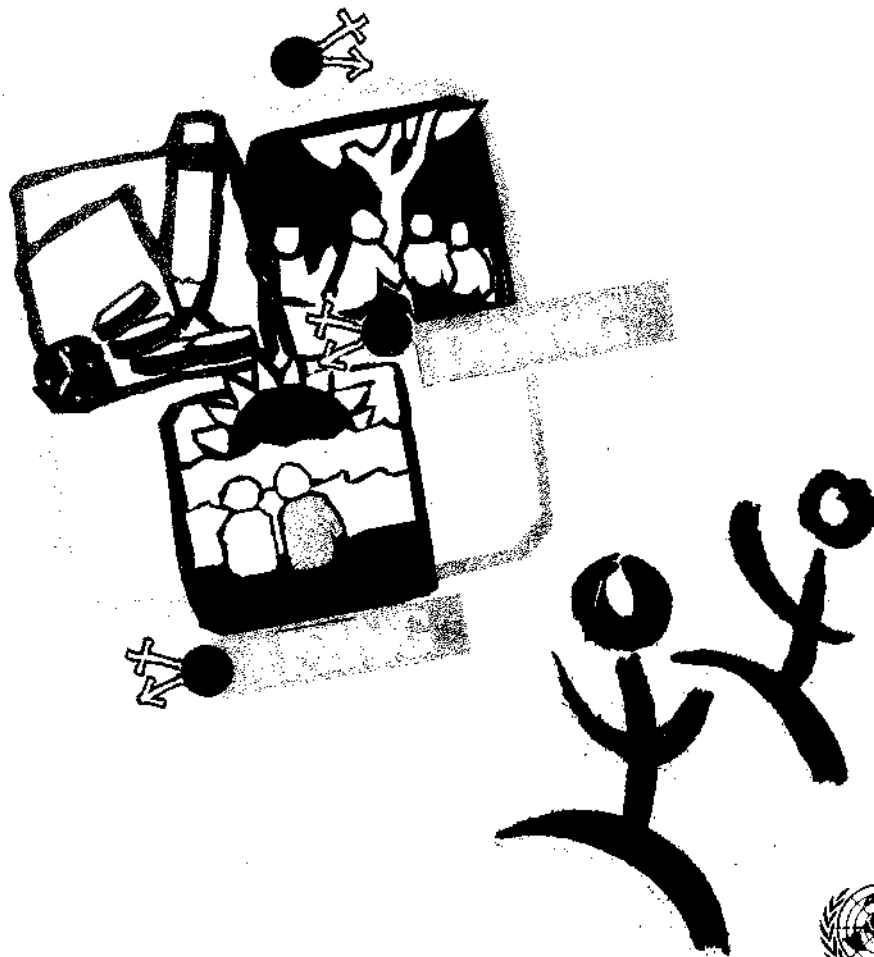


Coming of age

From Facts to Action
for Adolescent Sexual &
Reproductive Health



WHO

WHO/FRH/ADH/97.18

Coming of age

*From Facts to Action for
Adolescent Sexual & Reproductive
Health*



*Adolescent Health & Development Programme
Family & Reproductive Health
World Health Organization
Geneva
Switzerland*

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EXECUTIVE SUMMARY

This Guide has been developed to enable programme planners and managers to carry out a rapid situation analysis of adolescent sexual and reproductive health so that programmes may be designed or improved on the basis of sound, up-to-date information.

It provides guidance on the actions that should be undertaken in three phases over a 5 — 6 month period: planning the situation analysis, doing it, and using its findings. Various methods and procedures *are* proposed which may be freely adapted and flexibly implemented according to the needs and resources of each setting. In the development of this Guide, feedback from field-tests carried out by various organizations has been incorporated as appropriate. Whenever possible, key points *are* illustrated with examples highlighting experience mostly from developing countries.

The Guide focuses on the sexual and reproductive health of adolescents in recognition of the fact that the initiation of sexual activity is an almost universal feature of this second decade of life and becoming an adult sexually is so central to their overall health. It is emphasized, conversely, that adolescents' sexual and reproductive health has to be seen and dealt with in the broader perspective of their overall health and immediate environment, across sectors such as health, education, welfare, the legal system, and employment.

The health of adolescents has been somewhat neglected in the past — perhaps because as a group, they are relatively disease free. Their health problems, many of which are serious, are often related to behaviours. Furthermore, behaviour patterns established during adolescence are responsible for some of the major illnesses of adulthood. Promoting and protecting adolescent health is therefore an excellent short- and long-term investment.

Unwanted and unprotected sexual relations among young people increase the risks associated with too early and unwanted pregnancy and childbirth, reproductive tract infections, and sexually transmitted diseases including HIV infection. In both sexes, these problems may be devastating; in young women, they curtail education and employment prospects, and often carry a social stigma.

Establishing a sound information base on the health of adolescents and particularly their sexual and reproductive health, through situation analyses in different settings, is now an urgent priority. Using adolescents themselves as the primary source of information and involving them in the research and the formulation of programmes will ensure relevance, acceptability and long-term effectiveness. Creating a sense of ownership on the part of the community and of adolescents themselves is the key to successful implementation of programmes which will be enthusiastically and constructively received.

During the *Planning phase* of the situation analysis, the objectives need to be defined, and the core issues identified. Approval from the authorities must be sought, a Technical Advisory Group and Steering Committee established and their roles determined, and the situation analysis team selected. A planning workshop can be convened to further elaborate and clarify these issues, perhaps using the WHO GRID approach. The potential users of the findings of the situation analysis and potential strategies for data collection must be identified. A workplan for doing the situation analysis through collecting and analysing data, and for using the findings then needs to be formulated.

The first major task of the *Doing phase* of the situation analysis is to collect existing information. The availability, quality and location of this information needs to be assessed. This is crucial in terms of cost because gathering information which already exists is incomparably cheaper than collecting new information. If gaps and weaknesses are identified and it is decided that this missing information is vital and must be obtained, only then should the collection of new data be considered.

The sources and settings for collection of new information are discussed. Adolescents *are* a primary source as well as a resource for information collection. Settings in which to seek information include, the home, the school, the community, health centres and political and legislative systems. Within each of these settings are key people who influence adolescents' behaviours and/or deliver interventions to promote their health; parents, teachers, influential people in the community, health providers and policy makers. The kinds of information that these people can provide and their roles as "gatekeepers" are discussed. For each group, examples of questions they could be asked are provided. Methods of data collection including standardized questionnaires, focus group discussions, WHO techniques such as the Narrative Research' Method and the User/System Interaction Method, *are* described in some detail. Managing data collection involves choosing the sample for study, designing good questions, ensuring reliability and validity of findings, pretesting of methods, instruments and equipment; and important logistical and ethical considerations.

The analysis of data from the situation analysis is undertaken on three levels. The first describes the core issues and the current situation with respect to sexual and reproductive health of adolescents. The second level explores the relationship between these core issues in order to explain why the situation is as it is. The third level identifies emerging issues and sheds light on concerns that have been revealed by the situation analysis but which were perhaps not considered by the Technical Advisory Group or the situation analysis team at the outset. Methods for analysing both quantitative and qualitative data, including software that has been developed for this purpose, *are* described.

The final task in the *Doing phase* is to draw conclusions — bearing in mind that these will form the basis for public health action. The situation analysis team

needs to examine the findings and ask what issues are important, what can be changed and what do people want to change. This is a deceptively-simple task which requires very careful sifting through of evidence to extract the essential points and make judgements about essential actions to propose.

In the third and final phase — *Using* information from the situation analysis — a strategy for dissemination must be formulated, the reports (preliminary and full) written, and follow up action planned and initiated. The potential users or "stakeholders", identified in the planning phase, need to receive the reports immediately in order to ensure prompt and wide use of the findings.

The challenge at this point is to move from facts to action and to keep up the "momentum". If active participation and a sense of ownership on the part of adolescents, the community, and programme implementers have been encouraged during the situation analysis, bridging the gap between needs identified and action to be taken, will be that much easier. The situation analysis will have achieved its objectives if its findings can be used to develop or improve programmes for adolescents which promote and protect their health and which are appropriate, accessible and welcoming.

INTRODUCTION

The purpose of this section is to introduce the subject of adolescent health and development, highlighting challenges and opportunities faced by adolescents in a rapidly changing world, as well as by the organizations committed to improving the overall status of this age group. According to WHO, adolescents are 10 to 19 years old, youth are 15 to 24 years old; and young people are 10 to 24 years old ///

WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (2). This is especially important when we consider health in adolescence, the second decade of life, since this period is characterized by many rapid, interrelated changes of body, mind and social relationships. Physically, the individual grows in height and weight and develops strength and stamina; psychologically, there is an increase in the capacity for abstract thinking, empathy and internal control; and socially, the nature of relationships changes with both peers and adults. However, these changes occur unevenly — there are usually differences between:

- o the rates of biological and psychosocial development within each individual;
- o the timing, rate and degree of change between same sex individuals;
- o the sexes, and,
- o cultures, particularly with respect to socially acceptable behaviours and the timing of marriage.

The risks associated with adolescence

Adolescence is a time of learning which necessarily includes risk taking, but the conditions in which those risks are taken will often make the difference between constructive and destructive outcomes. The health of adolescents is profoundly linked to their development, since their physical, psychological and social abilities will determine what they do, how they act, and with whom they associate. These abilities change as adolescents mature, reflecting the degree of support and opportunity they are given.

Adolescents in all societies have substantially increased autonomy compared with children, and their own decisions play a vital part in determining their behaviours and relationships. Adolescence is a crossroads in life and is the gateway to the promotion of health. Many of the behavioural patterns acquired during adolescence will last a lifetime. They will affect the health and well-being of future children. The benefits which will accrue to every society in meeting the challenge of promoting the health and development of adolescents far outweigh the costs of neglecting their needs.

The health of adolescents is being given greater priority at national and international levels. Socio-demographic data on young people and selected facts about the major health problems which may affect their present and future quality of life are provided in *Box 1*.

CHALLENGES TO ADOLESCENT HEALTH & DEVELOPMENT

Young People in the World Today

- o There are more than 1 1/2 billion young people between the ages of 10 and 24; 85% live in developing countries (3)
- o In the least developed countries, only 13% of the girls and 22% of the boys enroll for secondary education (4)
- o Globally, 5 out of every 10 unemployed are young people; in some developing countries it is 8 out of 10 (5)
- o 73 million adolescents between the ages of 10 and 14 are working worldwide (6)
- o Throughout the world, many millions of adolescents live and work on the street, putting them at high risk (7)
- o Between 1970 and 2025 the urban population in developing countries will grow by 600% (8)

Nutrition and Non-Communicable Diseases

- o Under- and over-nutrition in young people are increasing problems in both developing and developed countries (9)
- o Adolescent girls are often last to be given food, even when pregnancy increases their needs (10)
- o Adolescent iron needs, increased by growth, development and menstruation, are being hampered by malaria, hookworm and schistosomiasis which affect young people disproportionately (11)

Reproductive Health and Sexuality

- o For the vast majority, sexual relations begin in adolescence, in or outside of marriage (12)
- o Unprotected sexual relations increase risks of unwanted pregnancy and too early childbirth, unsafe abortion and sexually transmitted diseases (STD.) including HIV resulting in AIDS (13)
- o Lack of knowledge, skills, and access to contraception; and vulnerability to sexual abuse puts adolescents at highest risk of unwanted pregnancy (9)
- o In developing countries, maternal mortality in girls under 18 is 2 to 5 times higher than in women from 18 to 25 (14)
- o Worldwide, more than 10% of all births are to adolescent women (15)
- o In sub-Saharan Africa, the majority of first-births are to adolescent women (16)
- o Adolescent abortions are estimated as between 1 and 4.4 million per year, most of which are unsafe because performed illegally and under hazardous circumstances by unskilled practitioners (17)
- o Each year more than one out of twenty adolescents contracts a curable STD, not including viral infections (18)
- o Of the estimated 333 million new STDs that occur in the world every year, at least 111 million occur in young people under 25 (19)
- o Globally, more than half of all new HIV infections are among 15-24 year-olds (20)

continued opposite

CHALLENGES TO ADOLESCENT HEALTH & DEVELOPMENT continued

Substance Misuse

- o If tobacco use begins at all, it usually begins in adolescence; few people begin after age 18/21
- o Half of regular smokers who start in adolescence and smoke all their lives, will eventually be killed by tobacco (22)
- o Alcohol is the most common element in substance-related deaths of young people (21)
- o Illicit drug use is becoming more widespread and shifting to riskier patterns of use (21)
- o Harmful substance use will increase cancers, cardiovascular diseases, respiratory illnesses in later life (23)

Unintentional and Intentional Injury

- o Unintentional injury is the leading cause of death among young people, especially traffic accidents among boys (24)
- o Suicide in young people is increasing and is an important cause of death especially of adolescent males (23)
- o Interpersonal violence is increasing among young people, with girls especially victimized (24)

Changing behaviours among adolescents

The behaviour of young people is affected by the social environment in which they live. Today, it is a rapidly evolving environment, particularly in relation to communications and culture. There appears to be an increase in the use of tobacco, alcohol and other drugs among young people in developing countries where restrictions on advertising and access are often weaker than in the industrialized countries. These behaviours, which typically begin in adolescence, bring a host of problems, not only in the short term but also in the longer term, such as cardiovascular disease, cancers and respiratory illnesses, at huge cost to public health. Overall, it has been estimated that 40% of deaths in developing countries, and 70-80% of deaths in developed countries, are attributable to behaviours, many of which begin in adolescence (25). This is a powerful argument for investing in adolescent health, and one which still needs to be forcibly made.

Changing eating habits and oral hygiene, a lack of adequate rest especially among those who have to start their working lives too soon, or lack of exercise among those leading an increasingly sedentary life, are also contributing to health problems throughout life. Violence, especially among young males, is another disturbing trend, as is an apparent increase in suicide in both sexes. There *are also* important changes in behaviour patterns associated with sexual and reproductive health, two closely intertwined *areas*. According to WHO, broadly speaking, reproductive health addresses the reproductive processes, functions and system, and implies that people are able to have a responsible, satisfying and safe sex life, with the capability to reproduce and the freedom to decide if, when and how often to do so. Sexual health, on the other hand, involves sexual identity and

thoughts, feelings, interactions with others and actions, which affect the health of the individual's own reproductive system as well as that of partners, irrespective of whether it leads to reproduction. As healthy sexuality motivates people to find love, contact, warmth, and intimacy, it is an important element for achieving mental and physical health (26).

Most significant for adolescent reproductive health is the phenomenon of unprotected sexual relations among young people, whether before, or during marriage. This increases risks associated with too-early and/or unwanted pregnancy and childbirth, induced abortion, reproductive tract infections (RTIs), sexually transmitted diseases (STDs) and HIV infection resulting in AIDS. This group of sexual and reproductive health problems threatens the physical, psychological and social health and well-being of young people and sometimes takes their lives. Despite the urgency of the need for action, it is still exceptional to find systematic provision of sound and accessible information, skills and services for young people.

Girls are particularly vulnerable not only because of pregnancy but because they are more likely to have coerced invariably unprotected sex than boys, and they are more susceptible biologically to STDs, including HIV infection. Inequity between the sexes makes girls more vulnerable to violence, to sexual abuse, and to the practice of female genital mutilation. Girls are also less likely to be given access to education and employment opportunities. Their long-term economic potential is reduced still further by early childbearing (27). The adolescent girl who has moved from a rural to urban area may be particularly in danger, especially if she has come without her family. However, young adolescent males, especially in economically deprived situations, are also vulnerable to sexual exploitation.

While specific health needs differ from place to place, the process of sexual maturation is central to adolescence. It is a physical as well as social process and affects young people's relationships both with each other and with the people around them. If the process of sexual maturation is healthy, it is a positive force and provides a springboard for development in other areas. Understanding and acting to promote healthy maturation is a key component of programmes for adolescent health. It is for this reason that this Guide focuses primarily on adolescent sexual and reproductive health. However, it also includes essential questions about the context of young people's lives including the environments in which they live, and their education and employment, issues which affect overall health. Findings of the situation analysis, while focused on sexual and reproductive health, can pave the way for greater sensitivity to adolescents' needs and provide a sound basis for improving, protecting and promoting all aspects of adolescent health.

The *WHO/UNFPA/UNICEF Framework for Country Programming for Adolescent Health* (see *Figure 1*) presents the major features of an integrated approach to adolescent health. The framework identifies the essential components of a programmatic approach, namely, the guiding concepts related to adolescent

health, the major interventions and settings where they can be delivered, and the keys to success (28).

One of the guiding concepts of particular importance relates to the interrelatedness of health problems by adolescents. Problem behaviour theory (29) has identified a co-occurrence of behaviours (e.g., early unprotected sexuality and use of substances) leading to health problems. Health problems associated with adolescents, typically attracting the public eye, not only have common roots (see *Figure 2*) but are linked together in terms of cause and effect (30). For example, the use of psychoactive substances alters judgment and makes aggressive acts, unprotected sex and accidents more likely. '

Moreover, the preventative interventions for many of the behaviours relating to adolescent health problems, including those associated with sexual and reproductive health, are the same and are summarized in the *Framework* as:

- o provision of a safe and supportive environment;
- o access to sound information;
- o help to build skills for living;
- o provision of counselling when needed;
- o provision of health services which are genuinely accessible and of good quality.

It is the combination of these interventions which is all important for the promotion of healthy development, including sexual maturation, as well as the prevention of and response to health problems, i.e., no single intervention on its own will achieve promotion or prevention goals. These interventions are not likely to be delivered by the same people in the same settings. A situation analysis provides an opportunity to identify and assess the systematic efforts to promote adolescents' health that take place (or could take place) in the various settings in which adolescents live, study, work and play — homes, schools, health centres, workplaces, the "street", and community organizations.

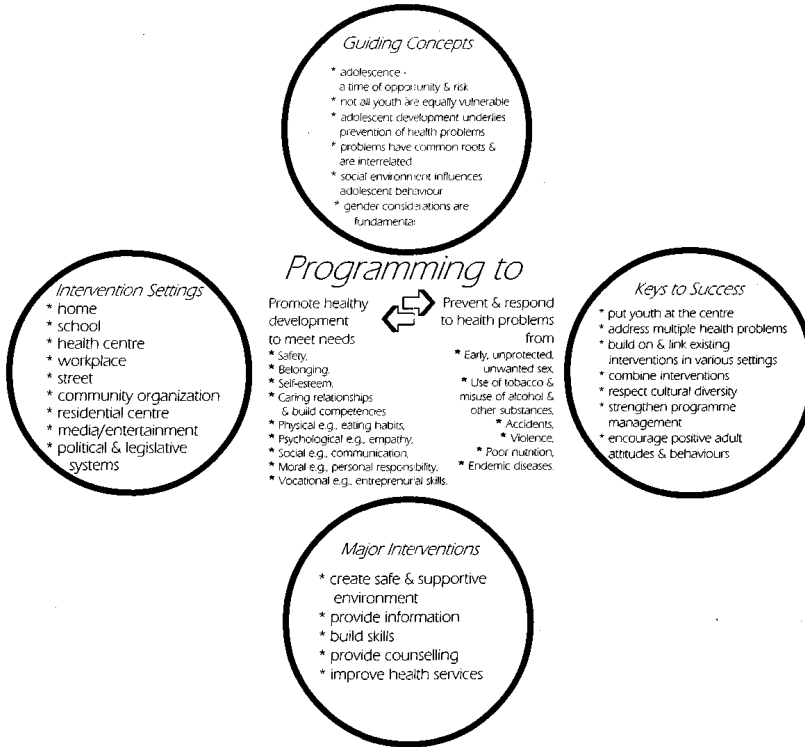
The Regional Office for Europe of the World Health Organization conducted an adolescent health survey to determine the priorities accorded to the health of adolescents in European countries (*Box 2*). This survey provides the basis for examining how sexual and reproductive health issues for adolescents relate to other health and development concerns.

