

## Medical Students' Awareness of the Population Problem

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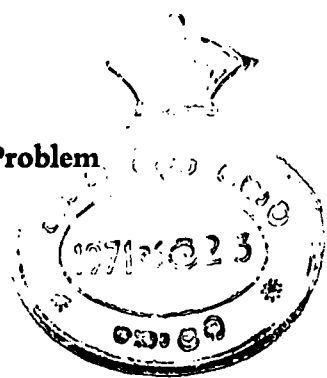
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THAT the unprecedented rate of increase in the population, occasioned by a dramatic fall in the death rate without a concomitant fall in the birth rate, is largely responsible for the economic ills of the country has been the verdict of Ceylon's Department of National Planning (National Planning Council, 1959). Yet, remarkably little has been done towards the alleviation of this condition. The inactivity has been partly due to the fact that though the rate of population growth has been considered problematic by national planners, the large bulk of the population does not appear to be much perturbed by it. As a social problem is a phenomenon whose incidence transcends the limits of social tolerance, population growth will be considered problematic only when a large segment of the population becomes aware of its magnitude and its social and economic consequences. What is more, the success that a program of social control meets with depends on the willingness of the people to have something done in that connection and this willingness must necessarily have its roots in the awareness of the problem (Horton and Leslie, 1955).

National Programs of Fertility and Population Control, undertaken in recent times by the Governments of India, Pakistan, Japan, Korea and Taiwan amply demonstrate the importance of the role played by public desire in the determination of its success. They have also stressed the importance of preliminary programs of propaganda or community education to ensure greater success of the actual program of population control (Kiser, 1962). How best this preliminary program could be operated is generally unknown, though information on the subject is now being gradually collected. The change of values and attitudes has been the subject of much research. This research has revealed that a relatively effective method of effecting such change lies in the use of prestigious members of the group whose values and attitudes are attempted to be changed as agents or instruments of that change (Homans, 1950).

Medical Students, during the five year period of training at the Faculty of Medicine at the University of Ceylon, are given lectures on population growth, on fertility and mortality but not on methods of population and fertility control.\* In the clinical work that they do during this period of training, they are, however, exposed to the work that is

\* After this study, a course on Family Planning has been introduced into the curriculum.

being done in this connection by the Family Planning Association of Ceylon and the Ceylon-Swedish Family Planning Pilot Project. In addition to this, in 1964 the Family Planning Association of Ceylon conducted a series of seminars on various aspects of population growth. These seminars were widely publicised in the local press and were open to the public. In September 1964 the Ceylon Association for the Advancement of Science held a seminar on a Population Policy for Ceylon. During the same period popular lectures on the subject were given by Professor Frank Notstein and Professor Vincent Whitney. This paper seeks to determine what effect all this propaganda has had on medical students.

A questionnaire was distributed in 1965 to final year medical students who were requested to complete the questionnaire and return it. Participation in the study was on a purely voluntary basis but as all seventy eight students in the class returned the completed questionnaire there was no element of bias that entered into the picture. Sixty students (77% of the sample) stated in their answers that a national program of population control was definitely needed for Ceylon. Of the remaining eighteen who were not so emphatic about such a program, eight (44%) stated that though such a program be needed it was not a matter of critical importance, six (33%) were adamant that such a program was not necessary while four (23%) were undecided on the point. Of those insisting on the need of a national program 7% claimed that their sentiments on the problem were influenced by heird religious beliefs while among those who felt there existed no such need, 50% admitted being so influenced. From the point of view of religious beliefs the sample consisted mainly of Buddhists (29), Hindus (21), Protestant Christians (14) and Roman Catholics (8). The group that felt that there was a strong need for a national program of population control—the "Yes" Group—contained only a small proportion of Roman Catholics. These persons constituted the largest single religious group within the "No" Group—those who felt that there existed no such need (Table 1). In this connection it is interesting to note that 14% of the Buddhists, 10% of the Hindus, 50% of the Roman Catholics and all those who did not give their religious affiliations claimed that their sentiments on the subject were influenced by their religious beliefs.

Opinions held by a person could have their basis in factual data or in the opinions held by others, usually considered prestigious persons in the group in which the person claims membership (Homans, 1950). When the former is the case there has been an intelligent appraisal of the problem, as should be the position with educated and intelligent persons. No such appraisal would have occurred when the opinion is only the result of contagion. The claim that Ceylon needs a national program of population control could have its basis either in the awareness of the factual situation or in the opinion of others. Likewise, the opposite view too could have its basis in the one or the other. In view of the fact that a large proportion of the "No" Group confessed that their attitude to the problem is influenced by religious sentiments, it would be expected that their belief is the result of contagion while the "Yes" Group, in contradistinction, would be expected to have as the basis of their belief the evaluation of the factual situation.

