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**PREGNANCY AND ABORTION
IN ADOLESCENCE**

Report of a WHO Meeting

WORLD HEALTH ORGANIZATION

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MEETING ON PREGNANCY AND ABORTION IN ADOLESCENCE

Geneva, 24-28 June 1974

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PREGNANCY AND ABORTION IN ADOLESCENCE

Report of a WHO Meeting

INTRODUCTION

A previous WHO meeting ^a has expressed concern at the relative lack of information about the adolescent community, the specific health problems that occur, and the types of service that would be required to meet them. Concern has also been expressed about the tendency ^b within many health services to neglect the needs of adolescents in favour of those of other age groups.

One area of adolescent health that has received little attention but has in recent years caused increasing concern at both national and international levels is that of reproductive behaviour and, specifically, of the physiological, psychosocial, and legal implications of pregnancy and abortion in the adolescent girl.

As part of a larger programme being undertaken by WHO to identify health-related problems and to design appropriate services in the related areas of human reproduction, human sexuality, and abortion, this meeting was convened to :

- (a) review the current situation in relation to pregnancy and abortion in adolescents in different cultural settings ;
- (b) identify variables that influence sexual and reproductive activity in adolescence ;
- (c) identify the short-term and long-term sequelae and implications of pregnancy and abortion in adolescence ;
- (d) identify special characteristics of reproductive health in adolescents ;
- (e) review the current and projected research and service needs.

The Meeting considered background documents covering the medical, psychiatric, sociological, and legal aspects of pregnancy and abortion

^a WHO Technical Report Series, No. 308, 1965.

^b WHO Technical Report Series, No. 300, 1965.

among adolescents as well as a review of information from developing countries. In addition, participants reported on the known characteristics of adolescent pregnancy and abortion in their respective countries and the types of service that are at present being used to meet the health problems felt to be associated with pregnancy and abortion in adolescence.

THE PROBLEM OF PREGNANCY AND ABORTION IN ADOLESCENCE

Any assessment of the current situation regarding reproductive behaviour and the incidence of pregnancy and abortion among adolescents must necessarily be made on the basis of insufficient empirical data and some anecdotal information. With few exceptions, most of the studies that have been conducted have reflected the situation as it exists in industrialized societies and even in these the methodological approaches have been sufficiently different to make comparative analysis of findings difficult.

What data are available, however, suggest that patterns of sexual and reproductive behaviour have changed significantly in many countries in recent years. For example, the probability of coital relations occurring before marriage has increased, as has the likelihood of adolescents experiencing their first coital relations during the early teens.^{a, b, c} A number of countries have also reported substantial increases in recent years in rates of birth out of wedlock^d and in abortion,^e with adolescents constituting a significant proportion of the cases coming to the attention of health and social service agencies.

^a ZELNICK, J. F. & KANTNER, M. The probability of premarital intercourse. *Social Science Research*, 1 (3) : 335-341 (1972).

^b BELL, R. R. & CHASKES, J. B. Premarital sexual experience among coeds, 1958 and 1968. *Journal of Marriage and the Family*, 32 (1) : 81-88 (1970).

^c CANNON, K. L. & LONG, R. Premarital sexual behaviour in the sixties. *Journal of Marriage and the Family*, 33 : 36-49 (1971).

^d UNITED NATIONS COMMISSION ON THE STATUS OF WOMEN. The status of the unmarried mother : law and practice. New York, 1971.

^e DAVID, H. P. ET AL. Selected abortion statistics : an international summary. Silver Spring MD, USA, International Reference Center for Abortion Research, Transnational Family Research Institute, 1973.

Adolescence

A variety of terms have been used in the literature to refer to the age period encompassed by adolescence. The term "puberty" appears most frequently and offers a relatively precise and culturally universal point of identification. As an indicator of the onset of certain physiological and anatomical changes, puberty is recognized by most societies as a significant point in the life cycle of the individual and is accorded specific social rituals to denote its importance. In itself, however, the concept of puberty does not extend to the range of ancillary traditions and customs that determine the kind of activities that precede, accompany, and follow its onset and which to a great extent determine the nature of the transition from childhood to adulthood.