FRAMEWORK FOR COUNTRY PROGRAMMING FOR ADOLESCENT HEALTH

Challenges

Building political commitment

- * "youth are healthy"
- but behaviours starting during adolescence are crucial to current & future health
- * "the issues are too sensitive"
- but the stakes are too high to ignore & there are those able to act
- * "youth make economic & political demands"
- they are also a great resource for social & economic progress
- * "there's no money"
- much can be done with better use of existing resources



Challenges

Monitoring & evaluation

- * establish & use indicators
- * track quality & coverage in multiple settings
- * understand the impact of youth participation throughout programming

Challenges

Identifying priorities for action

- * collect & analyse data by age & sex
- * compile data from different sectors
- * involve youth systematically
- * determine target groups

Challenges

Maintaining implementation

- * foster adult-youth partnerships
- * reorient & sustain existing interventions through training
- * coordinate activities in multiple settings
- * continually recruit young people as human resources
- * achieve large-scale programming

Key Health Problems: unwanted, unsafe pregnancy; maternal mortality and morbidity; infant mortality; abortion; STDs; HIV; RTIs; cancers; homicide; suicide; injuries; disabilities; anaemia; obesity; dental caries; tuberculosis; malaria; schistosomiasis; intestinal helminths.

YOUTH HEALTH AND DEVELOPMENT — LEVELS OF CAUSATION AND IMPACT

Health and Development Problems

Increased child mortality, low birth weight, increased fertility, heart disease, cancer and other tobacco-related causes of death and disease; poor parenting skills; decreased productivity, unemployment and poverty; chronic disease and disability; HIV/AIDS and other STDs; prostitution, teenage pregnancy, abortion, and maternal death; intentional and unintentional injuries, disabilities, and death; school absenteeism and drop-outs; poor nutrition and common endemic diseases; illiteracy



High-risk Behaviours

Substance abuse (including the use of alcohol and tobacco; engaging in unwanted and/or unsafe sex; unhealthy eating habits; situations which increase the likelihood of accidents and violence; negative and possibly harmful peer relationships and affiliations; street children, child soldiers, child sexual exploitation; harmful work conditions



Immediate Causes

Inadequate information and skills; poor access to education and health services; unsafe and unsupportive environment (from family and friends; service providers; policies/legislation and the media); exploitation and abuse



Underlying Factor?

Poverty, rapid social change and urbanization; gender, ethnic and other forms of discrimination; unemployment; social values and norms; war and emergencies

ADOLESCENT HEALTH SURVEY IN EUROPEAN COUNTRIES

As part of the preparation for a major meeting in 1995, the *WHO-UNFPA-UNICEF Study Group on Programming for Adolescent Health*, the Regional Office for Europe (EURO), commissioned a survey to identify key health issues.

How was the data collected?

A questionnaire was developed and sent to medical personnel, health promotion staff and those involved in the Healthy Schools Project in 40 countries in the region. Responses were received from 22 countries, covering a substantial cross-section of Europe (except for central Asian Republics).

The survey was supplemented by a literature review, including international health statistical sources, to provide epidemiological data.

What did the epidemiological review show?

- o throughout the European Region, mortality rates per 100 000 in 15-24 year olds have been falling since 1995, with large variations between countries, and with mortality rates among males exceeding that of females
- o principal causes of death among youth are accidents and suicides.

Findings based on the responses to the survey questionnaire indicate that:

- o adolescent (10-24 years) health problems relate mainly to psychosocial issues, sexual and reproductive health concerns and those related to use of substances such as tobacco, alcohol and psychoactive drugs. High levels of mortality from accidents, homicides and suicides were noted
- o key services identified as important are school-based health education and health services, counselling services and general health education (the European Health Promoting Schools Network is also mentioned as an important development)
- o most respondents prefer specialized preparation and training of professionals delivering counselling and health services to adolescents although the form this should take was not clear
- o the extent to which adolescents *are* consulted or involved in identifying their health needs or in providing services was unclear
- o ten of the countries responding to the survey have adopted national health targets for adolescents, principally relating to smoking, adolescent pregnancy, suicides, alcohol consumption and drug misuse.

What comes next?

A number of countries in the region are in the process of planning or doing situation analyses of adolescent health, which include sexual and reproductive health, in order to lay a foundation for systematic programme development to improve adolescent health.

Young people as a resource

While young people face many new problems in the contemporary world, there are also new opportunities which, if combined with the energy and creativity of young people, can bring tremendous dividends. Recognition of young people as a resource facilitates youth participation in the development, implementation and evaluation of programmes.

One way to draw upon their resources is through involving them in programmes which are designed to meet their needs. Such a client-centred approach is advantageous to young people themselves as well as the programmes. If young people are encouraged to participate and *are* rewarded for their contribution, they can:

- o acquire knowledge and marketable skills, and prevent problems. This benefits their own personal development.
- o lead to more realistic and meaningful formulation, implementation and evaluation of policies and programmes, including all phases of a situation analysis. This benefits the institutional responses.

Although participatory approaches involving young people have been strongly endorsed as effective by the scientific community, much remains to be learned about how best to put them into practice in countries with very different needs, cultures and infrastructures. Systematic involvement of young people remains the exception rather than the rule. The extent to which young people can be involved or actively participate in programmes, from non-involvement to shared decision-making with adults, is illustrated in *Figure 3 (31)*. Some innovative approaches used to involve young people in Africa, Asia and Europe *are* described in *Box3*.

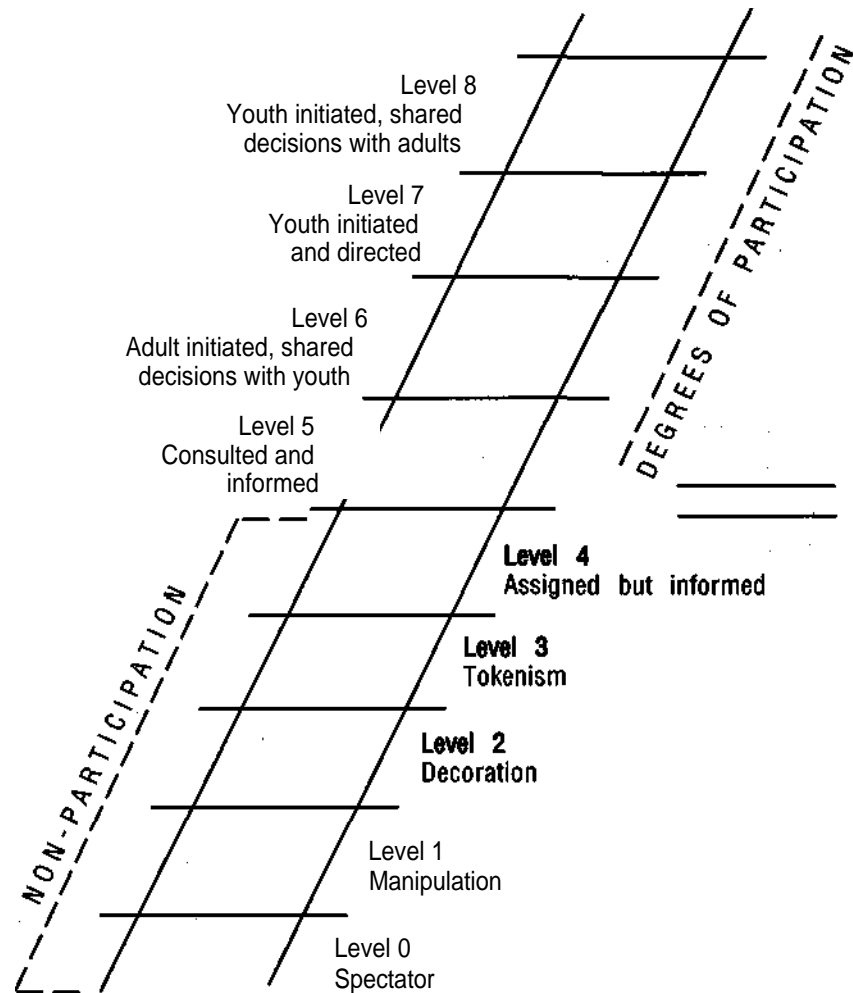
The growing recognition of the importance of adolescent health

Considerable progress in recognizing the importance of adolescent health has been made globally and, to some extent, regionally, and is just beginning to result in policy formulation and programming at the national level. International support for adolescent health *has* been manifest in a number of ways including: *The WHO/UNFPA/UNICEF Joint Statement on the Reproductive Health of Adolescents (36)*; a series of World Health Assembly and Regional Committee Resolutions of WHO; the UN Convention on the Rights of the Child, which defines the child as a person up to the age of 18; the 1994 International Conference on Population and Development (ICPD); and the 4th International Conference on Women in 1995.

At the global level, agencies which have formulated policy or are focusing attention on adolescent health needs include UNESCO, ILO, FAO and the World Bank, and WHO, UNFPA and UNICEF. Major bilateral donors and foundations

Figure 3

LADDER OF PARTICIPATION



WHO 97013

Source: The McCreary Centre Society (1996) *British Columbia youth health action handbook*. Burnaby, B.C., Canada, Adapted from Roger A. Hart. *Children's participation: from tokenism to citizenship*. Florence, Italy, UNICEF International Child Development Centre (Innocenti Essays No. 4).

GIVING VOICE TO YOUNG PEOPLE

Narrative Research Method to Study Sexual Behaviour Patterns of Young People WHO, together with its partners, the World Assembly of Youth (WAY) and the World Organization of Scout Movement (WOSMJ), developed the Narrative Research Method through its use in eleven African countries to learn about young people's awareness, knowledge, attitudes and behaviour related to their sexual and reproductive health. The project drew upon youth leaders aged 18-25 years, of both sexes, to develop the instruments used to collect information from over 13 000 adolescents, as well as to collect and analyse the data (32-33). Details about this method are provided in *Action D 2*.

Situation Analysis of Street Children and Street Youth in the Philippines
In light of the significant rise in the number of street children and youth in the Philippines, the situation analysis sought to describe their current situation and aspirations and use the findings to formulate specific programmes and policies. It was carried out by Kabalikat ng Pamilyang Pilipino Foundation, Inc, for UNICEF, in five cities in the Philippines and involved young people aged 7-12 and 13-18 years (34). Young people used participatory approaches such as drawing and drama to collect the information from others.

Other methods used consisted of interviews with randomly selected street children and youth, and focus group discussions with young people and with service providers. The methodology also included one-day long participatory workshops to further define and understand the situations of the respondents. The youth peer educators also arranged the venues for the information collection phase and translated the tools used:

Young People's Involvement in Family Planning Associations

In 1995, representatives of young people actively involved in Family Planning Associations (FPAs) in Europe were brought together for a meeting endorsed by the Europe Regional Council of the international Planned Parenthood Federation (35). A quick survey of the European FPAs carried out beforehand indicated that the majority of FPAs identified young people as the key target for their programmes to promote good sexual and reproductive health.

The meeting and resulting strategy document demonstrated how an organization can formally draw upon young people as a resource for the renewal of policy and programme approaches. They recommended:

- o IPPF investment in youth involvement through an annual competition offering seed funding for the most innovative project at an FPA-level
- o governance in FPAs and the IPPF, including training designed to improve the skills of young volunteers so that they can play an active role in the governance of the organization
- o youth involvement in FPAs through youth groups, networking, cooperation and training/skills development
- o communication between representatives from active FPA youth groups in order to support information sharing and programmatic support
- o youth-friendly service provision built around involvement of young people in planning and management, new staff training, operation and evaluation of projects, and policy of youth employment so as to create a more balanced age profile among staff
- o advocacy at the level of the IPPF and the FPAs to ensure youth representation on the IPPF Regional Council, and the FPA boards, respectively, and to encourage establishment of FPA youth groups to strengthen lobbying to national governments on legislation and sexual health policy.

Note to the Reader

To make best use of this Guide, the reader is advised to review the illustration of the situation analysis process in the Introduction and to skim the three sections describing the different phases of the situation analysis. In each phase, actions are proposed, although the order need not be strictly followed. Some actions may be combined or undertaken concurrently, and their sequence may be modified.



P. PLANNING THE SITUATION ANALYSIS

The objective of the planning phase is to define the parameters of the situation analysis, namely: the purpose and anticipated benefits; technical and geographical focus; organizational arrangements; and, resource requirements. The actions for this phase *are* suggested in the checklist below.

ACTIONS

- 1 Deciding to do a situation analysis
- 2 Bringing people on board
- 3 Reviewing core issues and setting objectives
- 4 Determining users of the situation analysis
- 5 Thinking ahead about strategies for data collection
- 6 Formulating a workplan

P. 1 DECIDING TO DO A SITUATION ANALYSIS

A situation analysis is undertaken in order to allow informed decision-making about action needed to protect and promote health. In most countries, the information currently available on adolescent sexual and reproductive health is partial, of mixed quality and inadequately synthesized.

Adolescents *are* commonly perceived as a relatively healthy group in whom there is little need to invest health resources. Whilst it is true that they *are* relatively free of physical disease (with the notable exception of STDs including HIV infection), they have other health problems — often related to behaviours typical of this age group. Some of these have serious long-term consequences. Many of the problems are poorly understood and others have been neglected, but it is now recognized that promoting and protecting adolescent health is an essential public health concern and a sound investment for society.

The aim of a situation analysis is to assess current adolescent sexual and reproductive health status, and behaviours, and to review the initiatives in various settings set up to respond to adolescents' needs and to associated health problems.

Specifically, the objectives of a situation analysis are:

- o to identify the conditions or diseases which most seriously impair adolescent sexual and reproductive health;
- o to identify risk and protective factors, including adolescent behaviours, socioeconomic conditions and cultural norms and values, that contribute to sexual and reproductive health;
- o to identify effective programme strategies and interventions.

Within these areas, it may be useful to investigate in more detail the following:

- o adolescent relationships, with peers, members of the opposite sex, siblings, parents, and other adults, within the family, and in the outside world;
- o the opportunities for cooperation and coordination between all agencies working with adolescents, in health, education, employment, welfare, justice, sports and others;
- o the skills, knowledge and experience required by any professionals working or coming into contact with adolescents; and in view of this, the orientation, sensitization and training that should be offered to these professionals to equip them appropriately for their tasks.

The decision to conduct a situation analysis may lie with a combination of interested parties, including policy-makers, programme managers, donors and/or

researchers. The success of the undertaking will depend on the commitment and availability of resources: political will; funds; technical expertise; access to information, and sufficient time. Ultimately, a reliable and competent group will need to accept responsibility for conducting the analysis and obtaining adequate resources for it to be completed successfully.

Once the decision has been made, carrying out all three phases of the situation analysis, could take around five to six months. The duration and cost of the analysis will depend on the capacity of the organization undertaking it as well as the dimensions of the situation analysis, i.e., the technical scope and depth, and geographical level and coverage.

Securing approval

Before proceeding with the situation analysis, formal clearance may have to be obtained from the relevant authorities. Further clearance may be required at later stages of the situation analysis from local authorities in the areas selected for data collection. This is particularly important as the information needed may be highly sensitive and not easily accessible. It will also facilitate any coordination that may be required with other pertinent situation analyses that have already been undertaken and/or are under way.

As a courtesy and in order to pave the way for good cooperative relations with the community, it is important to inform influential community leaders about the intended research. Ensuring positive attitudes and support for the project is the key to successful data collection and follow-up activities.

The members of the Technical Advisory Group and the Steering Committee, the two groups that will be established in *Actions P. ©*, will play a role in getting the necessary agreement from the authorities as rapidly as possible. They will also be called on to help inform the community.

P. 2 BRINGING PEOPLE ON BOARD

As with any other undertaking, the quality of the situation analysis will rely on the people recruited to plan and carry it out. In an organizational sense, the human resources used for the situation analysis fall into three groups which are complementary in terms of roles and responsibilities. They *are* the Technical Advisory Group, the Steering Committee, and the situation analysis team. Each is described below:

The Technical Advisory Group

The Technical Advisory Group, a small and committed core group, can guide the design, scale, implementation and follow-up of the situation analysis. This group will include the Principal Investigator for the situation analysis, and key

initiators of the situation analysis. The group will consist of 8-10 individuals who:

- o have expertise in behavioural, biomedical and epidemiological research, and communication;
- o are skilled in programme management, preferably related to adolescent health (planning, coordination, implementation and evaluation);
- o represent the different perspectives and operational experience of the numerous governmental and nongovernmental partners. This will facilitate an integrated response to the major adolescent sexual and reproductive health problems identified through the situation analysis, and will cast the net beyond the health sector for the mobilization of human, technical and financial resources, and access to information.

The group should include two or three knowledgeable young women and men, such as youth leaders. Young people will provide valuable insight into common adolescent behaviours and young people's perceptions of existing interventions. It also sets an important precedent for young people's participation in future activities undertaken following the situation analysis.

The Steering Committee

When the core issues and potential users of the situation analysis have been identified, the Technical Advisory Group will be in a position to establish the Steering Committee. This group includes the Technical Advisory Group as well as an additional 12-20 knowledgeable and interested individuals. Its members will include those who influence programmes and policies, and young people.

As in the Technical Advisory Group, it is important that both sexes be well represented. Overall, the purpose of this group is to broaden ownership and application of the findings to a wider influential circle at the national and local level. Specifically, it is to assist the situation analysis team by giving it political support, opening doors to information, and initiating changes suggested by the results of the situation analysis.

There is one major difference between this group and the Technical Advisory Group. The Technical Advisory Group is engaged in continuous provision of technical guidance during the course of the situation analysis. The level of assistance provided by the much larger Steering Committee is likely to be limited to ad hoc contact on an individual basis or during scheduled meetings. Two meetings are suggested in this Guide (see *Box 4*). Some individuals invited to be part of the Steering Committee may be available only for the initial meeting, or perhaps even just for the opening ceremony. However, even minimal participation of certain influential Steering Committee members may be important. In principle, members

should be available throughout the situation analysis, to be called upon as required, for example to help secure approval from authorities or to inform the community about the situation analysis.

The Steering Committee is briefed by the Technical Advisory Group about the technical and financial aspects of the situation analysis, and the expected use of the findings.

Box 4

WHAT THE STEERING COMMITTEE CAN DO

During an initial planning workshop (*Action P.3*)

- to elaborate the questions to be raised by the situation analysis
- to set its specific objectives
- to determine its scale
- to help identify likely sources of existing information in various sectors
- And
- to gain access to that information during the course of the situation Analysis

During a meeting at the conclusion of the situation analysis (*Action U 3*)

- to review the findings
- help disseminate them, and
- use them for programme planning

Situation analysis team

The small core team responsible for carrying out the situation analysis needs to have people with:

- expertise in research;
- understanding of programming for adolescent sexual and reproductive health;
- expertise in various disciplines so that adolescent sexual and reproductive health concerns can be considered from the broad perspective of all relevant sectors such as health, education, justice, social welfare, labour, youth and sports, etc.;
- access to existing data and other sources of relevant information which they can share.

The core team is led by a Principal Investigator (see *Box5*). Depending on the issues to be addressed, data collection methods used, and the level of resources, the Principal Investigator will need to be supported by data collection, data entry, and data manager/analyst staff, a statistician and a secretary. To encourage the consideration of both female and male perspectives in all phases of the situation

analysis, both sexes need to be represented on the team. For recruitment of data collection staff, a wide range of groups can be drawn upon, including: young people in youth-serving NGOs, schools and universities; community nurses and nurses' aids; social workers; physicians with community experience; teachers and community health educators, and social scientists.

As mentioned in *the Introduction*, involving young people in programmes, including situation analyses, is still a relatively new concept. However, it is an innovation of proven worth and organizers should not dismiss their involvement on the grounds of lack of time, resources or prior experience. Adolescents have a substantial contribution to make to the situation analysis which needs to be considered explicitly and incorporated from the outset.

