3.35 | 0.036 | 0.035 | |
| 98.52 | 3.83 | 0.039 | 0.039 | |
| 102.03 | 3.82 | 0.038 | 0.037 | |
| 105.41 | 4.11 | 0.039 | 0.039 | |

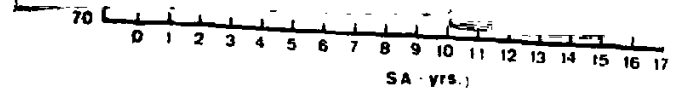


**Table 4**

**Mean velocity (cm) of supine body length of Hong**

| SEG 2 | | | SEG 3 | | | |
|---|---|---|---|---|---|---|
| Mean vel. cm/3 mos. | SD | CV | N | Mean vel. cm/3 mos. | SD | CV |
| 10.23 | 2.17 | 0.21 | 118 | 9.85 | 1.68 | 0.17 |
| 6.40 | 1.86 | 0.29 | 80 | 5.75 | 1.52 | 0.26 |
| 4.60 | 1.96 | 0.43 | 51 | 4.20 | 1.16 | 0.28 |
| 3.20 | 1.07 | 0.33 | 43 | 3.42 | 1.40 | 0.41 |
| 2.82 | 1.09 | 0.39 | 42 | 2.93 | 1.13 | 0.39 |
| 2.69 | 1.05 | 0.39 | 32 | 2.56 | 0.95 | 0.37 |
| 2.38 | 1.17 | 0.49 | 15 | 2.36 | 1.41 | 0.60 |
| 2.25 | 0.23 | 0.10 | 10 | 2.20 | 1.18 | 0.54 |
| 2.21 | | | 2 | 2.15 | 0.27 | 0.13 |
| 2.10 | | | 3 | 2.10 | 0.27 | 0.13 |
| 1.85 | | | 95-92 | 1.80 | | |
| 1.75 | | | 92-79 | 1.80 | | |
| 1.75 | | | 79-99 | 1.76 | | |
| 1.70 | | | 99-66 | 1.68 | | |

n weighted mean

**Comparison of height according to SA grouping**

Height according to SA grouping of the Boston series is derived from Table 3 in Bayley's paper (1962); but this is not possible in the case of the Brush series; and there are no such data of the English series. Hence comparison on the same basis is possible only between our children and the Boston series; and this is shown in Figure 11. Apart from the cumulative effect of growth, the height differences can be explained satisfactorily by the SA-CA relationship in the two populations; that is to say, whether the CA duration per SA of our children is shorter or longer relative to the Boston series. The results show that our children are smaller than the Americans at the ages when our SA is ahead of CA i.e. the passage of time is less than one CA per SA (e.g. at 1 SA; and at 6 or 7.5 SA to 14 SA); and that our children are taller than the Americans when our SA is retarded i.e. the CA duration per SA is longer relative to the Americans (e.g. 2.5 to 6 or 7.5 SA).

To remove the influence of CA duration per SA in comparing the heights of our children with those of the Boston children, we adjusted our children's mean heights to the same SA-CA relations of the Boston series. The mean adjusted height at each SA is obtained by first adjusting our children's velocity of height (cross-sectional) to the same CA duration per SA of the Boston series; and then adding successively the adjusted velocities starting with the mean heights of our children at 3 months of age. If the relationship between growth and CA duration is linear, the adjusted mean height should reflect the relationship between growth potential and SA. The results show the mean adjusted heights of our children to be all the way smaller than the American children, and that the differences increase with age in spite of fluctuations until 9 SA (which is about 10.2 CA) in boys and 10 SA in girls (which is about 10.4 CA). After these ages the differences decrease and then increase slightly.

Judging by the above comparisons on equal SA-CA basis, it seems evident that the American children are endowed with greater growth potential than our children in the first 10 years or so, in addition to the possible positive vectorial nature of growth in these years, that is to say that large increments of size tend to follow one another. On the average, the European children develop faster and grow more at the same developmental levels than our children in the pre-adolescent period. It suggested that in the race of growth which must run its course within a circumscribed span of years, it is the sustained stable and even pace that accomplishes the more; and not the irregular pace, slow at first and then a quickening in the second decade. While these differences may be partly environmental and nutritional in origin, genetic components of growth potential may reasonably be

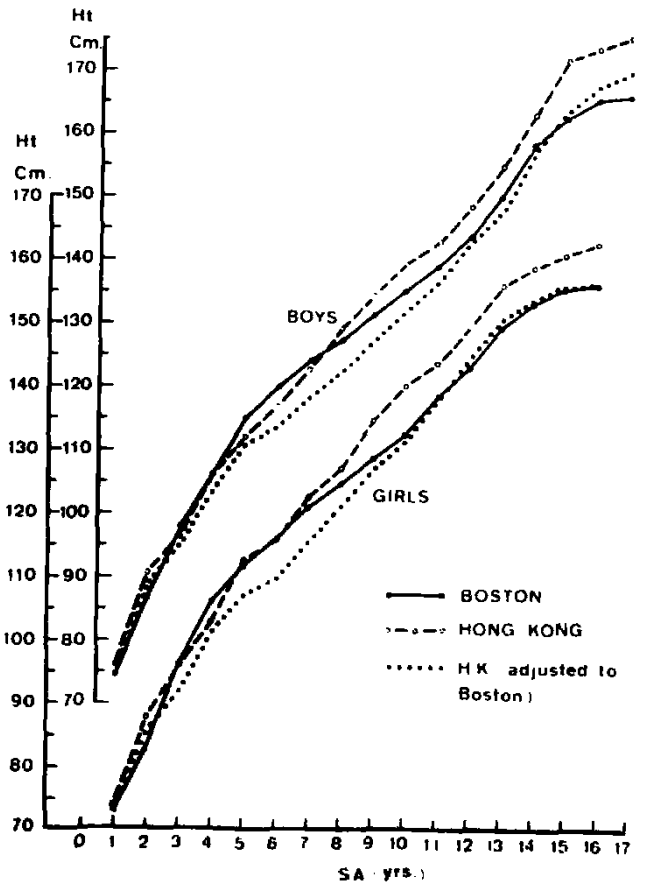


Fig. 11

*Comparison of height according to skeletal age grouping of Hong Kong Chinese children with Boston children. See Text for unadjusted and adjusted comparisons.*

assumed to be an important underlying determinant, which precedes and supercedes the plastic responses to environment or diet. This is not to say that the latter are unimportant; for they are important and have definite influence on the fulfillment of inherited potentialities. And yet, these very genetic components reflect a long-term adaptation of our people to our environment—our clime, our much dissected land and soil, our woods, gorges, valleys, rivers, fauna and flora, food supply and agriculture which mould our body, and through its mediation the traditions of our culture, art, music, literature, philosophy, economies, and our refined gentle mode of living. We are not particularly meat eating or milk drinking people; the energies of animals are channeled to serve agriculture. For food, we rely on the radiant energy of the sun caught by the plants directly, instead of its passing through the metabolism of animals and then recovered as meat; and this seems to be the most efficient way of feeding our teeming masses. Pork is the main item of meat consumed; there is good reason for this apparent paradox, for the pig is the most economical domestic animal as it costs practically nothing for maintenance, surviving mainly on the waste from human food. And our tradition was that only those who produced and earned a living deserved good food; this left young children's needs after weaning unsatisfied until they were old enough to forage for themselves. For extra nutrient, mass feeding in the innumerable feasts and festivals throughout the year appears to answer the purpose. Our population seemed to have trimmed itself down to a size and physique suitable to our nutritronal, economic, and general environment. And, smallness does not or need not imply lower effiency! However, we must not digress beyond provoking some thought on this interesting subject. As Tanner (1966) said: "We must suppose that in each of the major populations of the world the growth of its members was gradually adjusted, by means of selection, to the environmental conditions in which they evolved." Before concluding, let us indulge in mentioning another anatomical feature. Compared with the Europeans, we and the Japanese have lighter bones with thinner contex, even in Americans of Chinese and Japanese ancestry. To be convinced, just compare our slender wrist, male or female, with the stout wrist of the Europens. Garn (1964) thought that this moderate mineralization might have arisen from a favourable adaptation to rickets through selection, and that our shorter limbs could also be an adaptation to the same environmental stress.

## SUMMARY

Growth in height (supine body length) of 5194 pre-school children of ages from 2 weeks to 5 years has been studied and evaluated in relation to their developmental status and socio-economic background. The socio-economic differentials appear to be established in the first 2 to 3 years in our children, for the relative positions of the growth curves of the socio-economic groups are maintained from then on to maturity. By the same procedure, the subsequent pattern of growth is studied by using our large data from 29837 school children, our University students and those in 4 Teachers Training Colleges. Contrary to findings elsewhere, the socio-economic effect is found to be greater in our girls than in our boys, probably in consequence of our social pattern of according greater advantage to the boys at the expense of the girls. Height is found to be highly related to development (skeletal age). Comparison with European children (Brush, Boston, and English) is made and discussed.

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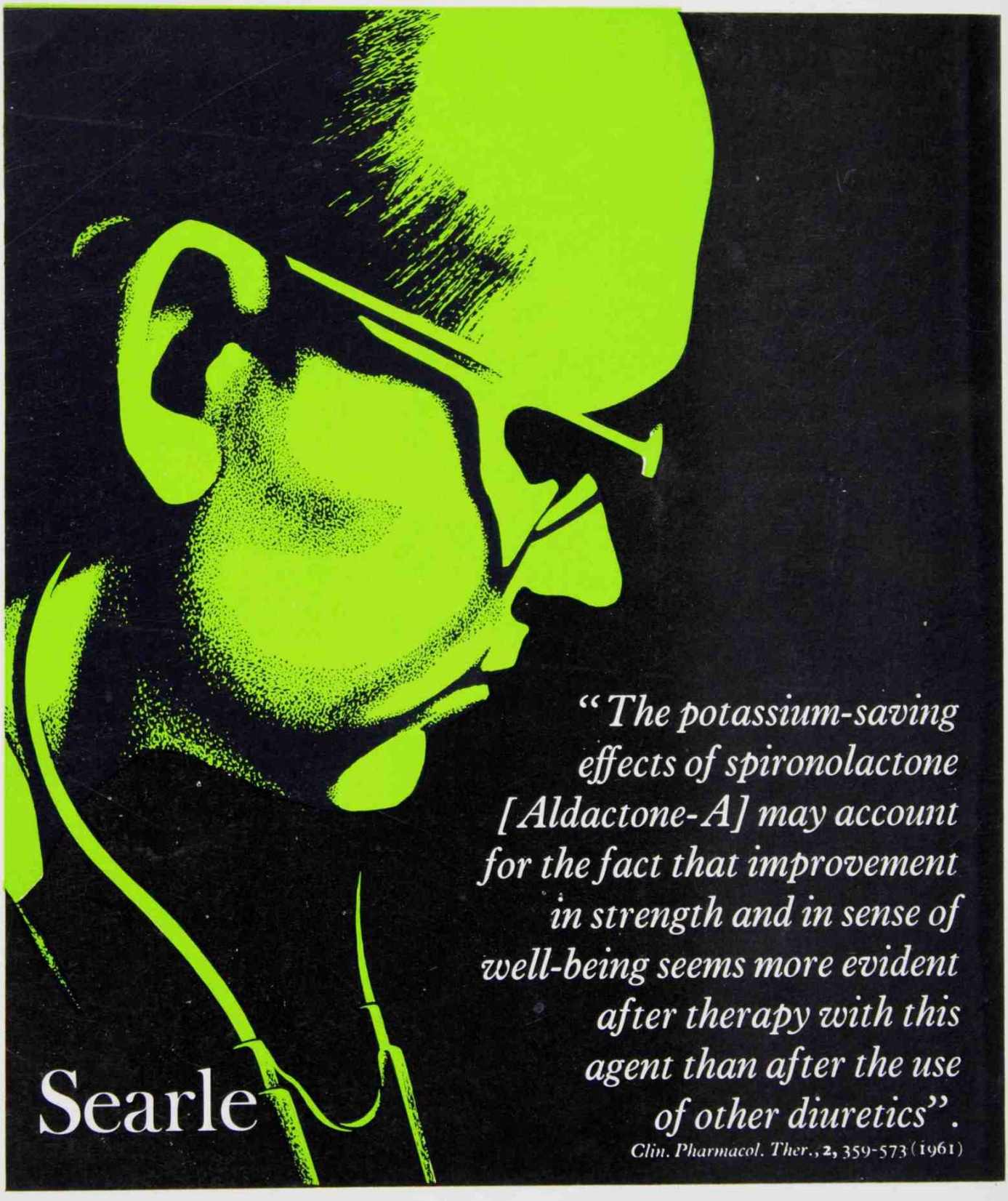
inherited defects are rare, the problems which they pose in what is often a soluble form sometimes have a bearing on more general and common pathological problems.

Some persons who suffer from inborn errors of metabolism are mentally retarded, and, in a study of mentally retarded individuals in Northern Ireland, Carson and Neill in 1962 identified several patients with a hitherto undescribed metabolic defect with a familial incidence, affecting the biosynthetic pathways of sulphur-containing amino-acids. We were surprised to find, when we began to study this condition, that some of these cases exhibited striking manifestations of an uncommon combination of physical features including lengthening of the fingers and toes. The limbs are also elongated, ligaments are loose, and the chest is deformed. This group of physical features together with some others comprise a well-recognized condition called Marfan's syndrome, which is not in itself associated with mental defect; indeed it has been suggested that Marfan's syndrome caused the unusual physical habitus of Abraham Lincoln, who was assassinated a hundred years ago this year. A certain amount of knowledge is available on the way Marfan's syndrome comes about, and it seems probable that the defect lies in the processes whereby connective or supportive tissues such as ligaments and bones are formed. The course of events leading to Marfan's syndrome, though usually set in motion by genetic factors, may also result from poisoning in the growth period by some vegetable substances, and the physical signs are probably only the visible results of any agent that will disturb in a particular way the proper formation of connective tissues in the growing individual. Our information about the metabolism of connective tissues is still defective; but the subject is obviously important, not only for those who suffer from Marfan's syndrome, but much more widely in surgery and in many other aspects of medicine. We may hope that the establishment of this correlation between connective-tissue growth and the sulphur-containing amino-acids, which was not recognized before, may eventually lead to practical contributions of widespread application. In this instance we were fortunate to hit early in our investigations on a link between a rare condition and a pathological problem of major interest.

In another group of inherited disorders of metabolism in which I have been interested—the porphyrias—biochemical analysis, stimulated by clinical observavations, has greatly enhanced our knowledge of general metabolism and particularly of enzymes such as hæmoglobin needed for cell respiration; respiratory enzymes generally contain the porphyrin ring molecule. Biochemists, by elegant methods of investigation such as progressive bio-synthesis and degradation of molecules tagged with radioactive atoms, have now worked out the steps by which every atom of the complex porphyrin ring is built up. The condensation of succinate, from the tricarboxylic acid cycle, with glycine yields aminolævulinic acid and substances like porphobilinogen on the route to protoporphyrin. Respiratory enzymes containing porphyrin rings are found in both the animal and the vegetable kingdoms and so appear to have participated in cellular respiration from a very early point in evolution.

Some forms of porphyria, fortunately the most uncommon, produce arresting physical manifestations—scarring of the face and mutilations of the hands on exposure to sunlight, and sometimes a purple discoloration of the teeth which emit a fluorescent glow in ultra-violet light. L. Illis has recently suggested that unfortunate subjects of this disease with such an obvious and unpleasant appearance may in the past have been called werewolves—that mythical combination of man and wolf which figures in the lore of many nations in Europe and some elsewhere. A commoner form of porphyria is one in which the patients, who appear perfectly normal, suffer from recurent attacks of abdominal pain and muscle paralyses, especially if they take certain drugs; porphyrin precursors

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the pursuit of intellectual excellence, or to use the words of Sir Richard Livingstone, in 'the philosophy of the first rate'. It is this pursuit which should fire the young scholar and sustain the old.

We cannot escape the conclusion that this aim is of particular value in Hong Kong, isolated by distance and other factors from similar institutions, to support our University against the seductions of educational or medical expediency. But Hong Kong, like ancient Tyre as Isaiah saw it, 'the crowning city whose merchants are princes and whose traffickers are the honourable of the earth', cannot look elsewhere than to its University to maintain its intellectual and scientific standards. For our merchants and traffickers, knowledge and straight dealing are honourable aims—or to put it as a Latin motto, *cognitio et fas*. But that is not the motto of our University, which must search in its different sphere after wisdom and excellence and that, I take it, was in the minds of our founders who chose the words *sapientia et virtus*.

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* * * *

## *SLICK SICK*

"Something's the matter with me, doc! I hate to get up in the morning . . . and I'm tired all day. Tell me the truth in plain English! What's wrong?"

"Nothing's wrong. You're just lazy! !"

"L-Lazy? Er . . . . . haven't you got a long scientific name for it I can tell my folks?"


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of China's youth; and my responsibilities were clear and definite. I was a zoologist and human anatomist by profession, and I had published a good deal in China and written a large manuscript which was never published unfortunately. While Kinsey left his insects for human sex (at least it rhymed), I left the wondrous animal kingdom for the whole man. I have now been teaching human anatomy for about 30 years; I have enjoyed every moment of it, but as Wood Jones said: "no perpetual consorting with youth can delay the advent of old age", though I cannot say that I am feeling it. Evidently, the nervous system is not only the first to develop, but also the most tenacious and long lasting of all the organ-systems of our earthly tabernacle. If there is such a thing as after life, it must be the same system in its ethereal state.

Before concluding, I would like to add a few words about the staff members who have left our Department for ventures abroad, as many have asked me for news about them. Dr. Joseph Lee is now Professor of Anatomy at Buffalo University. He has distinguished himself brilliantly in North America (Canada and U.S.A.), and risen to the very top. He has recently been invited to head the Anatomy Department at Mayo Clinic to succeed the famous anatomist there, Professor Hollinshead. Katherine Dr. So Dr. K. T. Sheng are now practising in America they have both obtained specialist qualifications in paediatrics. Dr. David Lee was made Assistant Professor of Anatomy in San Francisco. Dr. Marjorie Lee, who resigned in August this year, is Associate Professor of Anatomy in Nebraska University.

## APPENDIX

September 24, 1968.

Dear Professor,

The semester began on September 10, and classes have started for 2 weeks already. I have all my classes on Wednesday, morning and afternoon, lectures and labs. The state of Nebraska is short of cadaver supply, so all the bodies are gathered first in Omaha and then distributed to 3 medical and dental schools. The bodies are embalmed there, too bad that the arteries are not injected with dyes. You should see the day when the cadavers came in, the students were all dressed in old clothes (their white short gowns are supposed to be worn for 4 years and they will wear them to the clinics. Lab. gowns are very expensive) sport skirt, blue jeans, rubber shoes, aprons etc. They carried the bodies into the lab from the truck with stretchers, and they scrubbed the bodies and shaved the hair and later on cleaned up the place by themselves. So far, I think the students are not bad, they appeared quite keen and courteous. For the first year I have a lot of work to do, since I have to write the assignments, dissection manuals, class tests all by myself. I think when the second year comes, everything is sort of like routine, then I shall have plenty of free time to do some reseach work.

We rented a duplex 4 miles from the dental school. It is quite spacious. Sitting room, dining room and kitchen on the 1st floor, 3 bedrooms on the 2nd, in addition there are big basement and attics. The whole house is central heated and central air-conditioned, wall to wall carpet and curtains on the 1st floor. The rent is very reasonable, at $130 a month. I think the cost of living is comparatively low in Lincoln, probably slightly lower than 3 years ago in Ohio. I guess people's income should also be proportionally less than the east or west coasts.

Do drop me a few words when you have time.

Warmest wishes,

MARJORIE LEE

Misericordia General Hospital,
Winnipeg, Manitoba,
September 27, 1968.

# Immunity to measles from a single injection of a safe vaccine

"The analysis was completed of the results of the recent field trials of measles vaccine sponsored by WHO in several countries in order to compare the severity of the reactions and the antibody level produced by various available measles virus vaccine strains.[1] It was found that the Schwarz vaccine caused less reaction than the others tested and gave a satisfactory antibody response. Further studies to measure the duration of immunity provided by different vaccines have been planned. Present evidence indicates that the live measles vaccine will give good protection for years. Despite the pyrexias which they induce, no serious untoward sequelae have been reported from their use on a large scale, and there is good reason for using them for the routine immunisation of children where mortality from measles is high.[2]"

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1. See Off. Rec. Wld. Hlth Org. 139,16
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# MEDICAL STUDENT RESEARCH TRAINING

By Dr. Chauncey D. Leake,

*Co-ordinator, Medical Student Research Training Programme,*
*University of California School of Medicine, San Francisco, California.*

"I am glad to send a note for publication in the Elixir, the Student Medical Society Journal, on our medical research training program. You must have a keen group of youngsters, and I am delighted that they are interested in research training. This is also good teaching."

This from Dr. Chauncey D. Leake of the San Francisco Medical Centre, University of California.

If publication of this article be an indication of our students' interest in the deeper fields of medicine, then perhaps our teaching staff, after reading this article, might rally to the support and promotion of such a program. — The Editor.

Research training for medical students is a new idea. However, it can be a most important aspect of the teaching effort, especially as directed toward the practical business of taking care of sick people. The point is that every patient who comes for medical attention is actually a new, unique, original, and special research problem.

Every patient differs from every other patient. No two individuals are alike in any way. All of us differ markedly in our chemical profiles and it is now possible, with modern biochemical techniques, to get a fair picture of the chemical makeup of each individual, and how it may differ from the average. The function of the physician is thus to attempt to bring the picture more into average focus.

Research training thus becomes extremely important for medical students. Research training helps medical students to understand the problems involved in search and research, and to apply their knowledge in research methods to the actual management and handling of the sick patients they encounter in their daily practice.

### Why Search and Research?

It is interesting that we frequently ask, why should we undertake research? Usually the answer is because we are curious, but then we ask why is it that we are curious? Then we become engaged in the very process we are discussing. Search and research are a part of living. All living things have to search and research for food and reproduction. Mechanisms which control the search and research for food and reproduction appear to be built into the structures of their chemically sensitive nervous system.

MacLean has called attention to the two groups of chemically regulated cells which operate in cycles, and which lie in that maze of sensory and motor nerve pathways which we call the hypothalamus and limbic system. One group of cells, evolved in response to the biologic need for self-preservation, directs a drive for food, and may be regulated by a "glucostat." The other, oriented toward species preservation, which becomes activated during the metamorphis of puberty, channels the drive for sex. This group of cells may be responsive to chemical build-up, with polarizing "charge" within the cell, which is released, as the cells "discharge."

In either instance, there is a feeling of comfort, pleasantness, relaxation, sleepiness, and contentment. This is the feeling of "satisfaction." It may easily be conditioned, and is indeed conditioned in a different way for every one of us. Nevertheless, we all seek this feeling of "satisfaction." In the case of

scientists and health professional personnel, there has been conditioning toward "satisfaction" in the scientific or professional work. We get "satisfaction" from the achievements gained by search and research.

**Purposes and Judgements**

The purposes of the health professions are changing. Whereas it was once the case that the members of the various health professions would wait for people to get sick, and then try to do something to get them well, there has gradually come a change. This older system persisted for many centuries, and great experience was accumulated in the practical care of sick people.

In the 19th century, however, scientific knowledge about health and disease had increased to such an extent that it became possible to think about more rational methods of treatment of disease than those based merely on experience. Both microbiological scientific knowledge, as well as biochemical scientific knowledge, together with basic understanding of anatomical, physiological and pathological principles, made it possible to treat disease with ever-increasing success.

By the end of the 19th century, verifiable scientific knowledge about ourselves in health and diesease had come to such a high level that it could be seriously proposed that we make an effort to prevent disease. William Henry Welch (1850-1934), that great pathologist and humanitarian, proposed that medicine be oriented toward the prevention of disease. He recommended that all medical schools focus on preventive medicine. Indeed we all enthusiastically set up courses in preventive medicine, hoping that members of the medical profession would go out and practice successfully on the basis of preventing disease.

The effort was a failure. Physicians simply could not see how they could make a living by preventing that on which they thought their living might depend. Accordingly, they had little to do with preventive medicine in actual practice, but went along on the basis of the old conventions. The people, however, who frequently understand broad social developments, took up the matter and established public health, over the often violent opposition of the medical profession.

Public health became so successful that it has caused much difficulty. It has greatly prolonged life expectancy, and thus has contributed significantly to extensive population pressures. Public health has been extremely successful in controlling infectious diseases of all sorts, and in many instances has greatly aided in the control of metabolic disorders. On the other hand, the extensive population pressures have caused a tremendous increase in individual and social tensions, and is rapidly leading to marked distrubances in our environment through air and water pollution and in the destruction of the natural world from which we have evolved.

What is wrong? We do have to examine our purposes carefully. Perhaps now we can turn to an even more challenging purpose with respect to our health professions. Perhaps we may consider the proposition of trying to promote optimum mental and physical health for people everywhere. This is a great challenge. Whether we succeed in meeting the challenge will depend to a large extent on whether or not we can solve the economic questions which are certain to arise. How do we make a living by keeping people well?

Whatever may occur in agreement on purposes, we then are faced with an esthetic problem. Purposes are largely a matter of basic ethics. Purposes involve motivation, inter-personal conduct, and other matters that are concerned with basic morality.

On the other hand, we have learned by long experience that it is essential to have verifiable information about ourselves and our environment in order to accomplish our purposes. This is the function of the sciences. The scientific endeavor has been the most successful that we have ever been able to develop

in getting verifiable "truth" about ourselves and our environment.

Our problem then becomes how to apply this knowledge most effectively and fittingly to the accomplishments of our purposes. This is an esthetic problem, and calls for judgement. Unfortunately, we have not worked out a satisfactory method for the training of judgement. One can only acquire good judgement by continual practice. This is certainly something that the health professions have learned long ago.

**Medical Student Research Training**

It becomes increasingly important for medical students to have broad philosophical approaches to the practice of modern medicine. We all have to learn to work together. The members of the various health professions, health sciences, health services, can achieve their common purposes if they will learn to work together. It is here that the community teaching for medical students, along with dental students, pharmacy students, nursing students, public health students, and even veterinary medical students, will help in the long run. We will learn to know each other and to get along with each other. We will realize that we have common purposes, and that we can achieve our objectives better by working together than by going our own separate ways. Furthermore, we'll learn to get over inter-professional jealousies, and to get on with the important work that we have to do.

There are ever-increasing pressures upon us, largely because of our enormous population increases. We have to meet what is coming, and we have to learn to manage it. Perhaps one of our most important problems in the health professions will be to inspire people to control family size, so that we can continue to enjoy this earth that is ours.

We have long become accustomed to a discipline-oriented curriculum in the health professional schools. These various disciplines, such as anatomy, physiology, microbiology, biochemistry, pathology, pharmacology, and the various clinical special fields, have developed in an evolutionary way over the past few centuries. In general, those organized disciplinary areas of knowledge which are with us now have survived with us because they have a certain amount of survival value. Nevertheless, great changes are coming.

We are reorganizing our thought processes in connection with living material. We are becoming increasingly conscious of the significance of the various organizational levels of living material, from macromolecules to ecological milleus. We are learning that there are many important factors in understanding living processes which may not satisfactorily be developed within existing disciplinary fields. Accordingly, we have to promote interdisciplinary "conferences" and we have to seek ways and means of crossing various artificial barriers between different fields of endeavor. Perhaps this will result in a total reorganization of our medical curricula. Certainly there is plenty of experimentation going on in various medical schools throughout the world in regard to changes in the way by which we can acquire that verifiable knowledge which is increasingly essential for us in accomplishing our purposes of controlling disease and of treating it successfully when it comes along.