Because these traditions and customs vary so widely from one socio-cultural setting to another, adolescence is difficult to define in a cross-cultural perspective. While in some societies, for example, menarche is in itself taken to signify adulthood, eligibility for marriage, and new responsibilities, in others puberty has been subsumed under, and almost eclipsed by, a more complex process of social maturation. In industrialized societies particularly, as the criteria for intellectual maturity, technical expertise, or business acumen become more demanding, adolescence as the period during which children are prepared for "successful" entry into the adult world is being progressively extended.

The pattern of physiological growth during this period has, however, followed a quite different trend. Improved nutritional status, better health care, and improved environmental conditions have, in many countries, brought down the age at which menarche occurs and have contributed to increased height and weight gain and the earlier appearance of the secondary sex characteristics. Thus physiologically and anatomically there has been a trend towards earlier maturation while the process of social development, on the other hand, has been progressively prolonged according to various social and economic expectations and needs.

In order to take into account this variation, "adolescence" was defined as the period during which :

- (a) the individual progresses from the point of the initial appearance of the secondary sex characteristics to that of sexual maturity ;
- (b) the individual's psychological processes and patterns of identification develop from those of a child to those of an adult ;
- (c) a transition is made from the state of total socioeconomic dependence to one of relative independence.

Such a definition clearly assumes that specific age limits cannot be imposed on adolescence and that adolescence is a social classification that varies both in its composition and in its implications. The approximate age range of 10-20 years, however, as proposed in an earlier WHO meeting, encompasses many of the processes outlined above, even though it is at the same time acknowledged that the degree of variation may be great between cultures and even within them.

Reproductive behaviour

Attitudes to sexual and reproductive behaviour vary considerably between different social and cultural groups and also over time. This is particularly true in the case of reproductive behaviour among adolescents; in many traditional agricultural societies child marriage and early pregnancy have been a fundamental characteristic of the social system, while in others reproduction in adolescence has tended to be viewed as a sign of impropriety and has been condemned.

It was the feeling of the Meeting that, in relation to the question of pregnancy and abortion in adolescence, care should be taken to place the associated health problems within the context of the temporal and cultural situations in which they occur. Like "adolescence", teenage pregnancy cannot be understood within a purely biological frame of reference but should be seen primarily as a social category whose composition and implications are liable to change according to the interacting traditions, social institutions, and values.

Society's perception of, and response to, illegitimacy, adoption, compulsory marriage, and abortion as outcomes of pregnancy can thus be expected to follow no uniform pattern and to represent different implications for adolescents in different social environments. Similarly, the need to provide health and social services designed to assist teenagers will vary with the extent to which the different outcomes are viewed as desirable and acknowledgeable.

The social context of adolescent reproductive behaviour

Traditionally, most social systems have devised specific social techniques and mechanisms for preparing children for the different roles and implications involved in puberty, reproductive behaviour, and adulthood. Through the agency of the family and other social institutions clearly circumscribed patterns of sexual and reproductive activity considered acceptable to the community were established and maintained.

The extended family in particular appears to have constituted a primary agency for the transmission of values and information considered basic to the integration of the adolescent in the adult world, and to have acted as a source of social control over the behaviour of young people. Moreover, courtship and marriage patterns were governed by the close relationship that evolved between social and economic institutions and land inheritance and tenure.

As a result of urbanization, industrialization, and education transformations have occurred in many of these traditional relationships. Labour has become more mobile both geographically and socially, and young people have been encouraged to move away from the family of origin earlier, and through education and mobility have been more directly exposed than ever before to types of information and values not necessarily shared or understood by parents and other family members.

Within the nuclear family system that has emerged in much of modern industrial society, the ability of elders to influence the activities of young people has diminished and, as a result of their increased social and technological knowledge, young people have gained greater authority, psychological autonomy, and social prominence, while remaining socially and economically quite dependent.

Socialization and preparation for adulthood previously undertaken by the family and community have been increasingly delegated to educational and other formal welfare agencies, and, as traditional sources of control and management of behaviour have weakened, new patterns of social activity have emerged. Courtship and marriage, for example, have changed, less emphasis being placed on family lineage and more on individual needs and proclivities.

Especially in urban settings, adolescents have been required to adapt to a much broader and more complex set of interpersonal relationships than has traditionally been the case with young people. This they have often had to do in the absence of adequate guidance and have increasingly turned to the popular youth culture models promoted through the mass media. Typified by values, customs, and fashions peculiar to itself, this culture has, in many instances, served to separate the adolescent further from the sphere of adult influence and familial control.