Box 5

QUALIFICATIONS AND RESPONSIBILITIES OF THE PRINCIPAL INVESTIGATOR:

- o qualifications: social scientist/epidemiologist researcher and/or adolescent health programmer with a background in conducting adolescent health research; experienced in participatory approaches; capable of bringing together a diverse working group; receptive to the needs of adolescents and influential members of the community
- o responsibilities: serves as team leader; supervises all phases of the situation analysis; coordinates meetings of Technical Advisory Group and Steering Committee; recruits situation analysis team members

P. 3 REVIEWING CORE ISSUES AND SETTING OBJECTIVES

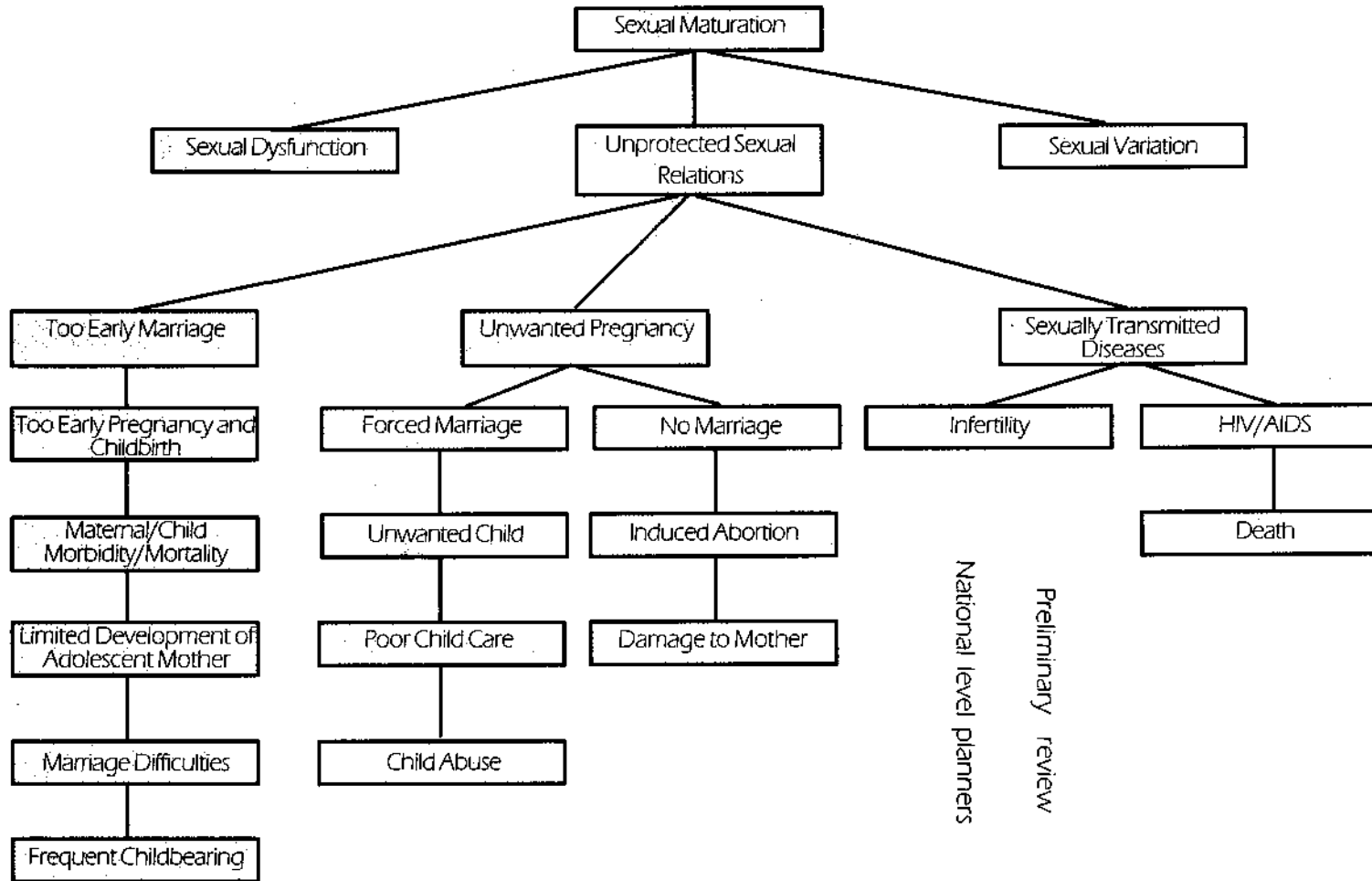
The process of reviewing core issues and setting objectives is likely to take place twice during the planning phase. The first time, in a preliminary way, limited only to the Technical Advisory Group; the second time, during a planning workshop, with participation expanded to the Steering Committee. (See [Box 6](#) for suggested key themes.)

Preliminary review

The Technical Advisory Group needs to look at what is known and what is not known about the sexual and reproductive health of adolescents. Three principal questions will assist in focusing the study:

- o *What are the priority issues of concern in adolescent sexual and reproductive health that this situation analysis should address? (See Figure 5 for "Potential But Preventable Problems and Points of Intervention".)*

POTENTIAL BUT PREVENTABLE PROBLEMS AND POINTS OF



National level planners

Preliminary review

Priority issues of concern from the point of view of adolescents themselves, policy-makers, governmental and nongovernmental, programme planners, and service providers; the factors contributing to adolescents' major problems; groups at risk and lacking health and other support services.

- *What policy and programme initiatives currently exist to meet the needs of adolescents? How do families and the community contribute to meeting these needs?*

Consistent with the *WHO/UNFPA/UNICEF Framework for Programming (Figure 1)*, all activities designed to prevent or reduce the problem, such as provision of information, building skills, counselling, health services (promotive, preventive and care), and policies, laws, or institutional guidelines concerned with the identified problems.

- *How can information about these issues be used to strengthen relevant programmes and policies?*

Potential opportunities relate to training; introduction of new interventions and improvement of existing ones; policy change; creating a safe and supportive environment, and the evaluation of the effectiveness of responses to the identified needs and problems.

It may be helpful to have preliminary consultations with some key informants including young people, to review and clarify these questions and the information needs of the potential users of the situation analysis. This will allow better priority setting in the gathering of data, more precise identification of users of the findings, and a clearer focus of analysis.

Box 6

KEY THEMES FOR INVESTIGATION

- Context: sociocultural, economic, political
- Socio-demographic factors: family structure, marriage, education, employment
- Development: physical, psychological, social and sexual maturation
- Behaviour patterns: sexual, health-seeking, high-risk
- Health status: morbidity and mortality, common infections; disabilities; psychological problems; nutritional problems; etc.
- Institutional responses: promotive, preventive and care interventions; policies, laws and regulations on age of marriage, access to reproductive health services and products, and others

Note: These themes are used in the Doing phase to organize the collection of existing information

After the core issues for the situation analysis have been identified, the objectives of the situation analysis can be clearly laid out. These will be used on numerous occasions, e.g., for fundraising, for informing the community, for briefing the Steering Committee and guiding the Planning Workshop. It should be noted that identifying core issues is one of the objectives of the situation analysis itself. It is likely that the analysis will reveal some additional or different core issues from those identified in the planning phase.

Holding the Planning Workshop

It is suggested that the Technical Advisory Group convene an initial planning workshop with the Steering Committee. The purpose of the Planning Workshop is to achieve consensus on the objectives of the situation analysis, to elaborate on core issues already identified and to make recommendations about the data to be collected.

The WHO Grid-Approach described below is one of various planning methods which could be used in the workshop. The Grid Approach is a structured but highly participatory method which has been used for planning multisectoral action in adolescent reproductive health and sexuality in many countries for many years. For the purposes of conducting a situation analysis, the WHO Grid Approach has been modified to focus primarily on action needed to obtain missing information.

Using the *WHO Grid Approach* in the Planning Workshop

<i>Workshop duration:</i>	usually 5 days, but can be shortened to 3 days
<i>Working methods:</i>	group work, plenary presentations and discussion
<i>Facilitators:</i>	should have a background in adolescent sexual and reproductive health and be able to share their knowledge and skills; (this will ensure that above working methods are used properly)
<i>Participants:</i>	20-30 people drawn from a wide range of disciplines who <i>are</i> members of the Steering Committee.

The workshop typically begins with an overview of adolescent health, followed by a discussion of the objectives and an explanation of the method of the workshop. The plenary sessions alternate with working groups of 8-10 people who complete a blank grid three times for different purposes (identifying problems, identifying institutional responses, determining actions needed to collect information through the situation analysis) and report back to plenary at the end of each task.

It is expected that the areas of concern and other information listed in the grids (*Annex I*) may be supplemented or further adapted to the local context because not all of the issues will be relevant in every country or for every situation analysis. In addition, some adolescent sexual and reproductive health issues may emerge in the process of data collection that were not considered in the original plan, and will need to be incorporated into the grids.

The workshop concludes with a presentation of the summary findings. This includes: priority information needs considered to be the most important for informing programme planners; sources of existing information and their strengths and weaknesses; areas where existing information is adequate; and areas where information is missing.

An example of how *Grid 1* was completed by the African Medical and Research Foundation (AMREF), Tanzania, during the field test of this document is provided in *Box 7*. Rather than elaborating all aspects of sexual and reproductive health, as is done for illustration purposes in the completed grids in *Annex 1*, AMREF chose to focus only on three priority concerns. These were: adolescent relationships within the context of sexual health; sexual intercourse, and, pregnancy. Therefore Grid 1 was completed three times, once for each priority concern.

Various participatory methods (*see Annex 2*) may be used to help group reach consensus.

P. 4 DETERMINING USERS OF THE SITUATION ANALYSIS

It will be the responsibility of the Steering Committee to identify those who will or could use the findings of the situation analysis.

Programme managers and service providers in the government and NGOs need information about adolescent sexual and reproductive health for populations living in areas reached by their programme, as well as for populations living in neighbouring areas, in order to permit self-assessment and comparison.

National level planners need an accurate and reliable reference document that:

- o identifies the multiple determinants and consequences of the problems;
- o demonstrates the need for multisectoral analysis, action and collaboration (education, health, welfare, employment, recreation, justice);
- o reflects the priorities and particularities of the situation in the country, including regional and district gaps in resources relative to needs.
- o Other potential users of the information include:
 - o youth and other community leaders;
 - o the general public, parents and adolescents;
 - o religious leaders;
 - o the media;
 - o professional and scientific associations, e.g. teachers, nurses, doctors researchers;
 - o donors;

GRID 1 - PROBLEMS

"ADOLESCENT RELATIONSHIPS WITHIN THE CONTEXT OF SEXUAL HEALTH", AMREF, TANZANIA

AREAS OF CONCERN	PHYSICAL	Psychological	ADULT RELATIONS	SOCIAL	EDUCATION	ECONOMIC	LEGAL
MARRIAGE/ CONSENSUAL UNION	Genital injury Unwanted pregnancies Fertility STD/HIV Domestic violence	Worries about sex, love and appearance Peer pressure Expectations Trauma due to violence	Expelled from house/school Forced marriage Beatings	Refused services Polygamous rels Women lose ID, are marginalized and stigmatized	Expulsion for girls No sex education Lose concentration Disapproval of teachers •	Expectations that money is required Cannot afford services Commercial sex Dowry	Marriage = ownership by man Pregnancy = expulsion from school Some unions not recognised
NON- CONSENSUAL UNION	Genital injury Unwanted pregnancies Fertility STD/HIV Domestic violence	Men = macho image Women powerless Lose trust/faith Guilt Trauma due to violence	Accused of "sinful" behaviour Adult exploitation Expelled from house/school Beatings	Peer pressure Right to say "No" to sex not recognized Lose chance of marriage	Teachers may force sex School does not build confidence Many not in school	Cannot afford services for help (bribes) Cut off from friends and family Look after self	No legal awareness or recognition "Evidence" of rape, etc. Police and courts not friendly
CHILD REARING	Capacity to support child Malnutrition Infant mortality Multiple births	Afraid/resentful of relationships and pregnancy again Inadequacy if single	Expulsion Setting up own home Expectations	Early adulthood Lose contact with peers Battered children	Cannot return to school Missed opportunities No career	Cost of food/clothes for child	
ADOPTION/ FOSTERING		Guilt Missed affection	Foster parents blame for extra work	Insecurity for child Irresponsible parenting	Poor education for child Reinforce poverty	Strain on extended family	Informal arrangements are not enforceable Rights of mother, father and child

o partners who have been involved in reviewing core issues and setting objectives for the situation analysis/³ (S>).

Knowing who will or can use the findings of the situation analysis is critical because the potential users' particular data requirements will in part affect the scope of the situation analysis as well as its information strategy (*Action UOJ*). Details about the various ways in which potential users can draw upon the findings of the situation analysis are provided in the *Using* phase of this document.

P. 5 THINKING AHEAD ABOUT STRATEGIES FOR DATA COLLECTION

The planning workshop provides a basis for thinking ahead about the strategies to be employed for data collection and the scale of the situation analysis. Because of likely resource constraints, the decision about the scale is likely to be a compromise between collecting some existing information from sources at national level, and some new information from smaller, more in-depth studies, perhaps in one or two districts or communities, representative of much of the adolescent population in different conditions, e.g., rural/urban.

There is no need to select the methods of information collection at this point, as this will be done in the next phase of the situation analysis (*Actions D.1—D.2*). However, overall thinking about the strategies has direct implications for who is recruited for the situation analysis team (*Action P.2*), and for the formulation of the workplan (*Action P.6*) because of time and funding requirements. In addition, pretesting of research instruments, data analysis and reporting also involve resource allocation which needs to be included in the workplan.

The two main strategies for data collection are:

o Collecting existing information. A systematic assessment of existing information relevant to adolescent sexual and reproductive health, such as information already collected by government ministries, academic institutions, health services, country-based UN agencies, foundations, census data, demographic and health surveys (DHSs), information from NGOs including youth and women's organizations, religious and community groups, and donors. This is relatively inexpensive because few people are needed to do the review, and other direct costs are limited to photocopying and transportation to different agencies and libraries.

o Collecting new information. The main tools are likely to be quantitative (survey questionnaires), structured or semi-structured interviews, WHO instruments such as the Narrative Research Method and User/System Interaction Method, and in-depth qualitative techniques with specific groups of adolescents,

including those that *are hard* to reach, such as street children or sex workers and adults. These techniques are more expensive than a documents review because of the need for specialized staff trained in social science, epidemiology and statistics, and the time needed to collect and analyse the data from the field.

P. 6 FORMULATING A WORKPLAN

Building on the outputs from the preceding planning actions, the Principal Investigator's primary responsibility is to formulate a detailed workplan for the next two phases of the situation analysis (*Doing and Using*). An outline of a workplan could be prepared even earlier, assuming that the Principal Investigator has adequate information about the expected scope and depth of the situation analysis. The outline will be further elaborated as and when the specific details of data collection and analysis become clear.

The workplan needs to indicate individual actions and corresponding outputs, and resource requirements (time, staff, budget, equipment and supplies). A carefully designed workplan is essential to ensure systematic implementation and monitoring of the situation analysis. It will be modified along the way in response to new ideas and changing circumstances.

The preparation and implementation of the workplan will be facilitated by thinking about the actions described in this Guide, in the terms illustrated in *Box 8*.

Box 8

WORKPLAN ELEMENTS

Action _____ (list phase and action)	
1. Is this essential for RAPID situation analysis?	
2. What resources are required to undertake this action?	
Time (number of weeks/months)	=
Personnel	=
Funds	=
Supplies (paper, diskettes, software, etc.)	=
Equipment (cars, computers, printers, faxes, etc.)	=

The numerous activities of the *Doing and Using* phases which will need to be included in the workplan *are* described in the next sections of this Guide. In particular, it is useful to note that the ethical and logistical considerations related to the collection of information require advance planning to *assure* access to respondents. *Box 36* in *Action D. 3* provides further details.



D. DOING THE SITUATION ANALYSIS

During the planning phase, priority information needs will have been identified and strategies for finding information formulated. These actions will form the basis for the second phase of the situation analysis (*Doing*) — assembling or collecting the required information.

Information on adolescent sexual and reproductive health, particularly attitudes and behaviours, is difficult to find. However, the situation has improved over the past decade — ironically as a consequence of the HIV/AIDS pandemic. The urgent need for practical solutions and factual information has made discussion of these sensitive issues much easier. More open and "down to earth" attitudes have allowed a deeper and wider information base on adolescents to emerge.

The objective of this second phase is to elaborate ways of collecting existing and new information and managing and analysing the assembled information.

ACTIONS

1. Collecting existing information
2. Collecting new information
3. Managing collected information
4. Analysing collected information and data
5. Drawing conclusions

D. 1 COLLECTING EXISTING INFORMATION

The review of existing information, often referred to as secondary data, is the logical first step in a situation analysis. It ensures the use of information that is already available and usable, as well as the identification of gaps in the existing data which may be outdated, imprecise or incomplete. Duplication and wasteful use of scarce resources is thereby avoided. The requirements for new data collection can then be defined and specified to fill the gaps identified.

It is important to note that data on adolescents may become outdated more rapidly than data on other groups. Adolescents themselves *are* going through a period of rapid physical, psychological and social change. Such change may be fleeting and/or intermittent. They *are* also receptive to new ideas that can alter attitudes and behaviours. Therefore, secondary data that is supposed to describe their perceptions may quickly become outdated.

As discussed in *P.5* secondary data can be gathered quickly, at relatively low cost, with minimal local travel. The advantages and limitations of secondary data *are* listed in *Box 9* and further elaborated in *Annex 3*.

Box 9

REVIEW OF AVAILABLE INFORMATION

ADVANTAGES:

- refine specific objectives
- identify key informants
- clarify target groups for further data collection
- synthesize what is known and what facts remain to be found
- add depth to analysis
- identify trends and patterns

LIMITATIONS:

- data may be out of date or limited
- data may be incomplete, biased or unreliable
- methods of collecting information may be inadequate or may not be described
- little data available that is specific to adolescents
- data seldom disaggregated by sex, age, ethnicity or religion

Core issues on which information may be collected were listed in *P. 3*. The availability, quality and location of this information are elaborated on the next page.

- o Contextual information on the social, political, economic, and cultural/religious environment will usually be available from a variety of sources, although the relationship between social environment and adolescents may not necessarily be specified.
- o Socio-demographic information on distribution of 10-24 year olds by sex, rural/urban residence, marital status, educational level and employment status is also generally available, especially from census data, and from the relevant ministries. However age may not be adequately disaggregated.
- o Development of adolescents, their physical, psychological and social maturation affects their behaviours. Information about physical development may be available but there is very little information on psychological and social maturation.
- o Behavior patterns of adolescents with regard to health and sexuality. Information on this subject is not usually available. Knowledge, attitudes and practices (KAP) studies about adolescent sexuality may exist in some areas, especially in regions that have been hard hit by HIV/AIDS. However, adolescent behaviours are changing rapidly and new information will probably be needed.
- o Health status data on fertility, morbidity and mortality are usually available, e.g., from the Ministry of Health, although they are rarely disaggregated by age in a way that is useful. For example, a 5-year grouping such as 15-19 for data on reproductive health obscures biomedical risks of pregnancy for 15-16 year olds which may be quite different than for 18-19 year olds. Some additional information may be available through DHSs, but this should only be included if the questions they used and the persons surveyed have been clearly understood. Information on abortions and STDs including HIV/AIDS is *scarce*, and again, when available, is not always disaggregated by age group and sex in a way that is useful for describing the situation of adolescents. Information on many other health conditions affecting adolescents is not recorded.
- o Institutional responses include a very wide array of activities, and programmes with or for adolescents. Some information about them may be available from central coordinating agencies. But in many places there is little coordination or documentation of such efforts. Texts of policies and laws will be found in written documents, and need to be reviewed carefully for any differences between the sexes. However, these do not always reflect what is actually implemented, specially where traditional rule and civil law differ.

Major national and sub-national surveys in less industrialized countries

Over the last 20 years a large number of major national or sub-national surveys were carried out in less industrialized countries on fertility, use of family planning methods, health problems including AIDS, and, more recently, sexual behaviour. These surveys include:

- o KAP surveys in the 1970s;
- o the World Fertility Survey (WFS) and the contraceptive prevalence surveys (CPSs) in the 1980s;

- o the DHSs since the mid-1980s;
- o the youth and adult reproductive health surveys.

There have also been many in-school surveys, several other KAPB (knowledge, attitudes, behaviour and practices) *surveys and* partner relations surveys related to AIDS. They offer information on fertility, nuptiality, family planning and other matters. It is possible to derive information on how couples meet and form unions, and on sexual behaviour among adolescents, from these surveys.

One of the major limitations of the WFS and the early DHSs was that they concentrated their investigations on women who had been or were still married as the key *actors* in fertility and family planning. However, most of the recent surveys now cover unmarried and married women, and increasingly, men.

In the same way, investigation of adolescent fertility and related factors was limited to married adolescents, mostly young women. It has been recognized that marriage is not the major step in adolescent fertility, sexuality and health. More recent surveys, such as the recent DHSs, acknowledge that sexual activity and fertility *occur* before, during and after the union formation and should be studied as a *process*.

Most of the large surveys were carried out by local researchers and institutions. *Very* often the data sets are still available, permit further processing and can be used again for a specific purpose, with a specific focus. Disaggregating these surveys geographically (by region, district *or* city), to match the situation analysis being undertaken, can be difficult.