No matter what the formal method of teaching may be, there will certainly be increasing need for research training. It is possible that medical students increasingly will have the responsibility of learning on their own. Formal didactic lectures have shown over the centuries that they are perhaps the most satisfactory way of condensing a vast amount of informative material, organizing it in a systematic manner, and presenting it succinctly and clearly. The lecture system will probably remain with us, and may indeed become increasingly important.

Laboratory exercises may undergo great change. There is little point in spending too much time on technical procedures. We can bog down readily in technique, and nothing is more dis-

astrous in the actual practice of medicine than a technical triumph in the face of a breakdown in judgement.

With modern methods of closed-circuit television demonstration, with two-way radio, it may be possible for teaching in the health professions to become increasingly personalized, even with increasingly large classes. It will always help to break down the class into small groups. Years ago it was suggested that medical students could work well together in a "student-unit laboratory," in which four students could have their own desks and book shelves, as well as a chemical desk, a microscope bench, and facilities for dissection or physiological or pharmacological experimentation.

Variations on this idea have been put into effect in many medical schools. In some instances, the size of the group is around twelve students, and this is a convenient group for seminar discussion. The individual students may have their own desks and book shelves along the sides of the room, with experimental facilities set up in the center of the room, and in such a manner as to offer opportunity for seminar interchange and discussion. These various ways of handling small groups of medical students are working successfully in many institutions.

Under these circumstances, it becomes increasingly possible for students to undertake specific research training. This can become highly individualized, and can approach most closely the ideal of an individual student working closely with an individual master.

In many medical schools there are now developing specific programmes for medical student research training. This usually is on an elective basis, and may comprise a quarter during the third or fourth years. Sometimes the research training may be set up during summer sessions.

In any instance, medical student research training depends upon the good willingness of faculty members. Most medical school faculty members realize that research interests are important in teaching. Research undertaking can lead to continual satisfaction, and thus help maintain emotional equilibrium and balance, and bring a great deal of continual joy to the whole business of living. Research interests actually require continual study. This gives the best kind of background to effective teaching, since there is a continual expansion of horizons, and a continual broadening of knowledge, even though the research endeavor itself may be sharply circumscribed.

The medical student research training programme usually operates on the basis of matching the interests of individual students with the opportunities provided by individual faculty members. Often the research effort proceeds on the part of the student in the institution with which that student is immediately concerned. On the other hand, arrangements sometimes can be made for research study away from the medical school with which the student is associated. Sometimes research is carried out far abroad. It is always stimulating under these conditions to get other points of view and to note different approaches to the ways by which knowledge may be acquired.

There is close personal contact between the research sponsor and the student. The research sponsor and the student work together in a successful medical student research training programme. Often the medical student participates, not only in the actual handiwork of the experimental procedure, but also in the intellectual ideas that are associated with it. Always a research effort involves a great deal of library work, and this aids the student in learning how to use library facilities quickly and easily.

The successful research venture, whether carried out in the laboratory or in the clinic, usually results in new knowledge. In order to become effective, this new knowledge must be shared with others. The customary procedure in sharing new knowledge among members of the health professions is by publication in a professional periodical.

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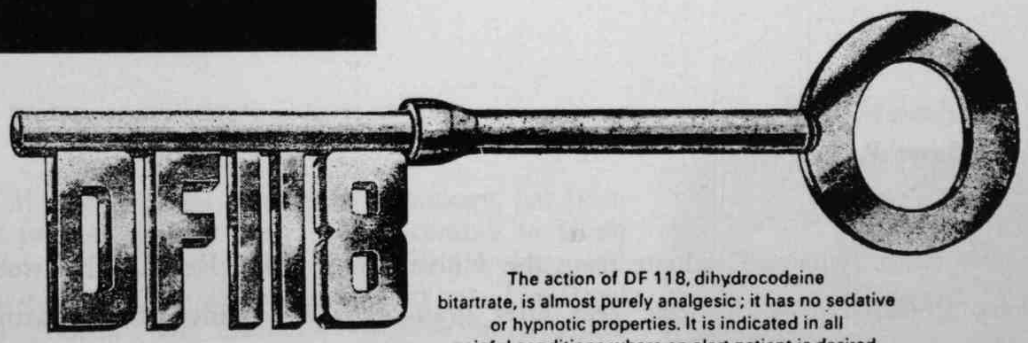


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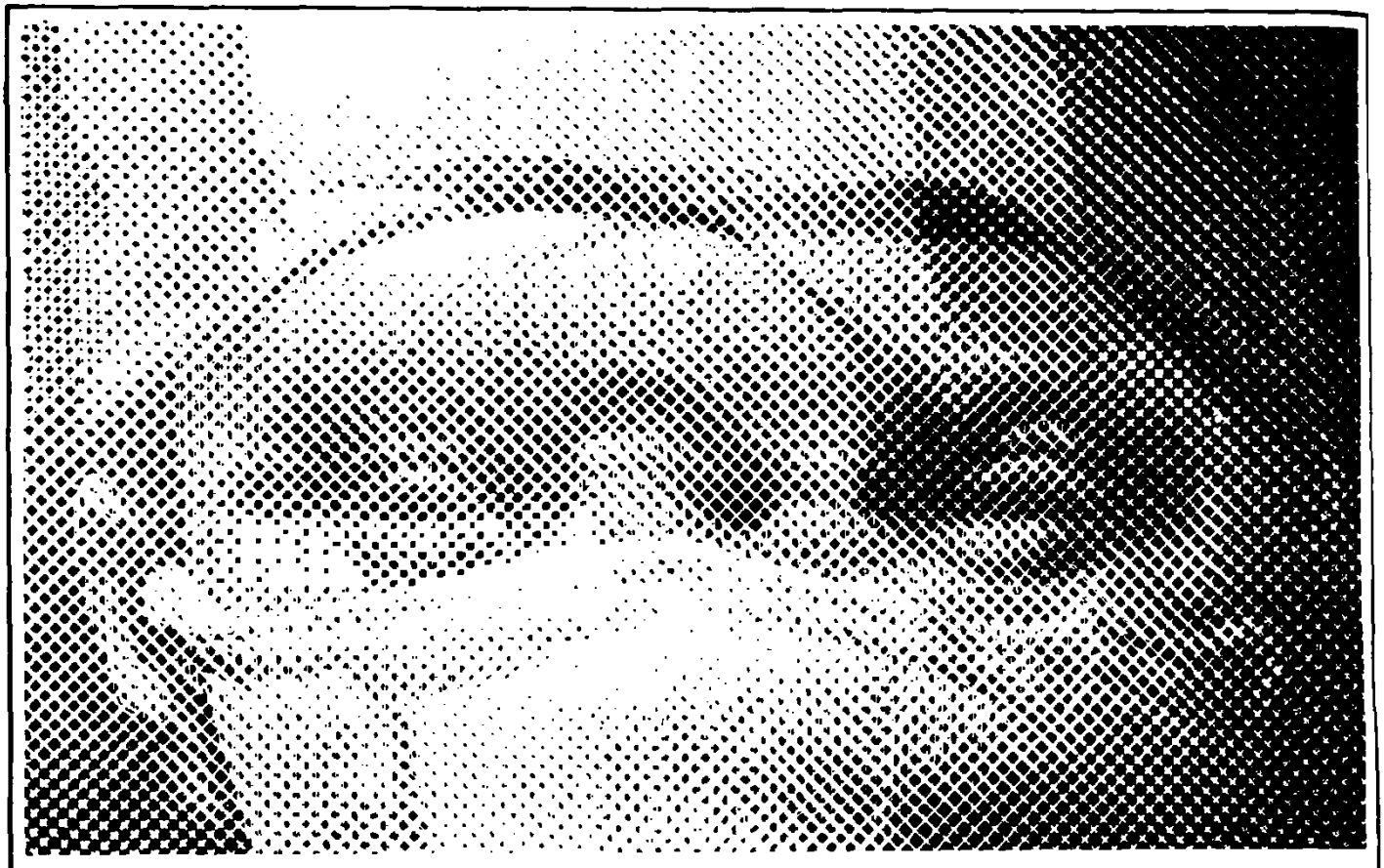

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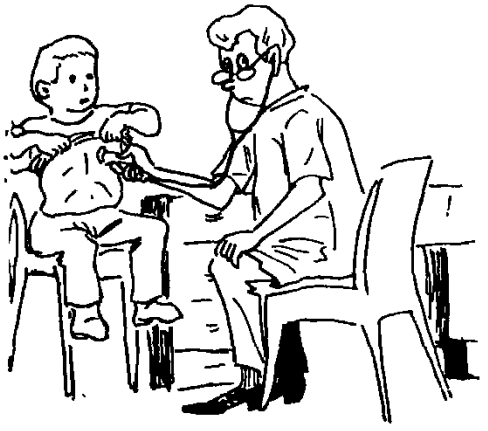
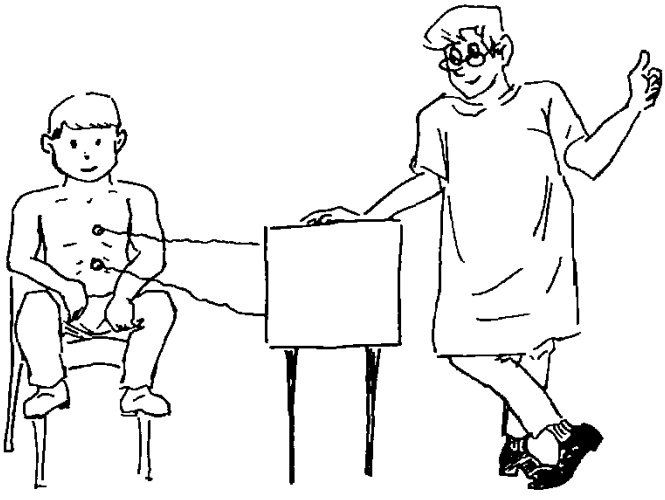
# A Home-Made Cardiotachometer





By W. H.

**Introduction**

A cardiotachometer is an instrument which records heart rate. It measures the heart rate directly and saves the trouble of calculating the heart rate by counting the number of heart beats in a certain time interval. Cardiotachometers operated by the QRS complex of the ECG are more accurate than those operated by the peripheral pulse or heart sound because they can record the weak heart beats that do not give rise to heart sounds or peripheral pulses.

**Apparatus**

The volutage produced by each heart beat is picked up by two skin electrodes, 3 x 5 cm each, tied on to the arms. ECG paste or saline solution should be first applied on to the skin to decrease contact resistance. The signal picked up from the electrodes is then fed into the amplifier. The amplifier is so designed that the low frequency signals, i.e. P wave and T wave of the ECG, do not pass through. A field effect transistor is used in the first stage of the amplifier to obtain a high imput resistance—2 Megohms. The sensitivity of the amplifier is controlled by the variable resistance. This also helps to eliminate the P waves and the T waves which are at a lower voltage. (Figure 1).

The amplifier is ued to operate a reed switch so that with each QRS wave picked up by the skin electrodes, the switch is closed once. The switch in turn controls the transmitter so that one signal is transmitted out with each QRS wave. The transmiter used here is a Japanese made O.S. Pixie model, designed for the remote control of model aeroplanes. Any other kind of transmitter will also do, even home-made models (2).

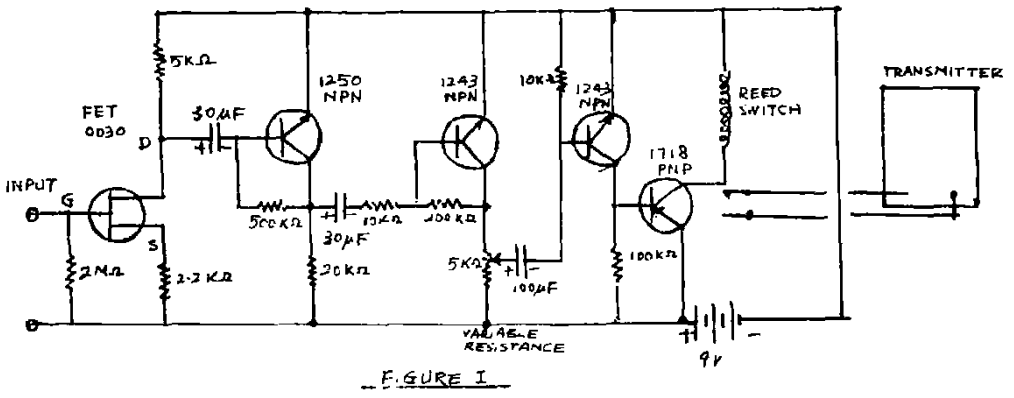



FIGURE 1

The signal transmitted out by the transmitter is then picked up by the receiver, which in this case is also an O.S. Pixie model. With each signal received, the relay switch inside the receiver is closed once. This switch is used to operate the tachometer. The tachometer is based on a design by A.R. Kahn (1), but it has been simplified for the sake of easy construction. The other alteration made is that different transistors have been used because the American transistors used by the original author are not available in Hong Kong.

The tachometer gives the average heart rate as well as the instantaneous rate after each heart beat. (Figure 2.) The output voltage in the integrated tachometer which gives the average rate is directly proportinal to the heart rate. In the intantaneous tachometer the output voltage is inversely proportional to the Log. of the heart rate.

The realy switch of the receiver also operates indirectly a circuit which gives a sound signal and a flash of light with each QRS wave. (Figure 3).

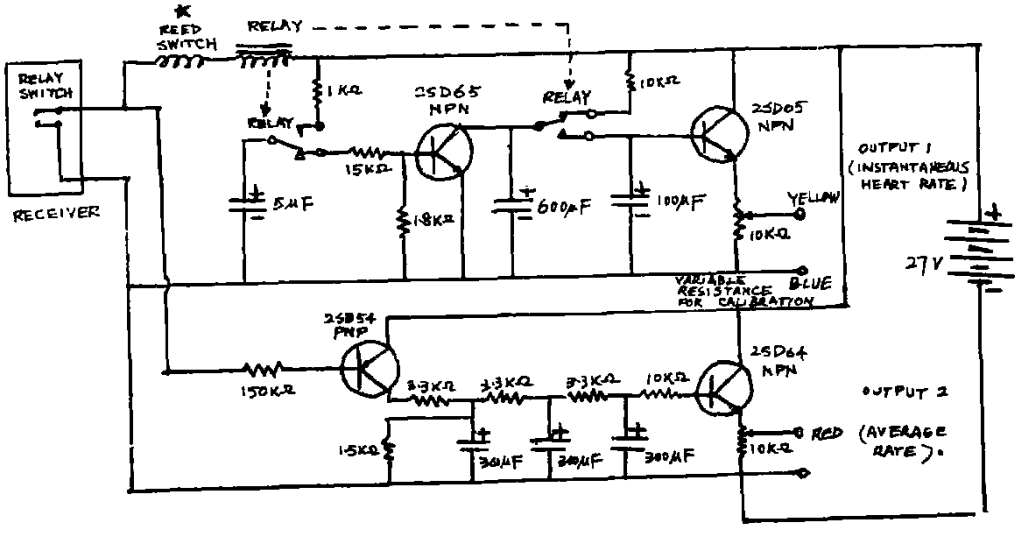



FIGURE 2

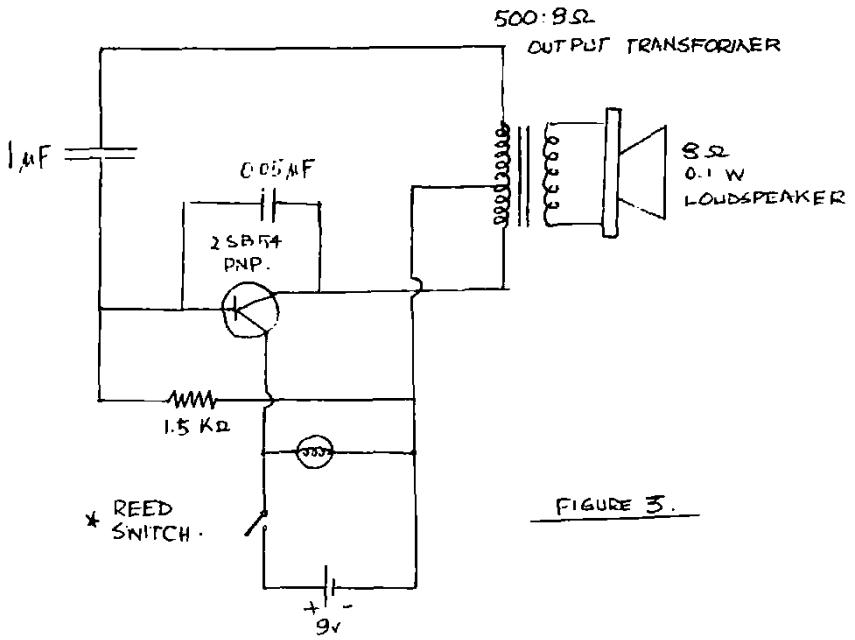



FIGURE 3.

**Characteristics:**

The amplifier together with the transmitter weighs less than a pound and can be brought from place to place easily. There is no connecting wire between the subject and the observer, so that there is no limitation to the movement of the subject. The farthest distance possible between the subject with his transmitter, and the observer with his receiver is about 200 yards. Greater distances are possible if more powerful transmitters are used. All the component parts used can be bought in Hong Kong. The cost of the transmitter plus the receiver is HK$160. The total cost of the component parts used is about $70 to $80. The outputs from the tachometer can be read off from a voltmeter calibrated in number of heart heats per second, from an oscilloscope, or traced out on a piece of paper by an oscillograph (Fig. 5 & 7).

If the amplifier is directly connected to the tachometer without passing through the transmitter and recliver, the apparatus becomes a monitor for heart beats, which gives a signal with each beat of the heart and the heart rate of the subject.

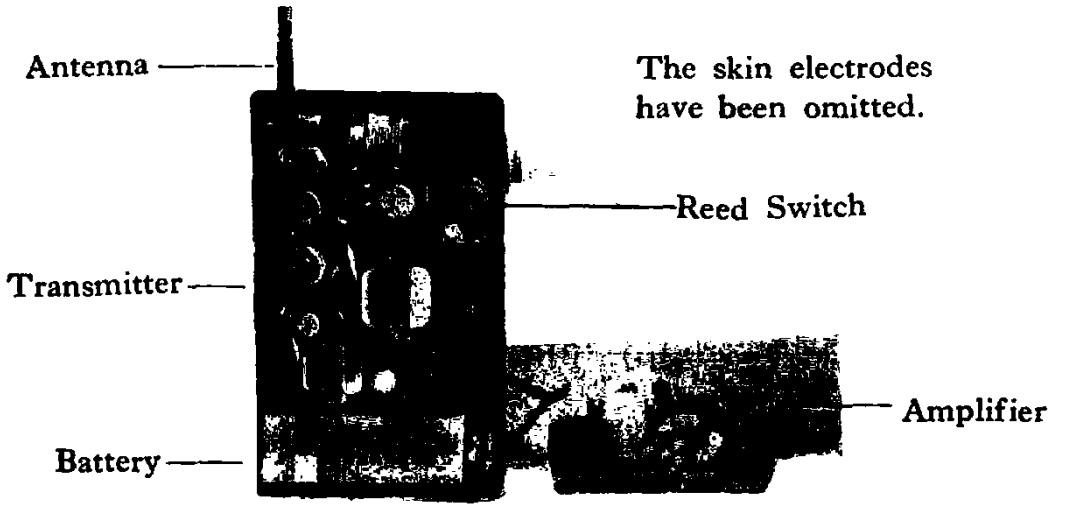
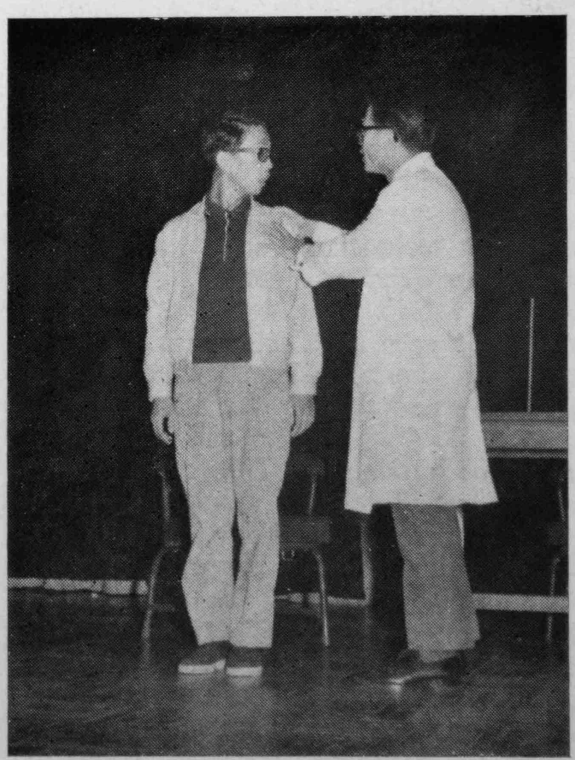



Fig. 4 *Amplifier and Transmitter.*

# AD WORLD

Playing the mouth organ

Physiotherapy



?-palsy

# COUGH THERAPY

## EXPECTORANT

**PIRITON EXPECTORANT**
LINCTUS

A H

* effectively liquefies tenacious sputum and aids its prompt removal.
* alleviates congestion.
* alleviates sneezing and lachrymation.

**PRESENTATION**

Bottles of 114 ml and 2 litres containing 2 mg PIRITON (chlorpheniramine maleate BP) 100 mg ammonium chloride BP and 44 mg sodium citrate BP in each 4 ml.

## SEDATIVE

**ETHNINE**
containing PHOLCODINE

A H

* less toxic than codeine.
* higher anti-tussive factor than codeine.
* less constipating than morphine or codeine.
* can be given to children.

**PRESENTATION**

Bottles of 114 ml and 2 litres containing 4 mg PHOLCODINE BP in each 4 ml.

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# Medical Education in North America

By Peter Kai-Fai LO, M.B., B.S. (H.K.) Diplomate, American Board of Pediatrics.

I was fortunate enough to spend 4 years in the United States to further my studies in Medicine after my graduation from the University of Hong Kong. In America, I spent 2 years at the University of Oregon Medical School, Portland, Oregon; and two years at the Children's Hospital in San Francisco, California. During these 4 years, I gathered a lot of information on different aspects in U.S.A., especially in medical education.

There are altogether 92 medical schools in U.S.A. Every year some 7000 dcotors are produced, but this number is far from meeting the need in that country. Therefore, a vast number of doctors has been brain-drained to the States from countries all over the world and this is still going on actively. A foreign medical school graduate will be allowed to go into U.S.A. for further studies on condition that he passes a qualifying examination given by the Education Council for Foreign Medical Graduates, better known as E.C.F.M.G. This examination is held twice a year in big cities all over the world; and Hong Kong is one of the centres. Having passed this examination, a foreign doctor can go to U.S.A. and work as a trainee in a U.S. hospital. He works either as an intern or a resident. Most of the hosiptals in the States are approved by the American Medical Association for training of interns and residents, whether it is a University hospital, County hospital, Private non-profit hospital or Military hospital. A foreign graduate cannot practise medicine in any of the American States unless he has passed an examination for medical licensure offered by that State. Some States require a candidate to serve one or two years of internship or residency; others would only allow a resident of that state to sit for the licensing exam. After serving an approved term of internship and obtaining the licence, one can practise as a general practitioner. For those who want to further their studies in a special field, they go into a so-called residency program. The residency training varies with each specialty: for some it takes 2 years (e.g. anesthesiology) for others it requires 6 years (e.g. brain surgery and plastic surgery). Having gone through all these years of training, they are eligible to take the American Board Examination for that Specialty. Salaries for interns and residents are deplorable; in general $200 per month to start with, and a yearly increment of $50 can be expected. This is far less than the salary of a nurse-aid or an orderly. Most of the interns and residents who are married, either have a working wife to support him or are in debts with loan and financing companies.

Medical schooling is as highly competitive in the U.S. as anywhere in the world. Only top grade students are taken. To be able to get into a medical school, a student must go through colleges (i.e. universities in the British system) for 4 years (sometimes 3 years if one works hard enough even in the summer holidays) to obtain a Bachelor of Arts or Science degree first. Then he enters a medical school and has to spend 4 more years to become a medical doctor (or to get his M.D. degree). Altogether one has to spend 8 years after high school education to beome a qualification doctor. (Then if he wants to specialise, it takes another 3 to 4 years on the average; which makes about 12 years for the training career and this is quite a long period out of one's golden time of life!) Admission to medical schools is chosen amongst college graduates of fine calibres. Priority is given to students within the State of the medical school (because their parents are tax-payers); next comes students of other States (for not every state has its own medical school); then foreign students. An average class in a medical school takes 80-100 students; of these usually only 1 to 2% are foreigners. This shows how difficult it is for foreign students to get into medical schools in the U.S.

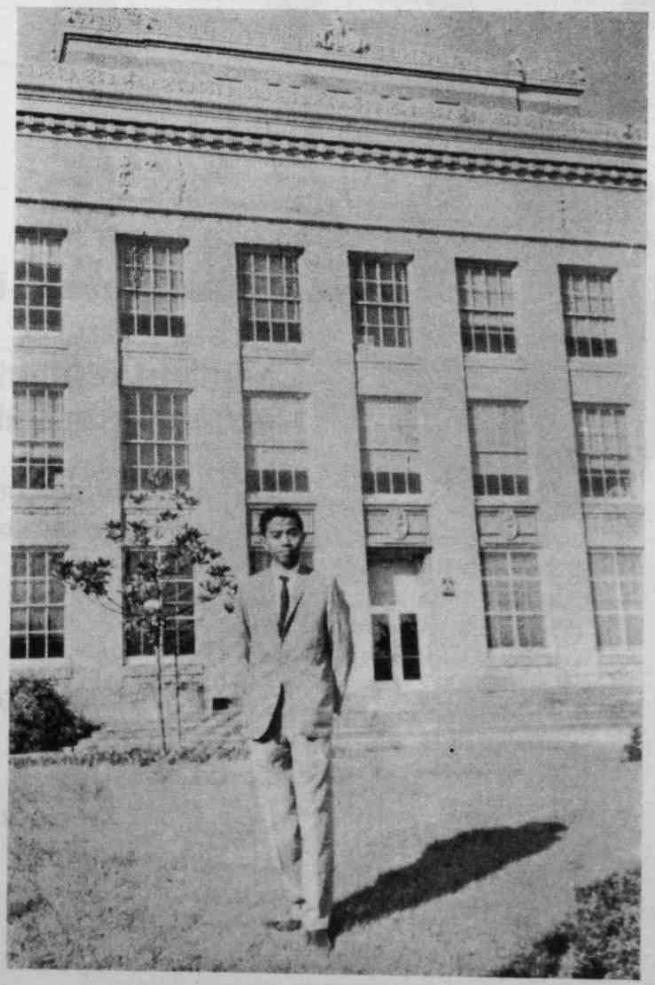
Expenses for studying medicine vary from school to school. It is more expensive to study in the private ones like Harvard and Yale univer sities, and less expensive with the state-subsidised ones. But tuition fee is

on the whole much higher than that for other faculties. It runs around US$2000-2400 a year or about $200 per month. On top of this, one has to pay for boarding, books and instruments. These amount to quite a sum. Scholarships or grants are few for medical students. Therefore, unless one is born with a silver spoon or has a rich uncle, it is not easy for him to get through this financial load. Many medical students take up part-time jobs during week-ends and of course in the summer holidays. They work in the medical libraries and laboratories. I knew of a medical student who worked as a private nurse at night attending those patients that needed close observations. Because our hospital was short of nursing staffs, the supervisor ussally informed him whenever there was a serious case in the hospital that needed night-long observation. He earned $25 per night in this way. About 25% of medical students in their first year are married; when they get to the final year over 50% are married. The wives in most cases work to support their husbands. The American girls do not seem to mind to support the family throughout the period of their husbands' medical schooling, internship and residency.