The population of Ceylon at the Census of 1963 was found to be 10.8 million. The estimated mid-year population in 1964 was 11.4 million. The annual rate of growth, in the face of a more or less constant birth rate and a decreasing death rate was 2.8% which

TABLE 1. *Religious Beliefs of Respondents.*

Religion	"Yes" Group %	"No" Group %	Number of Respondents
Buddhists	87	13	29
Hindus	86	14	21
Protestant Christians	86	14	14
Roman Catholics	25	75	8
Muslims	100	—	1
Other <sup>1</sup>	100	—	2
Not Known	—	100	3
Total	77	23	78

1. Includes one who claimed that he was a Marxist and one who claimed that he was a Free Thinker.

gives an expected doubling of the population in a little over 25 years. A correct assessment of the total population was made by a little over half the respondents. The changes in the birth rate were not correctly assessed. They all thought that the birth rate has increased within the last 20 years. The factual situation with regard to the death rate was reflected only in a little over half the responses; and with regard to the time anticipated for doubling of the population, in a little less than a third of them. An interesting feature about these assessments is not the error contained therein but the fact that the assessment of the problem appeared to be much nearer the factual situation in the case of the "No" Group than in the case of the "Yes" Group. A larger segment of the former appeared to give the correct total population, were correct regarding the changes in the death rate, were less incorrect regarding the changes in the birth rate, and were correct regarding the time necessary for doubling of the population. The responses to these questions indicate the assessment of the problem by the "Yes" Group to be less accurate than that by the "No" Group. Yet a larger proportion of the former group than the latter thought that the population would double in a shorter period (Table 2).

The empirical evidence is contrary to the expectations and suggests the hypothesis that medical students tend to appraise themselves of the factual situation only when desirous of rejecting the position presented them by their teachers—representatives of the medical profession in which they seek membership—in favour of some other position. If this hypothesis is correct we would expect

(a) the "No" Group to have a larger proportion than the "Yes" Group contending a neutral position by the medical profession;

TABLE 2. *Assessment of Population Changes by Respondents.*

	"Yes" Group %	"No" Group %	Total %
<i>Total Population</i>			
Correct Assessment	52	72	59
Lower than Actual	43	28	38
Higher than Actual	5	—	3

<i>Changes in Birth Rate</i>			
Correct Assessment	—	—	—
Slightly higher than actual	18	22	19
Much higher than actual	82	78	81
<i>Changes in Death Rate</i>			
Correct Assessment	60	69	54
Slightly higher than actual	28	12	31
Much higher than actual	12	19	13
<i>Doubling of Population</i>			
Correct Assessment	32	33	32
Higher than actual	40	27	37
Lower than actual	28	40	31

(b) The "Yes" Group to predominantly contend that that the medical profession is in favour of population and fertility control; and

(c) The "No" Group to have a larger segment than the "Yes" Group which claims that the medical profession is against such control.

The figures presented in Table 3 indicate that this is the position. In contradistinction to the supposed views of the medical profession is the supposed position of the Government (which perhaps does not influence medical students much) where the responses of the two groups do not display any marked difference. Further support for the hypothesis comes from the fact that a larger proportion of the "No" Group contended that they have never heard of population or fertility control in the course of their medical training (Table 4). Taken in conjunction with a better knowledge of the factual situation and the part that religious sentiments played in the fashioning of their opinions, this denial appears to be a defence mechanism against the rejection of a position held by a group with which the respondents identify themselves.

It is perhaps pertinent to note here that though a large proportion of the "No" Group claimed ignorance of family planning method—a position consistent with their claim of no such instruction in their medical training, their knowledge of such methods were on the whole much better than that of the "Yes" Group. That the claim of ignorance of family planning methods does not represent the factual situation is obvious. 16% of the "Yes" Group and 44% of the "No" Group claimed complete ignorance of family planning methods, yet, only 5% of the former group and 11% of the latter claimed never to have heard of family planning or population problems at all (Table 5). In this connection it might be mentioned that apart from their medical training, newspapers, books, magazines, friends and fellow students constituted the most popular sources of information. A marked difference between the two groups is that while a larger proportion of the "Yes" Group than the "No" Group got such information from radio programs and from parents, a larger proportion of the "No" Group were so informed by their relatives.