Most of the DHS and other demographic surveys present their tables with age groups 15-19 and 20-24, or even 15-24. The size of the samples for these ages (generally more than 250 women for each year of age, and more than 40 men, when men *are* surveyed) permits disaggregation of the data by single year of age and by sex, to get a better picture of health status and events during the adolescent period. It is also possible to create specific age groups for the purpose of the assessment (for instance, 15-16, 17-19, 20-22) which can be broken down by sex and other background variables. However, it is rare to find such survey data for adolescents below age 15, despite indications in some countries that sexual activity commences before this age.

A lot of information can be directly used or processed from DHSs for the situation analysis on adolescent sexual and reproductive health. Information is available on the topics listed below:

Menarche

Premarital sex

Age at first sex

Age at birth of first child

Marriage during adolescence
Contraceptive knowledge
Knowledge of specific methods
Use of contraception at any time in the past
Current use of contraception
Reasons for non-use
Availability and source of contraceptive methods
Attitudes and approval of family planning use
Exposure to information, education and communication (EC) messages about family planning
Use of contraception at first sex
Number of children at first use of contraception
Recent sexual activity, AIDS and STDs (for countries which used this module).

Annex 4 summarizes potential sources of data about adolescent-related issues, and the likely formats in which the data would be available.

Another approach to collecting secondary data on adolescent sexual and reproductive health is shown below. As part of the field-testing of this Guide, the Federation of Female Nurses and Midwives of Nigeria (FENAM) reviewed the existing information on adolescent health in Nigeria. *Box 10* lists issues selected for data collection and sources of these data.

A framework for collecting secondary data on adolescent sexual and reproductive health issues is shown in *Annex 5*. Here the information search is based on adolescent sexual and reproductive health issues, organized by: likely sources of existing data; common strengths, and weaknesses of existing data.

Analysis of existing data

The existing data that has been assembled has to be analysed in order to decide what new information, if any, is required. The collection of new information, discussed in *D 2*, involves significant resource commitment, human and financial, and has logistical implications. Obtaining informed consent, which is an ethical requirement — and just one of the many tasks to be performed — takes time and effort. Careful examination of the quality and scope of existing data is therefore a crucial action to which adequate time and attention should be devoted. A summary of how existing data can be examined is given in *Box 11*.

At this stage, it should be possible to use the existing data to determine why the observed situation occurs and what else is happening. Most often, this is very difficult to do, but at least hypotheses and assumptions about the relationships between available health outcome data, and behavioural and/or service data in particular settings, can be developed. These can then be the basis for selecting areas for new information collection. Further analyses which will go beyond providing descriptive information will be carried out later (see *D. 4*).

FEDERATION OF FEMALE NURSES AND MIDWIVES OF NIGERIA (FENAM)
REVIEW OF EXISTING INFORMATION IN NIGERIA

SELECTING ISSUES AND IDENTIFYING POSSIBLE SOURCES OF INFORMATION

ISSUES

Socio-demographic characteristics and health status

- o Distribution of young people from 10 to 24 by sex, rural/urban residence, marital status, educational enrolment and employment
- o Nutritional status of adolescents by age and sex
- o Adolescent mortality and morbidity by age and sex
- o Adolescent fertility, induced abortion
- o Prevalence of STDs among adolescents
- o Prevalence of HIV/AIDS among adolescents

Sources of information

National Population Commission (NPC)
Federal Office of Statistics (FOS)
Federal Ministry of Health and Social Services(FMOHSS)
Campaign Against Unwanted Pregnancy
Planned Parenthood Federation of Nigeria
AIDSCAP
STOPAIDS
AIDS Prevention Programme

ISSUES

Adolescents' health-related behaviours

- o Adolescent sexual behaviour
- o Adolescent contraceptive use by age and sex
- o Use of health facilities

Sources of information
Action Health International
AIDSCAP
STOPAIDS
IEC-USAID
National Population Commission
Federal Office of Statistics

ISSUES

Programming

- o Description of on-going and past interventions which are implemented by the establishment
- o Strengths and weaknesses of interventions either specially targeted at adolescents or from which adolescents benefited. *(Such interventions will include, but are not limited to, services for the prevention of specific sexual and reproductive health problems, health care services, services providing help following illness and injury, counselling, and outreach programmes)*
- o Perceived achievements/impact of such interventions

Sources of information'

Action Health International
Campaign Against Unwanted Pregnancy
AIDSCAP
STOPAIDS
FENAM
NERDC
Federal Ministry of Health and Social Services(FMOHSS)
IEC-USAID
Ministry of Women's Affairs — Family Support Programme
National Foundation for Vesico-vaginal Fistulae

ISSUES

Policy and legislation

- o Policy relating to adolescent health or development in each major sector
- o Minimum age of marriage and divorce legislation
- o Consent and confidentiality regulations for service use including contraceptives and STD treatment and reporting
- o Medical regulations and requirements for contraceptive provision
- o Abortion legislation, conditions permitting it and consent requirements
- o Female genital mutilation regulations
- o Family life/sexual education
- o Education, obligatory schooling, school-leaving age and regulations concerning pregnant or married students
- o Labour laws, including minimum age
- o Ratification of the convention on the Rights of the Child

Sources of information

Federal Ministry of Justice
Federal Ministry of Health
Federal Ministry of Education

ISSUES

Training and curricula

- o Inclusion or otherwise of issues related to adolescent reproductive health in the curricula
- o Courses or components in which adolescent reproductive health is incorporated
- o Do courses provide training in communication and/or counselling skills, knowledge about adolescent development including reproductive health

Sources of information

Nigerian Nursing Council
Nigerian Medical Council

Through interviews as well as document review

- o describing the sample population, disaggregated by sex, age, rural/urban
- o ordering, reducing or coding the data (data processing) in the form most appropriate to the specific questions of the situation analysis
- o displaying summaries of data in ways that makes interpretation easy
- o drawing conclusions
- o developing strategies for testing or confirming the validity of findings
- o identifying primary data collection needs

D. 2 COLLECTING NEW INFORMATION

Introduction

It is unlikely that existing information on adolescent sexual and reproductive health will provide answers to all the questions of interest. In this case, it must be decided whether there are additional issues of interest for which new (primary) information collection is absolutely necessary. It is important to distinguish between what it would be *nice* to know and what it is *essential* to know.

Some considerations for making such a decision are presented below in answer to two questions:

1. What additional information about adolescent sexual and reproductive health is essential but not available?

Answers to this question will determine the nature and scope of any new information collection in the situation analysis. Information that is needed may not be available, but even if it is, it may be unusable. For instance, the categories under which it has been collected, analysed or presented may limit its quality and usefulness. In many settings, information about abortion, for example, is unlikely to be published or available. When it is available it is likely to be too unrepresentative to be usable. As another example, the association between alcohol consumption and sexual attitudes and behaviours among adolescents is very unlikely to be documented.

2. From whom this information be useful and why?

Answers to this question will be critical in determining which gaps need to be filled, i.e., where to use the limited resources available to the situation analysis. The Technical Committee members will help in exploring this issue. Ideas could also be generated by asking questions about information needs and uses regarding adolescent sexual and reproductive health issues at each of the facilities visited for obtaining existing documents.

An example of the approach taken by the Center for Development and Population Activities, for a situation analysis, using both existing and new information, is provided in *Box 12*.

Box 12

AN EXAMPLE OF A SITUATION ANALYSIS OF ADOLESCENTS WITH EMPHASIS ON REPRODUCTIVE HEALTH

To address the reproductive health care needs of youth in sub-Saharan Africa, the Center for Development and Population Activities carried out an Adolescent and Gender Project for sub-Saharan Africa in 1995 with the financial support of UNFPA. Through needs assessments, pilot projects, training in 9 countries, and a regional youth forum, the project aimed to protect and promote the rights of adolescents to reproductive health information and services. The needs assessments were done in Benin, Burkina Faso, Cameroun, Ethiopia, Ghana, Niger, Nigeria, Senegal and South Africa. In line with the *WHO-UNFPA-UNICEF Framework for Programming in Adolescent Health* in the *Introduction* to this Guide, the political, sociocultural and economic situations in the countries were assessed in order to examine how they affect adolescent reproductive health.

The assessments were designed and implemented by in-country individuals experienced in adolescent reproductive health and each country used a variety of methods to collect information. For example, each started with a review of secondary data, and undertook primary data collection in urban and in rural areas through focus group discussions with adolescents, and with parents, religious and/or community leaders, structured interviews with gatekeepers in the public and private sectors, and questionnaires administered to adolescents, teachers and parents. Recommendations for programme interventions, implications for advocacy and policy formulation and suggestions for further research, were presented. Details are provided in *Annex 6*.

The implementation of the situation analysis in Ghana has led to the development of a National Adolescent Reproductive Health Policy, dissemination of the situation analysis at the national level and final printing of the analysis in a user-friendly guide for dissemination at the local level.

Sources of information

In collecting new information to supplement the secondary data for the situation analysis, the two key sources of information *are*:

- o **adolescents themselves;**
- o **adults who interact with them.**

Adolescents *are* the primary source of information about their own situation — followed by the adults who influence their lives. These adults include parents and other family members, teachers, youth leaders, religious leaders, health and community workers. There is also a wider circle of people who influence adolescents' health and social well-being — law makers, political leaders, popular entertainers and media 'stars.

Settings from which to collect information

The sexual and reproductive health of adolescents, as discussed earlier, depends in part on the environment in which they live. Families, communities, schools and health centres play important roles in meeting the needs of adolescents, promoting their health and preventing problems. The degree to which various different settings provide safe and supportive environments for adolescents represents valuable information for the situation analysis.

The settings in which adolescents and their inner and wider circle of adults live and interact provide convenient locations for information collection. They are:

- o homes;
- o communities;
- o schools;
- o health centres;
- o policy and legislative systems.

Additional key characteristics to note

Geographic location

The settings and sources from which primary data *are* to be collected should ideally be selected from a few districts, including both rural and urban. This not only contains costs, but also allows a more in-depth analysis of adolescent health and behaviour and the interactions between the interventions provided by various sectors (e.g., health, education, social welfare). These districts should be representative of the majority of adolescents in the country. That is, the adolescents in these chosen districts should be similar to adolescents in the general population.

However, in the interests of serving those in greatest need, districts might be selected because the situation for adolescents there is particularly problematic. They might also be selected because there is local commitment to improving or protecting adolescent sexual and reproductive health. To sum up, the advantages of limiting the collection of new information to selected locations *are*:

- o it is less costly;
- o in-depth collection of data and analysis is possible;
- o it contributes to rapid response within the district;
- o it can serve as a model for the rest of the country.

The age of adolescent respondents

Age is a critical factor that must be noted for all adolescents during data collection as discussed in *D. (D. Categorizing in this way allows the implications of age for various aspects of sexual and reproductive health to be explored and understood. The importance of having this raw data available for later analysis cannot be overemphasized.*

Methods and instruments

A variety of quantitative and qualitative methods and instruments are available for the collection of new information. The choice of method depends on:

- o the kinds of information needed;
- o the sociocultural context;
- o time and logistical constraints;
- o the human and financial resources available.

Quantitative and qualitative data complement each other and together provide more complete information. Certain kinds of information can only be obtained through quantitative methods and others only through qualitative methods. Quantitative methods are used to estimate an amount, the size, distribution and association of certain factors. The data derived from these methods are expressed numerically and can be subjected to statistical tests to establish validity. They are therefore seen as being more "objective". Qualitative methods are used to obtain more in-depth, subjective information (recorded using quantitative methods) that can provide insight into the nature and causes of problems and into the consequences of the problems for those affected.

Some of the issues under examination in a situation analysis occur as a result of attitudes and behaviours developed during adolescence. The current health status of adolescents, quantitative measures of morbidity and mortality, while important in their own right, will not depict current behaviours nor the conditions which influence them. A mix of quantitative and qualitative methods will be necessary to fully explore health status, behaviours, attitudes and their determinants. *Annex 7* summarizes methodological options for collecting new information by issue, respondents and sampling. A brief summary follows in *Box 13*.

Box 13

INSTRUMENTS FOR THE COLLECTION OF QUANTITATIVE AND QUALITATIVE DATA

Collection of quantitative data:	The main instruments <i>are</i> likely to be survey questionnaires and structured or semi-structured interviews and numerically-oriented primary data gathering (e.g., surveys and service data from health units).
Collection of qualitative data:	The principal instruments are observation, in-depth interviews, focus group discussions, life histories and role plays.

Sources of information

Adolescents: the primary source of information

The most crucial information for improved programming and services for adolescent sexual and reproductive health comes from young people themselves. They have more knowledge than adults about:

- o why and under what conditions they have or do not have sexual relations;
- o whether they take any precautions to prevent pregnancy or STD, or whether they even think about it;
- o the existing interventions that actually help them to reduce health risks and lead responsible lives (information, counselling, health services).

Adolescents are a heterogeneous group

Adolescents cannot be treated as a single group. The age range covered by adolescence may not appear large — roughly one decade — but it comprises groups of individuals at different developmental stages, living very different lives. In relation to sexual and reproductive health, 10-14 year olds and 15-19 year olds, for example, cannot be considered nor dealt with together.

Adolescents differ in how they spend their time and where they live — whether they are in school, in work, living at home, living independently, or living on the street. Their contacts with the outside world and their relationships with adults outside the family may vary enormously.

Adolescents lead varied social lives and have different social relationships. Some are close to their families, others are not, some have many close friends, some just a few, others none at all. Some adolescents *are* isolated and lonely. Others are never at home, have a good network of friends, providing entertainment, fun and real support.

Communities and families offer different degrees of support and services in different settings. In the best situations, help is available in the form of primary health care centres, STD and family planning services, sex education in and out of school and in the media, and recreation centres and resources. These various elements determine the support that adolescents receive from their immediate environment, including care and protection of their sexual and reproductive health.

Some adolescents live in supportive environments, even in poor settings. Others live in situations of extreme poverty, unrest, insecurity and violence. The most vulnerable are those living on the street, many of whom survive through selling sex. Others work in dangerous conditions and in dangerous environments.

The heterogeneity of the group under study must be taken into account in the methods used for collecting information and in the design of questions. In order to ensure relevance, and comprehension of the questions to be used, the

Technical Advisory Group needs input from adolescents. Some general questions are suggested in *Box 14*.

Box 14

WHAT TO ASK ADOLESCENTS IN EACH SETTING

- Status:** Their age and sex, family circumstances, and level of schooling.
How they feel about themselves and their circumstances.
- Social life:** What they do and how they spend their time.
Where are they during the day and in the evening?
Who are the important people that they talk to, confide in and seek advice from?
What information and services do they need and get?
What would they want to improve in their lives?
- Health needs:** What do they consider to be their health needs?
- Depending on the community they belong to and whether they go to school, more specific questions can be posed about the adolescents' sexual behaviour which would include their sexual experience, their use of methods to prevent pregnancy and/or STD, and their beliefs.
- The purpose of these questions will be to learn a) what interventions the young person is aware of and b) to what degree they see them as accessible, helpful, and useful in meeting their needs.
- Health interventions:** What interventions are available to:
- o create safe and supportive environments
 - o provide information
 - o build skills development and education
 - o provide counselling
 - o improve health services.
- Perceptions:** What do adolescents believe would most help meet their health needs that they do not have now?
How and from whom would they like to receive that kind of help?

Adolescents were a primary source of information for the first national study of the reproductive sexual health of adolescents in Malaysia. Several methods were used to explore their attitudes, knowledge and behaviours (see *Box 15* over).

VARIOUS METHODS OF PRIMARY DATA COLLECTION USED IN MALAYSIA

During 1994-1997, a national study on the reproductive health of adolescents in Malaysia was undertaken by the National Population and Family Planning Development Board (NPFDB), in collaboration with several ministries, including the Ministry of Health, Ministry of National Unity and Social Development, and Ministry of Youth, as well as the Federation of Family Planning Associations of Malaysia (FFPAM). Partial financial support was provided through the International Planned Parenthood Federation (IPPF).

Both quantitative and qualitative methods built on preliminary findings from a review of secondary data, principally published literature.

A quantitative knowledge, attitudes and practices survey of adolescents aged 10-19 years was carried out. The adolescents were drawn from a representative national sub-sample of households participating in the 1994 Malaysian population and family survey (MPFS). This survey involved 2366 adolescents, and employed two approaches: face-to-face interview using an interview guide of adolescents aged 10-19 years. The section on sexual behaviour and reproductive health knowledge was self-administered through a questionnaire for the adolescents aged 13-19 years. There were reservations about the validity of the responses obtained through the questionnaire as it is unusual in Malaysian society to discuss sexual and reproductive health openly.

Additional data was collected using a quantitative method through the press media. A survey requesting adolescents aged 13-19 to send their thoughts about "what they know about sex" was printed in major newspapers representing the four major languages (Malay, Chinese, Indian and English). A total of 1864 responses was obtained through the survey which appeared three times a week over a three-month period. The responses elicited were considered to have greater validity than the household survey due to the anonymity of the respondents. This survey is reproduced below.

Subsequently, a qualitative enquiry was organized to gain more in-depth knowledge. This included focus group discussions with adolescents from different walks of life (students, factory workers, juveniles in rehabilitation centres and youths in shopping complexes), and individual interviews with adolescents and adults (parents, teachers, counsellors, religious teachers and factory wardens). A total of 62 focus group discussions and 44 individual interviews with 297 adolescents and 104 adult respondents were conducted.

The dissemination of the study's findings and its impact in mobilizing increased programming efforts for adolescent health are described in the section on using the situation analysis (*U. 3*).

WHAT DO YOU KNOW ABOUT SEX?

If you are 13 to 20 years old, listen up. The National Population & Family Development Board and *The Star* are giving you a chance to tell adults what you know about sex. So fill in this questionnaire and send it to Teen Post, Section 2, The Star, No 13, Jalan 13/6, 46200 Potaling Jaya, Selangor. Tel: (03) 758 1 188. Or fax it to: (03) 755 4039/2859. Circle/tick/fill where appropriate. If you'd like to provide further details, please attach a sheet: we also welcome comments. Personal information will be treated confidentially.

1. PERSONAL INFORMATION:

1.1 Date of birth: _____

1.2 Sex: M F

1.3 Education: current level/highest level reached _____

1.4 Address: _____
_____ postcode- _____

2. SEX EDUCATION: □□□□

2.1 Which of the following would you consider most informative/helpful in providing sex knowledge?

	most informative	least informative	informative
--	---------------------	----------------------	-------------

- | | | | |
|----------------------------------|--------------------------|--------------------------|--------------------------|
| a. Father/mother/guardian | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Brother/sister | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Classmate/friend | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Teacher | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Counsellor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Newspapers/magazines | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Talks on sex | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Others (please specify) _____ | | | |

2.2 Have you ever attended talks on the following?

	yes	no	cannot recall
--	-----	----	---------------

- | | | | |
|------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Bodily changes during puberty | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Menstruation (period) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Nocturnal emission (wet dreams) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Sexual intercourse | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Pregnancy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Contraceptive methods | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Others (please specify) _____ | | | |

2.3 At what age do you think sex education should be introduced in school?
_____ years

2.4 An unmarried couple: " agree disagree

- | | | |
|--|--------------------------|--------------------------|
| a. Can have sexual intercourse when they are engaged | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Can have sexual intercourse when they are in love | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Can have sexual intercourse when they feel strong attraction for each other | <input type="checkbox"/> | <input type="checkbox"/> |

2.5 Do you approve of cohabitation, that is, mutually consenting to live together as a couple without being legally married? approve disapprove

2.6 At what age did you start to masturbate? _____ years

2.7 How many times have you masturbated in the last week? _____ times

2.8 At what age did you first have sexual intercourse? _____ years

continued over

3. SEXUAL ACTIVITIES:

3.1 Have you done the following with your boyfriend/girlfriend?

	yes	no	if yes, at what age
a. Holding hands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Kissing and necking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Petting (very close intimacy, short of intercourse)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Sexual intercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Other acts (please specify) _____			

3.2 Have you done the following activities? yes no if yes, at what age

- a. Dressed to attract the opposite sex
- b. Looked at pornographic videos and pictures
- c. Read pornographic material

4. KNOWLEDGE AND PRACTICE OF CONTRACEPTION:

4.1 Have you heard of the following contraceptives?

4.2 Have you ever used them?

contraceptives	yes	no	yes	no
a. Condom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The Pill (oral)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. IUD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Spermicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Injectable				
contraceptives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. others (specify) _____				

Settings

Homes

Adolescent

In general, household surveys of adolescents *are* likely to be far too cumbersome for a rapid situation analysis. Adolescents *are* often out, and even if they can be found at home, they may be uncomfortable being interviewed or completing a questionnaire with family members around. It is more satisfactory to deal with adolescents in other settings such as community or recreation centres, or schools.