Medical schooling in the USA does not differ much from that in H.K. or in Britain. The curriculum is about the same; that is, certain number of hours are spent on certain subjects. However, laboratory facilities are more advanced in the States and each student, for instance, may conduct a physiological or pharmacological experiment on his own, whereas in H.K. this would be shared by two or more students. There are more seminars and conferences which are beneficial to the students. Also the students are able to attend more clinical conferences and academic lectures given by visiting professors from other universities; these occur very often through exchange of staffs between universities in the States. However, in H.K. clinical materials are more plentiful, hence medical students have a more variety of patients to study on; such as in obstetrics, each medical student may have the opportunity of delivering as many as 50 babies during their clerkship in that branch, wheras in the States one may have only a few deliveries or none at all; the chances being taken by interns and residents. Tuition fee in H.K. is much less—only HK$200 per month, plus room and board for another $200.

Medical education in Canada more or less follows the same trend as in the U.S., except there are fewer medical schools in Canada (only 17). Students in both countries can apply for transfer of credits when they change places of domicile.

In recent years, thousands of our students are going to North America every year to persue further studies. It is hoped that with more subjects of this nature, they will get some idea before leaving for a strange country. Thus it might help them to decide on what field they are going into.



*The author in the U.S.A.*

# FAMILY PLANNING AND THE POPULATION PROBLEMS OF HONG KONG

By Professor Daphne Chun, o.b.e., m.b., b.s., f.r.c.s.e., f.r.c.o.g.

*Department of Obstetrics and Gynaecology*
*University of Hong Kong.*
*President of the Family Planning Association of Hong Kong.**

After the Second World War Hong Kong has been confronted with the serious problem of an ever-rising population. One of its courses is the great increment of birth rates. This indiscriminate expansion of population brings naturally with it numerous social, economical and medical problems especially among the low-income classes. A scientific, effective and yet mass-applicable method must therefore be devised to cope with such a situation in this community. Here Professor Daphne Chun talks on the results of the advocation and application of Intrauterine Contraceptive Device in Hong Kong in the past few years. — The Editor.

1. The need for population control is more urgent in Hong Kong than anywhere else in view of the limitation of both space and resources. With a land area of 398 square miles of which only 62 are inhabitable (1), the population was three and three-quarter million (Table 1) in 1964. The resultant density was therefore 9,400 per square mile which is equivalent to accommodating the whole world population in a circle with a radius of less than 75 miles. Compared to a population of less than 600,000 just after the second world war in 1945 there has been a phenomenal increase of more than 3 million people in 20 years. Of these, about 300,000 were pre-war residents returning to the Colony, over a million were refugees from Mainland China and the rest was the excess of births over deaths.

2. The greatest influx of refugees occurred at the commencement of communist regime in 1949 and again in 1961 and 1962 when there was a shortage of food. Since then the Hong Kong Government has imposed a restriction on immigrants and as a result there were only 6,944 immigrants last year. On the other hand the natural increase (births over deaths) rose steadily in recent years due to the marked decline in the death rate which was 10.2/1000 in 1951 but only 4.2 in 1964 (Fig. 2). Thus, the combination of a rapid natural increase together with an influx of immigrants created tremendous problems of housing, education, medical care and health services etc. in the Colony.

3. Although numerous resettlement housing estates have continuously been built, supply simply cannot meet the unending demand and thousands and thousands are still living in squatter huts. Since 1953 the number of medical doctors has doubled from 635 to 1466 (Table 2), yet the doctor/population ratio was only improved from 1:3445 to 1:2551. During the same period hospital beds were increased by 288% from 4,512 to 11,989 but the hospital bed/population ratio was narrowed only from 1:499 to 1:312. In the past decade many new schools were established with a 2½-fold increase in the number of teachers and a more than 3-fold increase in students (same table) yet annually over 60,000 children of school age cannot gain admittance.

4. The population problems of Hong Kong are therefore clear and alarming and existing trends give a projection (3) and (4) of almost 5 million people by

*(Delivered to the Belgrade World Population Conference in September, 1965.)

# From the President of A.R.M.S.A.

KEVIN LOH

I am happy to learn from the Editorial Board of Elixir that a special section in this issue will be devoted to A.R.M.S.A. I hope articles appearing in this section will help H.K.U. Medical students to learn more about the structure and functions of this Asian Medical Students body.

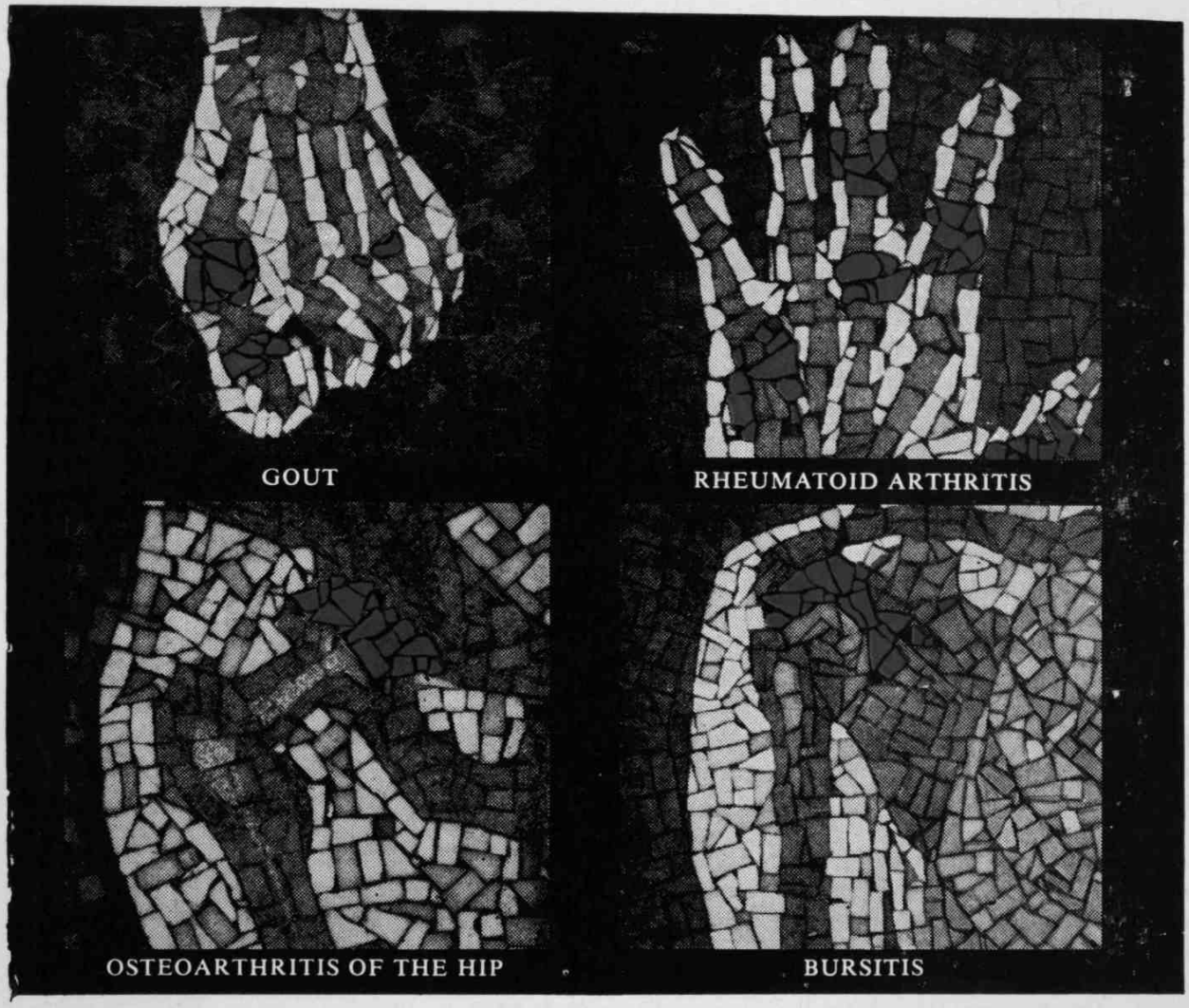
A.R.M.S.A. has been in existence since 1966 and what this organisation stands for and pledges to achieve need no further introduction. But many of our students are still not too familiar with the actual projects carried out in A.R.M.S.A. It is understandable then some people have doubts whether our Medical Society should be so heavily committed to A.R.M.S.A., for indeed it is at present, both financially and in man-power. Questions have been raised whether it is to the benefit of our Society members that we should participate in international affairs at this stage. The answer to this question is a positive 'Yes'.

A lot has been said that H.K.U. students in general live in an ivory power, ignorant of the world around them. Our participation in A.R.M.S.A. is a strong testimony to the contrary. For the past two years, our Society joined in international projects under A.R.M.S.A. aimed at promoting student health and student relief, and rendering help in cases where medical students can be of assistance. Under A.R.M.S.A. Drug Appeals 1967, 1968, H.K.U. Medical Society has collected over US$2,000 worth of drugs and these have already benefitted student clinics in Indonesia and Ceylon. The 'Seminar on Student Health', co-sponsored by the Standing Committee on Medical Education and Health, A.R.M.S.A., and the H.K.U. S.U. (July, 1968) has stimulated a lot of interest among the public of Hong Kong. However, at the 3rd General Assembly of A.R.M.S.A. held in Kuala Lumpur in August, 1968, delegates from different member countries agreed that A.R.M.S.A. health programmes should in future be aimed at engaging the active participation of many local medical students, in projects that may help in improving community health at large. This is of course a more ambitious approach, the success of which depends very much on the generosity and sacrifice of our society members. The above are services which by joining A.R.M.S.A. our Society voluntarily offers.

What then are our benefits when we participate as a full member of A.R.M.S.A. and automatically as associate member of the International Federation of Medical Student Association (I.F.M.S.A.)? These are numerous, but can be summarised as establishing constant international contact and co-operation in fields of common interest. Through these contacts, our Society can now easily organise study tours to member countries and carry out Professional Exchange with Medical schools all over the world, if we so desire. We know better the kind of curriculum other countries are having and the way they run their associations. This exchange of new ideas is of immense value if our Society is going to progress. This, in short, is what A.R.M.S.A. offers in return.

The H.K.U. Medical Society with a membership of only 570 is small when compared with the other member countries in A.R.M.S.A., but it has in the past played a most active part in A.R.M.S.A. affairs. This has left an impressive image on the other members. I am sure through our continued participation in A.R.M.S.A., we will show other people that our medical students are good not only in studies, but are ready to express our opinions concerning our curriculum, and recognise our responsibility towards the advancement and betterment of our community.

I would like to convey the best wishes of A.R.M.S.A.

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**Note:** Detailed information is available to physicians on request.

*Hart, F. D.: Indomethacin versus phenylbutazone: a comparison, Indomethacin 10th and 11th Symposium, March 1965-March 1966 Netherlands (Published by Merck Sharp & Dohme Nederland N. C. 1966), pp. 21-32.

# HONG KONG UNIVERSITY MEDICAL SOCIETY

(Session 1967-1968)

## ANNUAL REPORT

The present session of the Medical Society began on 27th, October, 1967 and ended on 4th, November 1968. At the Annual General Meeting of the Society held on October 27, 1967, the following were elected office-bearers of the Society:

*Chairman:* Mr. Timothy Teoh
*Hon. Secretary:* Mr. Kevin Loh
*Ass. Hon. Treasurer:* Mr. Ronnie Chan
*Social Convenor:* Miss Kathleen So
*Sports Captain:* Mr. Chiu Tak Wai
*Steward:* Mr. Ronald Lo

Throughout the session, 1 Extraordinary General Meeting 6 Committee Meetings (including 1 Emergency Committee Meeting) and 2 Officers Meetings had been held.

In July, 1968, Dr. Shiu Man Hay resigned as the Hon. Treasurer of the Society when he left the University and his post was not filled up.

Broadly reviewing the activities of the Society for the past year, it can be said that the running of the Society had been smooth and quite successful. Besides the traditional functions of the Society, the Committee had made various attempts to broaden the scope of our work and to increase the welfare of the members. The Constitution has been reviewed at an Extraordinary General Meeting. The Society Co-op was set up. A new Standing Committee, the Medical Fraternity Committee, has been established to further strengthen the bonds between senior and junior members. The Dean-undergrad Committee was formed in October, 1968. The Society Annual Ball netted about $6,000 to boost the Elixir Loan Fund. A Society Office was provided by the Dean in late October, 1968. It is much to the regret of the Committee that the proposed regular Staff-Student Dinner has not materialised. It is hoped that the new Committee will persist in these efforts, as well as to expand and improve the services and activities that have been started in this session.

### (*A*) STUDENT WELFARE

1. Elixir Loan Fund: 19 students, out of a total of 22 applicants, received loans which amounted to $12,000. 5 first year students, 3 second year, 6 third year, 4 fourth year, and 1 final year benefited from the Loan Fund. The actual sum of the Loans given out were as follows:

| | | |
|---|---|---|
| 2 students . . . . . | $ | 1,000 |
| 6 students . . . . . | $ | 750 |
| 11 students . . . . . | $ | 500 |
| Grand Total | $ | 12,000 |

2. Canteen: The Society signed a contract with a new caterer who started business on 20th, November, 1967, Canteen business had been quite well from January to May 1968, and as a result, the contract was extended for another year, i.e., up to 30th June, 1969. Throughout the year, the Committee had received no formal complaint concerning the service and standard of food. The sanitary condition of the Canteen was inspected by the Student Health Committee of the Students' Union on 19th February, 1968.

3. Co-op Stall: the Co-op stall was set up in February 1968, for the convenience of members in buying stationery, souvenirs and candy. The Steward's plan was to set up the co-op in 3 stages:

   *a.* Stock of stationery to be obtained from the HKUSU co-op and the society co-op will be a branch of the Union co-op.

   *b.* The Society will print the stationery on its own (capital investment 1). Profits will go towards expansion of the co-op.

   *c.* Addition of other items of souvenirs/articles for sale on a similar basis as the Union co-op (capital investment 2).

So far, owing to financial limitation, the co-op has not reached the second stage yet. However, business in the co-op has been brisk and encouraging.

4. Students' Common Room: No additional furniture was available for the common room in Li Shu Fan Building. A proposal to set up the Society Office in the Locker room was turned down by the proper authorities.

5. Medical Fraternity Committee: This Committee was set up in July, 1968, and has already done a great deal for the freshmen entering the University this year. Under this Committee, a Freshmen Information Service was held on 28th, August 1968. On that occasion, an information counter was installed in Loke Yew Hall and in the afternoon, an informal talk and tour around the pre-clinical building were arranged for the newcomers. This year, the second hand book sale was incorporated into that of the Union Welfare Committee project.

   On 14th September 1968, 114 freshmen were assigned to 29 Seniors form the third and fourth year under the Freshmen Guidance Scheme.

   It is hoped that this pilot scheme will result in closer relationship between senior and freshmen.

6. Guided tour for new Clinical Students: Information sheets were distributed to the new clinical students and they were then shown around Queen Mary Hospital and the Professorial Block to get them orientated.

7. Medical Student Hostel: the exact relationship between the Medical Student Hostel and the Medical Society has not been clearly defined. The Society is concerned with the welfare of members residing in the Medical Hostel. Negotiations have been going on with the Warden of the Hostel on the possibility of installing a TV set in the hostel.

8. Miscellaneous:

   *a.* The British Medical Journal was ordered at special concession rates for members.

   *b.* Past examination papers were printed and distributed.

   *c.* Christmas cards. The new design of the Society X'mas cards met with great approval from members. They were sold at 25c. each. A profit of $110 were made.

   *d.* Society key rings, ties, car badges were sold to members.

   *e.* Lockers at students common room were arranged for 1st and 2nd year students.

## (*B*) SOCIAL ACTIVITIES

1. Barbecue: The year's social activities opened with this enjoyable evening of 7th, December 1967 at the Sports Centre. About 200 members from all the five classes took part in the evening's programme which included Tombola games and an Intercalss Singing Competition. 2nd Year students emerged as the champion singers of the Society, with 3rd Year as runners-up. We were honoured by the presence of Dr. W. C. Chan, Dr. & Mrs. Arnold Hsieh, and Dr. Shiu Man Hay. The function came to a delightful end at around 11 p.m.

2. X'mas Carolling: On the sunny afternoon of 22nd, December 1967, about 60 members went out to entertain the patients at Sandy Bay Children Convalescent Home and Grantham Hospital. There was much fun and laughter, as Mr. Chan Chok Wan, a second year student, fully costumed as Sancta Claus, handed out gifts to the children and patients. The generosity of our members was well shown by a donation of $302 which went to buy the gifts.

3. Medic-Arts Get-Together: This first attempt to hold a combined function with the Arts Association turned out to be a complete success.

The barndance was held on 26th, January at the Medical Students' Canteen, and was attended by well over 250 students from both the Medical and Arts Faculty. The function was open to all members of the two associations free of charge. Non-stop music was provided by the' Nightbirds' and 'Bumble Bees'. The evening's programme ended at 12:30.

4. Medical Ball: The highlight of the Social functions of the year was the Medical Ball, held on 8th, June, 1968, at the Peninsula Hotel. It was attended by about 250 people, including Dr. W. C. Chan, Dr. Arnold Hsieh, Professor McFadzean and their wives. The Ass. Hon. Treasurer, Mr. Ronnie Chan, won the first prize of the Lucky Draw. From the profit of the Ball, $5927.70 was contributed to the Elixir Loan Fund.

5. Launch Picnic: History repeated itself when a typhoon prevented the launch from sailing on 26th, July. In order that the good food provided by Winthrop Company would not be wasted, the party of about 60 members went on to Middle Bay, where there were swimming, fishing, tombola games and even a movie show. Transportation was arranged on the spot and everybody enjoyed the occasion all the same.

6. Medical Night: the curtain closing function took the form of a Medical Night with Dinner at the Loke Yew Hall on 29th, October, 1968. Over 250 staff and students came to share this enjoyable evening, which was rounded up by the presentation of souvenirs to our sportsmen. The final year won the Winthrop Shield for the interclass performance competition, with third year winning second.

## (*C*) SPORTS

1. Interfaculty Competitions: It is very unfortuntate that our Society lost the Omega Rose Bowl to the Arts Association by only 2 points. Our sportsmen were however able to obtain the following good results:

| | |
|---|---|
| Hockey | *Champion* |
| Badminton | ,, |
| Teenis | ,, |
| Soccer | *Runners-up* |
| Table-tennis | ,, |
| Volleyball | ,, |
| Ladies Hockey | ,, |

2. Interclass Matches: this series of matches was carried out in the third term. First year emerged as the champion class and obtained the Braga Cup; and third year lost by a very narrow margin:

| | **1st** | **2nd** |
|---|---|---|
| Soccer | 3rd year | 1st year |
| Basketball | 1st year | 4th year |
| Volleyball | 2nd year | 3rd year |
| Hockey | 3rd year | 1st year |
| Badminton | 2nd year | 4th year |
| Tug-of-war | 1st year | 2nd year |
| Table tennis | 3rd year | 4th year |
| Table (ladies) | 1st year | 4th year |

3. The Kirk Memorial Cup for the best sportsman of the year went to Mr. Chan Yiu Cheung of final year.

## (*D*) ACADEMIC AND CULTURAL ACTIVITIES

1. Presidential Address: Dr. Chan Woon Cheong gave an address 'The Pathologist, his Training and Work' as President of the Society, at the Physiology Lecture Theatre on 3rd, May, 1968. The formal occasion was attended by some 20 members of the staff and over 100 students. Light refreshment and a group photograph were taken before the speech. On the occasion, the Society presented souvenirs to six members of the staff, including Dr. A. Hsieh, Dr. C. Braga, and Dr. Shiu Man Hay, who would be leaving the University very soon.

2. Symposium: A symposium on 'Modern Trends in Medical Education' was arranged by the Medical Fraternity Committee on 16th, October, 1968, at the Physiology Lecture Theatre. The three prominent speakers were Professor McFadzean, Dr. A. Hsieh, and Dr. C. Y. Lee. Over 100 members attended.

TABLE 2. HEALTH & EDUCATION STATISTICS 1953-1964 (5, 6 & 7)

| Year | Estimated Population | Doctors | | Nurses | | Hospital Beds | | Number of Students | Number of Teachers |
|---|---|---|---|---|---|---|---|---|---|
| | | No. | Ratio | No. | Ratio | No. | Ratio | | |
| 1953 | 2,250,000 | 653 | 1:3445 | 1,338 | 1:1682 | 4,512 | 1:499 | 201,541 | 8,820 |
| 1954 | 2,300,000 | 700 | 1:3571 | 1,411 | 1:1772 | 4,695 | 1:532 | 250,000 | 9,166 |
| 1955 | 2,400,000 | 773 | 1:3105 | 1,489 | 1:1612 | 4,880 | 1:492 | 246,833 | 10,410 |
| 1956 | 2,535,000 | 794 | 1:3193 | 1,596 | 1:1588 | 5,577 | 1:455 | 298,609 | 12,450 |
| 1957 | 2,677,000 | 899 | 1:2978 | 1,721 | 1:1555 | 6,970 | 1:384 | 308,180 | 11,428 |
| 1958 | 2,806,000 | 985 | 1:2849 | 1,910 | 1:1469 | 7,600 | 1:469 | 418,540 | 13,334 |
| 1959 | 2,919,000 | 1,011 | 1:2887 | 2,068 | 1:1411 | 7,702 | 1:379 | 484,986 | 17,878 |
| 1960 | 3,014,000 | 934 | 1:3227 | 1,740 | 1:1732 | 8,090 | 1:373 | 572,806 | 19,802 |
| 1961 | 3,226,400 | 1,107 | 1:2914 | 1,857 | 1:1737 | 9,444 | 1:342 | 658,618 | 21,152 |
| 1962 | 3,526,500 | 1,189 | 1:2966 | 2,056 | 1:1715 | 10,017 | 1:352 | 685,728 | 20,204 |
| 1963 | 3,642,500 | 1,372 | 1:2655 | 2,317 | 1:1572 | 11,719 | 1:311 | 810,632 | 27,590 |
| 1964 | 3,739,900 | 1,466 | 1:2551 | 2,763 | 1:1354 | 11,989 | 1:312 | 824,557 | 24,329 |

TABLE 3. COMPARISON OF VARIOUS CONTRACEPTIVE METHODS

| Method | Complaints Per Cent | Accidental Pregnancy Per Cent | Continuation of Use Per Cent |
|---|---|---|---|
| Diaphragm | 4.8 | 6.4 | 75 |
| Foaming tablets | 3.2 | 13.4 | 58 |
| Condoms | 1.6 | 5.2 | 70 |
| Oral Pills | 4.8 | 0.6 | 85 |
| I.U.D. | 15 | 0.33 | 93.9 |

TABLE 4. I.U.D. COMPLICATIONS

| | Per Cent |
|---|---|
| Complications<br>a. Slight bleeding ..<br>b. Abdominal pain<br>c. Lack of confidence | 4.6 |
| Expulsion after 1st insertion | 9.8 |
| Expulsion after 2nd or 3rd insertion | 1.4 |

This will be the beginning of a series of symposia to be arranged by the Medical Fraternity Committee on matters of professional interest. In addition, a symposium on "Surgery on Rheumatoid Arthritis" was organised at the end of March, 1968.

3. Debates:

   *a.* Interfaculty Debates: 3 first year students represented the Society in the series of Interfaculty Debates held during the firs term and came back with the Champion Shield. The final was between the Medical and Arts Faculty.

   *b.* Interclass Debates: This was held during the 3rd academic term and the final was between the second and third year. At the final contest held in early October, 1968, 3rd year emerged as winners. We would like to thank all the staff members who acted as our judges during the debates.

4. Film Shows: 2 film shows, borrowed from the Surgery and Medicine Departments respectively, were shown to members. The attendence at both shows were disappointing.

## (*E*) PUBLICATIONS

1. The Elixir—Through the unfailing spirit and diligent work of our editors, the first issue of the Elixir was published in July, 1968. The second issue is expected to be out in December this year. From the 1st issue, approximately $3,000 will be contributed to the Loan Fund. Special thanks should be given to Dr. Donald Yu for his advice throughout the session. A tape recorder was bought to carry out the work of the Elixir Standing Committee more efficiently with funds from the Elixir Account.

2. Society Handbook—The Society handbook with the revised names addresses, hostels were printed and distributed to members free of charge in January, 1968. The University Book Store sponsored part of the printing cost.

## (*F*) EXTERNAL RELATIONSHIPS

1. ASIAN REGIONAL MEDICAL STUDENT ASSOCIATION

   *a.* Standing Committee on Medical Education and Health (SCOMEH): In October 1967, Mr. Kevin Loh was elected by the Committee as Director of SCOMEH. A drug appeal was carried, with fine response from 3 local drug houses, Roche, Medipharma, and Pfizer. Drugs with total worth of $6,200 was collected and will shortly be shipped to India in aid of Student Clinics there. The Director also coordinated similar Drug Appeals in Singapore, Malaysia, and Australia.

   SCOMEH, in conjunction with the Standing Committee on Health, HKUSU, arranged a 3-day Seminar on 'Student Health in Hong Kong' at the Medical Centre from July 8 to July 10, 1968. The Seminar was attended by over 120 participants from different faculties, hostels of the University and other post secondary colleges and secondary schools in Hong Kong The Seminar was opened by the Honorable Dr P H Teng The findings of the Seminar were presented to the Education Department and the Medical and Health Department for consideration

   *b* 3rd General Assembly, A R.M.S.A. The 3rd General Assembly of ARMSA was held in Kuala Lumpur, Malaysia, from August 15 to August 22, 1968. The Society was represented by a delegation of 5 members, headed by the delegate, Mr. Timothy Teoh. The General Assembly carefully reviewed the working of the association in the past year and passed resolutions for the coming session. Memberships were enlarged to include also India, Indonesia, and Israel. As a recognition of the active part our Society has played in A.R.M.S.A., another Society

member, Mr. Kevin Loh, was elected the President of A.R.M.S.A. for the coming session. Donations, amounting to $4,125 were collected to meet the travelling expenses and registration fees of the Delegation. We are grateful to Mr. Peter Ng, City District Officer, Western, who helped the Society to collect $3,500.

*c.* Foreign Students: a total of 6 foreign medical students visited Hong Kong on a 'long term' basis (ten weeks) and were entertained by the Medical Society:

Miss Dale Myers, Mr. John Giles, Mr. Steven Caine from Australia Miss Katherine Hayden, Mr. Paul Abrams, and Mr. Jonathan Reeve from England.

*d.* Nuffield Exchange Scholars: In January 1968, two Society members, Miss Christina Wang and Mr. Mak Lai Wo went to Sheffield Hospital in England for ten weeks.