In developing societies, the processes of urbanization and industrialization are accelerating and as a result of rapid and intense rural-urban migration and technological change traditional social systems in some countries are changing more quickly than was the experience in

developed societies. Patterns of family structure and control are changing and many of the methods by which societies traditionally prepared the young are being invalidated. Adolescents are often forced into situations where they are confronted with conflicting influences of what are perceived as modern codes of behaviour on the one hand and traditional practices on the other. As a result they are increasingly channelled into socially marginal situations where they in turn become especially vulnerable to values and expectations that may have little social approval; they also find that few services are directed to meeting the needs they subsequently develop. Essentially "Western", the youth culture to which they are exposed often bears little resemblance to the traditional context in which adolescents in developing societies previously functioned or to the requisites of their present transitional situation. Initiation rites and ceremonies marking puberty and the onset of adult status become less important and in some cases disappear entirely, while modern school-based instruction, even where it is available, cannot entirely fulfil the complete preparation of youth for adult and reproductive life that was previously undertaken by the family and community. Increasingly denied both traditional and modern instruction on matters relating to sex, adolescents are particularly susceptible to unplanned reproductive behaviour, unwanted pregnancy, abortion, and the various consequences of these events.

Contraception

It was acknowledged by participants that the question of contraception is a fundamental issue in any discussion of pregnancy and abortion. However, because of the complexity of the problem it was felt that such subjects as safety, effectiveness, and acceptability of contraception should be dealt with at a separate meeting.

Little comparative data is available on the use of contraceptive techniques by teenagers. The most recent evidence available for the USA and the United Kingdom indicates that the proportion of sexually active adolescent girls who use contraceptives regularly is relatively small. For developing countries anecdotal material suggests that the situation is the same.

Some of the major obstacles to the better use of contraception by adolescents appear to be that many adolescents are ignorant of reproductive physiology and the implications of sexual intercourse, and that contraception remains a source of embarrassment to them. They do not discuss the question easily with parents and in many instances parents

themselves do not feel sufficiently prepared to introduce the topic to the adolescent. Fear of letting parents or elders know that they are sexually active further contributes to this reluctance to discuss sexual and reproductive behaviour. Outside of the family environment, few services have been developed to provide the teenager with the necessary information; schools often lack the legislative backing or approval of parents to undertake education for contraception, and even if such encouragement were forthcoming it is doubtful whether there would be sufficient teachers prepared to provide this type of service.

This is not to say, however, that family planning services are totally unavailable to adolescents; the past decade has seen significant improvements in the provision and delivery of family planning related services in general. Invariably, however, these have been designed for, and directed specifically to, older, married, multiparous women, and in many countries custom, tradition, and even legislation have tended to prohibit and limit their utilization by adolescents.

ALTERNATIVES FOR THE PREGNANT ADOLESCENT

Although the probability of sexual activity occurring earlier in life has increased, not all adolescents are sexually active and of those who are, many are active within stable relationships. Of those who are sexually active, it is mainly those who do not practise contraception appropriately that are at high risk of unwanted pregnancy. Among those who do become pregnant, some will already be married or preparing for marriage; others will be precipitated into marriage. Of those who remain single, some will seek a legal or illegal abortion; others will become unmarried mothers or surrender their children for adoption.

A number of obstacles, evaluations, and interactions are involved in arriving at what is perceived as a suitable solution. Little is known about the interaction of these factors or about the role they play in determining the nature of the decisions made. In particular there is insufficient data concerning:

(a) The alternative forms of action possible in different socio-cultural settings and, perhaps more importantly, which of these are perceived to exist and be accessible to adolescents in different social groups.

(b) The role played by the putative father in the decision-making process or the type and extent of the negotiations that take place between the girl and her partner with respect to the perceived alternatives.

(c) The roles played by lay and professional persons as they interact with the adolescent and the extent to which they influence her evaluation of the different possible avenues of action ; and the dimensions of these interactions in different societies and among different social groups.

(d) The ways in which parents and friends and educational, legal, religious, and welfare institutions, among others, are involved in defining the strategies deemed suitable or in promoting the course of action followed. In particular, little is known about the way in which interaction with the health system at this juncture influences future attitudes to health care and health services personnel.