Parents

Parents are concerned about the welfare of their adolescents, although they do not always express their concerns about adolescent sexual behaviour. They also exert significant influence and control over what adolescents have

access to, be it opportunities for skills, for obtaining information or for services. Thus they also function as "gatekeepers", and most of the suggested questions provided later in this section, for this group, would also apply to parents.

Parents of adolescents have a personal stake in sexual and reproductive health issues, particularly with the advent of HIV/AIDS. However, in most societies, parents find it difficult to discuss issues of sexuality with their own adolescents, and such information must therefore be elicited from them carefully. Furthermore, parents may know very little about their sons' and/or daughters' sexual behaviours and attitudes and they may state what *should be* rather than what *is* existing situation for adolescents. Admittedly, they often have a perspective that reflects their generation, rather than the reality that their children face. A questionnaire used by the Commonwealth Youth Programme (CYP), Asia Centre, Chandigarh, India, during the field-testing of this Guide is provided *In Annex8*, and some general questions are suggested in *Box 16*.

Box 16

WHAT TO ASK PARENTS

- o What do you believe *are* the most important goals for adolescent boys and girls today?
- o What do you consider to be the most important issues that have to be considered, regarding the physical, psychological and social well-being of adolescents?
- o What problems in the area of sexuality do you feel young people have today?
- o How does this differ from your experiences, and why?
- o What role would you like to play as parents?
- o Would you find it helpful to have more information about adolescent behaviour, health and development?

It may be difficult to get a representative sample of parents. Two ways are suggested:

- o through the school system, by getting a random sample of the parents of adolescents to complete a simple questionnaire;
- o by asking community groups, such as women's organizations to bring together parents of adolescents for group discussions.

Community

Adolescents

As already discussed, adolescents *are* likely to feel more comfortable answering questions, away from their parents. Much can be learned by going

to public places where adolescents tend to spend time, observing what they do and talking to them about their situation. Often there is an unconscious discrepancy between what people say they do, and what in fact they actually do.

It is perfectly possible to use standardized self-administered questionnaires as well as qualitative methods at community settings frequented by adolescents, such as venues for sports activities, youth organizations, marketplaces, or discotheques. Other settings, such as workplaces where large numbers of adolescents *are* employed, are important to visit. In the workplace particularly, care needs to be taken to ensure that those who do participate in the surveys/discussions do not face repercussions. There should be no compromise on ensuring confidentiality. The military, where young men are routinely conscripted is another group to talk to, keeping in mind that the discipline of the setting may skew the kinds of responses elicited.

The community is also where young people and adults live. The safety of the community as well as the opportunities afforded to adolescents will influence adolescents' behaviours. Adolescents who feel valued and supported by their families, peers and community members and who have opportunities to participate in community life are less likely to engage in unhealthy behaviours. These factors play a protective role, offsetting — existing or potential — negative influences in the social environment. Exploring the safety, support and opportunities provided by the community for adolescents warrants attention in the situation analysis. An example of efforts taken to assess the amicability of communities towards adolescents is noted in *Box 17*.

Box 17

YOUTH-FRIENDLY COMMUNITIES - A REPORT CARD

The McCreary Centre for Youth in Burnaby, Canada, learning that some young people feel that they are not respected, included, trusted or valued in their communities, has developed a simple form for use by young people to assess the quality of the welcome, the treatment received and the attitudes encountered in places such as shops, health clinics and by people such as police. It is intended to raise awareness about attitudes towards adolescents and to provide an opportunity to offer suggestions for making communities more youth-friendly.

For more information about the "Open Door" report card, contact the McCreary Centre Society, 401 N Esmond Ave., Burnaby, B.C. Canada, V5C1S4.

Observation of communities is likely to draw attention to the situation of adolescents who spend most of their time on the street, as well as those who have no home but the street. There are multiple reasons for the increase in the number of children and adolescents living on the street — poverty, civil unrest, family separations and conflict, natural disasters. These adolescents are likely to be especially vulnerable to exploitation and circumstances that put their health in jeopardy.

WHO has devoted attention to developing the capacity of street educators to assess and respond to the situation of street children, on an individual and community basis. While the focus of the materials developed is on the use of substances, the vulnerability of street children and adolescents to sexual risk practices and exploitation is also addressed. An excerpt from the materials for assessing the daily activities of street children produced by the WHO Programme on Substance Abuse follows in *Box 18*.

Box 18

NEEDS AND ACTIVITIES OF STREET CHILDREN

Like most adults and adolescents on the street, street children spend the day working and doing other things in order to meet their daily needs. Below is a list of needs that street children have and a list of the activities they do in order to meet those needs. Match the needs and activities by drawing lines between the two columns, you can add more examples from your own experience as well.

Activities	Needs
Begging	Acceptance
Carrying or bearing	Affection
Car washing and watching	Clothing
Drug trafficking and dealing	Companionship
Fighting	Food
Juggling	Sleep
Performing music	Medical Care
Playing	Money
Running errands	Protection
Scavenging	Recreation
Selling blood	Relaxation
Sex	Shelter
Sexwork
Shoe shining
Stealing
Using alcohol, inhalants and other drugs
Vending (selling items, often in the market)

Circle the needs that you think are most important. Now put a checkmark next to the needs that are probably most important in the eyes of children. Are their and your priorities the same?

Adults

Influential adults in the community often have views on the needs of young people and *are* key informants for the situation analysis. Moreover, they are often

gatekeepers i.e., they control the barriers and opportunities for the healthy development of adolescents.

The Technical Advisory Group can determine who are the important gatekeepers to interview, at both national and district levels. As previously noted, parents can also be included among those interviewed. A list of gatekeepers who could be interviewed is provided in *Box 19* below. Any interviews with them should be prefaced by an explanation of why their views *are* important for understanding the situation better and especially for preparing future action plans.

Box 19

WHO COULD BE GATEKEEPERS?

- religious leaders
- leaders of important community groups such as women's organizations and youth organizations
- parents
- key figures in the ministries of interior or justice
- those responsible for economic planning, public health and public education
- those influential in private health care and private education
- politicians

WHY TALK TO GATEKEEPERS?

What is the purpose of asking them questions?

- to expand knowledge about what Influential people believe are adolescents' current needs*
- to open a channel of communication among them, and between them and the Technical Advisory Group*
- to pave the way for the feedback of findings from the situation analysis for improving policy and practice*
- to provide a basis for concerted action in the future*

What answers are we focusing on?

- how they perceive a problem or the situation*
- how they would recommend that it be handled*
- what resources are needed*
- anticipated benefit*
- any benefits they see for their own group*
- who they think should be interviewed next*

Some examples of questions to ask gatekeepers are shown in *Box 20*. Questions may have to be tailored to suit the gatekeeper's particular position and area of work.

QUESTIONS TO ASK GATEKEEPERS

How would you describe healthy development for young men and young women in this society?

This should help identify their ideals for young people, and it may prove useful later for showing that these ideals *are* shared across sectors.

What do you believe are the major obstacles that need to be overcome to achieve healthy adolescent goals and what would help to do that?

This is to identify what they see as obstacles (they may often point to obstacles assumed to originate in other sectors which can be diminished when the findings of the other interviews are shared) and to take a positive line in thinking how to overcome them.

What do you believe *are* the most important health problems that young people face today — including those that affect their physical, psychological and social development?

This should enable people to express what is most important to them about adolescents, and what their current concerns are.

What policies guide your thinking at national or indeed international level, if relevant, on adolescent health and development?

This will help call attention to existing policy, or the lack of, as well as to important international conventions such as the Convention on the Rights of the Child (through age 18) which most countries have ratified, and the Convention Against All Forms of Discrimination Against Women.

How important is puberty in defining adolescent health needs? This is a reminder of the centrality of sexual maturation to adolescence.

Do you feel that sexual relations among unmarried adolescent boys and girls *are* increasing — or not really changing?

This is to ensure that this topic is covered.

If there is such an increase what do you see as the health consequences?

This is to open the door to a discussion of unwanted or too early pregnancy, childbirth, abortion, marriage, STD, HIV/AIDS, if they choose to discuss these issues.

What in your view can be best done by your sector?

This is to help focus attention on what these key people *are* most able to influence. In other words, what do the most influential people from the religious, health, education, justice, labour, etc., sectors propose to do?

Would it be helpful to you to have more information about the status of adolescents' health and behaviour, and about the kinds of programmes and projects that exist in other sectors?

This is designed to open the door to feedback of the findings of the situation analysis.

Are there other people in your sector with whom we should speak?

This should open the "gate" to meeting those key people in their sector over whom they have jurisdiction. For example it may be headmasters/headmistresses and teachers in the education sector, or doctors and nurses working in primary health care in the health sector. Similar questions will be posed to these groups, but in questionnaire form.

May we come back to you with what we have learnt from the situation analysis?

This is to encourage their commitment to the process and make feasible a second consultation perhaps through a national seminar to share the findings upon completion of the situation analysis. An extremely important part of the process, in any case, will be feedback of findings to all those who have been consulted.

Schools

Adolescents

Schools are important settings where adolescents can be reached to collect information cost-effectively. However, in many developing countries, more adolescents *are* out of school than in school. School policies, and the values of staff themselves, may influence the attitudes, behaviours and practices of adolescents. These factors need to be considered and a balance achieved by selecting schools in a variety of settings. It will also be important to find out what adolescents do when they leave school and are in a less supervised environment.

Self-administered questionnaires alone are not satisfactory for collecting information from students. However, questionnaires can be administered quickly in class, and confidentiality can be maintained by ensuring that no names are put on questionnaires. Information on the usefulness of school health education curricula and health services provided to adolescents (if at all) should be approached through the adolescents first. Following that, a set of questions can be developed for use with the school staff.

Teachers and administrative staff

Settings that can provide the most appropriate health services for adolescents are schools and health centres. The staff in schools are literate and can receive self-administered questionnaires by mail, to be completed and returned. However, to encourage a good response, it is advisable to get the support of influential professional colleagues. Also, since the staff tend to be over-stretched with their routine work responsibilities, it will be critical to limit questions to a few key ones.

The extent to which sexual and reproductive health issues are dealt with in the curriculum must be assessed by asking teachers:

- o whether interactive (e.g., group discussion, role play) techniques are used as opposed to purely didactic (e.g., lectures) ones;
- o whether there *are* attempts to impart skills as well as knowledge;
- o whether specific information is provided about health services in the district;
- o whether there *are* individuals/adults available for adolescents to confide in and consult with on an ad hoc basis.

Additional suggestions for general questions for teachers *are* in *Box 21*

Health centres

Experience in adolescent health in general, and in sexual and reproductive health in particular shows that adolescents have special needs which differ from those of both adults and children. In recognition of this, several countries have

QUESTIONS TO ASK TEACHERS

- o What subjects do you teach? Where do you teach? What grade/age of children do you teach?
- o What are the most common questions adolescents have about sexuality and reproductive health matters?
- o Do you provide sexual, family life, and/or reproductive health education to adolescent students — and, if so, of what age and sex?
- o Have there been opportunities to involve young people in outlining this education course, and have you made use of young people in any subsequent modifications?
- o Have parents been involved in the development or implementation of the activities?
- o What are the major lessons you have learned about what makes the education effective?
- o Are you able to use interactive techniques such as group discussion, question and answer, role playing, in the education?
- o Are there opportunities for students to practise skills that would assist them to communicate their feelings and wishes assertively, request assistance, respond to persuasion, and deal with threats and violence?
- o Which subjects do you find most difficult to address?
- o What are the subjects adolescents find hardest to discuss?
- o What differences in behaviours do you see between the sexes?
- o What differences in behaviours do you find between the younger and older adolescents?
- o Have you had any special training to deal with adolescent sexual and reproductive health matters? If you haven't, would you like to have that opportunity?
- o Are water and private toilet facilities available for adolescent girls who are menstruating?
- o Is specific information provided about local health services which could meet the needs of sexually active adolescents?
- o Does the education provide "field" visits to local health services?
- o Is individual counselling provided by you or others in the school which covers sexual and reproductive health matters?

taken action to make the health system more responsive to their needs, and health services more friendly and welcoming. A situation analysis is an opportunity to collect information on how the health system does and could respond to adolescents' health needs. Adolescents themselves can provide valuable information, as a "reality check" on their situation, by answering the following questions:

- o What are your health needs?
- o When do you use health services?
- o How do you know about these facilities?
- o What do you get (services, supplies and advice) when you go there? j
- o Are there health facilities that you do not go to?
- o if yes, why (probing for accessibility, acceptability)?
- o What would you suggest for improving the situation?

In addition to directly asking adolescents about their health needs and the use of health services, the Observation Method can be used to assess how health services are actually provided, when adolescents are clients. (This method is discussed at the end of this section). Adolescents can be involved in carrying out assessments by acting as a "mystery client" to record the level and quality of service they receive. Adolescents need to be trained for this role, particularly with regard to the confidentiality of findings.

A list of points to consider in direct observation of health centres has been developed in Nigeria and is presented in *Box 22*.

Health care providers

Health care providers can go a long way towards making services more acceptable to adolescents, to encourage their appropriate use of health services, as well as to facilitate adolescents' participation in delivering these services. After asking questions of adolescents, it will be necessary to follow up with either individual interviews or focus group discussions with providers, dealing specifically with the issues emerging from the prior findings. A method for doing this, the WHO User/System Interaction Method, is described later in the section on methods.

The implementation of standard policy and activities relating to services for adolescents can be assessed through key informant interviews of officers-in-charge. In order to further assess their quality and effectiveness, observation of the services in operation and the behaviour of providers is necessary.

Box 23 provides some examples of questions that could be asked of health care providers.

The research initiative supported by the South-East Asia Regional Office of WHO (SEARO) demonstrated the link between situation analysis and systematic programme development for adolescent sexual and reproductive health, as noted in *Box 24*.

HEALTH FACILITY - DIRECT OBSERVATION

Box 22

1. How accessible is the health centre in terms of location?
2. Does the centre have a waiting-room for patients?
3. Do the patients encounter problems in getting somebody to attend to them?
4. For how long do they wait before they are attended to?
5. Do they feel at ease with the environment?
6. Are there enough posters in and around the premises?
7. Which types?
8. How explicit are these posters?
9. Is the centre: out-patient, inpatient or both?
10. If it is out-patient, how does it deal with serious cases?
11. In a case of admission, what procedures are followed?
12. In a case of referral, where do they refer?
13. In which situations do they refer?
14. How do they treat cases of referral from other health centres?
15. What other follow-up do they do after a patient is discharged?
16. Do they have special rooms to deal with patients who have personal problems, that is, with more privacy for discussions?
17. How many types of services do they offer at the same time?
18. Are the services general or meant for adolescents only?
19. Do they take care of those who are delivering for the first time?
20. If no, what are their reasons?
21. Are there specific provisions for dealing with adolescents?
22. What are the facilities available at the centre and what are they short of?
23. Can the adolescents using the health centre come without an appointment?
24. Do they require anything from the adolescent before s/he is attended to?
25. How do they help those who cannot, for instance, fill in the forms?
26. Do they pay before or after receiving treatment?
27. How much?
28. How are adolescent patients who cannot pay immediately, treated?
29. What are the characteristics of adolescents attending the clinic with regard to age, sex and marital status?
30. What difficulties do they face in presenting their problems?
31. Do they make their requests (personal and medical) known to the health workers?
32. How are the adolescents coming for the first time integrated into the system?
33. How do the health workers monitor the adolescents in and outside the health centre?
34. How are the adolescents encouraged to report cases of infection?
35. From the look of things, do adolescents feel satisfied with the services?
36. If not, what could be responsible?
37. How efficient and friendly are the health workers?
38. What are the characteristics of the health workers with regard to age, sex and training?
39. What is the approach or general attitude of the health workers to their duties and to the patients?
40. Are the health workers approachable?
41. Apart from providing health services, do they give advice to patients when necessary, especially the adolescents?
42. How do the health workers deal with those who are not patients?

QUESTIONS FOR HEALTH CARE PROVIDERS

1. What is your profession and in which service do you work?
2. What proportion of your patients are adolescents? What proportions of these are male or female?
3. What are the most common health problems among the adolescents you see. Among girls? Among boys?
4. What difficulties do you face in dealing with these adolescents?
5. Do you encounter problems associated with or arising from: sexual maturation; sexual abuse; sexual relations; pregnancy and childbirth; induced abortion; sexually transmitted diseases (STDs) including HIV infection; AIDS, or female genital mutilation?
6. Do you provide contraceptives or contraceptive information? Do you provide condoms for the prevention of STD/pregnancy? */Only where abortion is legal/* -- Does your service provide abortion to adolescents?
7. How does an adolescent of either sex obtain access to your service? Is it through referral or can s/he come directly? Is an appointment necessary? Is the consent of an adult or partner necessary? .Are some reproductive health services restricted by age or marital status?
8. To what extent is the service confidential? How many people within the service will have access to the adolescent's name and/or file? Is the individual's name reported for some reproductive health matters to others subsequent to the visit? Are families informed if not initially present?
9. How private is the venue? Will the adolescent be seen by other patients who will be able to ascertain the reason for the visit?
10. Do adolescents express satisfaction after visiting you?
11. What are the main barriers to the use of your service by adolescents and what, in your view, could be done to overcome them?
12. To what extent do you believe the sexual or reproductive health problems adolescents experience are preventable?
13. What, in your opinion, could be done in your service to make it more accessible to adolescents in need?
14. What, in your opinion, could be done in your service to make it more effective for adolescents in need?

SUPPORTING PROGRAMME DEVELOPMENT FOR ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH

In 1995, the South-East Asia Regional Office of WHO (SEARO) commissioned a project to improve adolescent sexual and reproductive health in selected countries. The project consists of two phases: a situation analysis based on a regional protocol adapted to specific national settings, followed by an intervention research study to implement key findings from the situation analysis. The countries involved are Thailand, Bangladesh, Myanmar and Indonesia. It is anticipated that after the two-year research phase, culturally-appropriate approaches to meeting the needs of adolescents will be identified and expanded to national scale using the existing infrastructures. The countries participating in the initiative have received financial and technical support from SEARO.

As part of the intervention research phase, Indonesia, for example, has, on the basis of its situation analysis expanded existing *services* for adolescents at the primary health care centre level in one district. Based on findings from focus group discussions with adolescent service users, an adolescent clinic on Thursday mornings has been established during which general health services are provided, along with counselling on sexual and reproductive health issues. At the adolescents' suggestion, additional operating hours are also being considered, together with the implications this has for policy, management and resource allocation. Because of the cultural and social sensitivities associated with sexuality and adolescents, referral to the Family Planning Association for services in this area is being explored. The service providers in the centre have received training in counselling and interpersonal communication with adolescents.

Political and legislative systems

Policies and laws play a critical role in creating a safe and supportive environment for promoting and also protecting health. Programmes *are* likely to be based on and directed by policies and laws, and their performance may well be assessed according to standards set by these. In the case of adolescent sexual- and reproductive health, policies and laws sometimes impose constraints on promotive and protective measures.

In relation to adolescent reproductive health, laws often prescribe age limits for marriage and sexual activity. Policies may set age requirements for obtaining information and learning skills for sexual and reproductive health, as well as access to health services, for both prevention and care. The age at which adolescents may individually consent to health care may also be decreed by law and addressed by policies.

An assessment of laws and policies determining or affecting adolescent health often provides the information required to understand the problems adolescents experience in accessing information, skills and services for protecting or improving their sexual and reproductive health. An assessment would entail:

- o an analysis of the content, that is the texts, of policy statements and laws;
- o an analysis of the orientation, coverage and effectiveness of programmes aimed at young people which exist as a result of the policies (or lack of);
- o gathering the opinions of others about the adequacy of present policies/laws.

An analysis of the text or content of laws and policies indicates the programmes and actions that should be in place at community level if these *are* implemented as intended (whether these policies and laws are restrictive or progressive).

The existence of laws and policies and their implementation or reinforcement do not always go hand in hand. The next stage would be to assess what has actually been implemented. The discussions so far on information collection in various settings (homes, community, schools and health centres) can provide examples.