TABLE 3. *Supposed Position of the Medical Profession and the Government on Family Planning.*

	"Yes" Group %	"No" Group %	Total %
<i>Medical Profession</i>			
In Favour	77	39	68
Neutral	18	33	22
Against	5	28	10
<i>Government</i>			
In Favour	62	67	62
Neutral	35	22	32
Against	3	11	6

 TABLE 4. *Knowledge of Family Planning Methods.*

	"Yes" Group %	"No" Group %	Total %
Good	18	22	20
Fair	28	28	28
Poor	38	6	31
Ignorant	16	44	21

 TABLE 5. *Source of Family Planning Information.*

	"Yes" Group %	"No" Group %	Total %
No Information	5	11	6
Medical Training	85	78	83
Newspapers	80	78	78
Books	65	50	61
Magazines and Periodicals	62	50	59
Radio Programs	10	6	9
Meetings	13	17	14
Parents	12	5	10
Relatives	12	33	18
Friends and Fellow Students	77	56	71

An important aspect of a belief or opinion is its strength. It is consequently pertinent to determine the extent to which the opinion would influence their actual behaviour. In this connection questions were asked as to the desired size of the family, the personal use of contraceptives, and the advice to patients on family planning methods both on request and without request (Table 6). Those of the "Yes" Group want decidedly smaller families than those of the "No" Group, are more willing to use contraceptives themselves and are

willing to give advice on family planning methods whether requested or not. Their verbalisation of anticipated behaviour could be expected to be influenced to some extent by prevalent practices. Though a larger proportion of the "No" Group claimed that they did not know whether most people planned their families and used family planning methods, the proportion of those claiming that such was the practice and that such was not the practice was more or less the same for both groups (Table 7). Be this as it may, neither the "Yes" nor the "No" Group contends that the need to regulate population growth is the country's most pressing problem. This need has been relegated to a third position by the "Yes" Group while the "No" Group considered it the least important among the six problems presented. Both groups agree that the most pressing problems are the need to increase economic growth and personal income and the need to increase food supply (Table 3).

TABLE 6. *Personal Behaviour on Matters Connected with Population Growth.*

	"Yes" Group %	"No" Group %	Total %
<i>Desired Size of Family</i>			
No Children	8	—	6
1—3 children	45	11	37
4—6 children	40	56	44
7—9 children	—	—	—
Over 9 children	2	17	5
Not Known	5	16	8
<i>Anticipated Personal Use of Contraceptives.</i>			
Yes	67	22	56
No	18	56	27
Not Known	15	22	17
<i>Willingness to Advise on Family Planning Methods When Requested.</i>			
Yes	97	56	87
No	3	44	13
<i>Willingness to give unsolicited Advice on Family Planning Methods.</i>			
Yes	75	33	65
No	25	67	35

TABLE 7. *Supposed Prevalent Use of Family Planning Methods in Ceylon.*

	"Yes" Group %	"No" Group %	Total %
Definitely practised by Most People	18	17	18
Probably Practised by Most People	40	33	38
Probably not Practised by Most People	23	22	23
Definitely not Practised by Most People	17	11	15
Not Known	2	17	6

TABLE 8. *Assessment of the Country's Problems.*

	"Yes" Group %	"No" Group %	Total %
Defence of Country and Preservation of National Unity	11	22	14
Increase Economic Growth and Personal Income	30	26	30
Increase Food Supply	24	26	25
Regulate Population Growth	20	1	16
Improve Public Health and Sanitation	9	14	10
Increase Educational Opportunities	6	11	5

The figures are the average for each group calculated by giving  $\frac{1}{3}$  point for a first place ranking,  $\frac{2}{3}$  point for a second and  $\frac{1}{3}$  for a third.

## SUMMARY

In this paper answers to a Questionnaire distributed to final year medical students in 1965 (78 in number) have been analysed. Participation in the study was purely voluntary and all 78 in the class returned the questionnaire answered. The purpose of the questionnaire was to find out the awareness of medical students of the population problem and the action needed. 60 students (77% of the sample) stated in their answers that a national program of population control was definitely needed for Ceylon. Of the remaining 18 who were not so emphatic about such a program, 8 (44%) stated that though such a program be needed, it was not a matter of critical importance; 6 (33%) were adamant that such a program was not necessary, while 4 (23%) were undecided on the point. 7 per cent of those who insisted on the need of a national program claimed that their sentiments on the problem were influenced by their religious beliefs. Among those who felt that there was such a need 50 per cent admitted that this was influenced by religious beliefs. The questionnaire issued to the students is included. Those who felt that there was a strong need for a population control program have been designated as the 'YES' group; those who felt there was no such need have been designated as the 'NO' group. The religious beliefs of the respondents and the influence of such beliefs on the sentiments on the subject are shown. The assessment of population changes by respondents is discussed. The answers to the supposed position of the medical profession and the government policy, the knowledge of family planning methods, source of the family planning information and their uses and the assessment of the country's problems as found in the answers in the questionnaire are discussed.

The interesting feature of these assessments is not the error contained therein, but the fact that the assessment of the problem appeared to be much nearer the factual situation in the case of the 'NO' group than in the case of the 'YES' group.

## REFERENCES

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## Questionnaire

1. What is the present population of the country ?
2. Is the population of the country growing ?
  - (a) Yes
  - (b) No
3. If yes to Question 2 how many years will it take to double its present size ?
 