In conclusion, the H.K.U. Medical Society is very much indebted to Dr. Chan Woon Cheong, Dr. Arnold Hsieh, Dr. Shiu Man Hay, and the Dean, Professor McFadzean, for their encouragement and generous support throughout the year.


So this is a guy who aims at DISTINCTIONS

# A MEDICAL STUDENT'S APPROACH TO THE EX-MEDICAL BEHAVIOUR OF THE MEDICAL STUDENTS

Logic, to the general public, is of two main categories; Ortho-logic, and "Woman's logic"; and the latter has often been looked upon as the equivalent to that often-heard utter — "NONSENSE". This can never be further away from the truth.

In the Faculty of Medicine, University of Hong Kong, other kinds of LOGIC exist. Prominently enough, there is this "Medical-student-logic". It has been labelled by the authorities (i.e. the possessor of "Medical-staff-logic") as more akin to "NONSENSE" than any intuitive remuneration of the gentle sex.

These authorities are forever engaged in the ridding of their followers of this "NONSENSE"; to remould them; to let them acquire some real sense and to cultivate them to the high quality that is expected from the world. And in order to succeed, they are more than entitled to use such drastic measures like shock treatment, endogenous adrenaline therapy, brain-washing, etc.

To facilitate this remaking of the medical student, a thorough understanding of the EX-medical behaviour of the students would be beneficial. A most crude investigation was made to bring out the cross-section of the interests, or hobbies of the students. Nonetheless since this "behavioural-probe" was also done by medical students, it can never claim to be exempted from the logical madness of the Student, and the subscribers to Elixir are warned rather than to continue reading this report at this very juncture.

A total of 136 medical students were interviewed, of which 25 were the rarer birds of the faculty. Each were requested to name not more than five hobbies that he or she would take to when not doing academic work. Besides the unanimous devotion to the worship of the profession (quite unexpected, I must say) a total of 460 items were collected, and these can be grouped under 76 kinds, which again fall under six major categories.

| Item | No. of Students Interested |
|---|---|
| *Creative Hobbies* | |
| Movies | 29 |
| Photography | 20 |
| Hiking | 15 |
| Parties | 11 |
| Picnic | 9 |
| Dating | 7 |
| Day-dreaming | 6 |
| Painting | 6 |
| Sleeping | 5 |
| Camping | 4 |
| Electronics | 4 |
| Debate | 4 |
| Dress making | 4 |
| Eating | 4 |
| Folk Dance | 4 |
| Chess | 3 |
| Talking | 3 |
| Drama | 3 |
| Needle work | 2 |
| Astronomy | 2 |
| Carpentry | 1 |
| Hairdressing | 1 |
| Gardening | 1 |
| Flower arrangement | 1 |
| Wood carving | 1 |
| Touring | 1 |
| Knitting | 1 |
| Cooking | 1 |
| Total | 156 |

**Report of Asian Regional Medical Student Association**

# 3RD GENERAL ASSEMBLY

**Kuala Lumpur, Malaysia**
**15th—22nd August 1968**

By Timothy Teoh

ARMSA is formed purely on grounds of professional interest, transcending the barriers of race, religion and politics. It respects the autonomy of member associations by its rigid adherence to the policy of non-interference in internal affairs.

The Association upholds the popular notion the Medicine is international. This is reflected in its aim "to study and to promote the interest of medical student co-operation." It was on this note that the 3rd General Assembly of ARMSA was declared opened by Prof. T. J. Danaraj, Dean of the Medical Faculty of the University of Malaya, on Thursday evening, August 15, 1968.

The duration of the General Assembly was one week. Altogether 26 medical students from 8 conntries attended the Assembly. The delegate from Hong Kong was Mr. Timothy Teoh and the other 4 members of the delegation were Mr. Woo Chi Pang, Mr. Kevin Loh, Mr. Ronald Lo, and Mr. Alex Fung. All the participating students were accommodated in the Clinical Students' Hostel, University of Malaya, Malaysia.

The were five plenary sessions and four sectional meetings throughout the Assembly. The first plenary was on the morning of August 16, 1968. The four members of ARMSA presented their credentials to the president of ARMSA. Various Sub-committees were formed to ensure the smooth running of the conference.

On the following day, the second session was held and the executives of ARMSA presented their respective reports. These reports were debated on and scrupulously scrutinised. Some reports were controversial but they are not going to be related here because of lack of space. The third session was extremely serious as it concerned the relaxation of a certain part of the constitution relating to membership rules. The outcome was the unanimous opinion for the relaxation of its rules for membership so as to pave the way for the admission of the University of Indonesia, Medical Society, the Tel Airv Medical School Society and the All-India Congress. The arguement was "that experience has shown that in the Asian region, very few national medical student associations exist, and it would be impractical to wait for them to form before they are admitted." Israel became an Associate member of ARMSA as it was already a full member of IFMSA.

In the subsequent session, the assembly was informed that Mr. Richard Hamilton, Vice-President of ARMSA had been elected President of IFMSA for the current session. This piece of news was received with mixed feelings. The new crest of ARMSA, submitted by Singapore, was adopted by the Assembly. Unfortunately, no country submitted in any 'motto' for ARMSA. In one of these sessions all the delegations retreated to Fraser's Hill (a popular hill resort in Malaysia) for a meeting and a dinner as guests of the Selangor State goveinment.

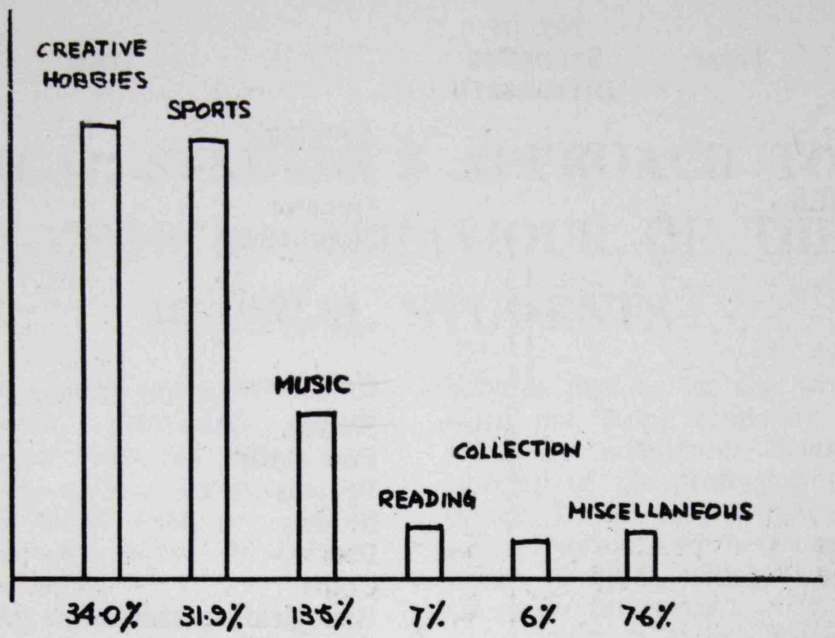
Before the final session, a seminar was held. The topics discussed were the following:—

(i) Role of Medical students in National Health Schemes,

(ii) Role of Medical students in National Family Planning Programme and Sex Education., and

(iii) Medical students representation and Medical Curriculum.

Working papers were prepared and read. Numerous resolutions were proposed and adopted in the hope that it would be useful in the near future. One of the most important resolutions passed was that Medical students should have a say in the planning of the Medical curriculum and the functioning of the Local Medical School.




Beethovenites, and the other, the pro ROLLOVER Beethovenites.

Collective hobbies like stamp-collecting, the collection of coins (latter to be "matured" to the collection of bank notes) are relatively unpopular — but they'll learn it soon enough — no physician (or surgeon, for that matter) is far from being respected unless he is able to quote a few hundred bizzare and not-seen-by-any-other cases. And the student? — to remember and be able to re-quote these hundred and one bizzare not-seen-by-another cases, PLUS being able to learn from the mistakes of these none-but-the-other physicians.

Individual-wise, the most popular items of interest are:

1. Swimming
2. Movies
3. Fishing
4. Classical music
5. Photography
6. Fiction
7. Table tennis

8, 9 and 10 Popular Music, Football and Hiking.

In order that this investigation may reveal the differences in the interests of the possessors of the Medical-student-logic and Medical-staff-logic, the investigators had endeavoured to try to make a similar enquiry into the staffs. The results were most shocking and disheartening, and the breathtaking (and breathholding as well!) enquiry of the staffs was stopped after an initial inquest of a few — and they were conclusive.

Their interests *were* never less complicated than the students nowadays possess WHEN they were students (a most relieving fact, I must say). But as they climbed the ladder of knowledge, as they marched to the fore-front of the advancement of Science, a strong inhibition arose from the horizon. One by one, the hobbies were dropped; and long before they are professors or senior lecturers, everything is for the devotion to the profession. The daily hourly afternoon tennis and the weekly golf is to tune up the body; the tank of tropical fish and the faithful St. Bernard is to tune up the mind, so that they are better prepared for the shock and impunity of you and I, the Medical Students.

So fellas, when are YOU going to quit your first hobby?
When can WE set foot on the Holy Ground?

A. L.

# FIRST YEAR

## TO THE BEACH

REBECCA WANG

It was only twelve o'clock when we finished our lunch. Anatomy dissection would begin at 2 p.m. We had two hours free. On such a fine day, with bright sunshine, blue sky and cool weather, it is a waste not to accept the invitation of Nature to venture outside. Anita, Katherine, Juliet and I seized the chance promptly to fulfil our wish—to stroll down to the beach.

The sea seemed to be just a few yards away. But, as far as we could see, no road led to the sea directly. We decided to take the path down the grassy slope. The steps were cut off crudely. They were slippery. So poor Anita and Katherine with their heels had to be particularly careful. This was one of the few occasions that I was grateful to my height which prevented me from wearing heels.

The steps led to farm houses. Clucking of hens could be heard. We looked forward to a peaceful and homely picture of a village. To our great dismay, we ran into dogs. Dogs turned out from nowhere. Soon, we were surrounded by tens of dogs; big, small, ugly and cute ones were all present, barking fiercely at us. Our legs shook. I wanted to turn back. Some classmates turned up. They laughed at our helplessness and pursued their way bravely. Anita, perhaps thinking that "what boys can do, we can do better", urged us to go on.

At last, we descended safely onto the beach. The vast ocean was before us. Trains of waves rushed ashore and broke into white foam at our feet. The continuous movement of the sea symbolized the vitality of Nature. Before the incessant activity of Nature, one felt that indolence was indeed a sin.

It was time to go back. As we dreaded to meet the dogs, we took the highway instead. We grew tired and thirsty. A series of beautiful buildings greeted us. They were the Sandy Bay Children Convalensent Home, Kennedy Centre and Sandy Bay Rehabitation Hospital. We plucked up our courage and knocked at the door of Kennedy Centre to ask for a cup of water. The man answering our call was very kind. He brought us to the kitchen and each of us was given a big cup of icy water. The cooks were busy in preparing lunch of the children. The dishes smelt delicious. If our stomach had had any space left we would have unhesitantly joined the children in their lunch.

Refreshed by the cold drink, we proceeded our way. The place was new to us. Everywhere we saw were silent graves. Fortunately, we caught sight of the cow shed on the slope. We knew that Medic Centre was not far away.

We were exhausted after the one and a half hours walking. Sinking comfortably into the armchairs at the locker room, we had still 20 minutes left for us to go over the dissection manual. This is life. We are overwhelmed with work but there is always time for exploration, adventure and fun.

# MEDICS WRITE

## MEDIC SENIORS

FONTAINE

The most vivid impression the medic seniors convey to anyone is their solemnity. All of them wear white shirts, medic ties, dull-coloured trousers, and black shoes; and they carry office-bags which never fail to arouse awe and respect in me whenever I see them. Some of them even wear immaculate white-gowns when walking about. In short, they are doctors-to-be but they carry the airs of doctors already.

The common saying goes (醫者父母心). It may account for the fact that some of them have mature looks. On their faces are lines of wisdom. At first sight, it is very difficult to decide whether they are demonstrators or seniors. Perhaps all the Medic Seniors are young at heart. If that is the case, they do not show it, for they have asked the first year students to stop wearing too colourful shirts back to University.

Moreover, the Medic Seniors must be rather sentimental, and poetic. They seem to like to dwell on the sweet past, for they are most reluctant to empty their lockers which they have kept in close contact for a year or two.

In an ingenious way, some of them have discovered a new way of distributing hours of sleep. Instead of sleeping for an uneventful but continuous period of eight solid hours, they enjoy short durations of precious nap in a peculiarly crouched manner inside the Medic Library. However, they are most generous and sympathetic. In the Medic Fraternity Scheme, they have done a lot for the first year, and throughout the term, they have proved themselves to be 'Wong Tai Sin' giving away books and notes. Indeed it is high time for the first year to give them three cheers, 'Hip Hip Hurray'.

### AUTUMN SONG

CLEMENT HO

From the mountains a cold wind sweeps
across the plain

turning the leaves yellow and makes them fall
it's autumn time again

The dangling dry leaves withered by the wind
sway rythmically

waiting for a gentle breeze to take 'em on their way
a long and lonely journey

Some leaves are resting on my window-sill
and some just go floating by

maybe the soft rustling sound they make
is their word of last goodbye

Aimlessly they travel on and on
drifting endlessly along

like the notes of a poorly written melody—
my autumn song

# Chopsuey

## IN RETROSPECT—
## PREVENTIVE & SOCIAL MEDICINE

By Alanna

The first lecture was patronized by the presence of the Director of the Medical and Health Services, Dr. P. H. Teng. The sight in the full lecture room was spectacular. Regular lecture attenders together with those who wished to pay tribute to the Professor stuffed the lecture room for the first and last time in the whole course of the subject to the limit of its capacity. However, as time went by, even roll calls failed to serve their threatening purpose. A 50% or lower attendance could not be called unusual; but to no one's surprise, the roll-call list was fully and duly signed everytime. You can even find some signatures in initials like H.Y.B. simply for convenience sake.

The time of the day allotted for the lectures was most unwelcome: either at 8:30 a.m. when we carried with us unaccomplished dreams into the lecture room, or, 2 lectures on end in the afternoon when the heat of the summer sapped everybody's vigour. However, our 'experienced' lecturers now and then propped up our spirit a little by giving slide-demonstrations or film shows. Notwithstanding that the films were on Rural Health and Diphtheria to School-children, we university students none the less found interest in them, especially when they were dubbed in Cantonese. You won't gather how intense a man's inquisitiveness and thirst for knowledge can be until you witness the scene when, on projecting demonstration slides of VD, all the front-row seats were taken full advantage of to get a close, clear view.

The highlights in the subject came with its field visits. On one occassion, I was assigned with two other colleagues to a Medical Social Worker—a Miss Ho. Dressed in our Medic blazers, we looked just like bodyguards in uniform who followed her heels to the Resettlement Areas, squatter huts and dilapidated pre-war flats. Inside the patient's residence, as we were pre-instructed not to frighten the inmates with too-much questions, it only left for us to scrutinize every corner in the house, putting on an air of solemnity and concern to hide our knowing-not-what-to-do situation. A friendly warm welcome was not infrequent and it was no surprise either to face hostility. Unlucky were those colleagues who went uphill searching all the afternoon for a door-plate but finding the occupier not in at the end. By making these home visits, we did get a little better acquaintance, if not much, with the poorer section of the society from which most of the government hospital patients came.

The other field visits were on a larger scale. Showing not much difference from the schoolkids, we were thrilled and impressed wherever we went—factories and public utility companies. But places like slaughter houses and incinerators were low down in the popularity poll. Nevertheless, we did benefit in these visits by getting into actual contact with the everyday-life models of the high-sounding preventive and social principles in our lectures. We were not also without material reward sometimes: in a visit to a certain local canning factory, every goer was loaded with a gift of a handbag of its productions; on returning home, my family was gratified and suggested, "Take with you your kid borther next time."

The subject stands out as one of its peculiarities in that there is no textbook suitable for local medical students. So we had to turn to a large heap of lecture notes. This saved us the burden of carrying large-volume books that easily frighten our Arts friends. By the way, you may be interested to know the student requirements of the subject—the dictionary of an Arts student as we, all of a sudden, found ourselves in possession of a poorly scanty vocabulary, the benevolent and compassionate philanthropism of a Social Science student, the interest in ecology of a Zoology student, and last but not least, the knowledge of public health in our medical field. Aren't we a sophisticated lot?

The subject commenced with much enthusiasm but ended, as usual, in the climax of sitting the examination. In fact, it had done a great deal in mitigating our heavy clinical course. And amidst the pleasant reminiscences, we take the next stride to the Specialty Clerkship.

"Carry On, Medics."

# Armsa News Armsa News Armsa News
# Armsa News Armsa News Armsa News
# Armsa News Armsa News Armsa News

By Kevin Loh

The session 1968-69 will be remembered as an important stage in the development of A.R.M.S.A. Our membership has recently been enlarged considerably with the admission of India, Indonesia, and Israel. It remains to be seen if we will enjoy a corresponding increase in our influence and activities. A.R.M.S.A. fully recognises the fact that to assume a position of representative body for medical students in Asia and Australasia, and to achieve its aims on a wider scale, participation by many more countries in this geographical area is necessary. Admission rules have been revised so that in future any medical student association in Asia can be admitted. The significant change has opened the door of A.R.M.S.A. to many countries where national medical student associations do not exist. Indeed, in the very near future, we can expect a rapid expansion in A.R.M.S.A Through the efforts of past and present executives of both A.R.M.S.A. and I.F.M.S.A., Thailand, Ceylon, and Kerea, have already expressed their desire to join A.R.M.S.A.

Encouraged by this breakthrough in our membership drive, delegates to the 3rd General Assembly in Kuala Lumpur had drawn up a more active and daring programme for the present session. Each office was designated specific tasks by the General Assembly, and a lot of planning and investigations have been going on to see how these tasks are to be successfully carried out. I have already been informed by most executive board members that they have completed their preparatory groundwork, and are now ready to start their programmes.

There are 4 main fields of activities in A.R.M.S.A., that of student exchange under Professional Exchange, student and community health under Health, Medical Education, and Publication. These are the 4 fields in which we believe medical students can and indeed should play an active role. There are thus these 4 offices in A.R.M.S.A. to co-ordinate activities in each field.

**Professional Exchange:** For the past 3 years, student exchange under A.R.M.S.A. has been very much a plan on paper. This is because of financial problems and lack of elective postings on the curricula of many member countries. Past experience of the International Federation of Medical Student Association tells us of the immense benefits of such a scheme, and we are determined to continue our efforts to overcome these obstacles, however great they may seem at present. It is gratifying to learn that at least Indonesia has been quite successful and already there are plans for Indonesian medical students to go on the first exchange clerkships in Hong Kong, Malaysia, and Singapore. But we must remember that situations in different member countries are very varied, and a lot will depend on the local associations to solve their own problems.

**Health:** This has been in main theme of A.R.M.S.A. activity in the past, and has been well justified to be so, as most members are from developing countires where medical services are far from ideal and the services of medical students are worthwhile. In this session, A.R.M.S.A. will carry out Drug and Medical Equipment Appeals in aid of student clinics in developing countries. In addition, an International Blood Donation Campaign will be organised during which member countries will carry out blood donation campaigns simultaneously to give the whole project greater appeal and propaganda. Many members have been quite active in organising health education programmes for the public and these will be continued and carried out at the discretion of the local associations.

**Medical Education:** There is at present a growing consciousness among medical students all over the world concerning their own curricula. A.R.M.S.A. has always utilised its position as a regional organisation to collect data on medical education from medical schools in Asia. These have been complied in reports sent to interested medical schools. The topics chosen for this year's survey are Medical Curriculum and Examination Methods, and a symposium on the same topics will be organised during the 4th General Assembly in 1969. The ultimate aim of such comparative studies is the mutual recognition of training and degrees in this geographical area.

**Publication:** Our annual publication is the 'Medicasia' which contains reports from all executives and interesting articles from member associations. 'Medicasia' will be short of articles if members do not actively contribute to it. ARMSA-NEWS is published quarterly and is circulated among executives of member associations so that they will be informed of the current developments in all offices of A.R.M.S.A.

I hope members of the Hong Kong University Medical Society will be better acquainted with the functions and activities of A.R.M.S.A. from this short account and will support its cause and join in its activities in the coming year.


Do remember your first time with CADA.

# SEVENTY-FIRST CONGREGATION

13th November,

## DEGREE OF DOCTOR OF SCIENCE

* Dr. Marjorie Mo-Chueh Lee (*Anatomy*)

## DEGREE OF DOCTOR OF PHILOSOPHY

* Miss Liu Hin Ching (*Anatomy*)

## DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY

### 1967

PASS LIST

MR. CHIU SHING PING—*Ricci Hall*
MR. CHOW HOK KUN—*University Hall*
MR. FUNG TAT BIU—*Hornell Hall*
MR. IP SHING KWAN—*St. John's College*
MR. KWOK MAY SHING—*University Hall*
MR. RAYMOND LAM SHU TAK—*Morrison Hall*
*MR. MICHAEL LEE SHUN WAI—*University Hall*
MR. LEE WING KWONG—*Hornell Hall*
MR. LEUNG KIN YUEN—*St. John's College*
*MR. SAW THIAN AUN—*Lugard Hall*
MR. RAYMOND WONG CHE WAI—*Ricci Hall*
*MR. WONG HIN NANG—*Eliot Hall*
MR. WONG HOW CHUNG—*Hornell Hall*
MR. YU HON BIU—*Hornell Hall*

### 1968

HONOURS LIST

MISS CHRISTINA WANG CHUNG LUN, (with Distinctions in Physiology, Biochemistry, Pharmacology, Medicine and Obstetrics and Gynaecology)—*St. John's College*
MR. MAK LAI WO, (with Distinctions in Anatomy, Biochemistry, Pharmacology, Pathology and Bacteriology, Paediatrics, Medicine, Surgery and Obstetrics and Gynaecology)—*University Hall*

PASS LIST

MR. CHAN CHING KEI—*University Hall*
MR. CHAN FU LUK, (with Distinctions in Anatomy, Physiology, and Preventive and Social Medicine)—*University Hall*
MISS MAY OI-WAH CHAN—*St. John's College*
MR. CHAN SHU WING—*St. John's College*
MR. CHAN YAU TUNG—*St. John's College*
MR. PETER CHANG PAI TAK, (with Distinction in Physiology)—*Lugard Hall*
MR. CHANG SZE CHING—*St. John's College*
MISS VIVIEN CHANG YUEN HWA—*St. John's College*
MR. DAVID CHENG HUNG FAI—*University Hall*
MR. CHENG MUK NOONG—*Morrison Hall*
MR. CHEUNG CHI FONG—*Ricci Hall*
MR. CHIANG CHUEN TANG, (with Distinction in Pharmacology)—*St. John's College*

* ***In absentia***

Mr. Chow Shew Ping, (with Distinction in Pharmacology)—*Lugard Hall*

Mr. Jimmy Alastair Chow Wing-Hung—*Lugard Hall*

Miss Chu Wai Yee—*St. John's College*

Mr. Fung Kai Bun, (with Distinction in Physiology)—*St. John's College*

Mr. Fung King Hay—*Hornell Hall*

Mr. Ho Hon Lau—*Hornell Hall*

Miss Linda Ho Tze Ching—*Duchess of Kent Hall*

Mr. Philip Hsieh Cheung, (with Distinction in Surgery)—*St. John's College*

Mr. Louis Hsu Che Shek—*Ricci Hall*

Mr. George Hsu Lee Keung, (with Distinctions in Pharmacology and Obstetrics and Gynaecology)—*Morrison Hall*

Mr. Hui Cho Wah—*University Hall*

Mr. Hung Chi Bun—*St. John's College*

Mr. Ip Kai Wah—*Lugard Hall*

Mr. Ip Moon Wai—*University Hall*

Miss Shirley Ip Siu-Yee—*St. John's College*

Mr. Michael Kan Kwok Choi—*St. John's College*

Mr. Ko Sai Cheong, (with Distinction in Physiology)—*St. John's College*

Mr. Jeremy Kwok Yam Tat—*Morrison Hall*

Mr. Lai Siu Kee—*University Hall*

Mr. Roy Lau Sek Fai—*Morrison Hall*

Mr. Lau Wai Hon—*Hornell Hall*

Mr. Lau Yu Sun—*St. John's College*

Mr. Lee Chak Man—*Morrison Hall*

Mr. Lee Sai Ping, (with Distinctions in Anatomy and Physiology)—*St. John's College*

Miss Vivien Lee Wai Ying—*Lady Ho Tung Hall*

Mr. John Lee Yiu Kan—*University Hall*

Miss Martina Leung Siu Chu—*Lady Ho Tung Hall*

Mr. Lim Heng Poh—*University Hall*

*Mr. Lim Meng Aun—*St. John's College*

Miss Vivian Loh Wei-chun—*St. John's College*

Mr. Edward Mok Kam Chiu, (with Distinctions in Anatomy and Biochemistry)—*St. John's College*

Mr. Ng Shek Lun—*Lugard Hall*

Mr. Ng Sheung Yee, (with Distinction in Pharmacology)—*Lugard Hall*

Mr. Pang Hok Tuen—*Lugard Hall*

Mr. Siu Leung Chow—*Hornell Hall*

Mr. Tam Ping Ching—*University Hall*

Mr. Michael Tsang Tse Shu—*Lugard Hall*

Mr. Tse Tak Fu, (with Distinction in Medicine)—*Lugard Hall*

*Mr. Tsin Tai Yan—*St. John's College*

Miss Elizabeth Wang Shuk Ching—*Duchess of Kent Hall*

Mr. Wong Chak Po—*St. John's College*

Mr. Wong Chun Bong—*Hornell Hall*

Mr. Wong Kai-Ping—*St. John's College*

Mr. Moses Wong—*University Hall*

Mr. Wong Tak Lun—*Ricci Hall*

Mr. Lawrence Wong Ting Kwok—*Lugard Hall*

Mr. Alfred Wong Yat Wah—*University Hall*

Mr. Woo Kam Sang—*St. John's College*

Mr. Woo Kwok Kwong—*Lugard Hall*

Mr. Wu Ho Mun, (with Distinctions in Anatomy and Pharmacology)—*Hornell Hall*

Mr. Yam Chung Wah—*St. John's College*

Miss Lillian Yang Yang—*St. John's College*

Mr. Yeung Kai Kin—*Morrison Hall*

*Mr. Yu Tak Po, (with Distinction in Pharmacology)—*Ricci Hall*

Mr. Yu Wing Kit—*Hornell Hall*

Mr. Victor Yu Yu-Jei—*Morrison Hall*

* *In absentia*

## ACTIVITIES

The proposed Association shall pursue its aims by:

1. Studying and promoting activities concerning medical education problems.
2. Encouraging students' interest and activities in general health problems.
3. Promoting the exchange of medical students among various countries.
4. Promoting the organisation of International Medical Student conferences and courses.
5. Publishing a journal, newsletter and reports and encouraging the publishing of news of medical students' interest through other publications.
6. Acting as liaison between medical student associations and World Organisations such as W.H.O.
7. Co-operating with national and international organisations.

## ORGANISATION

The governing body of the proposed Association will be the General Assembly which will gather annually representatives from every member country. This Assembly will elect an Executive board made up of a President, Vice-President, a Secretary-General-Nation, nations to be Directors of Standing Committes on, say,

a. Professional Exchange
b. Publications
c. Medical Education
d. Health

and a nominated member of representatives from member countries.