The criteria for judging the adequacy of policies and laws should be flexible, to take into account the opinions and interests of the various stakeholders (adolescents, service providers, parents and policy-makers). The criteria themselves *are* likely to evolve over time as programme experience accumulates and the document review progresses.

An instrument to review the status of laws and policies affecting adolescents' access to information and services was developed jointly by WHO, UNFPA and UNICEF. It has been used in a 12-country survey. Although the instrument was developed for use at the national level and for use by policy-makers, it could be used with modification at the community level. This would allow assessment of the knowledge and experience of families and adolescents regarding the implementation of services in response to these laws and policies, and any strategies in place for reinforcing this. A summary of questions in the survey is in *Box 25*.

Methods

There are many methodologies and instruments for collecting primary data. Each has strengths and limitations in design, suitability for implementation, and ease with which the resulting information can be analysed. The disadvantages of any particular method can be at least partially offset by combining it with other data collection methods, in order to benefit from different strengths so that the approaches reinforce each other.

QUESTIONS TO ASK ABOUT POLICY AND LEGISLATION

- o What is the minimum legal age of marriage? Does it differ for men and women?
- o What is the age at which a person can legally consent to sexual relations?
- o For which (if any) of the following services does official government policy require parents or partners to give consent before services can be provided to adolescents:
 - pregnancy prevention information and guidance*
 - HIV/AIDS testing*
 - STD treatment*
 - provision of contraceptives (including condoms).*
- o For which (if any) of the following services does official government policy exist which guarantees confidentiality for adolescents receiving the service:
 - pregnancy prevention information and guidance*
 - HIV/AIDS testing*
 - STD treatment*
 - provision of contraceptives (including condoms).*
- o What is the official government policy relating to the provision of information and skills for sexual and reproductive health in schools?
 - family life education*
 - HIV/AIDS education*
 - population education*
 - reproductive health education*
 - sexuality education.*
- o Is there an official government policy on school attendance for adolescent girls who become pregnant?
 - If yes, does the policy:
 - prohibit school attendance
 - require school attendance
 - encourage school attendance
 - provide for alternative education.
- o Is there an official government policy on school attendance for adolescent boys who impregnate adolescent girls?
 - If yes, does the policy:
 - prohibit school attendance
 - require school attendance
 - encourage school attendance
 - provide for alternative education.
- o Is there an official policy on sexual activity between students and school staff?
- o Is there an official government policy on providing out-of-school adolescents with information and skills pertinent to sexuality and reproductive health education?

The data collection methods to be selected for use in the situation analysis will depend partly on the issues identified for field study and partly on the available resources, including local skills, personnel, time and funds. When it is essential to "hear people out", in-depth methods such as unstructured interviews and discussion groups *are* appropriate. When it is important to measure the extent or magnitude of specific problems, methods such as highly-structured questionnaires *are* called for. Most often both types of approach are necessary.

The combination of multiple methods and different sources for the study of the same issues is called "triangulation". Such an approach will generate a more reliable picture than any single method.

Surveys using a standardized questionnaire

As mentioned above, the subject matter to be gathered in the situation analysis is an important determining factor for the choice of method. Adolescents may not be very candid about their sexual attitudes and behaviours unless they feel that their anonymity is well protected. This is difficult in groups, and even in personal interviews, unless a good rapport is established. For this reason, anonymous self-completed questionnaires can be useful where literacy levels are adequate. *Box 26* summarizes some advantages and disadvantages of using questionnaires.

Any questionnaire that is designed is only a draft until it has been pretested among respondents who are similar to those who will be part of the actual survey. A pretest can be used to not only improve the design of the questionnaire, but also to assist in planning other aspects of the survey. In order to pretest (and later administer) the questionnaire, it should be translated into the local language of the area. Some tips for questionnaire design, translation and pretesting will be provided in *Action D.3*, under *Management of data collection*.

Self-completed questionnaires rule out those who *are* unable to read. If this is a substantial portion of the adolescent population it will severely limit the use of this method and the value of any findings. One option with a non-literate population is to read aloud the questions, asking respondents to tick themselves the boxes which represent different responses. Loss of confidentiality and lack of anonymity result with this option though.

When information is needed on issues which *are* very sensitive, the Letterbox Method, in which the adolescents surveyed supply anonymous questions in advance to the researchers, is very useful. (This method is further discussed in *Box 32* on in-depth research methods.)

INTERVIEWS USING STANDARDIZED QUESTIONNAIRES

Standardized questionnaires *are* used as part of a survey to interview people and *are* then analysed to produce quantitative results. The questionnaires are administered by interviewers (especially where literacy is low) or self-completed (e.g., with secondary school students). The questionnaires may be structured (i.e., presenting "closed-ended" questions with a limited range of possible answers) or semi-structured (using a number of "open-ended" questions that allow the respondents to say as much as they want about the topic).

Structured questionnaires are quick, can be very reliable (in the sense of getting the same information each time), and *are* good at generating quantitative information about distribution and prevalence. However, the information that can be obtained from them may be superficial and therefore may not help explain behaviours.

Additional difficulties with individual interviewing include the time needed to find suitable respondents, and the lack of anonymity. Depending on the size of the sample, the interview sessions may require large numbers of trained people to collect the information. Some other common problems include bias introduced by poorly designed questions, inappropriate attitudes or presentation of the interviewer, and poor recording of information received.

Focus group discussions

Focus groups and other forms of group discussion are convened with people of similar age and sometimes of the same sex, in order to discuss a single topic in some depth.

The method works well with young people too. While a guiding principle of this methodology is to organize homogeneous groups of people of the same sex or age, it should be designed to ensure coverage of all the different groups (by ethnicity or socioeconomic status) that may be present in the community. Focus groups may be particularly helpful prior to designing a larger-scale survey to pinpoint the issues which are of considerable importance to young people, and/or controversial among young people.

Box27 lists some common group methods used for interviews, including focus group interviews.

See *Annex 9* for a sample topic guide for focus group discussion for young people as well as for adults. This might be useful for discussions with a series of parents of adolescents (but not parents of adolescents who have just participated in focus groups in the same district as confidentiality might be put at risk).

GROUP DISCUSSION METHODS

General considerations (advantages, limitations)

In general, group techniques provide a rapid opinion source, and group interactions can stimulate the responsiveness of the various participants in the session. With adolescents, a well facilitated group is capable of generating reliable, valid and accurate information, especially about potentially sensitive and embarrassing topics, such as sexuality. Difficulties include lack of privacy, and desire for social acceptability affecting answers about any individual's own personal behaviours.

There are two main categories of group discussion, based mostly on size since scale has a great effect on the participatory potential in a group. The two categories are small-group discussions, such as focus groups, and larger groups, sometimes called plenary sessions.

Small discussion groups, e.g., focus groups

Focus groups are generally limited to 6-12 people for best participation. These groups are good for identifying the range and nature of a situation or a specific issue, including beliefs, attitudes, group behaviours. Prior planning and some training are needed for the facilitator and note-taker (rapporteur) so that the session does not shift from a discussion among participants to a group interview. Group interviews, i.e., responding to a long series of questions, are not as useful or revealing of participant beliefs as guided discussions around a limited number of topics of intense interest to the participants.

Community interviews, e.g., plenary of large-group sessions

Community meetings (15-30 or more people) can be a good way to get a rapid overview of some aspects of the adolescent situation, e.g., identifying vulnerable groups. They can also be an excellent forum to elicit solutions for problems already identified, e.g., strategies for addressing adolescent pregnancy. Such meetings are one of the best ways to disseminate and discuss the findings of the situation analysis with the communities where the study was done. Difficulties include the need for careful planning; fine detail is hard to elicit; some people may not participate actively and can be dominated by more vocal persons.

The qualitative interviews mentioned here, using topic guides (open-ended questions about larger topics where verbatim, full-text answers are recorded), or semi-structured questionnaires, can yield qualitative explanations, perceptions and opinions, and are quite good to use with key interviews. The difficulties include problems with post-coding of information, the amount of time consumed in the interviews and the greater training needed for the interviewer.

The WHO Narrative Research Method

The WHO Narrative Research Method uses and generates qualitative and quantitative information to learn about patterns of sexual behaviours and their social contexts. While this method can be used with adults, it provides a unique opportunity of getting information from the perspective of young people, and also serves as a way of involving them in exploring sexual and reproductive health topics. It is designed to enable young people to provide a realistic picture of what

normally happens to adolescents, through role playing and consensus, without having to reveal personal details about themselves in the process.

The ways in which adolescents describe sexually-related events, their sequence, and who is involved, provide important information for understanding the determinants of behaviour and identify opportunities for interventions. The method uses role play in a 3-5 day workshop with knowledgeable young people. A story is developed which is put into questionnaire form and taken to a wide representative sample of young people, to get their input and feedback for subsequent modification.

The *Narrative Research Method* may be employed on a national sample of youth. One strategy is to engage a youth organization if it has members in all districts, or alternatively in one or two districts that are representative of the country. Application of the method here can assist in the further development of the Narrative Research tool and its application to a representative sample of adolescents.

The method starts with a group of knowledgeable young people selected from young youth leaders, who *are* asked to develop what they believe *to* be a prototypical story about an event relevant to adolescent sexual or reproductive health behaviours. For instance, they could be asked to develop a story about an unwanted pregnancy in their community.

This is how they begin:

- o they select the names and ages of two young people;
- o then they decide how the two would meet and role play that event;
- o they build the story and role play each succeeding event;
- o they construct questions around those events.

The story develops through a series of role plays and discussions among the group and is converted into a questionnaire in which each event in the story is the basis for a question. See *Box 28* for extracts from a questionnaire developed in the African region.

The youth leaders then involve their own youth organizations and get them to take the story in questionnaire form to a wider representative sample of young people in the country (or district). The respondents in the sample decide how the characters in the story:

- o feel,
- o what they do,
- o and
- o what happens next.

The data is collected and analysed by the youth organizations. By totalling the choices for each event, a new story is developed which represents the views of

the overall sample. It can then be further analysed for differences in the views of:

- o girls and boys;
- o older and younger adolescents;
- o urban and rural youth, etc.

An important outcome of the technique is to gain an understanding of the decision-making process of adolescents at critical points in their sexual behaviours and in relation to reproductive health events, and how, or whether, they seek help. Decisions *are* likely to involve the:

- o first sexual encounter;
- o the use *or* non-use of contraception or condoms to prevent STD;
- o whether health services, other adults or peers are consulted;
- o what is likely to happen about an unwanted pregnancy, STD, etc.

The WHO User/System Interaction Method

Health services which deal with reproductive health issues, such as maternity care, family planning, STD diagnosis and treatment, and sometimes HIV/AIDS counselling exist in some community settings. But these services *are* not usually designed for adolescents, and are underutilized or inappropriately used by them. A close look at selected health services for a short period of time, in order to learn what actually happens when adolescents use them, may provide valuable information for improving the adolescent friendliness of health services. For this purpose it will be important to get information both from adolescent clients and from the health providers.

A method for doing this is the WHO User/System Interaction Method which compares the views of the young client with the views of health providers on their perceptions of what the young client thinks, and then provides feedback. A service is selected that is important for the people in the district and could be used more widely by adolescents even if this is not yet the case. Agreement of those responsible for the service is of course essential, so that this assessment method could be promoted as providing the opportunity to learn how a good service can be made better for a neglected population. The User/System Interaction Method is then implemented in three parts.

Adolescent questionnaire. A small group of adolescents who have used the service should be invited to meet initially to discuss some of the things they liked and did not like about the service in order to create a brief questionnaire, *or* semi-structured interview form. It is important that the discussion and the subsequent questionnaire or interview, *not* be administered by health clinic staff to avoid the possibility of adolescents feeling pressure to say only good things. Typical questions posed to the adolescent client will explore the psychosocial costs of using the service, along with other issues. A sample of likely questions is provided in *Box 29*.

Box 29

NARRATIVE RESEARCH METHODOLOGY. EXTRACTS FROM A
QUESTIONNAIRE DEVELOPED IN THE AFRICAN REGION

John (17) has seen Eva (15) and wants to meet her. He sends her a note through a friend asking to meet her on Saturday afternoon. Eva is supposed to be at home then, but decides to meet John and tells her mother that she will visit a friend. Her mother agrees as long as she is home by 5.30 pm.

1. At their first meeting, John and Eva are most likely to:
 - a. Go to the marketplace and talk
 - b. Go to the cinema
 - c. Go to their homes and talk
 - d. Go to a friend's house and talk
 - e. Take a walk and sit for a while by the river
2. What do you think Eva and John talk about?
 - a. John tells Eva about his feelings towards her
 - b. Eva tells John about her feelings towards him
 - c. They both talk about their feelings towards each other
 - d. Neither talk about their feelings on the first meeting
3. John asks Eva to see him again. What does Eva say?
 - a. Eva agrees
 - b. Eva does not answer his question
 - c. Eva tells him she will think about it
 - d. Eva says no
4. John wants Eva to stay longer with him, even though it is time for Eva to go home. What does Eva do?
 - a. Insist that she must go home by 5.30
 - b. Yield to John's wishes and goes home late
5. Let us imagine that Eva decides to stay a while longer and is late going home. Eva is most likely to:
 - a. Tell her mother why she was late
 - b. Make up a story for her mother about why she was late
 - c. Try to sneak into the house and avoid saying anything
6. Suppose Eva makes up a story, but her mother finds out the truth. What is Eva's mother likely to do?
 - a. Punish Eva
 - b. Do nothing
 - c. Threaten to tell Eva's father
 - d. Give Eva a warning
7. What does Eva's mother tell Eva's father?
 - a. Nothing
 - b. She makes up a story as to why Eva came late
 - c. She tells him the truth
8. If Eva's mother were to tell Eva's father everything, what would he do?
 - a. Blame Eva and mother
 - b. Blame Eva alone but not punish her
 - c. Punish Eva
 - d. Ignore the situation

TYPICAL QUESTIONS TO THE ADOLESCENT IN THE WHO USER/SYSTEM INTERACTION METHOD

1. How did you find out about this service?
2. Did you choose to come here, or were you sent by someone else?
3. Did you come alone or with someone? How do you feel about that?
4. Were you able to ask all the questions you wanted to? Are there some questions you thought of later?
5. How did you find the people who saw you? Were they friendly, not so friendly, or unpleasant to you?
6. Did you come *to the service* with a particular *health problem or need*?
7. In your opinion did you get what you needed?
8. Did you learn something new that will be helpful to you?
9. Would you come back here again if you had a similar need?
10. What did you like best about the service?
11. What did you like least about the service?

The questions in *Box 29* need to be worded in a way that is easy to answer and code, such as yes/no for closed questions; and using a 4-point scale such as: 1) very much, 2) somewhat, 3) a little bit, and 4) not at all, *for open questions*, where this is possible.

If the service in question is a specific one, for example, STD or family planning, the *questions can be made more specific* to the particular help or *service that* the adolescents are seeking. However it should be borne in mind that the major purpose of this questionnaire is to get the opinions of the adolescent.

Health provider questionnaire. The *administration of questionnaires for adolescents* should be followed by similar questions posed to the staff of the health services involved, preferably anonymously. The health providers should be asked the same questions asked of the adolescents, but twice. The first time, they should be asked how they think the adolescent will answer, particularly regarding likes and dislikes. For example, for health providers:

Question 1 for adolescents becomes: "How do you think adolescents typically find out about this service?"

Question 2 for adolescents, becomes: "Do adolescents usually choose to come here or are they sent by someone else?"

The *second time*, the providers are asked to describe their own views about the strengths and weaknesses of the adolescent health service, and how the services can be improved. The main thrust will be to ascertain the degree to which the health providers are in tune with adolescent perceptions.

Collection of objective information about the service (see *Box 30*). Some of this information can be collected through a meeting with the service manager, or through observation of the service for a limited period of time, in order to get some ideas of the existing practices.

OBJECTIVE INFORMATION ABOUT THE SERVICE

- o the cost of the service to an adolescent client
- o opening hours
- o whether or not self-referral is possible, and if not, what the procedure requires
- o whether there are requirements for adolescents to be accompanied or to receive permission to use the service; if this relates to their age, sex, marital status
- o what degree of confidentiality exists
- o how this particular service makes referrals to other services, particularly those dealing with sexual and reproductive health issues
- o typical waiting time
- o degree of privacy available
- o average distance/time needed for an adolescent to reach the service
- o the number of adolescents of each sex using the service over a limited observed time

The objective information collected will be useful when the findings from both adolescents and health care providers are reviewed. Further details about this method are provided in *Annex 10*.

Additional in-depth methods

There *are* many approaches to getting more in-depth information from young people about important but sensitive subjects such as their views on sexuality, the formation of relationships, their concerns about sexual behaviour and gender, and in whom they place their trust. It is unlikely that there will be sufficient time to apply several in-depth methods and generalize from them to the larger population. Unfortunately, the methods mentioned above will provide only limited information about such concerns. Two methods for in-depth information collection are described below.

Observation

Observation is a technique for collecting first-hand information about physical settings (e.g., sports fields where adolescents meet, health units providing sexual and reproductive health services to adolescents), events in the social environment (e.g., weddings, circumcision ceremonies), and behaviours (e.g., adolescent drinking and social relationships at discotheques, "sugar daddies" meeting girls after school, etc.). The method of observation can be used as a discovery process early in a situation analysis, e.g., by having all members of the Technical Committee make a visit to the intended study area. Observations can

also be used very effectively for cross-checking (triangulation) of information obtained through other methods, e.g., to assess the physical reality of perceptions reported in quantitative surveys. Some suggested ways in which observation can be used to collect information are presented in *Box 31*.

It is always a good idea to confirm any interpretation of findings obtained through observation, by other methods. Events, behaviour, even physical settings can at times be misinterpreted by the observer if there is no subsequent validation. Another weakness is the effect of the observer on the observed behaviour/activity. When people are conscious of being observed, their behaviour may change substantially.

Observation is a time-consuming process. Moreover, the observer must be able to gain access to and function as a part of the setting where observation is to be undertaken. It is important that the observer blend in *as far as possible* so as to avoid disturbing the situation as it would otherwise be without the presence of an observer. The situation being observed must be sufficiently limited in scope so that it can be studied. The impact of a pre-post measurement of interventions to change behaviour over two years, for example, could not be evaluated through observation alone.

Finally, from the ethical point of view, many objections could be raised about observing the private actions of others, especially when the behaviour is at all sensitive.

Box 31

SOME POTENTIAL APPLICATIONS OF THE OBSERVATION METHOD

- o for the description of settings and interactions where development of sexual interests and relations occurs or *are* pursued and encouraged (bars, waterholes, etc.)
- o for the assessment of condom sales/distribution sites, including access to the sites, nature and presentation of promotional/ advertising materials at the sites
- o for the description of clinical settings where sexual and reproductive health services or adolescent health care *are* provided
- o for physical/clinical examinations of adolescents for specific health problems, etc.
- o for the assessment of the delivery of strategies to provide information, build skills, provide counselling

Diary recall

This method may be appropriate for literate populations, but in many

countries illiteracy may be a serious constraint. Young people *are* asked to keep a record of their activities and the people with whom they interact, for a specified period of time. For instance, they could keep a record of purchases from a local shop and whom they met. Thus diaries could provide information on their leisure activities and social networks.

Alternatively, adolescents may be asked (through dialogue/interview) to recall all activities over a 24-hour period, which are then recorded by the interviewer. In general, the shorter the time period, the better the quality of the data. For instance, they may be asked about people with whom they interacted in the morning and what they did the previous evening, or even the hour before the interview. For adolescents who *are* not literate, or when there is reason to believe that diaries are not being maintained accurately, it may be necessary to ask for details over a short timespan in the past. Such interviews could be used to cross-check the quality of information being recorded in diaries. A limitation of this method, which is used quite extensively for health and nutrition-related data, as well as for consumer surveys, is the reliability of the data. Thus, whether diaries are maintained by self-report or by interviews, the information obtained from them may be affected by recording error or by forgetting some aspects when trying to recall the situation.

Box 32 below lists additional in-depth methods that can be used with adolescents. It is hoped, that as a result of using a combination of these broad brush techniques, some of the major unanswered questions of young people will be brought to the fore, leading to greater interest in learning from young people in order to improve programming. *Annex 11* summarizes a variety of primary information collection methods. Its purpose is to provide additional details about the methods already described here as well as describe additional ones.