Throughout this consideration of alternatives the balance between choice and constraint is defined by the availability, visibility, and accessibility of the services provided, and ultimately by the sociocultural definitions of what is considered reasonable and tolerable behaviour.

Thus the range of alternatives varies considerably between one society and another, within the same society, and over time. In many developing societies, and within particular subcultures in developed societies, the alternative of legal abortion is not available ; in its absence, there is greater tendency to resort to illegal abortion. On the other hand, in many countries premarital sex and pregnancy are almost a prerequisite for marriage and unmarried motherhood may carry little stigma.

The different elements involved in the choice are illustrated in countries characterized by well developed class structures ; in the United Kingdom, for instance, middle-class girls may solve the problem of pregnancy through marriage, while working-class girls do so through adoption or incorporation of the infant into the extended family ; those from professional backgrounds meanwhile tend to seek a solution through therapeutic abortion. In each case, then, the range of alternatives available to the individual may be different, and the adolescent girl makes her choice, or is constrained, according to the culturally specific situation in which she lives.

Attempts to calculate the nature of the psychosocial implications of any one outcome must be made within the context of all the possible alternative outcomes. Emphasis here has understandably been placed on the psychosocial implications of unwanted pregnancy and abortion ; for a complete appraisal, however, these must finally be assessed alongside the various psychosocial implications of marriage precipitated by pregnancy and/or of family relations strained by unofficial adoption.

The participants felt that much more needs to be known about the range of alternatives open to adolescents in different settings and the different constraints that influence their decision. In the absence of information of this kind it is unlikely that the types of service appropriate to the needs of adolescents can be developed.

Pregnancy

Despite the apparent liberalization of attitudes in recent years, unwanted pregnancy, for a variety of complex social, economic and cultural reasons, continues to be a source of stress on the adolescent girl and her immediate family. Irrespective of the cultural or social setting in which it occurs, pregnancy, whether wanted or not, plays a fundamental role in determining the future life opportunities of the girl. In the case of the unmarried adolescent particularly, it has been observed to precipitate a broad range of events that combine to disrupt both education and family life.

Few educational systems make provision for accommodating pregnant girls, or girls with children, within normal school activities. In fact, the existing policy in some countries is to deny them entry for fear that they might be an undesirable influence on other children. As regards the provision of social services that would help a pregnant girl continue her education, these services have, in the past, been defined in many countries in ways that have precluded the pregnant adolescent from taking advantage of privileges that are automatically available to older married women.

At the level of the family, social pressures often make adaptation to an unwanted pregnancy in a daughter difficult and, as a result, the family becomes unable to give the support the girl requires. In many instances this inability is simply due to the absence of advisory services to explain to parents the nature of the problems faced by their daughter during pregnancy and to point out the relevant sources of assistance.

Physicians and nurses reflect the social values of the community and the medical profession ; since they are in positions of authority the ways in which they relate to the girl can be expected to have a profound effect on her attitude to pregnancy and continued maternity care. There is little evidence to suggest that any attempt has been made to prepare health personnel for the type of psychosocial problem encountered by pregnant adolescents. Clinic referral systems rarely differentiate between the older pregnant woman and the adolescent, the assumption

being that their needs are the same and that they come to the health service with similar expectations and experiences.

The observation that the reproductive career of adolescents who have an unwanted child at an early age tends to be characterized by further, ill-spaced pregnancies highlights the increased risk associated with unwanted pregnancy in this age group. The participants agreed that greater stress should be placed on the coordination of contraception education and pregnancy services, and that clinical service staff should be made more aware of the complex nature of the problems of pregnancy in the adolescent.

Out-of-wedlock birth

Where marriage to the putative father is inadvisable or not possible, and abortion is not a viable option, the alternative is invariably to carry the pregnancy to term and have a so-called "illegitimate" child. In recent years the number of such births has been increasing in many countries. In industrialized societies, evidence indicates that births out of wedlock are now likely to be more tolerated than previously and that less stigma is likely to be attached to unmarried mothers. Despite this, however, in many countries the unmarried mother and her child are deprived of many legal rights and social welfare benefits. The effect that limited access to assistance and lack of support has on the young unmarried mother depends to a great extent on her family background and her economic situation. The problems of the adolescent girl who has recently moved to an urban setting and perhaps has few relatives or friends to provide help is particularly urgent. In developing countries especially, where rural-urban migration is occurring on a large scale and where labour needs may be precipitating the selective movement of young girls, special attention should be given to this problem.