The general Assembly will consider the activities of the previous year, criticise and advise, and finally decide the working programme in each field of its activities for the coming year.

The constitution thus follows closely the constitution of the International Federation of Medical Students Association which was founded by European countries in 1953 and still has its activities confined to Europe.

## ADVANTAGES

What benefits will participation in the proposed ARMSA offer to Hong Kong Medical Students, either individually or as a whole? There are constants and variables to the answer.

The *Constants* are in matters of:

1. *Prestige and Obligation*
   a. Gaining of international recognition for the Hong Kong University Medical Faculty and Medical Society.
   b. To establish Hong Kong's full right as an independent unit, if only in matters of higher learning. (It happened in the past in international student conferences that Hong Kong was not given the right to vote because of its status as a colony and not a country. For similar reasons Hong Kong was excluded from the Colombo Plan and the benefits that go with it.)

2. *Knowledge and Ideals*
   a. Widening of the sphere of student contact through publications and travels.
   b. Partake in the world wide phenomenon of international co-operation towards mutual progress and peace, and keeping in step with world progress in health and medical problems through closer relationship with world organisations such as W.H.O.
   c. Opportunity to study a wide variety of new clinical materials, to see new approaches and emphases, and to participate in international medical conferences.
   d. Opportunity to study the social structure and problems facing our neighbouring countries and their influence on our society; and to make known Hong Kong's own problems and its need for assistance.

e. Stimulate students' active interest in the promotion of community health through activities as Health Surveys and talks on Personal and Community Health.

3. *Material benefits*

a. Possible grants and scholarships may become available to Hong Kong Students.
b. Possible benefit of books and equipment for students or for the library.
c. Possible travelling accommodations and fare reductions.

The *variables* upon which success depends are:

1. The amount of energy and time that students are willing to spend on the projects. Obviously little can be gained from half-hearted efforts.
2. The amount of encouragement and support given by members of the teaching staff. For instance, a revision of the clinical curriculum giving clinical students a break will be necessary for effective student exchange. At present the preclinical students are getting too many holidays (2 summer vacations adding up to 7 months + Christmas and Easter = another week), while the clinical students get hardly any at all.
3. The response of students in general to make use of the opportunities offered.
4. What finance is available to meet the expenses of:
   a. an Annual Subscription of about HK$150 to the proposed Association.
   b. sending delegates to meetings.
   c. activities such as publications and correspondence.
   d. provision of accommodations for conferences, etc. when it is Hong Kong's turn to be the host country.

## RECOMMENDATIONS

The subcommittee views with favour the proposed formation of an ARMSA and recommends that:

1. *Publicity*

a) Publicity of the above scheme will be given to all medical students through the Undergrad.
b) Copies of this report will be sent after its adoption, to the Dean and Heads of Departments of the Medical Faculty to enlist their support for the proposed scheme.

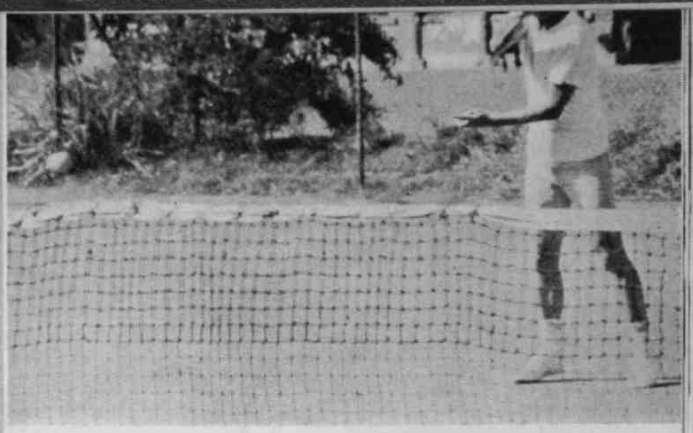
2. *Delegation*

a) A delegate will be sent to the Singapore Conference in 1966 with full power to act on behalf of the H.K.U. Medical Society at the conference table.
b) A selection committee will be set up for the choice of delegate.
c) Criteria for selection should include these clauses —
   i) Application be made by the candidates who are student members of the Medical Society and have completed their Introductory Clerkship at the time of departure.
   ii) No discrimination against sex, race, religion or creed of the candidate in the selection.
   iii) Preference be given to:
      — records of academic achievement and student responsibility
      — personality and knowledge of local conditions.
d) A report should be submitted by the delegate within 2 months after his return.

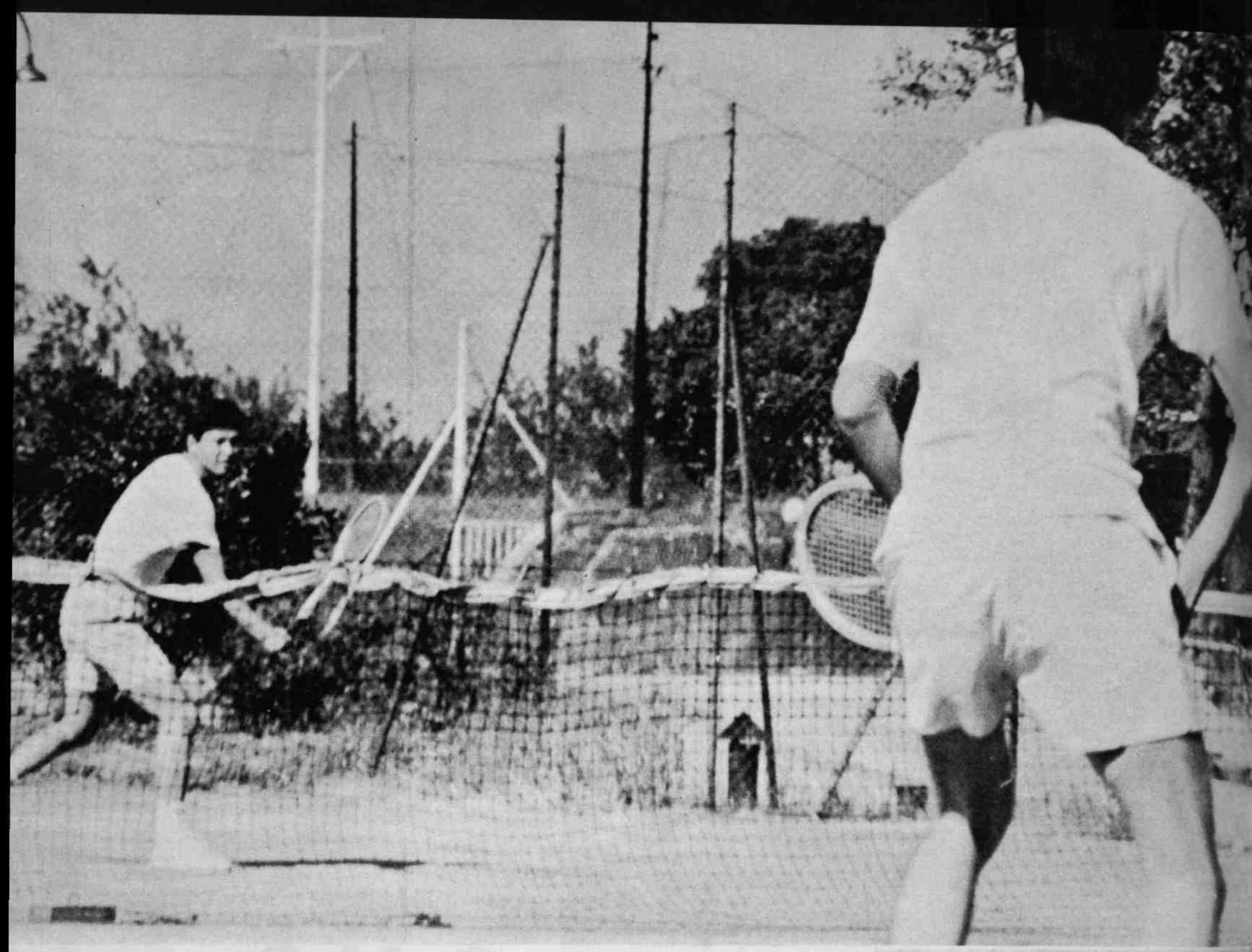
3. *Finance*

a) The estimated cost of sending a delegate to Singapore will be in the region of HK$1,500.
b) Financial assistance will be sought from relevant organisations such as the Li Shu Fan Foundation, Asia Foundation,

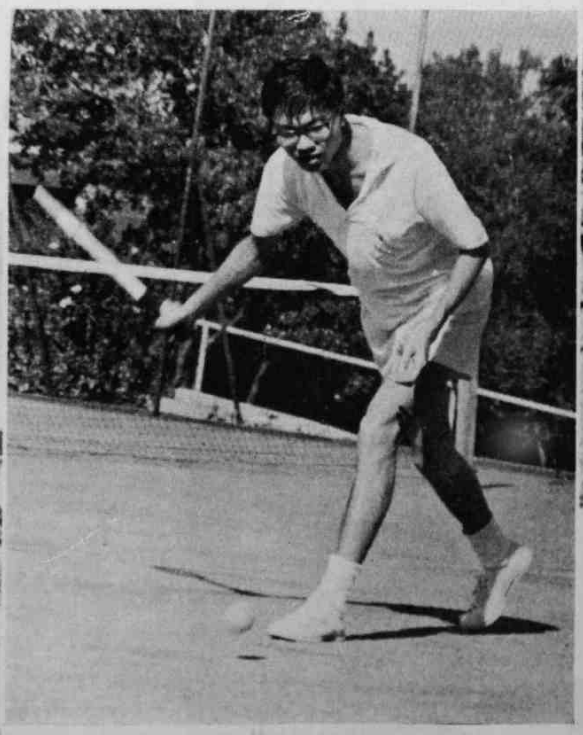
# THE ALBUM

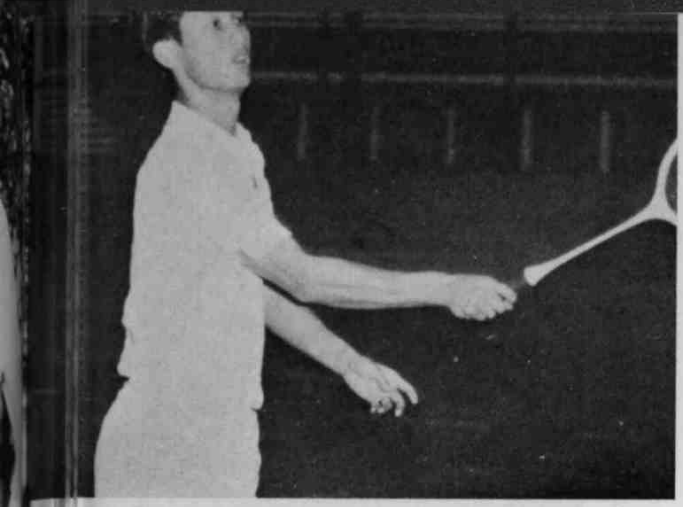


# MEET OUR SPORTSMEN



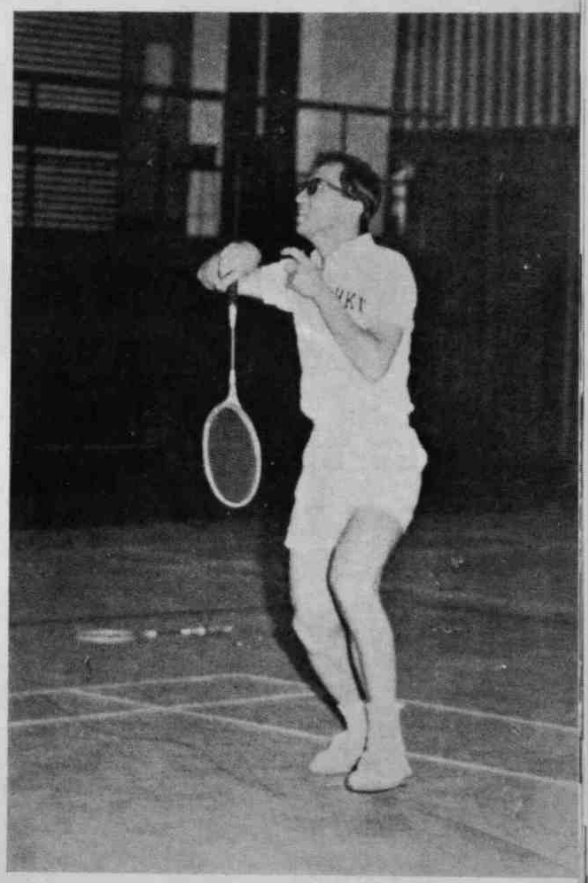
# ON THE WAY TO WIMBLEDON





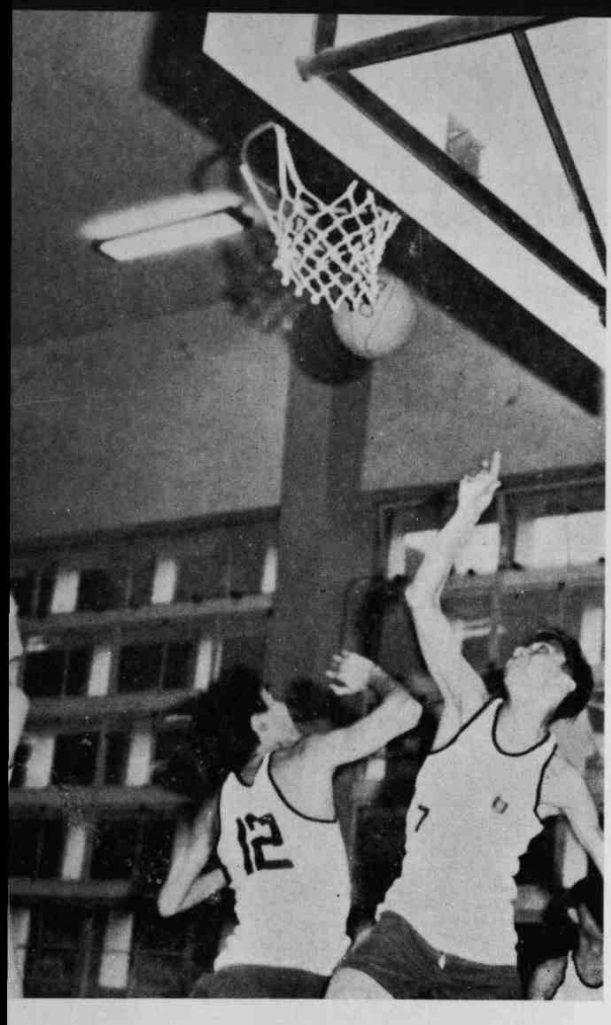
*Here's a tricky backhand coming up.*

# SUBTLE SHUTTLE

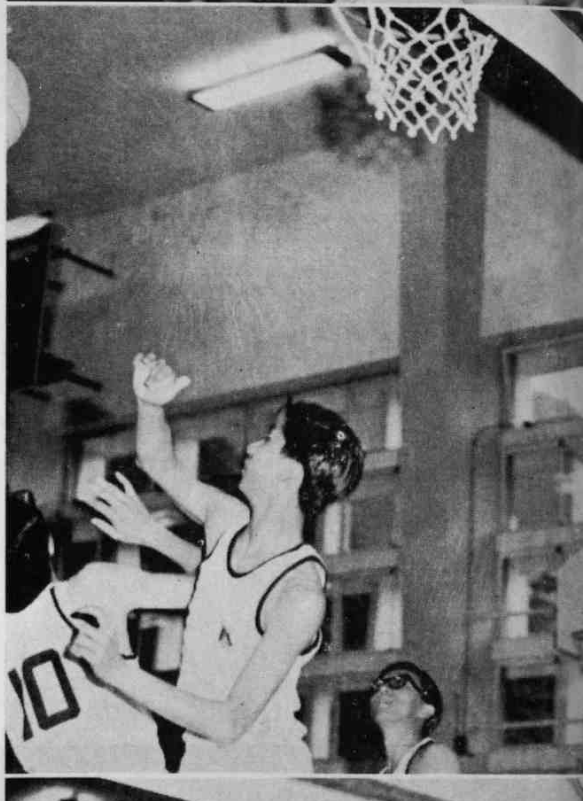


*Hee hee! The shuttle is on the left not over there*

*This shuttle is definitely going to be out.*



*Ouch! I've dislocated my arm*



**THREE BLIND MICE**
**EE HOW THEY SHOOT**

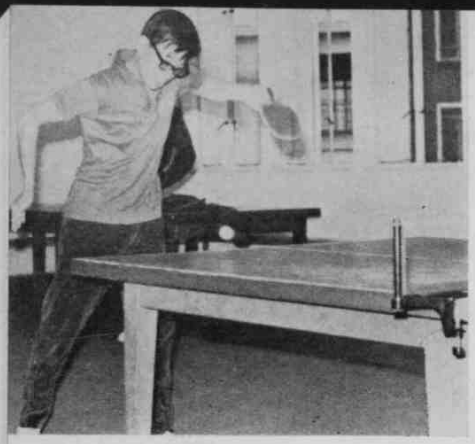
# MERRILY ROLLS THE BALL

*Who's there hatching eggs.*

*Twinkle twinkle little toes.*

## COURAGEOUSLY STRIVE WE UNTO VICTORY

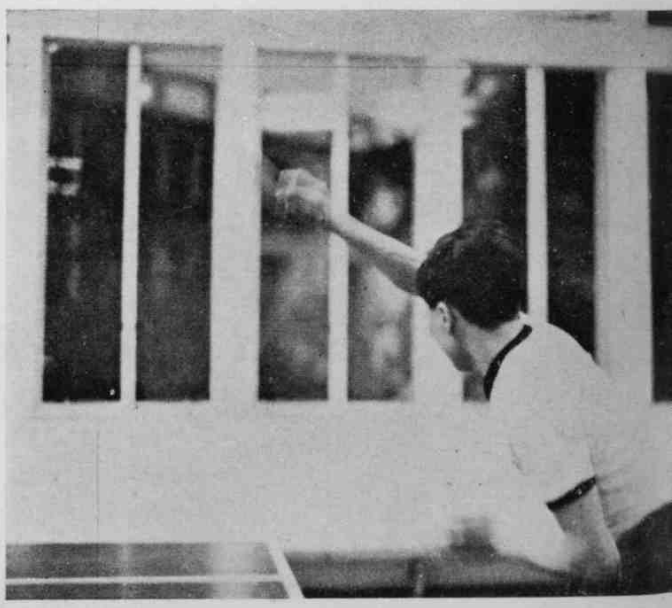
*Gotta sacrifice my head to save this one*



PING PONG BALL

SLIPPERY BALL

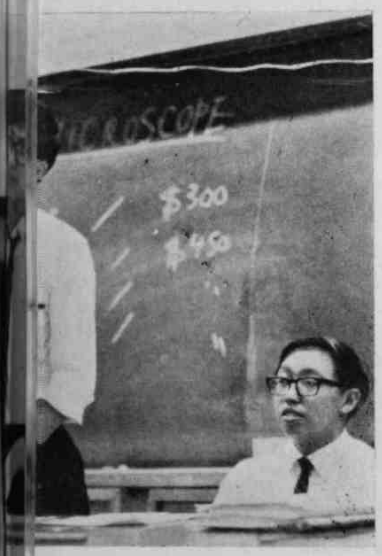
SLIPPPERY ALL THE DAY



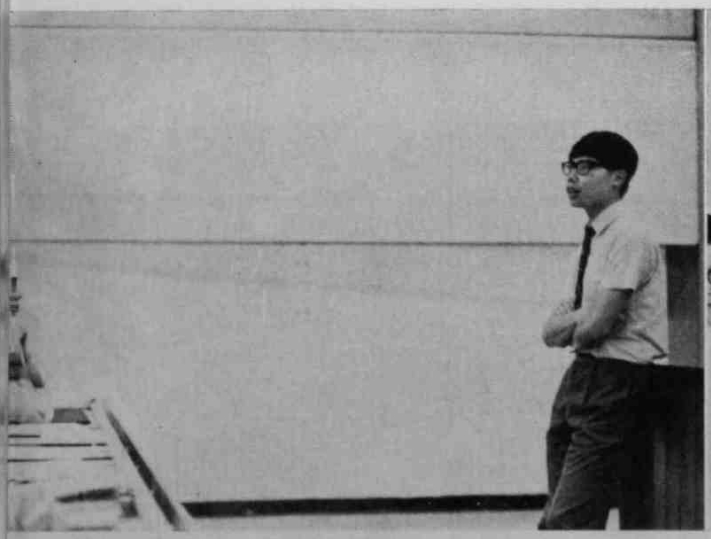
*Sheep being led astray?*

# NEW STUDENTS IN THE WONDERLAND

## Freshmen Welcome Day.



*"Anatomy, I consider, is the most . . ."*



*now a final warning—NEVER put your hands in pockets—I learnt that from painful experience."*

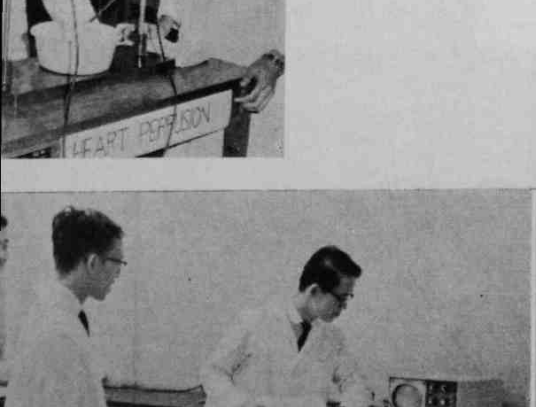
*Don't forget—I repeat—GENTS on the 3rd floor, LADIES on the 4th.*

# OPEN DAY

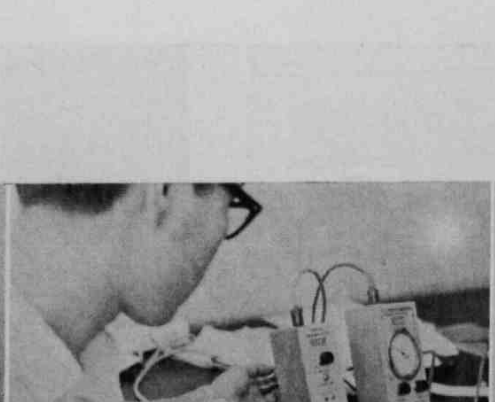
*The respiratory function test.*


*Ladies and gentlemen, let me introduce ou highly skilled receptionists.*


*The heart perfusion experiment*



*EGG tracing*



*The physiograph*

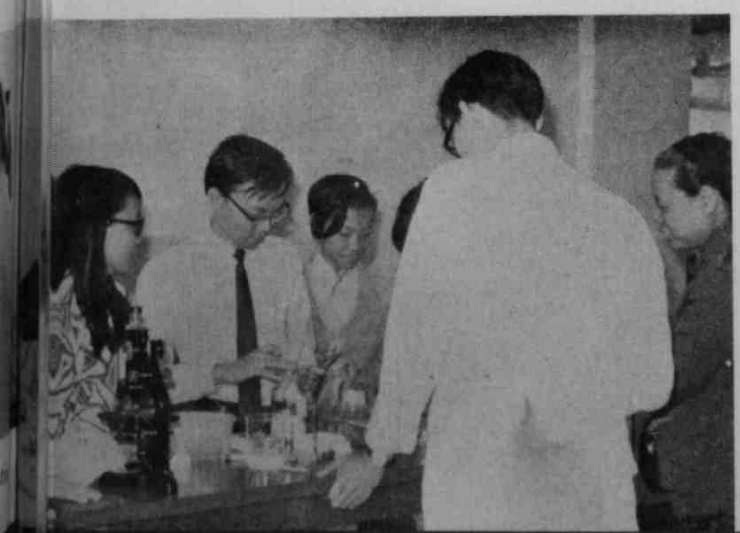
*—And heaven knows who's activ as the patient there*

*...zle the Biochemistry Laboratory*

*Are you sure that they are really REAL?*

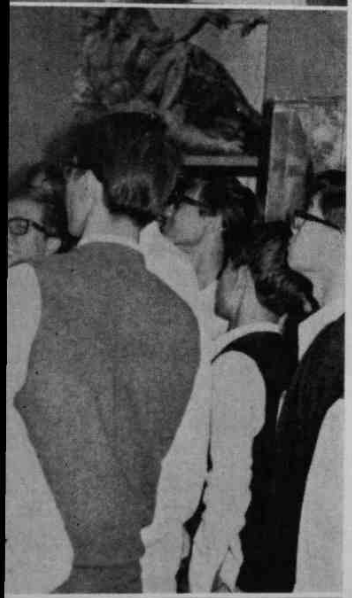
*...i, What's so funny about THAT?*
*...(scene inside the Anatomy Museum).*

*Well, this is just the way how we do our urine analysis.*



# MEDICINE IS BIG FUN

*Tears of delight from the parents, looks of admiration from middle school students and laughter of joy from friends and relatives. This is how people react when they come pouring from all four corners of the colony.*



*They stream into the Anatomy museum, queue in the Physiology Laboratory and loitre around the Pharmacology Demonstration Theatre.*

*"The most interesting place in the University" were recorded.*

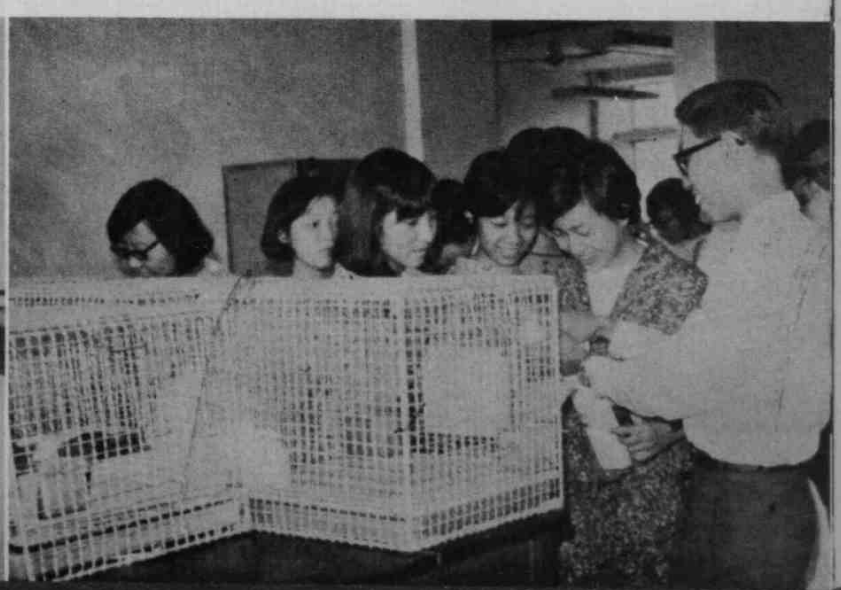
*Remarks like "better than expected",*

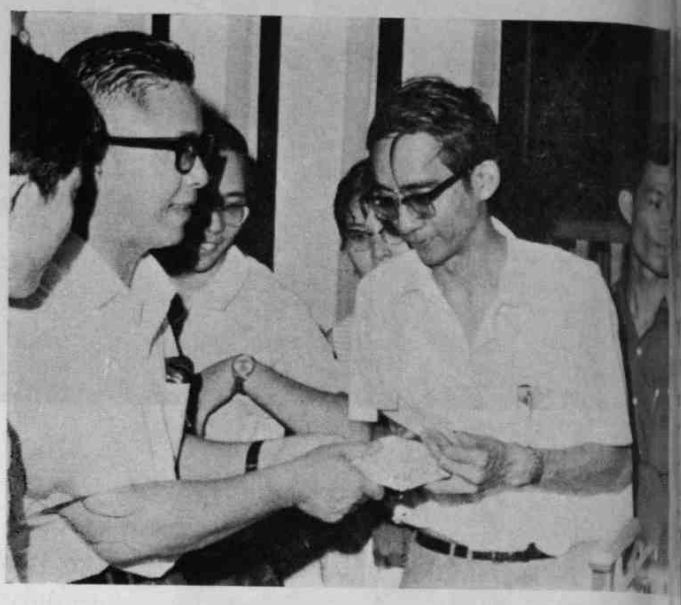
*That Anatomy Museum proves to be the greatest attraction.*