Box 32

IN-DEPTH RESEARCH METHODS

Letterbox Method

1. Questions from adolescents. Collecting anonymous questions from adolescents, who are asked to write down questions which are otherwise difficult to ask, is a useful way to derive information about what is of concern to adolescents and will also provide some sense of their knowledge, and of their myths and misinformation. To some degree, questions of this kind can also come from spontaneous submissions to advice columns in local newspapers, calls to telephone hotline counselling services, or even questions posed at health education sessions. They will inevitably be biased towards those who *are* willing and able to submit questions, but nonetheless may provide a rich vein of information. A content analysis of such material could provide further information.

2. Network analysis. With this technique, young people are asked to identify, and perhaps even "map" various aspects of their social network, such as important reference groups (e.g., persons called upon for advice). It is a relatively simple means of obtaining useful information.

continued over

3. Free-listing, pile-sorting and rank-ordering exercises. Young people can be asked: a) to free list all areas of importance for making specific decisions; b) then sort the elements into related piles, and c) rank the issues for importance, and rank those for which they have autonomy. This could be compared with parents' rankings.

4. Free-listing for contraceptive use. Key informants prepare a list of all family planning methods of which they are aware (with probing as to the accuracy of that information), a list of sources of their information (and ranking of their relative importance), and a list of sources for contraceptive supplies (as well as information regarding their costs). A complementary technique is to engage the informant(s) in a mapping exercise to situate all known (and utilized) sources of contraceptives. Such a map may subsequently be used as a sampling frame to select providers of contraceptives for interview.

Systematic methods of data collection may also be used to examine other issues such as barriers to contraceptive use, for example. In this example, adolescents would be asked to first free list all their reasons for not using contraception, and then to separate them into related piles (to provide a conceptual map by multidimensional scaling (see Annex 11) and finally to rank order them. This data can be used to inform a standardized instrument which may subsequently be the basis for a quantitative survey with a larger sample of adolescents as well as providers of contraceptives to adolescents.

5. Story and sentence completion exercises could be used to supplement questionnaires. A scene is presented and the respondent is asked what would typically happen next.

6. The photo novella technique. This involves serial photographs with quotes in cartoon-style balloons added to tell a story which can then be used to trigger discussion. Alternatively, the balloons can be left blank and a participatory group process can be used to fill in the words of the actors in the pictures. Single drawings or photographs may also be used as the starting point for an adolescent to describe his/her perceptions of what the picture shows. Typical pictures might illustrate a pregnant girl in a secondary school uniform, an adolescent boy looking at a display of condoms, an adolescent boy and girl in a room with a bed, etc. They can be asked about preceding events that might have led to the scene portrayed, what the future might be for the persons in the picture, and how the chain of events could be changed or prevented.

7. Personal life histories, including sexual events, can be taken from in-depth interviews with a small number of respondents. Advantages of this method include the ability to explore many areas of concern to the researcher, but also to follow up on unexpected topics presented by the respondent. While difficulties include the impossibility of true confidentiality or anonymity, the time involved to collect detailed histories, the small size of a feasible sample, and the organization, management and analysis of textual data, the insight provided in a well chosen and carefully selected group of respondents may make the effort worthwhile. This technique may be especially useful when considering the involvement of male and female adolescents in commercial sex, for example, and the sexual histories of adolescents generally. Such information can be used for the development of a structured questionnaire which may be administered to a larger, representative sample of adolescents.

In hard-to-reach populations such as street youths, sex workers or drug-dependent young people, the first step must be in the form of careful in-depth interviewing of key informants. "Snowball sampling", i.e., getting other key informants through referrals, will expand the range of contacts and information for "mapping" the places in which high-risk behaviours occur. Collection of individual "life histories", individual "sexual encounter episodes", and individual "drug-injecting episodes" will provide a great deal of insight into these issues which are generally hidden from public view. This effort should also be attentive to free listing and other interviewing to get vocabularies of drug-use terms; male-male sexual terminology, and other language use materials.

The aim of this research on hard-to-reach, high-risk sub-groups is to quickly develop information that will be useful for initiating programmes to prevent the spread of STD/HIV infection, as well as unintended pregnancies. Evidence suggests that action can be taken if sufficient detail about behaviour patterns and vocabulary of sexual and drug injection interactions is available for developing preventive information for vulnerable populations.

8. Health context matrix. Another relatively cost-efficient manner in which to explore patterns of health seeking behaviour on the part of adolescents is by developing a "health context" matrix as a participatory exercise. This has the value of involving young people in its construction and explication. This technique consists of constructing a matrix with two axes. On one axis, the adolescent (or small group of 3-5 adolescents) lists all health issues/problems that are of concern to him/her. On the other axis, he/she lists all providers known to him/her, e.g., allopaths, traditional healers, pharmacists and so on. S/he is then asked to indicate which provider would be the first choice for treatment second choice, third choice, etc., for each illness or problem in the domain.² In the course of developing the matrix there is ample opportunity to question and probe regarding its construction, e.g., adolescent perceptions of the causes and consequences of the illness being discussed, the rationale of the choice of provider and the perceived likelihood of successful treatment. The matrix may also be used, to construct a sampling frame for the interview of providers as described above, or in the development of a structured instrument to be used with a larger sample of adolescents.

Annex 11 is a fairly extensive summary of a variety of primary data collection methods.

²*This exercise may require a preliminary stage of first free listing all illnesses and conducting a pile sort. Experience has shown that a free list of all illness or health problems known to subjects (usually 25-30 respondents leads to a point of redundancy) results in a list of perhaps 100 items unless the domain is restricted beforehand, i.e., to reproductive or sexual illnesses. A pile sort of all illnesses will enable the researchers to cluster them into culturally meaningful categories and to then make an informed decision with respect to their inclusion in the matrix depending on the question(s) of interest*

D. 3 MANAGING COLLECTED INFORMATION

Collecting new information through carefully planned and well-conducted methods provides valuable complementary data to fill the gaps identified by a review of existing data. This action is intended to provide a basic review of "how to" collect the information that has been identified as missing and yet critical for taking informed action.

CHECKLIST FOR PRIMARY INFORMATION COLLECTION PROCESS

Field study workplan	Plan for quality control
o Choosing the sample	Unbiased selection of Respondents Purposeful selection of Respondents Clear sampling strategy
o Designing the questions	Reliability and validity Pretesting Ethical considerations
o Logistics	Selection of field team Training of field team Editing and supervision Debriefing Data entry

Choosing the sample

Ideally, information should be collected from all adolescents. In practice, this would not be feasible because it would be time-consuming, expensive and wasteful. It is necessary to interview a sample of respondents, in order to get the best estimates of the information that is desired. Sampling is the process of selecting the group of people who will be the respondents (37, 38, 39). Having a statistician as part of the situation analysis team, or readily available, will assure accepted standards for sampling and other data collection and analysis.

What is the group of people from whom we want to draw a sample?

The selected sample of respondents should be representative of the larger population group whose situation is being analysed. The term "representative respondents", means individuals and/or groups selected as sources of information who will be *as similar* to, or express views that are *as similar* as possible to the intended respondents in the larger population. This larger population group has to be clearly defined by the objective of the situation analysis, which in this case is to learn about adolescent sexual and reproductive health. Therefore, as discussed

in D. 2, we would like to collect information by sources (adolescents, 10-19 years old, and their parents and other community members), by setting: (home, community, schools, health centres, etc.) and by geographical focus (both urban and rural, or a percentage distribution such as 30% urban, 70% rural).

How will these people be selected?

An important issue for choosing the most appropriate method for sampling is whether a sampling frame is available or not. This is a listing of all units (states, provinces, districts, communities, households, individuals, etc.) in the larger population from which the sample is to be selected. Very few countries have a current listing of all individuals, and some list only households. The sampling frame would then include listings of larger population units, states, provinces, districts, towns and villages, and then an estimate of the population or number of households for each type of unit. Particularly for quantitative data collection, this allows the use of probability sampling methods, when each study unit has an equal or known chance of being selected for participation in the study. These methods are discussed in *Box 33*.

When a sampling frame is not available, or when there is a deliberate choice to purposively sample a particular group of people for in-depth research, as is the case particularly for qualitative data collection, non-probability sampling methods are used; see *Box 33*.

How many people do we need in the sample?

This is an important question for qualitative methods of data collection, but even more for quantitative methods, where there still exists the belief that the bigger the sample, the better the results. This is not necessarily true. Increasing the accuracy of data collection (training the interviewers, or by improved pretesting of data collection instruments) is generally better than increasing the sample size for both qualitative and quantitative methods. Moreover, it is better to get a more representative sample than a very large sample (37).

Box 33

SAMPLING: A COMPARISON OF QUALITATIVE AND QUANTITATIVE STRATEGIES

QUANTITATIVE

Large samples selected randomly

Sample should be representative of some larger population to which one hopes to generalize research findings

Sampling concerned with representativeness

QUALITATIVE

In-depth, small samples selected purposively

Sampling driven by the desire to illuminate questions under study, and to increase the scope or range of data exposed

Sampling concerned with information richness

continued over

Common types of sampling include the following:

- o Random sampling: ensures that each member of the population has an equal chance of being included in the sample
- o *Systematic sampling*: the first unit is chosen at random, and other units are chosen systematically, e.g., every fifth person, every tenth household in a specific area
- o Panels: a sample is randomly selected, and data are collected from the sample on several different occasions
- o Stratified sampling the population is first divided into groups, e.g., by age, 10-14, 15-19, 20-24, and then a random sample is drawn from each group
- o Area sampling generally maps rather than lists *are* used; e.g., a city map might be divided into blocks which are then numbered, and then blocks, or houses within blocks, selected at random
- o Cluster sampling: involves choosing groups of units or clusters at random
- o Multistage sampling: subsampling within groups chosen as cluster samples
- o Multiphase sampling: used to take basic data from a large sample and details from a subsample
- o Sequential sampling: a small sample is tested in order to answer certain questions; if they are not answered, the number of subjects is increased until conclusions can be drawn.

Purposive sampling, often used for in-depth research, is used to select specific populations and generally does not allow wider generalization with statistical precision. Every attempt should be made to ensure adequate coverage of the important subgroups in question. The features of qualitative, non-probability sampling include the following, and reflect the iterative nature of much qualitative research (40).

- o Research/sample design is flexible and evolves as the study progresses
- o Sample units are selected serially. Who and what comes next depends on who and what came before
- o Sample is adjusted continuously or focused by the concurrent development/analysis of the data
- o Selection continues to the point of redundancy i.e., until data collection yields no new information or insights
- o Sampling includes a serious search for negative cases/evidence to give credence to reliability and validity of conclusions drawn
- o The validity of the insights generated from qualitative research has more to do with the context, the richness of the data/cases than sample size.

For purposive sampling (41) a typology of strategies relevant for this situation analysis could include:

- o Maximum variation documents variation and identifies important common patterns
- o Homogeneous focuses, reduces and simplifies; may facilitate group interviewing
- o Theory-based: sampling in focused manner, based on *a priori* theory being evaluated/ modelled
- o Snowball to the point of redundancy
- o Stratified purposeful: illustrates subgroups, facilitates comparisons
- o Criterion: all cases that meet some criteria — e.g., useful for quality assurance
- o Opportunistic: following new leads, taking advantage of the unexpected
- o Convenience: saves time and money, but at the expense of information and credibility.

For qualitative methods of data collection, since the purpose is to explore in some depth the relationship between factors, rather than quantify the magnitude, distribution and association between factors, it is customary to interview or observe small groups of people. For example, for focus group discussions, a frequently used qualitative method, usually 6-12 persons are selected to comprise the discussion group, led by a facilitator.

For quantitative methods, desired sample size depends on:

- a) what the issue of interest is for the study; if the expected results can establish the presence or absence of the issue of interest (e.g., yes/no to use of condoms, accessible health centre/inaccessible health centre), then they are expressed as percentages or rates. This is also true when data is collected for unrelated categories such as ethnicities or blood groups. When the issue to be measured has a scale of values (e.g., weight, height, age or blood pressure), different statistical analyses (and sample sizes)-will be needed;
- b) the expected variation of the important characteristics of the sample; the more varied the data (e.g., age groups, adolescents in and out of school, rural and urban locations), the larger the sample size will have to be to obtain the same level of accuracy;
- c) the number of cells in the cross-tabulations for analysis [see Action D. 4]; as a very rough guideline, there can be 20-30 study units (households or individual adolescents) per cell.

Measurement of single factors

When measuring a single factor (smoking rates, STD rates, high school drop-out rates) the required sample size can be estimated as follows:

- a) Estimate or guess the expected proportion (it is true that you are measuring this because you do not know the value, but an approximate idea of the expected value is adequate; when in doubt, estimate 50%, since this requires a larger sample size for a given margin of error (see below) than for either smaller or larger proportions.
- b) Choose the margin of error that would be allowed in the estimate of the proportion (say +/- 5% or 10%). This implies that if the surveyed value of say STD in the sample is found to be 20%, the proportion would be between 15% and 25% for a 5% margin of error, and 10% and 30% for a 10% margin of error in the larger population from which the sample was drawn.
- c) Choose how confident you wish to be about the precision of your findings. We can never be 100% sure, but do we want to be 99% sure or 95% sure? These are termed confidence levels - 99% or 95% respectively; 100% is

only possible if every unit in the target population is surveyed, rather than a sample. There are tables for the calculation of sample sizes, depending on the levels desired for these three factors (38).

How many people is it feasible to have in the sample?

An underlying and important consideration is cost-effectiveness. Different methods and sample sizes have different cost implications. Cost depends on:

- o size and capacity required of the team, including their training;
- o transportation and logistical requirements as well as the time; required for completion of data collection;
- o data collection, entry and analysis costs;
- o report preparation and dissemination costs.

These requirements should not be underestimated or under-resourced in making information collection choices, as each of these actions contributes towards making the situation analysis effective.

Designing good questions

In order to ensure the relevance of the questions designed, the purpose of this new information collection should be clear. It is a mistake to have a long list of questions even though it is always tempting to add just one more". Each question needs to have a rationale for why it is included and what will be done with the information after it is collected. *Box 34* summarizes relevant points for designing questions.

Box 34

POINTS TO REMEMBER WHEN DESIGNING QUESTIONS

- o Use simple language
- o Make questions clear and specific
- o Do not combine questions, ask them one at a time
- o When questions do not include all respondents, include SKIP instructions to allow respondents to move on to questions that concern them
- o Ensure that questions do not lead to "expected" answers
- o Use wording which allows each response option to be given equal consideration
- o Put difficult or sensitive questions at the end of the questionnaire, if possible
- o Respect the respondent's right to privacy (*see discussion on ethics below*)

Reliability and validity of information collected

Good instruments are both reliable and valid. Reliability means that no matter who asks the question, and no matter when and where it is asked, the same respondent would give the same answers. A well-designed instrument, complemented by rigorous training of interviewers, ensures that the same question is asked in the same way by different interviewers, thus keeping differences between interviewers to a minimum. Validity means that the response given to a question is true and- accurate, that is, the response reflects the topic of interest. A good instrument should enable the valid determination of issues that are to be measured by ensuring that the respondent understands what information is being sought.

Translating the questions: Before training the team of interviewers to conduct the survey, the questions need to be translated into the local language of the respondents. Translation needs to be done professionally, and should never be left to the individual interviewer since small differences in interpretation can create a bias in the data. In order to ensure that the meaning of the questions has not been changed in the process of translation, a second translator should translate the local version back into the original language (without referral to the original version). This retranslated version should be checked against the original version for perfect matching. Any ambiguous words or phrases should be discussed in order to reach final agreement on the correct translation.

Appropriate language for sensitive topics like sexuality is an issue that needs to be discussed and resolved. Often no single definition or synonym for sexual intercourse is used, known, or accepted among adolescents throughout a country (or even a region). Moreover, there may be much apprehension about terminology among government officials who fear that the use of slang or more explicit terms could hinder clearance by school officials at district or local levels.

Pretesting: instruments, methods, equipment

As a general principle, it is recommended that the instruments and methods be pretested before the training of field staff. This will permit the greatest flexibility in thinking about improving the approach, as well as minimizing the likelihood of retraining staff after making any changes. Pretesting should include all actions in the process, including finding and recruiting of respondents, use of questionnaires and topic guides, data recording and data entry. Ideally, the pretest should be conducted by a small number of the actual data collection team. The results of the pretest require a serious review with experienced colleagues and the interviewers, in order to modify the questionnaire, with further pretesting if necessary. A summary of how pretesting can assist in instrument design is given in *Box 35*.

Visiting the settings which have been selected for the fieldwork before the principal data collection will not only allow an assessment of their suitability, but can also help in obtaining permission and cooperation from local communities

and their leaders. Such visits can even be used to collect preliminary data about the communities' own perceptions of adolescent sexual and reproductive health topics, e.g., through group interviews or focus groups.

Box 35

WHAT A PRETEST CAN TELL YOU

- o Are respondents willing to answer the questions in the form proposed?
- o Are any of the questions particularly difficult or sensitive? *Extra training of interviewers could focus on these questions. The best ways of introducing and phrasing these questions could be explored.*
- o Are the questions misinterpreted by the respondents? Are any of the words ambiguous or difficult to understand? *The pretest should point to where changes in wording or improved translation are needed.*
- o Does the questionnaire flow smoothly? Can the interviewers follow the instructions easily? How can the questionnaire/guide be improved so that interviewers do not misinterpret questions?
- o Is there adequate space on the form and can the answers be clearly coded? *The pretest should show where the format needs to be improved before the final questionnaire is printed.*
- o HOW long does an interview take? *The answer to this question will help decide how many interviewers are needed and how long the field work will take*

Ethical considerations

It is important to consider the welfare and rights of all persons contacted, including adolescents, in the process of collecting new information. The importance of planning early to take ethics into consideration was mentioned in *Act/on P.6 Formulating a workplan*. Information collection should abide by the laws of the country. If approval by a national research ethics committee is required, this should be requested at an early stage to prevent delays. Particular attention must be paid to the ethical issues related to the involvement of young people below the age of majority. When the subject under discussion is as sensitive as adolescent sexual and reproductive health, particular care needs to be taken to protect adolescents who may provide confidential information that their families and community members may not be privy to. Other ethical issues to be considered include access to potential respondents, invasion of their privacy, the need for informed consent, the responsibilities when potential health problems are discovered and giving feedback to the respondents and the community.

Consent and confidentiality: Even where written and signed consent forms may be required of respondents, these are generally less useful than is often supposed. This is because many people feel social pressure to please, to conform,

or to "help", particularly if they see the interviewer as an authority figure or as superior to them socially. A health worker, interviewing an adolescent would be a case in point.

Care should be taken to seek formal approval from traditional leaders, and neighbourhood and community leaders where appropriate. Treating adolescents and other potential respondents as active partners and collaborators, rather than as passive sources of information, may also improve the quality of the research by increasing their involvement.

In order to maximize the accuracy of information collected, interviewers must be trained:

- o to be non-judgemental in verbal and non-verbal expressions;
- o to give a full explanation of the reasons for carrying out such research;
- o to give clear permission for refusal.

All interviews need to be conducted in complete privacy. Interviewers *are* responsible for finding a protected locale for their interviews, out of ear-shot of adults, other young people, or younger children. Persons who *are* interviewed will need to be assured, sometimes repeatedly throughout the interview, that the information being recorded will not be available to people they know and could not be linked to them in any way. Privacy and confidentiality will improve sensitive disclosures, particularly when the interview does not concern the informant's own life, for example, the opinions of gatekeepers on the sexual problems of youth. However, it must be easy, particularly for young people, to refuse an interview.

Focus group discussions, because of their "public" nature are especially useful for uncovering local social norms. People will normally only speak about issues that they know will not shock others present in session. Hence, while confidentiality is of little importance, privacy for the group is valued, as distractions from other family members, or noisy surroundings, for example, can hinder the functioning of an effective group process.

Importance of sensitive/taboo concerns: Sexuality and sexual behaviours *are* both extremely important and extremely sensitive topics in most people's lives. Cultural sensitivities in most countries translate into people making substantial efforts to keep their personal behaviours private. Nevertheless, while respecting the needs for personal anonymity, it should still be possible to get information about the values, perceptions, and behaviours that constitute social reality for adolescents.

Appropriate referral strategy for crises identified by respondents: In the process of undertaking a situation analysis of adolescent sexual and reproductive health, various very sensitive topics, including issues of abortion, unwanted pregnancy, child abuse, sexual coercion, STD, and HIV/AIDS may be discussed. It will be important for the team to reflect ahead of time on how best to deal with

adolescents if they disclose events or feelings which are particularly stressful, illegal or present a danger to their health or security.