Little is known at this time about the effects of such conditions on the relationship that evolves between unmarried mothers and their children. More research is called for although there is also an immediate need for social services to provide the assistance needed in such cases.

Adoption

In many traditional social contexts and in situations where large extended families exist, collective responsibility for the care of infants born out of wedlock can often be assumed by the parents or relatives of the unmarried mother, obviating the need for formal legal adoption.

Where such family resources do not exist, however, responsibility for deciding whether to surrender the child for adoption lies increasingly with the adolescent mother. It was the feeling of the Meeting that the stress involved in taking a pregnancy to term and then having to surrender the child for adoption should not be underestimated and that social services designed to assist the adolescent in assessing the various advantages and disadvantages of such a course of action need to be emphasized.

Marriage to the putative father

Forced marriage has traditionally been considered among some social groups as the most favourable avenue to pursue ; in terms of the promise of economic security and social legitimation its attractiveness to both the girl and her family is apparent. Studies of the outcome of these marriages, however, suggest that in the United Kingdom and the USA they may represent nothing more than a temporary palliative ; the probability of their dissolution has been shown to be high.

Where such marriages have lasted sufficiently long to involve the birth of additional offspring, the psychosocial implications of divorce for the mother and the children in terms of immediate and long-term opportunities are complex. The likelihood of the mother remarrying may be reduced because of her age, because of her dependants, or simply because remarriage is not considered appropriate within the society in which she lives. Similarly, the likelihood of her continuing her education or of successfully continuing her earlier career is lowered as a result of having children.

The viability of such unions is clearly determined by the cultural traditions of the society and it may be that in some settings the social pressures increase the possibility of the marriage continuing. It should not be overlooked, however, that in certain societies continued marriage and cohabitation may mask difficult relationships that continue to be harmful to the health of the partners and their offspring.

Abortion

Reports from both developed and developing countries indicate that the incidence of therapeutic abortion among teenagers has increased over the past twenty years in both relative and absolute terms. As far as illegal abortion is concerned, it is difficult to indicate the precise

prevalence since, with the exception of data on medical problems related to abortion, little is known of the epidemiology of the situation.

In situations where abortion is regarded as immoral and where it is defined as illegal the search for the abortionist and the attempts to identify all the various avenues for obtaining an abortion within a limited time and without the knowledge of family and friends is stressful and hazardous. Even if the many obstacles of a social nature can be overcome, illegal abortion procedures are often badly performed and constitute a major health risk for the adolescent girl.

The participants felt that even where abortion laws have been liberalized, the decision to seek an abortion and the referral system that has to be gone through may give rise to major psychosocial problems. The girl may still risk criticism from her peers and her family. The influence of medical personnel may also be negative and unsympathetic, and to a great extent their attitudes and the manner in which they approach the patient will influence the emotional and psychological attitude with which she is able to meet the situation. The individuals who are involved in the decision-making process do so with different predispositions and values concerning sexual behaviour, reproduction, pregnancy, motherhood, and abortion. Because abortion has been characterized by overtones of immorality in the past, impartiality and understanding may not be immediately forthcoming. Thus, because of their backgrounds these individuals may be able to provide little assistance in terms of counselling and emotional support.

Concern was also expressed in the Meeting at the type of clinical services being provided. In most countries the existing services have invariably been developed within a traditional obstetrical context orientated to the needs of older and often multiparous women for whom therapeutic abortion does not necessarily represent the same stress that it may for younger unmarried patients terminating a first unwanted pregnancy. The referral system, the staff involved in its various phases, the exposure to older and experienced women, and the anonymity of the clinical surroundings may all combine to interfere with the adolescent girl's adaptation to the abortion and the post-abortion period.

The meeting emphasized the need to bear in mind that the girl is not the only person for whom the unwanted pregnancy represents stress. To the family in particular, the various alternatives involve activities and decisions whose implications may be far-reaching. Especially in the case of abortion, acceptance of the decision and subsequent rehabilitation to normal functioning may be difficult. Their ability to adapt will in turn affect their ability to assist the girl.