# OPEN DAY FROLICS

*...stration of the three-channel ...graph.*

*. . . I wonder whether man is only a food-consuming machine or something more . . .*

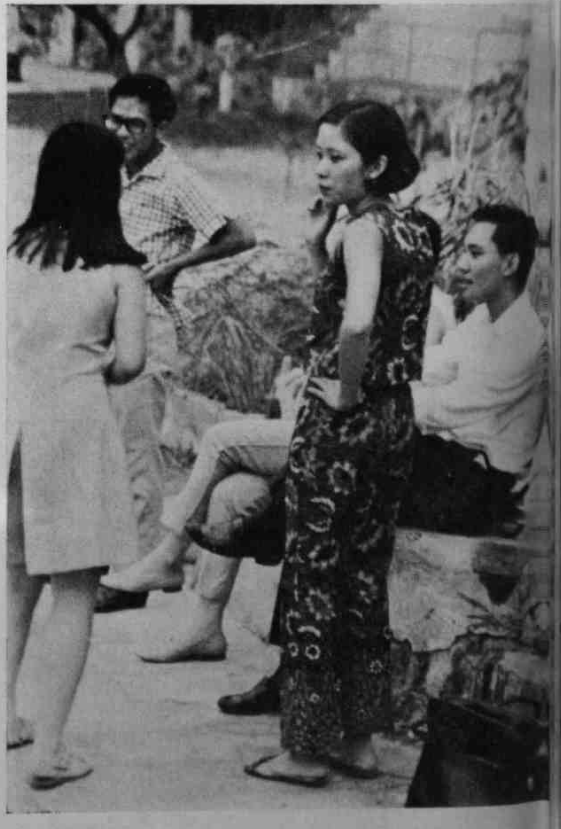




*Lucky draw—one of the winners.*

# THE LAUNCH PICNIC

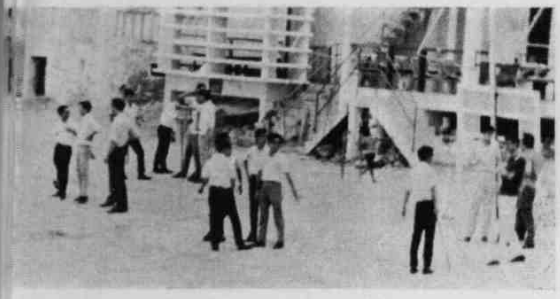
*Laughter is the best medicine.*



*Miss Social Con., who are you looking for?*

# THE MEDIC JUMBLE

*the[illegible] is a nice one over your right.*



*Sometimes something somehow revives your interst in human anatomy.*

*Scene from Peyton Place.*

*dr[illegible]ing sea water for a change."*

# ON LAND AND AT SEA

*A launch that drives on four wheels.*

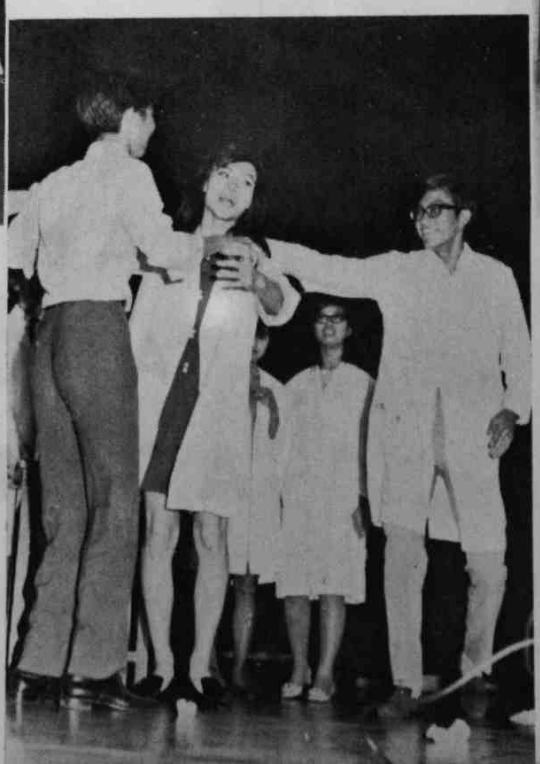
*, wait, who says my skirt is not mini enough?*

*1st year singing group.*

# MEDIC

*Hey, you listen to us nurses, we are the true bosses around this hospital.*

*I'll show you Arts girls what fashion is.*



*Take your hand her, she's my g*

# NITE

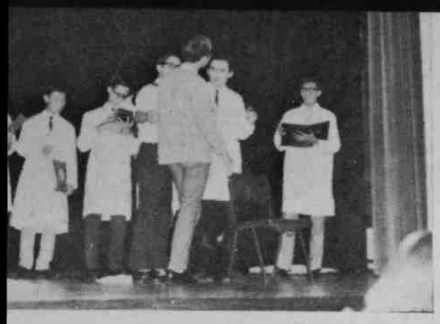
(Scene in O.T.)

*Hey Frank, what shall we do with this extra loop?*

*Come back, take a closer look, those Arts girls can't be prettier than me.*

*Young, handsome, eligible young medical student (see photo for proof), expert in guitar, seeks attractive female companion.*

*Apply by Tel:* **437755**



*mad mad world in first year.*

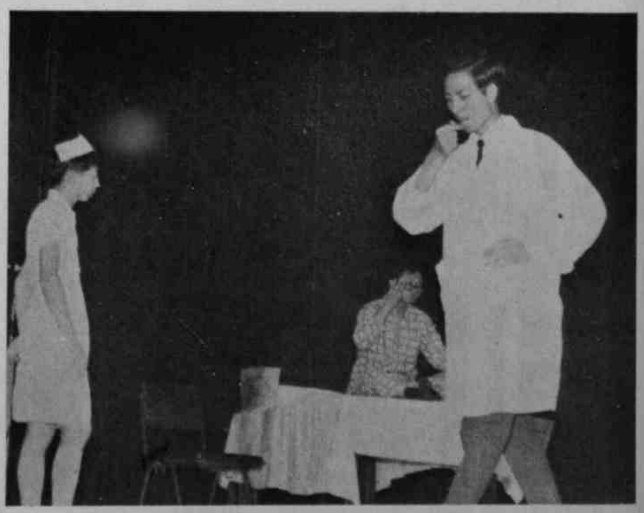
*4th year singing group.*
*On the count of three . . . and I, and a 2, and a* **3** *. . .*

*First year singer.*

*Please Doc, tell me whethert hat lump is malignant or not.*

*2nd year singing group.*
*Gosh, can't hit those high notes.*

喂，我係 . . . *Melaena* . . .
(*Final year play*)



# *Acting Singing and Laughing*

*Yeah! Yeah! Yeah!*

*"Who's calling for the Social con.?"*

*. . . and the next item is . . . "*

**ENJOY YOURSELF TONIGHT**

*Gee Dr., I just Love your sideburns.*

*Triumph*

*Waltzing Matilda*

批發進出口

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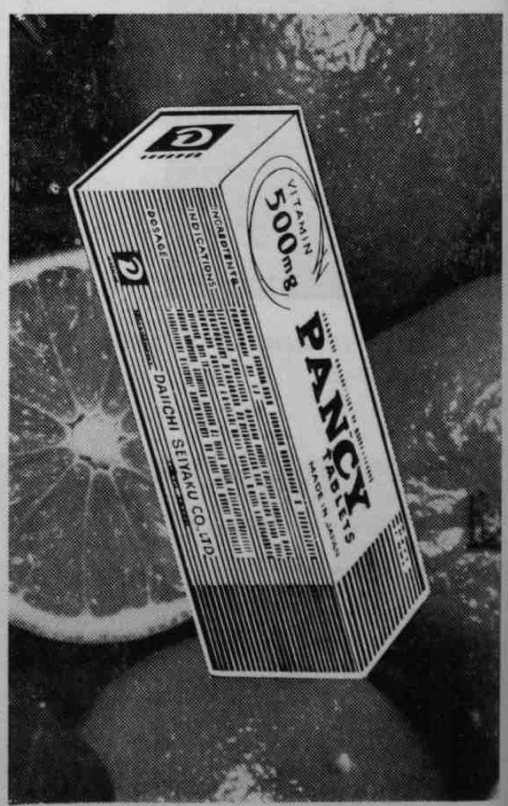
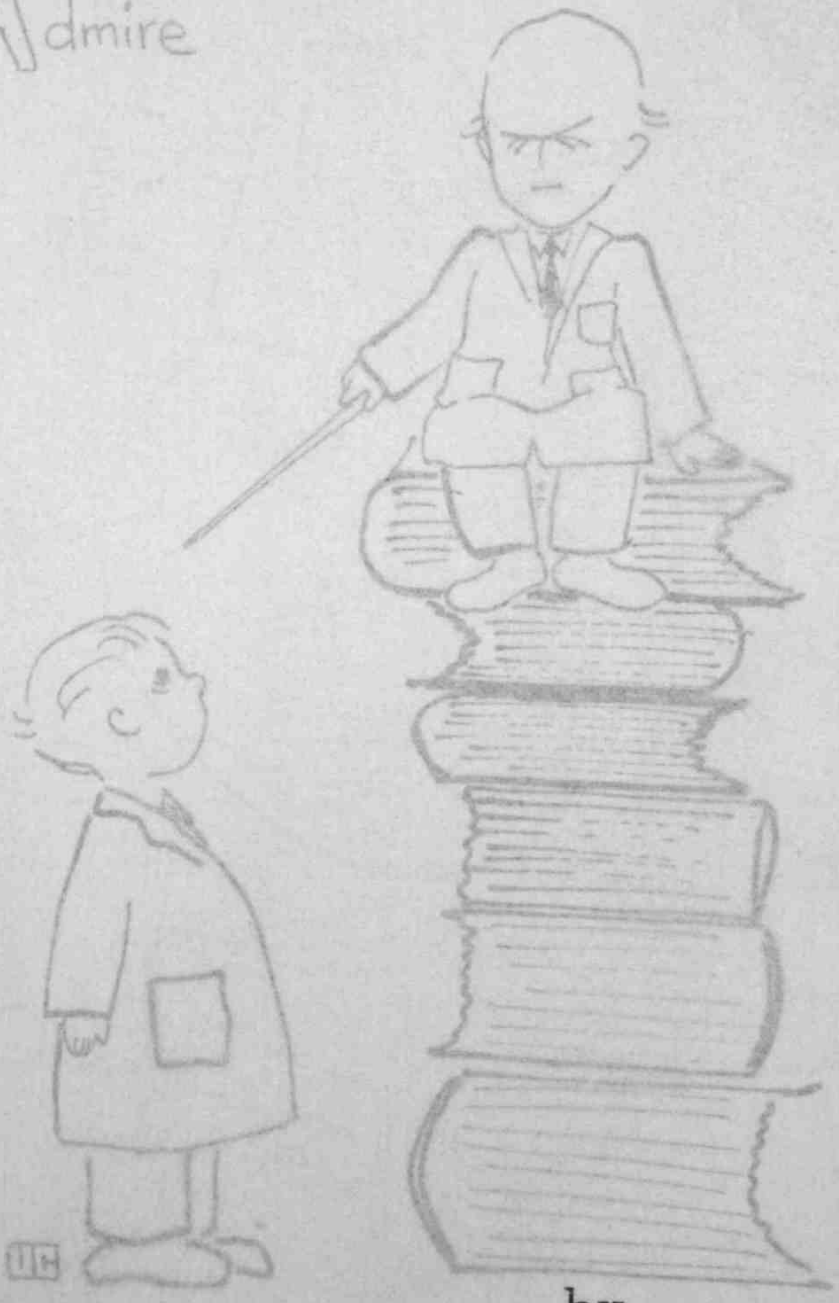


# On teacher . . . .

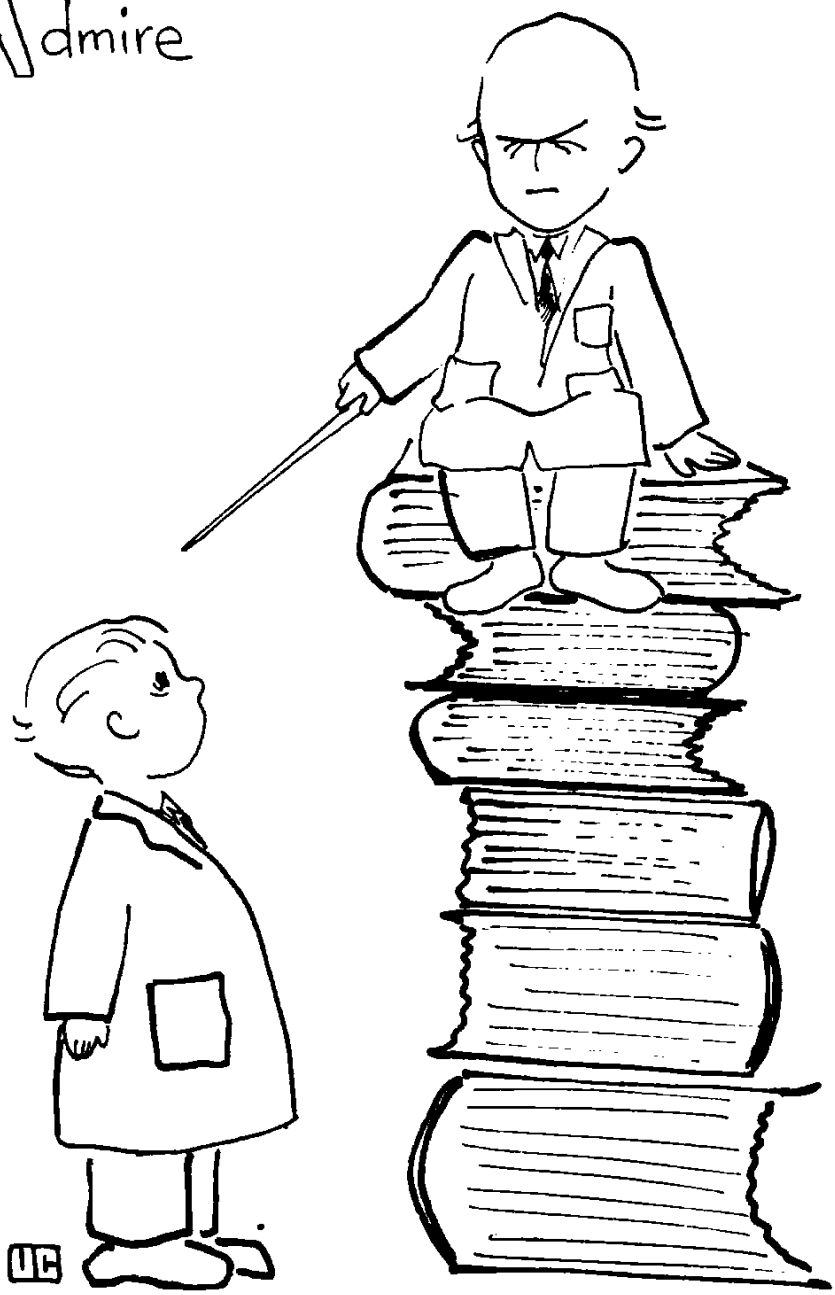
*(dedications with apologies)*



by —

Vicky Chen

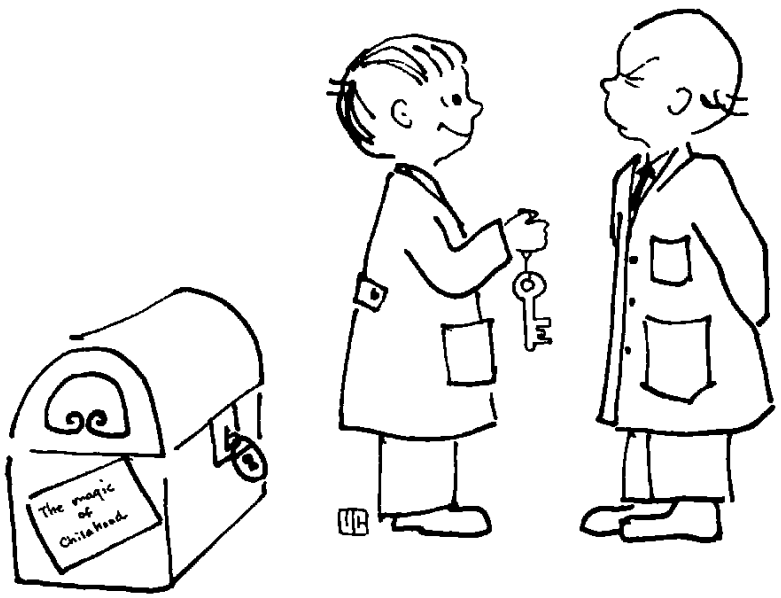
Teacher
is someone you
Admire



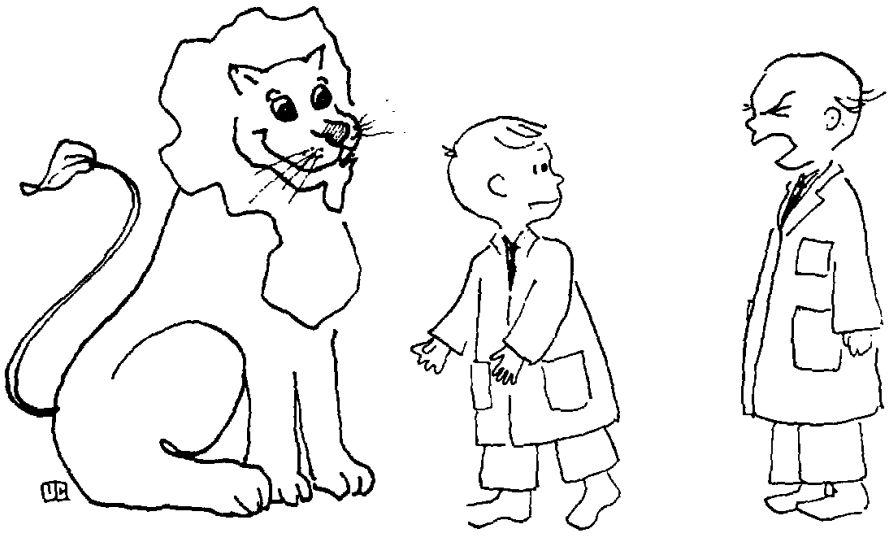

Teacher is someone you should be Grateful to

Teacher is someone who
will always give you
a Hand when you are
in need

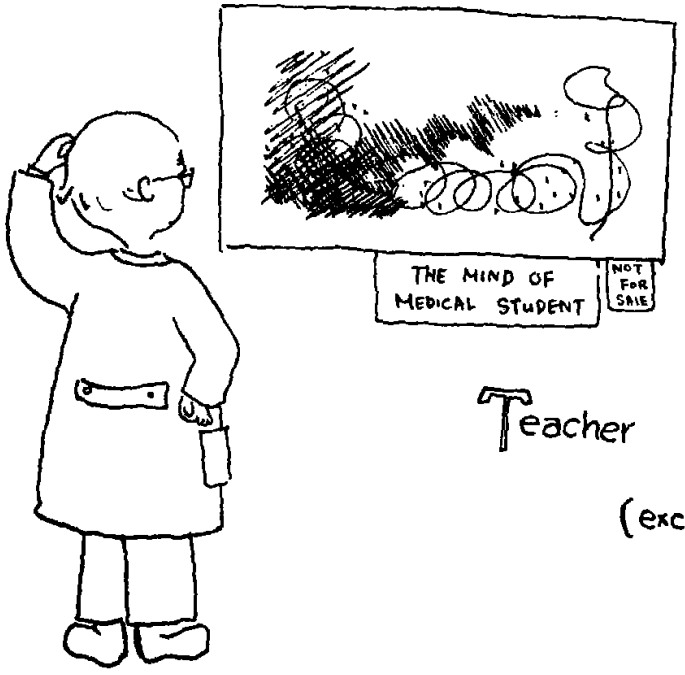
Teacher
is someone you
Trust




Teacher is someone
who is always
Watching over you

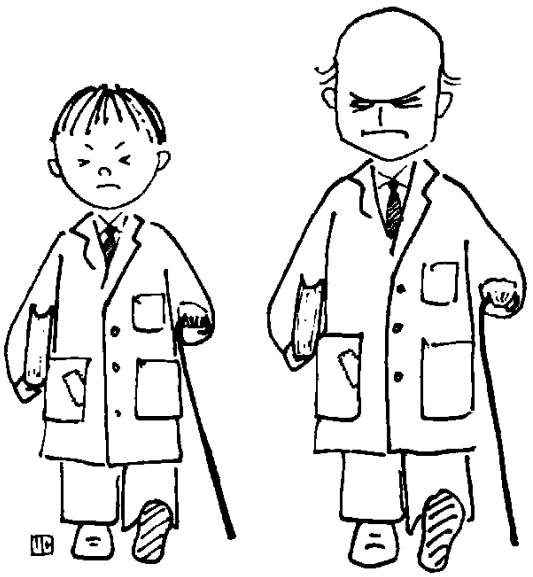


Teacher is the one you Fear more




Teacher is all-knowing

(except his students)



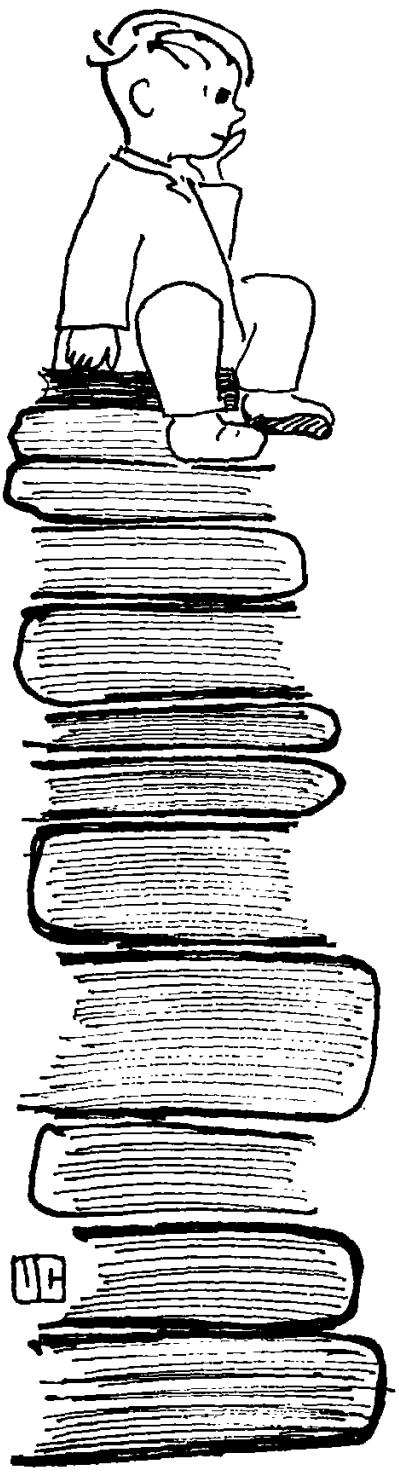
Teacher is someone you learn
Things from

Trying to know a
Teacher is trying
to catch a
butterfly

( Teacher
is someone who suddenly
becomes so near yet so
intangibly
Far away )


Teacher is someone you love
yet can never
Reach

it is your Duty
to be better than your
Teacher
someday

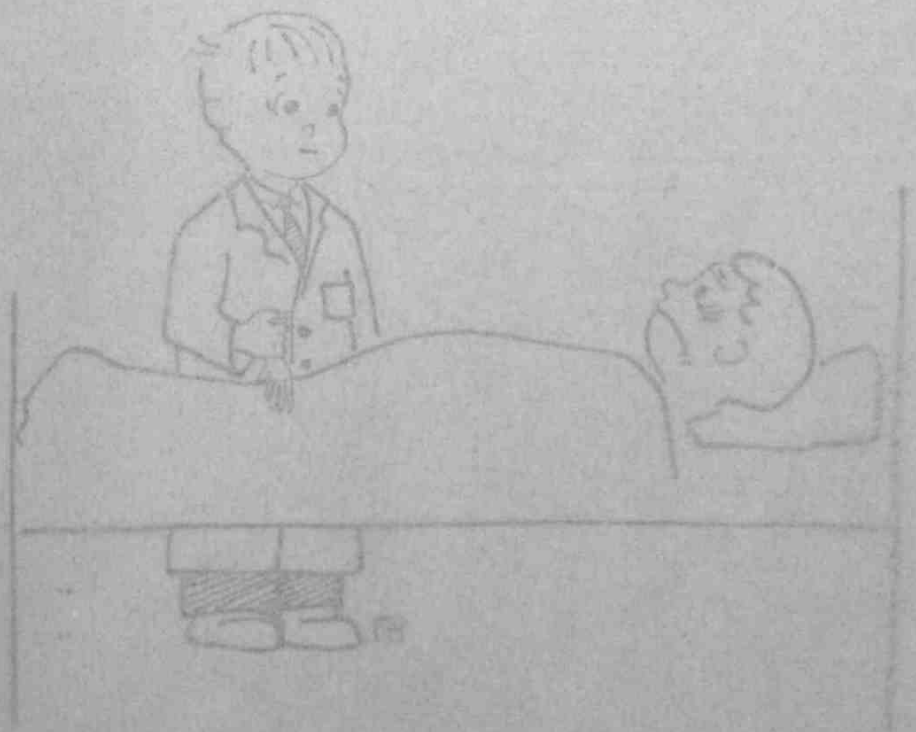



REASSURE YOUR PATIENT

# and others . . . .

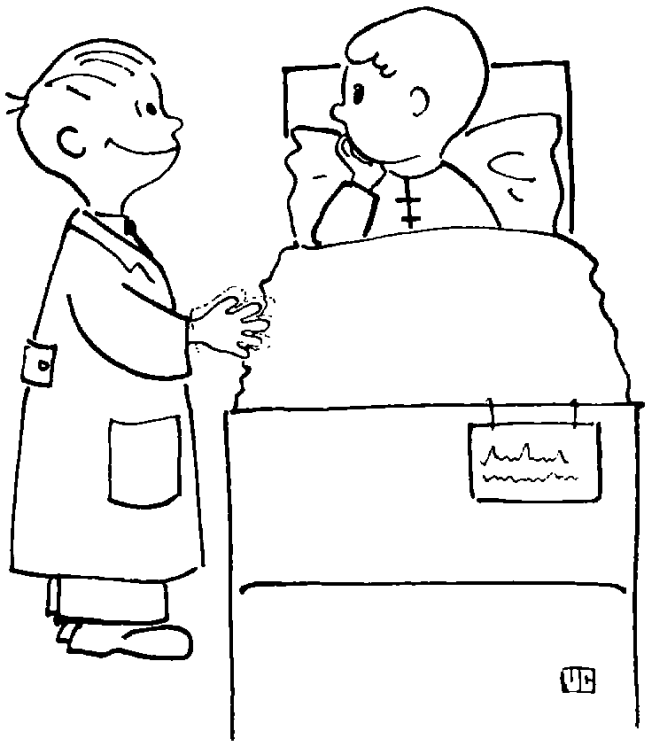
POST-OPERATIVE CARE

"I admire you, you have such faith in human technique."