(a) 20	(b) 30	(c) 50
(d) 100	(e) 500	(f) 1000
4. Please list in order of importance, the three most important problems your country faces in the next twenty-five years.
  - (a) The need to defend the country and preserve national unity.
  - (b) The need to increase economic growth and personal incomes.
  - (c) The need to increase food supplies.
  - (d) The need to regulate population growth.
  - (e) The need to improve public health and sanitation.
  - (f) The need to increase educational opportunities.
5. In the last twenty years has the birth rate in the country gone up ?
 

If yes

  - (a) up considerably
  - (b) up, but not a large amount

If no

  - (c) on or about the same rate as before
  - (d) down, but not a large amount
  - (e) down considerably
  - (f) I do not know.
6. In the last twenty years has the death rate in the country gone up ?
 

If yes

  - (a) up considerably
  - (b) up, but not a large amount

If no

  - (c) on or about the same rate as before
  - (d) down, but not a large amount
  - (e) down considerably
  - (f) I do not know.
7. Today, changes in the rate of population growth in the country are *most* affected by :
  - (a) changes in the birth rate
  - (b) changes in the death rate
  - (c) changes in both birth and death rates
  - (d) changes in the number of people entering and leaving the country.
8. In the last month, have you talked about family planning
  - A. with your medical associates ? (a) Yes (b) No
  - B. with non-medical people ? (a) Yes (b) No
9. Have you heard of family planning from any of the following sources ? Please list as many answers as you need.
  - (a) Newspapers.
  - (b) Books.
  - (c) Magazines or Periodicals.
  - (d) Radio or Television programs.
  - (e) Meetings, Community announcements and programs.
  - (f) Parents.

- (g) Relatives.
- (h) Friends or Fellow students.
- (i) I have not heard about birth control or population problems at all.

10. What sources of guidance on family planning are now available that you know of? Please list as many answers as you need.

- (a) Medical advice from doctors
- (b) Advise from clinics set up for this purpose
- (c) Government announcements and policies
- (d) Programs actually set up
- (e) Parents
- (f) Friends and fellow students
- (g) Relatives
- (h) None of the above choices.

11. Do you think that some method of family planning is practised by most people in the country?

*If Yes*

- (a) Yes, definitely
- (b) Yes, probably

*If No*

- (a) No, probably not
- (b) No, definitely not
- (c) I do not know.

12. If Number 11 is yes, what method do you think they use most?

13. What is your feeling as to the need for a national program for family planning?

*If Yes*

- (a) A national program is definitely needed
- (b) A national program may be needed, but is not of critical importance

*If No*

- (a) A national program is definitely not needed at all
- (b) I have no opinion.

14. Does the Government have a policy or a position on family planning?

- (a) Yes, definitely in favour
- (b) No stated position but probably in favour
- (c) The Government takes no position
- (d) No stated position but probably against
- (e) Yes, definitely against.

15. If there is a government program for family planning, how effective would you say it has been?

- (a) It has definitely been effective
- (b) It is probably effective
- (c) There is a program but I do not know how effective it is
- (d) It is probably not effective
- (e) It is definitely not effective
- (f) There is no program I know about.

16. What do you think about what is being done about family planning?

- (a) There is too much being done
- (b) There is just the right amount being done
- (c) There is not enough being done
- (d) I have no opinion.

17. What is the medical profession's view on family planning?

*If in favour*

- (a) definitely
- (b) probably

*If against*

- (c) not particularly against
- (d) definitely against

*Other*

- (e) there is no generally accepted view by the medical profession
- (f) I do not know what the general opinion is.

18. Have you heard about family planning in school or in your medical training ?

- (a) Yes  
(b) No

If yes, please note

- (a) where you heard  
(b) in type of course or class  
(c) at what year.

19. Do you know of any places in this area where family planning information and supplies are given out ?

- (a) Yes  
(b) No

If Yes, do you remember

- (a) where the place is  
(b) who gives it out  
(c) is it free or for payment.

20. If you go into medical practice, will you give family planning advice to those patients who ask for it ?

- (a) Yes  
(b) No

21. Will you give family planning advice to those who may not ask for it ?

- (a) Yes  
(b) No

22. How many family planning methods do you know of ?

Please list them below.

- 1.
- 2.
- 3.
- 4.
- 5.

23. Which method do you think is the most practical and effective ?

What is your age ?

Sex

Religion

Are you married ?

(a) Yes (b) No

If Yes, how many years have you been married ?

How many children do you have ?

Boys

Ages

Girls

Ages

Looking ahead to your future, how many children do you want ?

Boys

Girls

Do you think that you will use (or have you used already) some method of family planning ?

(a) Yes

(b) No

If Yes, what method do you think you will use ?

Are your feelings about family planning affected by your religious beliefs ?

(a) Yes

(b) No.