More research is needed into the referral systems that adolescents in different countries are required to go through, and the way in which the different aspects of these processes affect rehabilitation.

HEALTH RELATED SEQUELAE OF PREGNANCY AND ABORTION

The health problems of adolescents have largely been ignored in the development and provision of health and social services. In part, this has been due to the fact that, relative to other age groups, adolescents have been regarded as a healthy segment of society not requiring any special health care.^a No doubt this lack of attention has also been due partly to the ambiguous status of the adolescent in many societies and the fact that until recently adolescents have not been — and in some cases are still not — perceived as a special group.

Increasingly, however, it has been acknowledged that during the period of physiological and social maturation which adolescence represents the individual is particularly susceptible to specific health related problems and is at definite risk in terms of related somatic, mental, and psychosocial complications.

Obstetric complications

Studies of the complications of pregnancy have been hampered by differences in the definition of the disorders being investigated and by the fact that different populations and methodological approaches have often been involved. Partly as a result of these variations, agreement is lacking on the severity and incidence of complications of pregnancy and labour, although the evidence increasingly suggests that the risks for pregnant girls under 16 years are particularly high.

There is evidence, for example, that the incidence of toxæmia and pre-eclampsia is significantly higher among young adolescents than any other group of reproductive age. Anaemia has also been identified as a common clinical problem in adolescent pregnancy and this has highlighted the need for greater surveillance of the nutritional status of pregnant adolescents, especially in cases where the socioeconomic background of the girl would suggest a history of poor nutrition.

^a WHO Technical Report Series No. 308, 1965.

These studies, however, have not always taken into consideration the fact that other predisposing factors, such as poor socioeconomic background and inadequate antenatal care, may be over-represented among teenagers who become pregnant.

Low birth weight

Low birth weight babies are born to teenagers more frequently than to women in other reproductive age groups, although the precise epidemiology of this problem is difficult to define because of the different cultural and national norms and the different socioeconomic backgrounds and levels of antenatal care received by various groups. Low birth weight has been shown to be closely associated with the prevalence of perinatal deaths among infants born to adolescent mothers and with the risk of epilepsy, cerebral palsy, mental retardation, and poor motor development.

Congenital anomalies

Studies have also suggested that congenital anomalies such as anencephalus, spina bifida, and occipital meningocele are more likely to occur in infants born to teenagers and women over 40 years of age, than in those born to women in other age groups.

Psychosocial considerations

It was the feeling of the Meeting that changes in the legislation on abortion and the rights of women as well as changing attitudes to sexual and reproductive behaviour have tended to make much of the literature on the psychiatric problems associated with pregnancy and abortion in adolescence out of date. While it was acknowledged that more research in this area is called for, it was felt that it is the broader psychosocial aspects of pregnancy and abortion that call for more specific attention.

SERVICES

The adolescent girl

The adolescent girl, and the sexually active adolescent girl in particular, presents certain social and health needs that are specific to this age group and that call for special approaches in preventive and therapeutic care. Many of the services required could possibly be developed within the existing framework of health and social services; for certain other services, however, entirely new approaches may be required.

In the case of pregnancy it is apparent that the traditional organization of health facilities has been directed to the needs of the older woman and that from the psychosocial point of view in the existing structures little attention has been paid to the needs of the adolescent.

While in many countries economic and manpower constraints may prevent the provision of additional facilities designed to meet the special needs of the pregnant adolescent, and while adolescents may not always be perceived as a distinct age group, attention should be paid to the young girl seeking antenatal and postnatal care and to her specific circumstances as a married or unmarried patient. Family background, the history of the pregnancy, and the relationship with the putative father must all be taken into account, as indeed must the economic and educational situation of the girl. In providing pregnancy care, the health and social services personnel should consider the entire range of the girl's needs.

In the case of an adolescent seeking to terminate a pregnancy it may be advisable to provide separate services that do not require unnecessary exposure to older women with established families and different attitudes to pregnancy and abortion. Health personnel should be encouraged to be sensitive to the complexity of the problems that face the teenager, particularly in social environments where family background, moral climate, and legal institutions impose undue stress on the girl.