REASSURE YOUR PATIENT

"Isn't this a face you can trust?"



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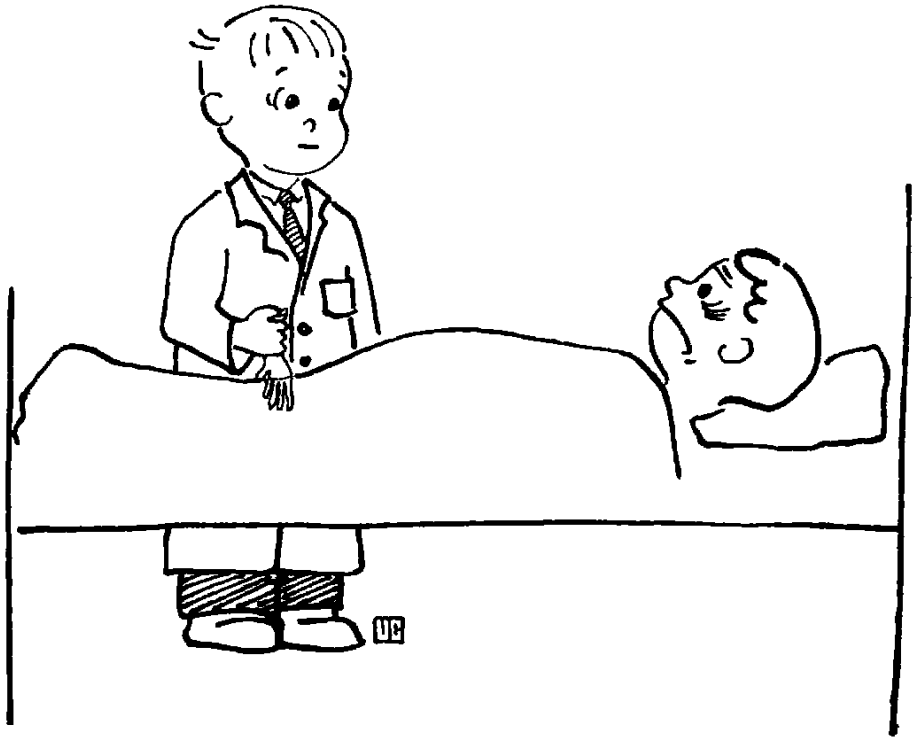
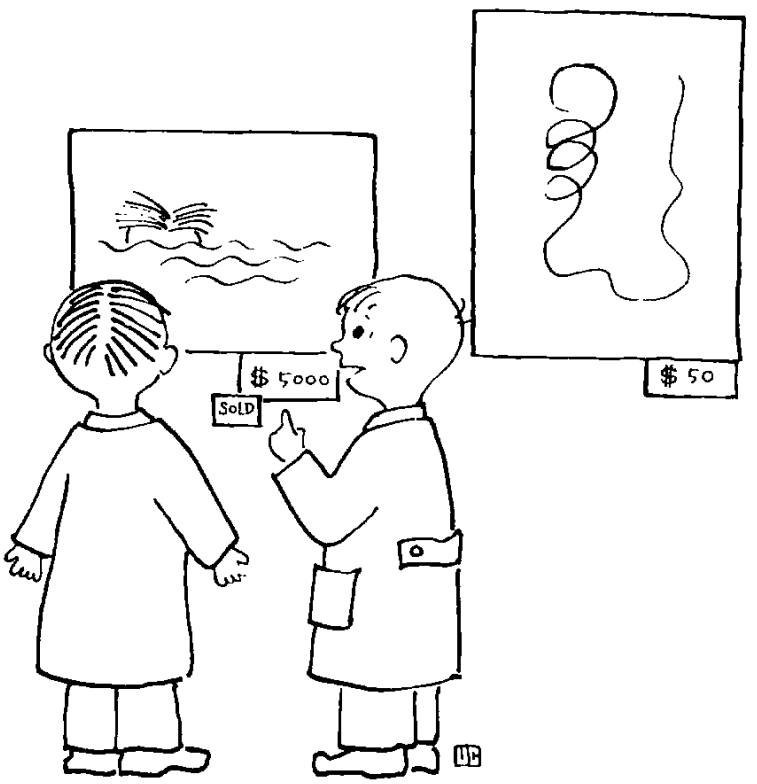


PUZZLE-PUZZLE

*Student A:* "It gives me an impression that a certain surgeon is drowning.

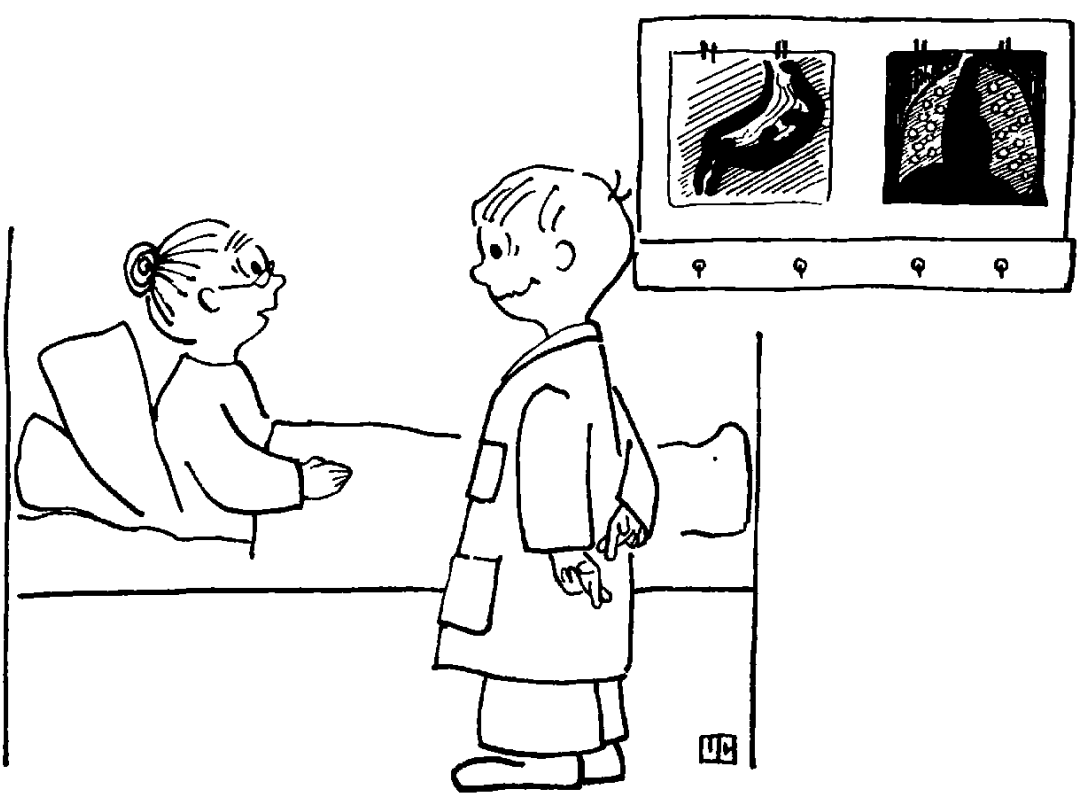
*Student B:* "Sure, common sense."




"WE OPERATE, GOD CURES."

*Patient:* "I will get better after surgery, won't I?"

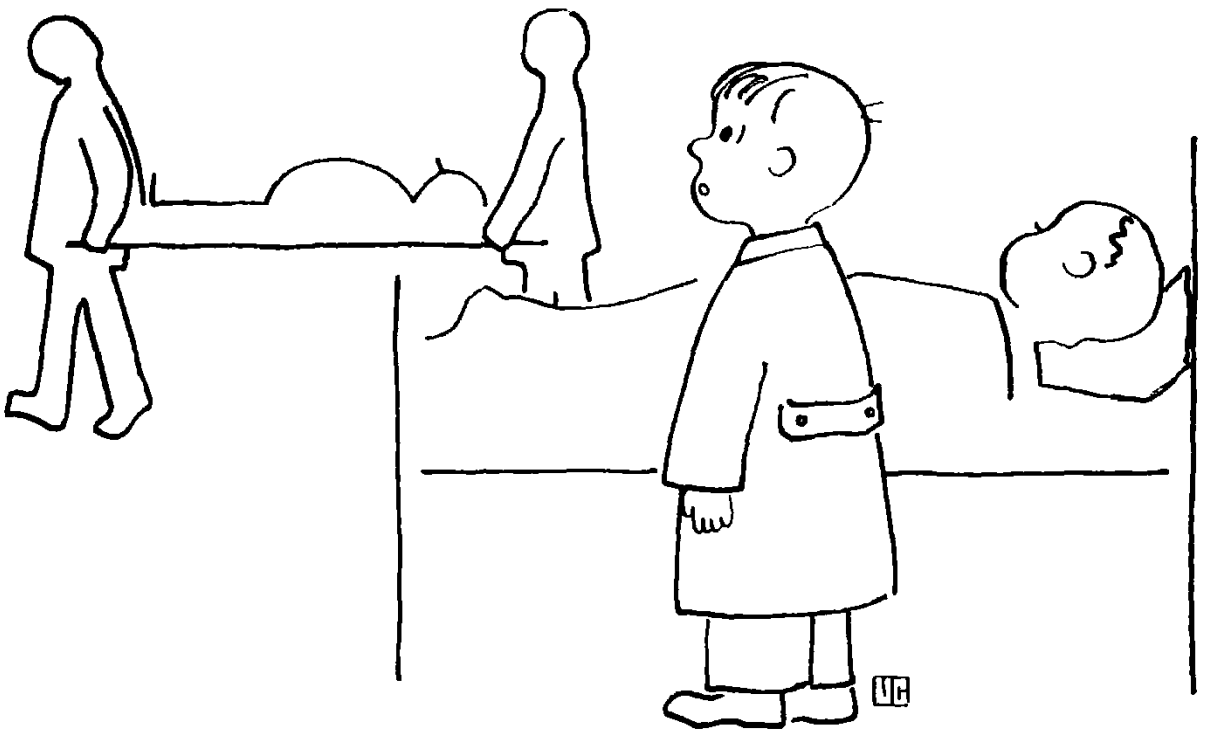
*Surgeon:* "....."



GIBSON'S WARD

*Patient:* "Wonder where he's going....."

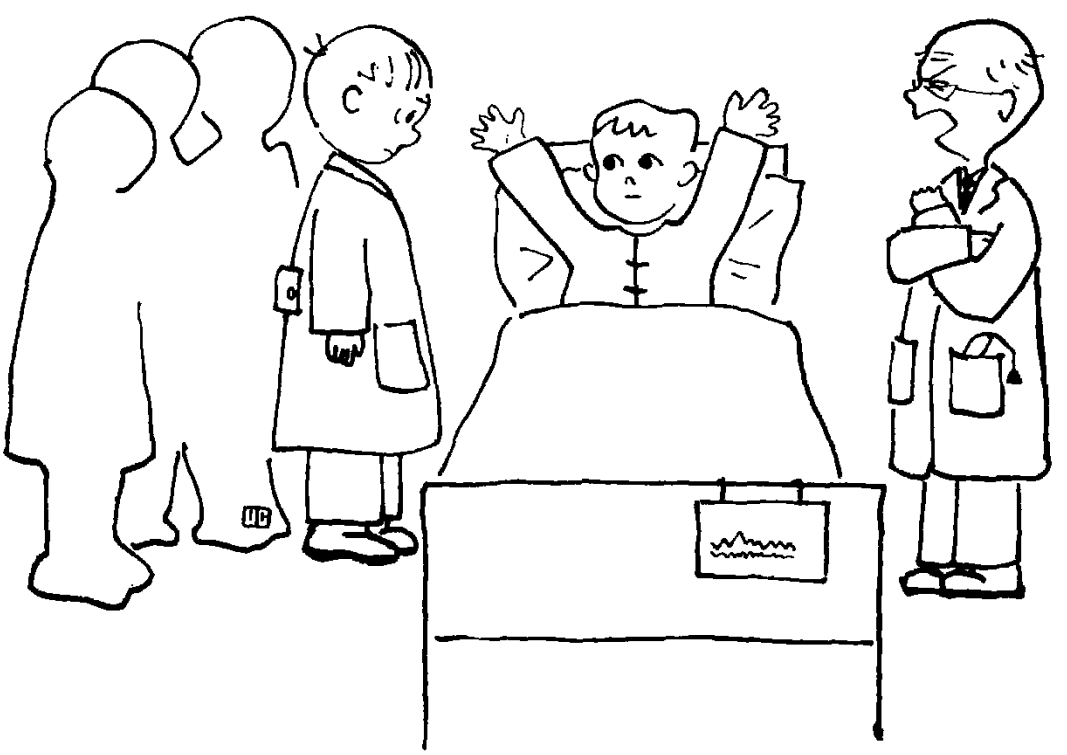
*Student:* "Oh, to a private ward for better care, I suppose."



ROUTINE EXERCISE

*Student:* "To examine the axilla, we must first ask the patient to raise his arms . . . . "

*Teacher:* "What now? He has surrendered."

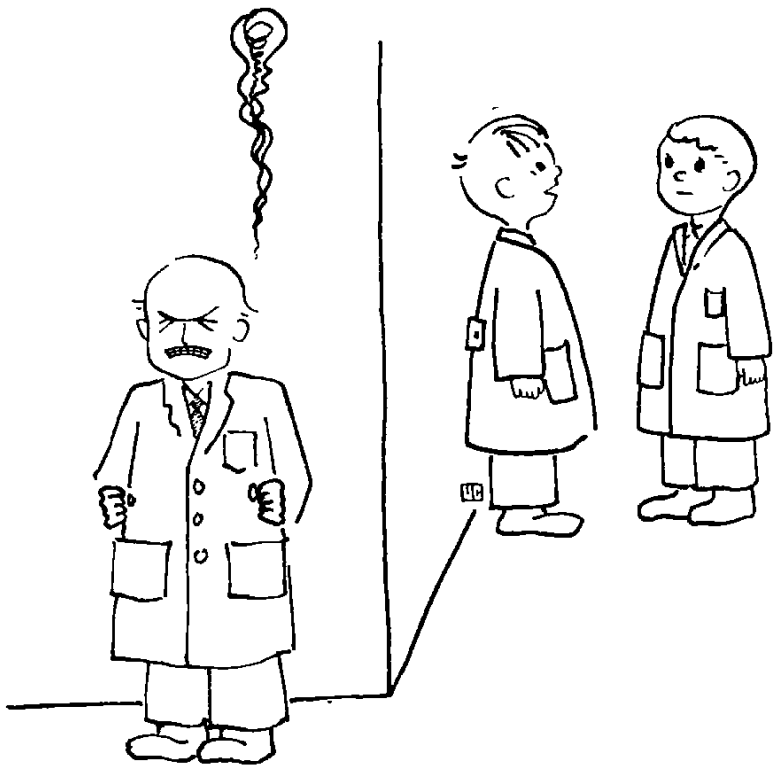


HERE-SAY KNOWLEDGE

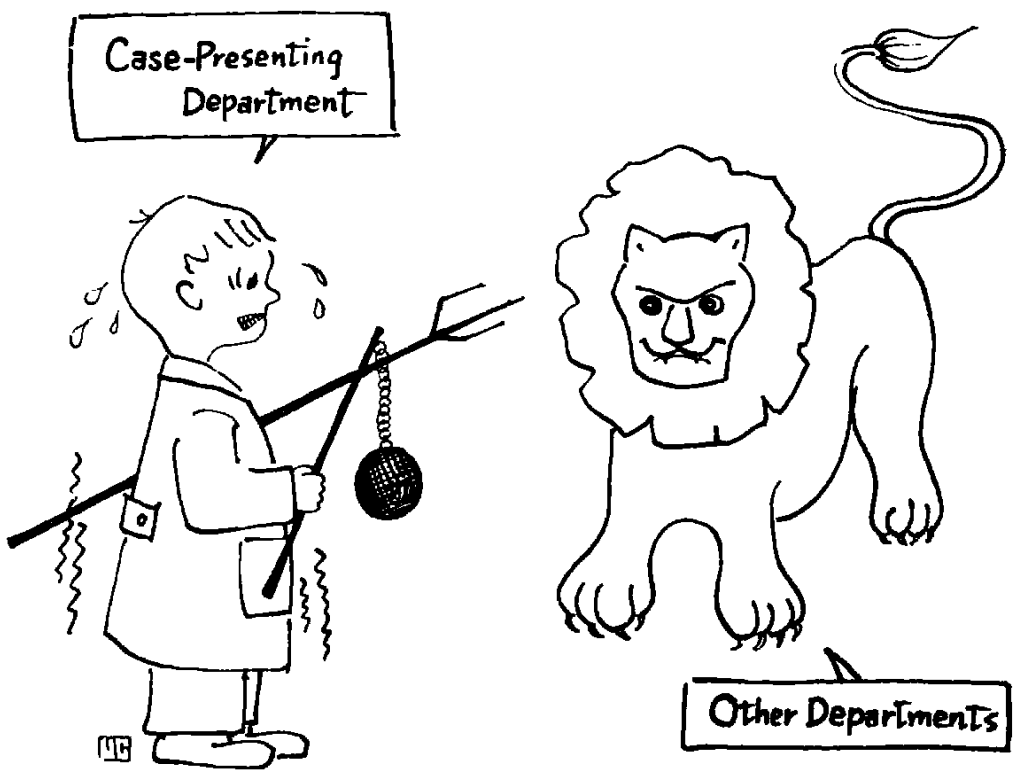
*Student A:* "What do you think is the commonest cause of fever in our locality?"

*Student B:* "Splenectomy of course!"

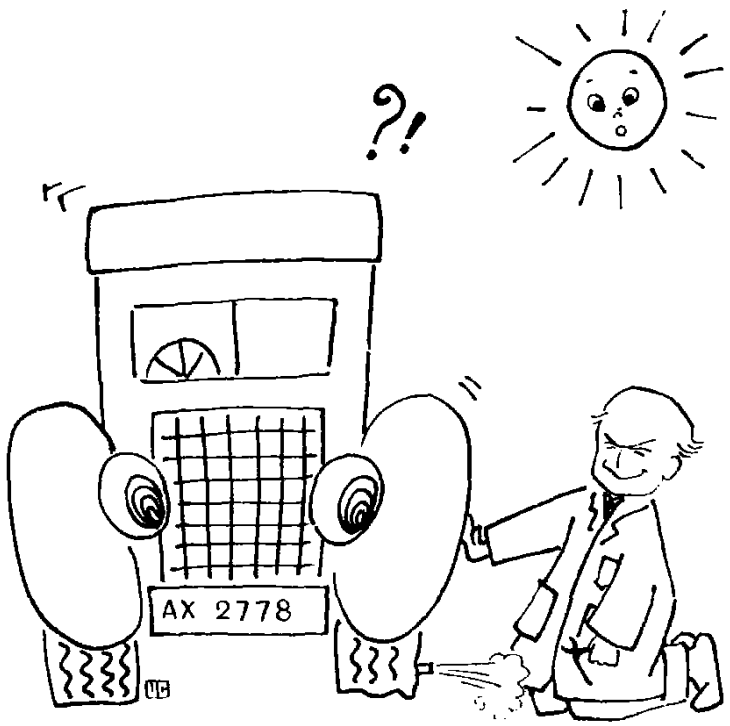
*Teacher:* (My stomach aches ! !)



THE ARENA OF CLINICAL—PATHOLOGICAL CONFERENCE.



STUDENTS' CARS PARKED ON HOSPITAL LEVEL ARE LIABLE TO BE IMMOBILIZED.




DOCTOR-DOCTOR RELATIONSHIP

*Surgeon A:* "They usually prepare some surprise for us before sending the patient over."

*Surgeon B:* (Goodness Gracious Me!)

THE VIRTUE OF PUNCTUALITY IS INVERSELY PROPORTIONAL TO THE VIRTUE OF (?).

*Teacher A:* "Young man, you are two minutes over-time."

*Teacher B:* (I am not a bit frightened by you but.....) Sigh.

SOMETIMES IT'S NOT HOW BAD YOU FAILED,

BUT REALLY HOW BAD YOUR TEACHER FELT THAT HURT.

# NEWS FROM THE GAZETTE

30th November, 1968.

## PERSONALIA

Professor A. R. Hodgson attended a meeting of the Australian Orthopaedic Association in Melbourne from September 30—October 4, 1968.

Dr. Rosie T. T. Young, Senior Lecturer in Medicine, has been elected Fellow of the Royal College of Physicians (Edinburgh).

## FACULTY OF MEDICINE

### Appointments

Lam Shiu Kum, M.B., B.S. (H.K.) appointed Assistant Lecturer in Medicine from July 1, 1968.

Michael Ma Kin Gay, M.B., B.S. (H.K.), Temporary Lecturer in Surgery, appointed Lecturer in Surgery from July 1, 1968.

John Patrick O. Brien, M.B., B.S. (Sydney), F.R.C.S. (Edin.), Temporary Lecturer, appointed Lecturer in Orthopaedic Surgery from May 22, 1968.

Clive William Ogle, M.B., B.S. (Malaya), PH.D. (Western Australia), appointed Senior Lecturer in Pharmacology from the date of his arrival.

Peter Tam Yu Tat, M.B., B.S. (H.K.), appointed Lecturer in Surgery from July, 1, 1968.

Wu Kim Ho, M.B., B.S. (H.K.), appointed Assistant Lecturer in Surgery from July, 1, 1968.

### Resignations

Dr. R. H. P. Fung, Lecturer in Paediatrics, from May 28, 1968.

Dr. Marjorie M. C. Lee, Senior Lecturer in Anatomy, from October 15, 1968.

Dr. K. H. Luke, Lecturer in Paediatrics, from August 1, 1968.

R. B. Maneely, Senior Lectuer in Anatomy, from April 2, 1969.

### External Examiners

Professor T. A. J. Prankerd, F.R.C.P., Professor of Clinical Haematology at University College Hospital, London, appointed External Examiner in Medicine for the Final Examination in May 1969.

Professor R. M. S. Smellie, D.SC., PH.D., F.R.S.E., Cathcart Professor of Biochemistry, Institute of Biochemistry, University of Glasgow, appointed External Examiner in Biochemistry for three years from 1969, to visit the University once during that period.

Professor N. K. Yong, M.D., F.R.C.S., F.R.C.S.E., F.A.C.S., F.R.A.C.S., Professor of Surgery at the University of Malaya, Kuala Lumpur, appointed External Examiner in Surgery for the Final Examination in December 1968.

### Leave of absence

The following have been granted special leave:

Dr. Chau Wing, Lecturer in Obstetrics and Gynaecology, for five months at the end of his seven months' long leave beginning on July 1, 1968, to enable him to sit the M.R.C.O.G. examinations in the United Kingdom and to gain experience in the University of Glasgow.

Dr. Anthony K. Y. Lee, Lecturer in Medicine, for two years from September 1, 1968, to August 31, 1970, to enable him to undertake further training in Australia under the Leverhulme Interchange Scheme.

Dr. Michael Ma Kin Gay, Lcturer in Surgery, for two years' study under the terms of the clinical training scheme, from September 1, 1969 to August 31, 1971.

Professor G. B. Ong, from October 13 to November 22, 1968, to enable him to take up appointment as Ian Potter Foundation Visiting Professor of Surgery at the University of Melbourne.

**Symposium**

The Department of Orthopaedic Surgery organized a symposium on spinal conditions on September 16 and 17, 1978.

**Prizes**

*The Society of Medical Officers of Health Essay Prize* for the best essay submitted in 1967-68 has been awarded to David Chan Moon Cheung.

## PUBLICATIONS

DEPARTMENT OF BIOCHEMISTRY

M. W. Poon, E.O'F Walsh, and M. L. Ng: 'Effects of morphine on the hormonal control of metabolism—IV morphine induced changes in sensitivity of the glucose-uptake system of muscle to extracellular magnesium', *Biochemical Pharmacology*, Vo.l 17, No. 8, pp. 1575-1581 (1968).

E.O'F Walsh: *An Introduction to Biochemistry* 2nd edition, (English Universities Press, London 1968).

DEPARTMENT OF MEDICINE

A. J. S. McFadzean and Rosie Young: 'Diabetes among the Chinese in Hong Kong', *Diabetes* Vol. 17, No. 4, pp. 219-228.

Zung Hong: 'The methylene blue decolorization test in the screening for erythrocyte glucose-6-phosphate dehydrogenase activity', *Journal of the Hong Kong Medical Technology Association* Vol. 1, No. 2, pp. 7-12.

DEPARTMENT OF ORTHOPAEDIC SURGERY

K. P. Chan and J. S. Shin: 'Brittain ischio-femoral arthrodesis for tuberculosis of the hip—an analysis of 76 cases', *Journal of Bone and Joint Surgery* 50A, Vol. 8 (1968).

DEPARTMENT OF PATHOLOGY

T. Sun, S. T. Chou, and J. B. Gibson: 'Route of entry of *Colonorchis sinensis* to the mammalian liver', *Experimental Parasitology* Vol. 22, pp. 346-351 (1968).

DEPARTMENT OF SURGERY

F. C. Y. Cheng (with Alan G. Cox): 'Lomotil in the treatment of episodic diarrhoes after vagotomy' *The British Journal of Clinical Practice* Vol. 22, No. 5. pp. 211-212 (May 1968).

# QUOTABLE QUOTES

(by V.G.)

The most famous general in medicine is "general malaise".

* * * *

Our Professor of Internal Medicine recently gave a lecture on Post-Splenectomy Fever, and was congratulated at the end, by a member of the audience for the voluminous amount of research done on this subject and for the intelligent interpretation of the results. The Professor declined accepting the priase and added: "I have a group of staff who helped to do much of the work, and as for the interpretation, they were always on hand for me to Consult and Insult!"

* * * *

At a recent Clinical-Pathological Conference on the Indications of Surgery for Pulmonary Tuberculosis, the surgeon who presented the case drew attention to the long period of time needed for results to be apparent when strictly *Medical* treatment is instituted. He pleaded for more consideration to be given for *Surgical* management, and remarked: "The worry and anxious anticipation of the outcome of Medical therapy on the part of a patient is not often realized by the Physician, and is certainly not demonstrated on a plain Radiogram of the chest!"


Eagero, 1ST YEAR MEDIC
ABOVE PHOTO TAKEN IN LAB.
after expt.