There is a need for counselling procedures that are consonant with the values of the society, the social groups the adolescent represents, and the needs that can be expected to emerge during pregnancy. Clinical personnel should be made aware of the counselling services that exist and should be encouraged to work closely with them, even though in some cases these services may not be provided through formal channels.

All possible alternative ways of providing counselling should be considered. Peer-group counselling, counselling provided by religious leaders, paramedical personnel, educational staff, and youth leaders

should all be viewed as offering potentially valuable entry points for interaction with the adolescent who requires advice and support.

The family and the putative father

Counselling services should at all times consider the range of needs experienced by the girl's family and by the putative father. Their adjustment to the situation may play an important role in their interaction with the adolescent girl and thus in her ability to perceive existing alternatives of action.

Special subgroups

Within the universe of the sexually active adolescent there are various special subgroups. Social class, ethnic origin, and language represent some of the more clearly defined parameters of these. Other subgroups are less obvious and for various reasons have been relatively little considered: educationally subnormal, mentally and physically impaired, and emotionally underdeveloped groups, for example, have received little attention in the past and yet account for significant numbers of people whose needs call for special sex counselling, counselling personnel, and access to clinical services.

Adaptation to pregnancy outcome

The participants stressed throughout the discussion on services that emphasis should be placed not only on assisting and supporting the adolescent at the time when different alternatives are being considered, but also on the provision and coordination of comprehensive follow-up procedures including rehabilitation, social assistance, education, economic support, legal advice, and assistance with housing and child care.

Planning and development of services

The types of service required and the economic and manpower resources that can be called upon to develop them will vary in different situations. To what extent existing health and social services can be adapted to meet the special needs of adolescents, or the degree to which the existing infrastructures can and should be modified to incorporate new approaches, will in part determine the specific design of new services.

Since family planning education in human reproduction and antenatal services for adolescents have not been extensively developed in the past, any introduction of new services should be preceded by detailed evaluation of alternative models. Relative costs, potential acceptability, effectiveness, efficiency, manpower needs and availability, and methods of delivery should all be considered prior to the definitive introduction of new programmes. It was felt that although existing health and educational systems present ideal structures through which to provide many of the new services, innovative methods should be given equal consideration.

Communication of information on services

The use of new or existing health and social services is determined by the extent to which potential users are aware of their existence and have access to them. In order to improve the use of services by adolescents and their families, dissemination of appropriate information should represent a fundamental part of any programme and should be undertaken through as many appropriate channels and in as systematic a manner as possible. Schools, youth groups, industries, and all other formal and informal associations with which the adolescent is likely to be in contact should be used.

FAMILY LIFE EDUCATION

It is apparent from reports in a variety of developed and developing societies that as patterns of family integration change and as patterns of reproductive behaviour, mate selection, and decision making in reproductive behaviour change among adolescent groups, the need for sex education is increasing. Sex education programmes, however, should not be limited to information on reproductive physiology but should be designed to cover a far broader range of topics including contraception, family life, and parenthood. They should also deal, as far as possible, with questions of ethics in interpersonal relationships and responsibility in reproductive behaviour.

The Meeting considered that in view of resistance to the term "sex education" and given the fact that programmes should ideally be far more broadly and imaginatively conceived, alternative titles such as "population education", "growing up in society", "marriage and family relations", "family life education" should be considered.

It was the consensus of participants that the most appropriate title would be "family life education" since this provides a more accurate indication of the overall content envisaged for such educational programmes and would allay the fears of religious and moral leaders who in the past have disapproved of the teaching of sex education *per se*.

The methods by which family life education should be presented will no doubt vary according to the traditional teaching methods of the society and the framework in which the programmes must be developed. It was generally acknowledged, for example, that the teaching of boys and girls together is not common practice in all countries or social groups; certain benefits, however, might be drawn from mixed classes in family life education.

Similarly, consideration should be given to the participation of adolescents in the development and presentation of family life education programmes. In some societies, for example, information may be most effectively transmitted through peers rather than adults. Assessment of the needs and of the relative value of different approaches may also be better accomplished by adolescents than by any other group.

The shortage of personnel trained to provide sex education or suited for such work represents a problem in many countries. In the past, few resources have been devoted to developing expertise in family life education within ongoing educational and welfare services.