·售出有均房藥大各·

# 中醫師江濟時先生監製

## 醫有專科，藥有專長
## 男女生理，構造不同
## 調養藥物各異，理至明顯


參蛤蠶蛾丸，係男性專用補藥，以蠶蛾，蛤蚧，鹿尾耙等含有高度男性荷爾蒙，調補督脈之動物為主要製劑，（督脈為男性最主要之經脈）配合補氣補血，養陰興陽，滋潤臟腑之名貴地道中藥，古法新煉，藥力增強十倍。

男性服之，萎者復生，弱者復強，精神健旺，化白髮為白髮，增強少男發育，花甲老翁，都能恢復活力，誠男性無上之良藥也！


婦科疾病，身體瘦弱，多數由於氣血不足，經脈不調所引起，若能使氣血充盈，經脈調和，自然身壯力健，面色紅潤，精神飽滿，青春常駐，嬌艷永存。

「歸鹿毛鷄丸」，乃名中醫江濟時先生，四十多年臨床實驗，治療婦女經驗良方，藥用鹿參，白朮，雲茯苓，甘草，調補中氣，健脾消食，川芎，當歸，熟地，白芍，鹿茸，蒺藜，驅風補血，調養衝任，督，帶，諸脈，對婦女身體衰弱，及因身體衰弱所引起之婦科疾病，有對症下藥之妙，可謂一針見血，故婦女身體虛弱，婦科時病者，服食「歸鹿毛鷄丸」，自然轉弱為強，暗病消除，增強發育，滋潤臟腑，化白髮為黑髮，永保青春，舒肝解屈，健胃消食，故曾服用過之婦女，無不衷心稱讚，樂於介紹閨中姐妹購用云。

藥店有售

K四一六六四九
K八九四八九七

「更重要的是：他們熱愛社會主義新農村，熱愛貧下中農」。調查報告提到重要的一點：「他們比專業醫生好得多」，因此提議：

「第一：這樣可以生產，又可以服務社會。

「第二：醫學院招生的對象是：『赤脚醫生在農村滾上二三年，再進醫學院學習。』

「第三：一部份回校習醫，另外絕大部份却要堅持紮根農村。衛生院定期和『赤脚醫生』上下定期對調，加以提高。這樣做，既有利原來醫療衛生隊伍的改造，又有利於實踐中提高工作技能。」

## （五）展望

上文純粹用客觀方法報導。現在要談的，是中國將來醫學會發展的方向。這是一個極大的問題，批評錯誤實在難免，尚祈識者指正。

中國七億多人口的健康，是一個難以解決的問題。加以中國社會不發達，一般民智尚未達到高發展階段，因此，原有的衛生人員的負担，是相對地加重。

中國固然要發展尖端的醫學，但是基本是如何搞好農村和城市的人力分配。因此，無論中西醫，祇要有利於中國民生的，都有保留的價值。大陸的出勤追的手法取得祖方，是有理由的。

現有的各醫院的醫務人員，亦不應祇照顧大城市的健康，而忽畧鄉村的大多數人口。初期的巡迴醫療隊的價值可稱不少，但尚嫌不足。赤脚醫生的設立，是一項值得的嘗試。

然而怎樣地去保證該等醫務人員的質素問題，即是不容稍怠的。以幾年讀書經驗就拿起藥箱，到鄉村行醫，似乎是馬虎一點，他們起碼的醫學常識相信不大足够，就要承起關乎人命的大事。還有，以他們來作醫學預科生，似乎有冒着降低醫務人員質素的危險。

筆者却對把農村與城市醫務人員的對調方法加以贊同。這樣，鄉民與醫生都可得益不淺。

願中國人民的健康更進一步！

（編者按——歡迎各同學對此問題繼續發表意見。）

# 小記一則

嘉蒂華

換了一個新環境，進入了一個新階段，雖然已有二個月了，但總覺得不慣。整天爲這爲那的忙着，腦海中空空洞洞的，什麼也沒想，有的祇是些無緣無故的憎怒及牢騷。

日記中記下的滿是些看不順眼的人和物，聽不慣的言和談。香港大學在幾個月前還是我夢寐所求之處，現在進了來却又覺得也不過如此而已，對她缺少了親切和熟落感。新同學中有的是除了讀書什麼也沒他們份兒的。有的是滿口說自己是大懶蟲，作出個輕鬆狀，但實際上他們又何嘗不是如假包換的「挫書王」。更有的是大搖大擺，才做新丁便就擺出副神氣活現的「大仙」態度。同學們喜歡開一些批評他人的「討論會」，說實了，他們給別人亂下的評價，可要比那些三姑六婆的更可惡。此外，更聽不慣的，便是那些剛進大學第一年，就不停的嚷着畢業後要往別處跑。也許是從小在殖民地教育制度下長大，一切都放在其次，自己的利益永遠是在最前頭的。

這些大小事物都引起不滿，逐漸，連對自己也不滿起來了。心情非常矛盾，以前的美好憧憬，理想，消失得無影無蹤了。

在心情如此矛盾惡劣時，唯一的好去處就是往山上跑，找個靜靜的小角落，就是自己一個人，面對一片綠林，遠望平靜的海港和山巒，一直來的撇扭心情就會給一掃而空，對着大自然，我會領悟到自己所處所在。我是香港這個古怪但可愛社會中的一份子，是香港大學的一員，比起很多其他青年，我要幸運得多，又想到自己不正在理想的道路上邁進嗎！爲什麼却會對現實不滿意起來，想到這兒，心情輕鬆了起來，差些兒要忘我地高聲歡呼。

同學們，當你們也有不舒暢的心情時，讓大自然平靜你們的思潮，使你們領悟到進大學的眞正目的及人生的意義。我在此不過是仿效野人獻曝而已。

## （三）二十年來的變化

傳統的教育目的，是根源西方（美國）杜威所擬定的：教育是人生的一個過渡，教育祇不過是提供一個發展機會與一般的兒童和青年，使他們能夠獲得更多的知識。至於將來他們品性的發展方向，把他們的知識用來造福人羣社會或用來侵害他人以增進自己的私慾與否，則與教者無干。

中國大陸所推行的，則強調「學以致用」，「教育爲無產階級政治服務，教育與生產勞動相結合」，因此，他們提出「又紅又專」的口號。這可從一九五八年一月「工作方法六十條」見其大畧。於是，大陸醫學院自解放以後，即進行了「一邊學習，一邊行醫」的方法，由教授領導的農村巡迴醫療隊，有空暇時即往鄰近的村莊服務。這樣，對普通大衆的健康和醫學生的見識，從客觀方面來看，都有肯定的意義。還有，醫療人員和病者彼此間的距離，有一定程度的縮短，藉以「消滅體力和腦力的差別」。

一九六六年夏，中國大陸進行了舉世震驚的文化大革命，「鬧就是三年半。當時，由中共中央、國務院的聯合通知裏，有改革高等學校的招考辦法和徹底改革學制的意圖。六月進行了「揪黑幫」，八月進行了「革命串連，破四舊」運動。

個中原因，可以從北京喉舌「人民日報」的兩封信中見到一斑。六六年六月十八日有「讀者來函」要求「改革舊教育制度，改革舊教學的方針和方法，是文革的「重大任務」，這是因爲原來的「爲個人奮鬥、追逐個人名利地位」對中國前途有極大阻礙。隔日又提到「臨考試則脫離生產，學分第一，鑽書本的目的，是爲小洋房，小汽車，小家庭，而追求讀書」。

其實，大陸教育的改革，也不是文革鬧開始的。五〇年中央第七屆三中全會上，毛澤東要求逐步改革，以改變「幾千年來的舊科舉的延續，落後、反動的教育」，奪取「權威，學閥在意識形態領域的一個重要寶座」。六四年二月還提到「學制要縮短，進行直接生產」。經過近一年多的文革後，反對毛澤東的勢力在各方面，包括在學界的極多元老亦已被鬥垮或解除職務。六七年十月十四日由中央國務院、中央軍委、中央文革小組共同發出的「關於大中小學校復課鬧革命的通知」，提出「一邊教學、一邊進行改革」。然而社會性運動一發不可收拾，於是在六八年八月實施更嚴厲的鐵腕手段，由工人進駐學校，進行第二階段的改革。

最近，於七月二十二日「人民日報」引用了上海機床廠青年技術員的話，提出「學校與工廠相結合」。第四期的「紅旗」還提出四點，第三點是「拜工農爲師，赤脚老師上課堂，知識份子和青年學生走與工農相結合的道路，實行工農，教師，學生的結合的教學方法」；第四點提到要「參加實踐，在勞動中進行學習」。

在這場文革中，毛澤東的思想被神化起來，一切人民的成就，無論工業或醫學上，皆歸於毛思想的勝利。是禍是福，祇有留待後世歷史家去判斷好了。

## （四）赤脚醫生的形成

這種職業，其實應可說是半農半醫的衞生員。上文提到的是中國農村的醫生荒，歷中共統治的十多年來還未解決。文革的到來，使更多的醫務人員從城市下放到農村，但還不能夠完全妥善地照顧中國七億人口中百份之八十的農民的健康。赤脚醫生的成長，是一項嶄的嘗試。且看「人民日報」怎樣地報導：

「平均年齡是二十三歲，絕大部份是貧下中農的子女，祇有小學或初中文化程度，有的祇讀過二年半書」。

以這樣的程度，當然不能夠保證人民的健康。但是，他們却可以進行簡單的常見治療，預防，作爲宣傳媒介。該日報還介紹了河北的一個例子：

「好處是不脫產，一半時間參加勞動，生產大隊對他們補貼不多，貧下中農養得起。

# 中國大陸「赤脚醫生」的形成

口青松

## （一）前言

鴉片戰爭的燉火，開啓了這個東方大帝國故步自封的大門。隨着帝國主義勢力的入侵，西方文明陸續地被介紹到這個神秘的天朝。

初期西方醫藥的傳入，與傳教士實有不能分割的關係。他們在中國建教堂，築醫院和育嬰堂、孤兒院。他們亦漸漸發覺，要使他們的宗教在中國能建立起威信，除了要和達官貴人有好的聯絡外，更要在中國普通民衆取得他們的信賴。如果能「藥到回春」，自然信徒日增。

清末李鴻章、張之洞所進行的社會和政治改革，也在形式上把西方醫藥介紹到中國來。八國聯軍之役後，外人在華勢力益加澎漲，新的西方醫學也更多地傳入中國，如北京美國的協和醫院，上海由德人創辦的藥機專科學院，就是著明的例子。

孫中山辛亥革命以迄中日抗戰期間，雖說通都大邑漸漸西化，而傳統的中國農村所賴以保持健康的，仍然是祖傳秘方，把脈，針灸等。西醫祇能在各大都市盛行。近世中國醫藥的沒有方法發展，與社會的混亂情形也不無關係，軍閥割據，民不聊生，那有什麼時間和心情去弄好科學發展呢？

隨着北京政府於一九四九年完成整個中國大陸的一統後，中國社會進行了一連串史無前例的劇烈改革。極多的舊傳統與舊思想亦從中國的社會連根拔起。這方面的得失，亦祇能由後世的歷史學者作公正的判斷。我現在所要談的，就是現時中國大陸，特別在文化大革命後中國的醫學情形。這是我們旅居國外的華僑所應關心垂注的。

## （二）背景

國共內戰期間，中共於其佔領區域內，有巡迴醫療隊的設立。成員有中、西醫生，方法則採用中西合璧，包括針灸等。成績據稱十分美滿。

隨着中國大陸的統一，這項方法亦沿用到現在。大陸醫學院採用中西醫合併教授的方法，新式的西法和優良的中醫都一鼓腦兒教授給了各醫學院的學生。

新的醫學研究機構，在「中國科學院」管轄下紛紛成立。他們研究的目的，其一爲把舊中國有價值的醫藥單方從民間發掘出來，加以重估其價值，並爲國家的醫學寶庫增加了可貴的知識。另一方面，則進行了多方面新的研究，其中有些成果突破了西方先進國家的水平。上海的斷手再植，杭州人工胰島素的合成，湯非凡教授的沙眼病毒的發現，九十公斤子宮癌的割除，都是世界第一。這方面，又一再證明中國人民的智慧在有充份發展的條件下，並不會比世界上任何民族都差。這些成果，作爲中國人的一份子都應可以感到自豪的。

然而，最大的問題，是在如何地着手去解決困擾着中國國民健康的諸疾病。像血吸蟲病，在中國黃河長江流域，侵襲着二千萬人的健康。珠江三角州則被肝蟲盤據着。西北的甘涼一帶，因沙眼而失明的人，通處都見。這些疾病所構成的社會性問題，是任何執政者都應該留意。隨着大陸局勢的安定，中共亦曾於這方面下過功夫，據說現時情形好了一些。

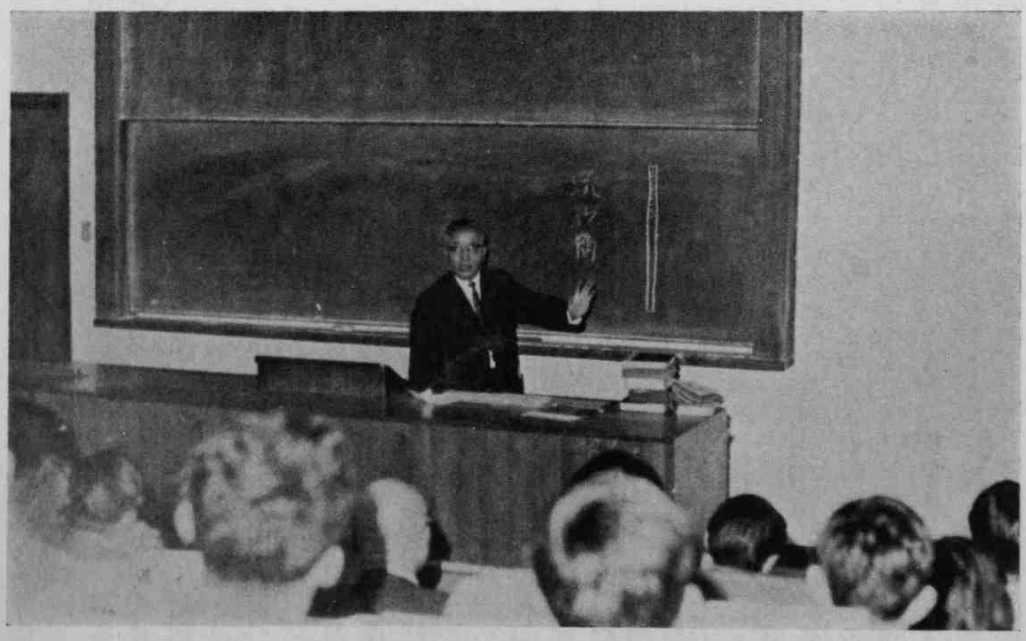
談醫學教育，首先要談的是教育的變遷。

醫學上最大的貢獻是預防，能預防則可安全無事。那麼中國醫學有沒有預防呢？有沒有免疫的方法呢？有沒有 Vaccine 呢？好像都沒有。我現說一故事：就是天花。天花死人千萬，但總無辦法。中國在宋代之時（九九八年）盛行到極點，如何防範呢？當時四川有一人，會種天花預防。他把天花發出來的漿（痘漿），乾了後變成一個痂，乾了磨成粉，其實內部仍有天花菌的；然後把它吹進鼻裏。吸後很輕的發了一日、兩日、三日天花，發後就不會再加重發。這是中國發明的免疫療法，九九八年後，古時交通不便，學術傳佈困難。差不多五六個世紀都沒有廣泛應用，原因是中國太大，一個地方的發明他處不知，不同現在一發明，全世界都知到了。到一六八二年，即康熙二十七年，中國的北方各省，把種痘在鼻裏的方法廣泛應用，使天花出兩三日便完了，此後天花減少了很多。後來傳到日本，傳到朝鮮（高麗），都認爲中國這預防發明了不起。由傳到俄國，和土耳其，英國的駐土大使又把此法傳到英國。待到一七九八年英人 GENNER 發明種牛痘的方法，用牛身上的漿取出來作天花預防。至於他知否中國的種痘法，我就無法查到了。不過多多少少總會受到影響的。

另一事就是中國的針灸傳到西方，法國的針灸史，都把中國放在首位。現有二三百種針灸的書：德、法、日、美等都有。但法國對中國的醫藥特別注意。有一個法國人作中國醫學史大綱，那裏有很多中國醫藥方法，傳佈很廣。

我認爲各位對科學有認識，有科學的研究方法，所以希望各位對中國藥材多加注意。我們中醫有很多發明，但等於一名啞巴，不能說出來。如果將來各位需要我講，我可以把很多有用的中藥介紹出來的。

今天很感謝你們叫我來講話，因爲我實在有很多藥無法告訴各位。希望以後有機會逐樣講。我的目的，就是想你們不只做一個醫生，要做一個發明家。在中國的醫藥方法中，正如一個礦藏，一經發掘，必定大有所獲的。



陳存仁醫師演講神態

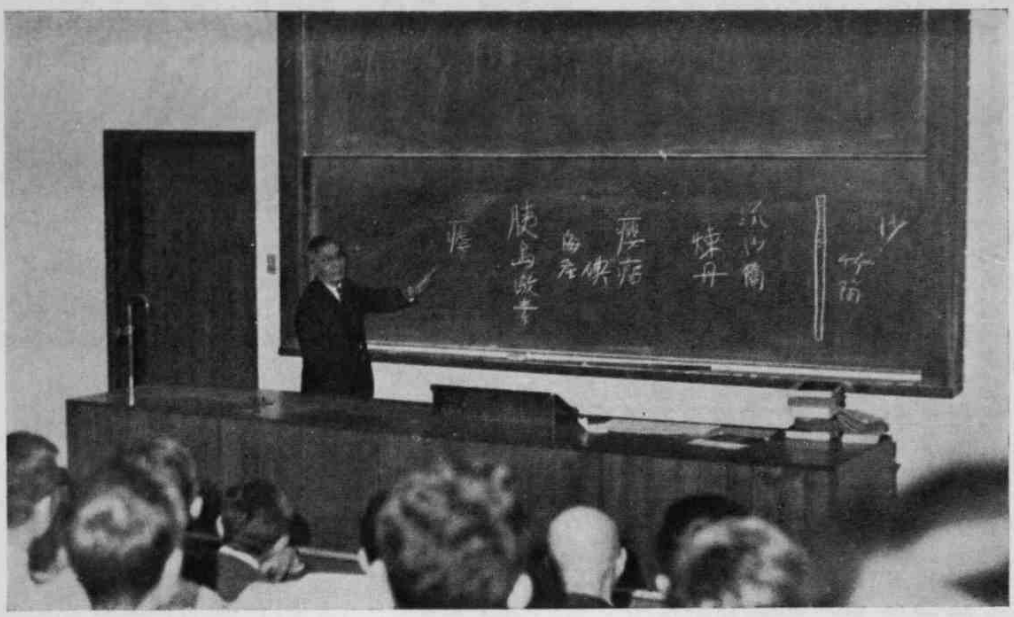
中國有一最出名之事；十三世紀時，有人出了一本書「洗寃錄」，是法醫學。書上講出的話，和現時法醫學所知的，有很多相彷彿，可見那人寫的內容有多麼重要。當時有死人的案件申寃，都依據洗寃錄。後來一個德國駐福建使館的人，見中國人對驗屍很有辦法，所以將那書譯成德文，西方醫學多多少少對中國法醫學醫書有關係。這也是中國的光榮。

十七世紀時，李時珍把所有中國藥材，寫成「本草綱目」。該書現有七國翻譯（德、法、英、日、俄等）。英文本是上海一個西人「伊博恩」譯出來的。譯出來之後，他就死了。他太太把英文「本草綱目」帶到香港，他託朋友在香港學術的最高學府，請他們印。第一次，當全部都打好了時，但沒法做好一個目錄；後來竟然使人全部取消了。至今尚未出版，眞是很可惜的。

至於李時珍，差不多全世界都知道中國有這一個人。爲什麼？中國人小孩子的「臍帶」，是全世界最早的賀爾蒙劑，在「本草綱目」翻譯成幾國的譯本後，我相信對德國人「臍帶劑」的發明，是有一定的功勞的。還有現在小孩子出痲疹，要他出得輕些，假使沒有預防針，就用那「臍帶」來做針劑，那方法是很平安的。至於胚胎劑，有人認爲很不潔，實在是荷爾蒙的大發明。又小孩子的「童便」，講出來認爲不好，但小孩子的小便，含有賀爾蒙在內，我告訴各位：日本人出品的『賀爾蒙劑』、名爲『英男兒蒙』實在是用小孩童便製。他們如何得到童便呢？就是在小學堂叫學生大家一同出來小便，然後全部給武田藥廠收去。但銷路後來太大，於是另用新法：就是用馬的小便。馬的小便和小孩的一樣。現養有很多馬作此用途的。

十七世紀（一六九〇年），日本科學化，請了荷蘭的植物學專家去整理全國的植物學，有一個名叫 Kacupfer 的人，是植物分類學的專家，他到日本之後，發現日本很多藥物和中國的一樣。因爲徐福到日本帶了三千童男童女，代秦始皇要取長生不老之藥，要找一個醫生，同時又是道家，以徐福在當時很有地位和名氣的。選中了徐福後，徐福說長生不老之藥是在蓬萊島，是東方神仙之島。爲着要得始皇保證，他帶了三千童男童女，幾十隻船，並有很多藥材的種子，穀物等，全部帶到日本去。所以日本有很多人都原是中國人，是徐福帶去三千童男童女的後裔。日本有很多中藥，他們稱做「漢藥」。因爲漢藥的繁殖，令到漢方醫學極爲發達。那位專家一看之下，非常驚奇。一方面他幫助日本做分類工作，一方面到中國把很多藥材的種子搜集去。所以現時外國的藥廠出的很多是中國藥：如龍胆草、薄荷、黃連、遠志、覆盆子等都是。這些都是那位荷蘭藥家帶到歐洲、歐洲帶到各國；後來傳到美國，所以美國有很多中國藥。我曾到美國一藥廠買到許多 HERBS 的烹飪配件。原來都是中國藥物，這種東西很普通，現時處處都有發售。有一種意大利的馬天尼酒，人說那酒是最好的，其實是用中國當歸、大黃、陳皮等中國藥。歐洲各國對中國的藥材，都非常稱揚。英國倫敦有十多間草藥舖，內中大部份是中國藥物。歐洲很多人認爲有時食西藥作用太大，食後感到不適，於是寧去買草藥。有一時期我在香港報紙讀到：中藥幾百斤幾百斤運過去。有時還在西餐內放些中藥：丁香、肉桂等等，這當然要看廚的人如何。有些廠藥五十多種中，中國藥佔了三十幾種，我現帶一瓶壹蔻給大家看。醫藥發達如德國人，也認識當歸等的重要性，認爲是名貴的藥。我爲何要告訴各位這些呢？就是希望各位能對中藥加以研究。因爲這是中國文化上的一種光榮。

我們江蘇人陳克恢，他父親是個中醫，他自己到北京協和醫學院裏讀書，到協和醫院實習後，要寫畢業論文，有一次問他父親有何材料？他爸說：西人的方法如何我不知，但我告訴你，用麻黃醫氣喘是很好的。他於是做一篇論文，把用麻黃方法介紹出來。於是日本人立即把麻黃應用，發覺它非常有效。東西各國藥廠都知道了，後來 LY 藥廠便出了麻黃素。現發明權已過了二十五年，英、法、德各國都用麻黃素，或用「腎上腺素」，其實都是從麻黃煉出來的。我希望你們把中藥介紹到全世界，不單是一國，是全球。現知很多藥都是從中國介紹出來，全世界中國藥材有一百六十種以上。



陳氏講中藥傳入歐洲之例子

# 中國歷代醫學的過程

陳存仁

主席、各位：

我今天來講話，實在很慚愧。我是一個中醫，覺得你們各位知識都比我淵博。現在科學發達，可以打開腦，可以換心，可以換腎。但我們自己中國的醫學，却沒有什麼進步。中醫對於病：各種治療方法。然則中醫所靠是什麼呢？是靠藥材。藥材乃是不可消滅的中醫工具。很多藥材都有功效，如在醫學地位上說，眞的：我相信我們這些是不乏科學價值的。

中國的藥劑是從很多藥材配合而成。最早在神農之時，所謂「神農嘗百草」：他把各種草的味道來嘗。古今所用的草藥，有一部份由他發現：所以，他可說是中國最早的一個藥物發明家。這是我們中國人的一種光榮。我曾看過一英國人所作的世界醫學史 Dr. Arturo Castiglioni "A History of Medicine"，他認爲世界最早的藥物發明人，是中國的神農氏。

遠在幾千年前，我們已有病名的引用；在三千年前的甲骨文上，已見幾種病名。藥方在兩千年前，也已經有用到。這藥方「流沙墜簡」寫在一塊竹片之上，說出何病用何藥。這些竹片就是世界最早的藥方，是現時的稀世奇珍。中國所存不多；英國的大英博物館內，我曾見過六張，於是我立刻把它攝成照片。日本有十多張，我也同樣做。這些竹片是用刀切用的斷片，是由一個英國人斯坦因爵士和一個法國人伯希和氏，在中國西部沙漠裏發現。

現在舉世認爲醫藥最重要的是預防，所謂「預防勝於治療」。中醫兩千年前，已知道這點：但當時沒有 Vaccine，也沒有預防針。有的是：清潔和心理衛生、喜、怒、哀、樂有節制（把神經系統節制）。營養方面，中國人很早已知道它的重要性；例如某些病，可在食物或飲料方面補足一下；中國人吃的豆類、青菜等，都很有營養，不一定魚翅才是有營養的。

麻醉的方法，西方在一八四七年發明，然而中國在第二世紀（漢朝）之時，已會應用麻醉藥。現有幾張藥方留下，是關於用麻醉藥的。最著名的故事，是關公給華陀開刀一事。華陀一面開刀，關公一面下棋。這手術終於成功，華陀把毒箭取了出來：他用的就是麻醉的方法。麻醉藥方大概有三張，各位如有興趣，我可告訴各位。你們看電影可能見過；用一枝香能使人暈倒，這也是一種麻醉方法。

中國最流行的傳染病是傷寒，即是腸熱症。第二世紀時，張仲景發明醫治傷寒的方法，十分見效。第四世紀，道教盛行，煉丹以求長生不老，並用以醫病。當時中國用硃砂煉成昇汞，再煉成紅丹和白丹。有幾本書是西人出版的，說明當時中國煉丹術就是化學作用的濫觴。第七世紀，我們對病名的分類方法，有了進步。例如巢元芳的『病候源論』，都一一分類出來。這時有一本『千金方』把很多藥方介紹。

糖尿病是用什麼來醫呢？我們用胰。何時開始呢？第七世紀已有用了。現時的胰島素發明之後，救了很多人，但我們早已用胰島素了。我們中醫有所發明，比起你們西醫，是有點不值，何以言之？即如西醫發明用胰島素，可在雜誌上發表，發表後送到醫院試驗，試驗成功，注射後把糖尿消除，於是發明人得了專權，全世界都有。但中國很多藥方，我有你不知，你有我也不知，大家都不知。我雖知道很多，但沒有辦法寫論文，無法到世界雜誌上發表，不能有幾百個人試驗。所以中國有很多發明，自己人不知，到人家發明後，一看才知自己早已知道了。但有誰信你呢？

你們一定讀過醫藥史：香港在醫藥貢獻最大的，就是知道瘧疾。會有一個香港醫學教授，說瘧疾是由瘧蚊咬而發生的。其實我們第七世紀唐時，在『千金方』上已經講出『蚊瘧』的名辭。我們雖知道，但人家看書時却揩裏糊塗沒有講，在南北朝時，我們知維他命。那時醫腳氣病用豆：紅豆、黑豆等，即今的維他命B，有人腳腫，則給他扁豆，飲紅豆湯，大豆湯，或吃其他豆。

# 香港大學

## 醫學院學生會會刊

一九六八年　（第二期）



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