A related issue concerns the degree to which teachers will participate voluntarily in such educational schemes. There is still a good deal of embarrassment about sex education and also scepticism about what should and should not be taught to teenagers. The most effective teachers are likely to be those who undertake such work voluntarily, but again it is not clear what pressures are likely to influence such decisions nor is it possible to predict the availability of such staff.

A second major consideration is the acceptability of the information and the information agent. Again, no uniform or ideal model can be identified since the manner in which adolescents are likely to respond and relate to different individuals can be expected to vary according to background. In some settings it may be the physician who appears to be the most appropriate person to provide the information while in others it may be the social worker or the community or religious leader; in others an older adolescent may be the best person.

There is an obvious need for more knowledge about the ways in which adolescents learn about sex. Do they learn more effectively from each other than from adults? Do they acquire different kinds of informa-

tion and attitudes from peers than from adults? What are the main areas of ignorance and bias in a peer-group learning system, and how can they best be rectified? What are the relative advantages and disadvantages of single and mixed sex information channels and learning situations? Answers to these and related questions are essential to understanding and anticipating patterns of use and, in turn, to reducing the gap between adolescent educational needs and existing services.

CONCLUSIONS AND RECOMMENDATIONS

Changing social conditions, changing demographic patterns, and changing types of behaviour are producing new social and health needs in all parts of the world. Adolescents in particular are assuming an increasingly significant role and, in most developing societies, are beginning to constitute a strong social and economic component.

In the past, many of the health needs of this age group were neglected. Little was known about them and little was done for them. The problems related to pregnancy and abortion, for example, were often ignored or simply included within the larger phenomenon of adult pregnancy and abortion; little attention was paid to the complex legal, social, and economic implications of pregnancy and abortion.

This lack of concern has been typical both of developed societies, where the problem has perhaps existed for longer, and of developing societies, where adolescents are often not even perceived as a distinct group.

It is important that all countries should acknowledge the needs of adolescents and reappraise the existing situation and its significance. It is equally important that mechanisms should be developed to foresee these problems and to allow appropriate programmes to be developed to meet them. The Meeting formulated the following recommendations.

1. Epidemiological studies should be developed to identify the characteristics of the problem of adolescent pregnancy and abortion, particularly in countries where existing record systems do not afford a comprehensive picture of the situation.

2. Steps should be taken to make known the changing nature of adolescent sexual behaviour and particularly the special vulnerability of this age group to the risk of unwanted pregnancy and abortion.

3. Information should be made available on the social and economic implications of unwanted pregnancy for the adolescent and for society.

4. Policy makers should be made aware of the significance of reproductive behaviour in the adolescent and be encouraged to incorporate appropriate programmes for adolescents in national family planning programmes.

5. Consideration should be given to further exploration of questions relating to pregnancy and abortion in adolescents and specifically to :

- organizing a seminar on adolescent pregnancy, urbanization, and culture change, concentrating on the special problems encountered by the adolescent, particularly the adolescent girl, and by providers of services in those societies where traditional institutions and systems of control have been disrupted by rural-urban migration, industrialization and "westernization" ;
- preparing a publication on various aspects of adolescent pregnancy containing the Meeting's background papers and reports from countries, a bibliography of the relevant literature, and the recommendations of the Meeting.

6. Consideration should also be given to formulating detailed proposals for research in the following areas :

(a) The registration, classification, and evaluation of existing services related directly and indirectly to adolescent pregnancy and abortion. This would be a cross-cultural survey concentrating on the evaluation of different models of adolescent health services in terms of consumer satisfaction, outcome, effectiveness, and cost efficiency.

(b) The formal and informal sources and channels of adolescent knowledge and attitudes about sex, contraception, pregnancy, and abortion. This would be a cross-cultural study which, based on both formal and informal sources, would provide much needed information for the design and modification of programmes of family life education.

(c) The sex education training that is at present available to family life educators, methods of evaluating different programmes of instruction and the personnel involved, and of assessing their appropriateness for different sociocultural contexts.

(d) The extent of choice and constraint in adolescent decision making on matters relating to sex, contraception, pregnancy, abortion, and adoption in different sociocultural situations. By concentrating on all the problems associated with pregnancy and on the alternatives confronting the adolescent, it is envisaged that this research would provide vital information for counsellors and service providers and facilitate closer coordination between the needs and services provided.

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