Feedback to the responders: The respondents who have freely donated their time to the interview are entitled to a summary of the findings. Any important conditions discovered during the interview should be discussed.

Feedback to the community: Before starting the data collection process, the coordinators should plan what type of feedback will be given to the communities. If possible, this feedback should be provided before the team departs to a new setting.

Logistics

Selection of field teams

Getting high-quality information will be possible if sufficient time is taken to train the team of interviewers thoroughly. Field teams will need to be fluent in local languages and conversant with local cultural norms, expectations and etiquette. Where possible, it is desirable to involve adolescents and other residents of the region as collaborating members of the field team. This strategy facilitates obtaining "insider" information as well as strengthening the possibilities for local application of the situation analysis findings after the study has been completed. (See section below on training of fieldworkers.)

The field team should include persons responsible for transcribing notes and/or tape-recording material. It is important that they be familiarized with sexually-related issues and materials that they might come across, to avoid their being shocked or offended. As already mentioned, team members must respect the ethical rules applied to the access and use of data. The persons responsible for data management should be capable of working with a combination of qualitative and quantitative data, as well as familiar with computers. *Box 36* lists essential logistical considerations related to information collection and analysis.

Training of field teams

The training should be substantive and experiential, with considerable time devoted to rehearsing so that interviewers *are* not only clear about the factual information-in the questions, but also role play all the skills that will be needed to ask the questions in the field. It is best if the instruments used for training have been pretested prior to the training session, so that the interviewers can receive unambiguous, clear and explicit instructions and materials to learn from and practise with. Lessons of "what not to do" in interview situations, based on the pretest experience, *are* extremely valuable.

SHORT LIST: LOGISTICAL CONSIDERATIONS FOR DATA COLLECTION AND ANALYSIS

Field staff

- stipends and per diem
- transportation costs and arrangements
- accommodation
- venue for meetings
- field equipment
- supplies (forms, tape-recorders, paper, field manuals, etc.)

Data and information flow

- data entry support
- data entry arrangements (computers, software, printers, diskettes, photocopying machines)
- safe storage space for raw data
- communications (phones, faxes)

Administration

- secretarial support
- office space
- notification to facilities and communities to be visited

It is critically important for data reliability and validity that the interviewers understand that they ask the questions exactly as they *are* written, so as to avoid altering the meaning. Adherence to the procedures and interview formats is essential. A training manual that clearly explains any decision points that will be faced by the interviewers/fieldworkers is useful, such as skipping a series of questions which do not apply to all respondents.

Another important consideration for the data management or analysis teams is the training of extra individuals beyond the actual number required in the field. This allows for alternates for people who fall sick or otherwise have to drop out. It also allows for the selection of the actual team based on the performance during training, rather than relying solely on initial impressions from interviews of candidates and consideration of their *curricula vitae*.

An example of a multicountry youth health survey undertaken in the Caribbean is provided in *Box 37*. It illustrates many of the aspects of the *Doing* phase discussed in *D. 3*.

Editing and supervision

Ongoing supervision of information collection and editing is important for ensuring the quality of the data collected. Field editing generally includes daily reviews by the field teams of all data generated, e.g., questionnaires, focus group discussions, field notes, etc. These reviews can check for completeness of data as well as legibility, inclusion of all the necessary identifiers (type of session, date, interviewer, etc.) and the logical consistency of answers recorded.

A MULTICOUNTRY YOUTH HEALTH SURVEY IN THE CARIBBEAN

As part of an effort to formulate a regional plan of action for adolescent health, the WHO Regional Office for the Americas, through the Caribbean Program Coordination Office, and the University of Minnesota (a WHO Collaborating Centre on Adolescent Health), embarked on the development of national adolescent health surveys in 1995.

Planning

The approval process in Jamaica as in all the other countries of the Caribbean was as follows:

1. The Permanent Secretaries of the Ministries of Health and Education were contacted by letter, requesting permission to administer the survey and gather information on the distribution of the student population in order to draw an adequate random sample. Ethical *considerations* were specified. Also an *in-country coordinator* was appointed to coordinate all activities and to ensure uniformity of method of administering questionnaires.
2. School principals were consulted on the schedule so as not to interfere with examinations or other scheduled school activity. They were informed in writing of the precise dates of the survey.

Doing

1. The process of refining the instrument was extremely rigorous and depended on pretests, and comments of the young people and health educators selected and trained to administer the questionnaire. From the original questionnaire with more than 100 questions, pretesting reduced the number to 87 questions and 246 variables. *Annex 12* reproduces the final survey instrument.
2. During administration, short discussions were organized about the illustrations in the questionnaire so as to maintain the students' concentration. On occasion, student *literacy* required the questions to be read *aloud*.
3. In most countries, the research team comprised individuals from the Ministry of Health: MCH coordinator, health education officer, and epidemiologist.
4. Data entry was *contracted* to a firm in Barbados for all of the *countries* except the Bahamas.
5. Preliminary regional analysis of the findings has been undertaken by the University of Minnesota in order to contribute to the regional plans. Each country has its data set and a full analysis will take place at the country level.

Using

1. The preliminary data analysis provides key information on adolescent risk behaviours, the role of families and when to intervene. The information will be vital for:
 - o strengthening existing programmes and selectively targeting areas for specific improvements in interventions
 - o defining information and health service delivery needs
 - o developing appropriate
 - o materials identifying how young people can contribute to programme design.
2. Reports of the findings will be prepared in various formats for dissemination at press conferences, workshops and scientific meetings, and to national bodies involved in policy and programming, for example, National Youth Advisory Councils, and the Task Force comprised of young people, schools, NGOs, international agencies, the university, policy-makers and planners.

The initial survey instrument developed by the WHO Collaborating Centre and adapted for use in the Caribbean has also been adapted for use in the countries of Latin America.

Debriefing

It can be very useful to hold a "debriefing" session with the field staff immediately after return from the field. The field team can discuss any issues that might affect the interpretation of data, e.g., the quality of responses, problems with instruments, etc. A session of this kind can be used to discuss impressions of the field staff about the situation of adolescents, including their perceptions of factors which may not have been taken into account or recorded in the data. In this way, the debriefing can already contribute to a preliminary analysis which may be useful to the Technical Advisory Group.

Data entry

The data that is generated on a daily basis should be processed immediately by the data entry staff if possible, as long as the completed instruments can be made available, without waiting for the entire sample of respondents to be interviewed. In the early stages of the survey this would enable checking for any systematic problems that may be occurring in the field, in time to retrain field staff and correct serious *errors*. To avoid loss of primary data, arrange for the photocopying of completed instruments, if possible, before sending to the data entry staff, or arrange for small batches to be dispatched regularly to minimize losses.

Box38 below lists a set of actions that should be undertaken straightaway for the data that has been collected, including quality control and action to ensure the safety of the data.

Box 38

ORGANIZING FIELD DATA FROM THE SITUATION ANALYSIS

1. Consolidate the Data

Checklist: A checklist for the planned data will be very helpful in cross-checking against the data collected. The checklist might cover: how many focus groups from which locations, how many interviews, how many questionnaires, etc.

Identifiers: The originals now need to be thoroughly checked to be sure there are adequate identifiers for each kind of session, e.g., place, time, date, who was responsible, who were the respondents, without names, etc.

Completeness: Check all the data from each and every session for completeness, e.g., make sure there *are* no missing pages or missing answers.

2. Data. Entry and Storage

Typing/computer entry: It is not absolutely necessary that all data be entered into a computer, but it will generally be easier for analysis and its subsequent use if it is. Any items entered should include all the appropriate identifiers (see above). There should also be a system of making a copy of everything, e.g., on diskettes or a second computer.

Storage: The original data should be stored in a safe place, i.e., one that is safe from weather and termites, where the data will not be discarded, and where there is some control over who has access to the original completed instruments, for whatever purpose.

Choosing an appropriate computer programme

A number of computer programmes are available on the market that can be used to enter process and analyse quantitative and qualitative data. The software programmes suggested for qualitative data analysis are discussed in the *next action*.

Briefly, for quantitative data, the most widely used programmes are:

- Epi info (version 6), which is a very user-friendly programme for data entry and analysis. It also has a word processing function for creating questionnaires, as well as analysing data, some statistical analysis, and the production of tables and simple graphics developed by the Centers for Disease Control and Prevention, Atlanta, and the World Health Organization, Geneva.
- SPSS/PC, SPSS (Statistical Package for the Social Sciences), which is quite an advanced programme for data analysis, calculating statistics and producing tables and graphs. SPSS was developed by SPSS Inc.

If the decision is made to use a computer for data management, it will be important to consult with "computer-friendly" resource persons on the most appropriate programmes for the type of data that is being collected. It should be noted that *Epi Info* can be obtained free of charge from WHO or the Centers for Disease Control, and can be freely copied and distributed. The other programmes mentioned have copyrights. A brief description of these programmes is provided in the next section focused on analysing the data.

D. 4 ANALYSING COLLECTED INFORMATION AND DATA

The major aim of data analysis is to generate insight and understanding about a problem in order to find the best way to solve it. The data analysis phase should ensure that the findings present an accurate and complete picture of the status of sexual and reproductive health of adolescents, and the evidence for the factors which contribute to or determine this. These include factors in the social environment that influence adolescent health and behaviour, and the responses of institutions that mediate health-related outcomes for adolescents.

Data analysis can be an ongoing activity from the start of the data collection process. This allows for identification of problems that may have been missed during the daily checks on the quality of the data collected and correction of these problems in subsequent data collection. The situation analysis team needs to ensure that the overall plan allows time for analysis, reflection and continuous feedback and guidance between data analysis and field-work.

In general, all analysis of data should be disaggregated by sex, age, and rural/urban residence (though for secondary data this may not always be possible).

The first level of analysis of the data describes the core issues, and the current situation, with respect to:

- o the socio-demographic factors that relate to adolescent sexual and reproductive health
(e.g., population distribution by rural and urban residence, household income and expenditure, available health services and personnel by population served, enrolment ratios and employment rates)
- o the sexual and reproductive health status of adolescents
(e.g., fertility rates, STD rates)
- o the behaviours of adolescents
(e.g., sexual behaviour, use of health services)
- o the institutional responses and interventions for adolescent sexual and reproductive health
(e.g., legal age of marriage, access to health services).

The second level of analysis examines the relationship between core issues in order to answer the question, "Why is the situation the way it is?" The relationship between adolescent behaviours (sexual relations, the use of contraceptives or condoms, and health service usage) and adolescent reproductive health status (the prevalence of adolescent pregnancy, childbirth, induced abortion, and STD including HIV) is explored at this second level of analysis.

The third level of analysis identifies the emerging patterns of concern of the respondents, which may be different from the issues identified as important by the situation analysis team and the Technical Advisory Group. For example, the team may have been interested in the presence and technical quality of health services, but the major concern of adolescents may be the attitudes of health workers and the lack of attention to the sexual concerns of non-married people. The differences between adolescents in and out of school, in the extent of their sexual and reproductive knowledge and life skills, might be an interesting *area* to analyse. It would also be useful to examine the differences between people working in health, education and other settings, for example, with respect to their ideas about adolescent health status, needs and ways to improve the situation.

Such analyses are not easy. Nevertheless, it may be possible to formulate hypotheses from secondary data, about the relationship of behaviours to health in particular settings. Information to test these hypotheses can then be collected through primary data.

Analysis of quantitative data

When the information is collected as quantitative data, the analysis can be presented as frequency counts, percentages and ratios in descriptive tabulations (by age, sex, geographical residence), for the first level of analysis. For the second and third levels, analytical cross-tabulations comparing various issues should be prepared. Examples of these are provided below (37).

Simple tables can be made with frequency counts for each variable for which data has been collected. For example, for the number of adolescents by sex, or age, the following can be used:

Number of adolescents by sex		
SEX	Number	Percentage
Male		
Female		
Not Stated		
Total		100 %

Age distribution of adolescents		
Age group	Number	Percentage
10 – 14		
15 – 20		
Not Stated		
Total		100 %

Cross-tabulations to describe the sample

The next common tables that can be constructed by hand or by computer are descriptive cross tabulations that define the sample of interest, which in this case would first be the adolescents themselves. Here are two examples, for . and number of pregnancies:

Adolescent	Residence		Total
	Rural	Urban	
Male			
Female			
Not Stated			
Total			

Number of pregnancies by school attendance			
Age at onset of pregnancy	Number of pregnancies		Total
	Attending school	Not attending school	
12 years			
13 years			
14 years			
15 years			
16 years			
Total			

Cross-tabulations to explore relationships between variables

The next set of tables consists of analytical cross-tabulations that *are* used to determine possible explanations for reported outcomes and associated factors.

It should be noted, however, that no causality can be ascribed between these factors and outcomes (for example, frequent alcohol use and engaging in unsafe sex); the analysis can only point to this as a possible explanation. We cannot prove that frequent alcohol use causes a person to practise unprotected (i.e., unsafe) sex (even if we suspect that this may be the case), since the data was collected at one point in time. If data is collected, at least twice, the first time when no alcohol drinking is reported (and no unprotected sex is reported either), the second time when alcohol drinking is reported (and unsafe sex is reported as well), we then have a better case for ascribing causality between alcohol drinking and unprotected sex practices.

However, even in this situation there may be other contributing factors that we have not thought about, such as leaving home, taking up drinking and engaging in unprotected sex while living in an unsupervised environment, which may be the real cause behind practicing unprotected sex, rather than the drinking.

Further statistical analysis of the data in such tables is possible. This can be done with the help of statisticians, to show the strength of the relationship indicated by the tabulations. This increases the validity of findings about the relationships being explored and presented.

Substance use and unprotected sex			
Adolescents	Unprotected sex		Total
	Yes	No	
Frequent use of alcohol			
Frequent use of marijuana			
Total			

Cross-tabulations to determine differences between groups

Users of health services and condom use			
Adolescents	Reported condom use		Total
	Use	Do not use	
Use health services			
Do not use health services			
Total			

In the longer term, the more important task is to relate interventions to behaviour and health status change. Additional efforts can be made to look at targets, current policies and resources in any existing programmes, particularly with regard to their impact on adolescent health needs. The impact of the introduction of family life education into the school system, or new legislation on abortion, could be investigated through the analysis of behaviour or health outcomes (for example, practicing safer sex, increase/decrease in abortions), before and after these policy or legislative changes.

Determining the costs of adolescent health programmes (e.g., AIDS and STD prevention among teenagers, family life education, counselling services for adolescents, etc.) and weighing such information against lowered human productivity, disability, and the perpetuation of poverty, resulting from the country's burden of adolescent health problems, is a useful exercise which can produce valuable advocacy tools.

Using computer programmes to analyse quantitative data

As discussed in *Action D.3 Managing collected information*, there are several computer programmes which can be used for data management as well as analysis. Two programmes are briefly described below:

- o Epi Info (version 6) is a series of microcomputer programmes for handling epidemiological data in questionnaire format, or other structured data. It can be used for organizing study designs and results into the text, tables and graphics that may be part of written reports. A questionnaire can be set up and processed in a few minutes. *Epi Info* can also form the basis of a powerful disease surveillance system database with many files and record types.
- o SPSS/PC, SPSS comes with a number of add-on modules along with the base module; the add-on includes trends, tables and categories modules. The graphics module is incorporated into the base module.

The statistics module is separate from the base module and is divided into advanced statistics and professional statistics. The base, trends, advanced statistics, professional statistics, tables and graphics modules are available for IBM-compatible microcomputers.

The common features of the two programmes for data management and statistical procedures are highlighted in *Box39*.

Box 39

EPI-INFO AND SPSS/PC, SPSS

Data management	Data management capabilities of Epi-info and SPSS/PC include: Detailed labelling of variables and data values, additional documentation of data sets, storage of data and documentation in system files Flexible definition of missing data codes Permanent and temporary transformation of existing variables and computation of new variables Macro facility to build customized data analysis steps
Statistical procedures	Statistical procedures for data analysis for Epi-info and SPSS/PC include: Exploring data sets before deciding on the course of data analysis to perform Descriptive statistics, frequency distributions and cross-tabulations, bar charts, histograms and scatter plots The RANK procedure, which produces ranks, normal scores, average scores, and percentiles for numerical variables T-tests, univariate and multivariate analysis of variance and covariance Nonparametric tests.

The *Epi Info* manual and programme are in the public domain and are made available by WHO and CDC. The programmes were produced by the Division of Surveillance and Epidemiology, Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia 30333, tel: +1 770 639 3661, in collaboration with the World Health Organization. They are not copyrighted and may be freely copied, translated and distributed. They are available on the Internet at <ftp.cdc.gov>.

SPSS data management capabilities include in addition:

- o reading raw data files in a wide variety of formats e.g., numeric, alphanumeric, binary, dollar, date and time;
- o flip command to switch to columns and rows in a cross-tabulation.

- In addition, SPSS has the ability to perform more complex, statistical analyses:
- o tables to produce simple or complex tabulation formatted for presentation;
 - o trends including time series plots, plots of autocorrection, partial autocorrection, cross-correlation function, smoothing, seasonal regression;
 - o multiple regression, nonlinear regression, constrained nonlinear regression;
 - o log-linear models for discrete data;
 - o factor and principle components analysis, cluster analysis.

Further details regarding SPSS *are* described in *Annex 13*.

Analysis of qualitative data

The discussion of analysis so far has focused on quantitative data. When the information collected is qualitative many pages of written text may need to be analysed.

Analysis of focus group discussions

For focus group discussions (42), analysis is an ongoing process that begins as the information collection starts and continues until the final report is written. It is important to start analysis immediately, rather than waiting till the end, so that any significant gaps in the data can be identified and filled, while there is still time.

The purpose of early and continual analysis:

- o to allow the information collection process to focus quickly on the main issues identified as important to the respondents, and then to explore these issues more closely;
- o to ensure that the focus group discussions are being conducted professionally, (i.e., naturally flowing discussions, respondents not pressured into answering in a particular way);
- o to ensure the collection of the relevant information needed for meeting the objectives of the situation analysis, through an early examination of the results of the discussions.

Who does the analysis?

While this may be specific to the particular information collection effort, in general it is recommended that all those involved in data collection should also be involved in the analysis. Even if the task of synthesizing should fall to one team member (which is highly undesirable), this should be done in consultation with other team members who were present during the focus group discussions.

What activities are undertaken during the analysis process?

Orientation

From the beginning of the information collection process, even informal feedback from people about the topics of interest would help focus and direct the planning and subsequent choice and use of instruments.

Debriefing

After each focus group session, the facilitator and recorder should review and complete notes taken during the meeting. They should then evaluate how the focus group functioned and what changes may be made when facilitating future groups.

Analysis of transcripts

This is the most difficult of the activities. The transcripts should be edited to ensure that the text recorded is coherent. They should then be reviewed to prepare socio-demographic descriptions of the respondents, as noted in *Box 40* below.

It is helpful to keep a record and tally of all the responses collated, by topic of interest and by group of respondents. This is useful information for the users of the analysis. For example, it is of greater significance when the different focus groups mention the same topic of interest than if the same group members raise the issue several times.

Before presenting the conclusions, it is important to describe the selection and composition of the respondents, and the group process. This helps judge the validity of the reported findings.

The objectives of the focus group discussions, and the list of topics that guided the discussions, should also be presented. The findings, descriptions, summaries and interpretations should then be presented. Where possible, quotations to illustrate the main ideas that emerged from the discussions should be selected and included.

There are computer software packages for the review of pages of qualitative data. One such package, *GOFER* is described in *Box 41* (see page 90).

Analysis of information from the WHO User/System Interaction Method

This method generates subjective information from the adolescent and from health providers which should be compared, as well as objective information about services. The information collected should be analysed in three stages, as described for *Action D. (3)*.

Part I

Adolescent questionnaire (see *Box 29, Action D.3 Managing collected information*).

ANALYSIS OF QUALITATIVE DATA

1. EXTRACTION FROM THE RAW DATA

Description of the sample population — by age, sex, education, occupation etc.

Note major opinions and attitudes that were expressed:

Marking/coding: using the right-hand margin, all the passages can be marked that relate to each of the planned and emerging themes. Remember that some passages may be coded for more than one theme, as they cover more than one issue at the same time. Consider making extra copies to insert during the clustering step (discussed below). Keep the coding system simple.

Cutting (creating data slips): draw a line across the page (examples above and below this paragraph) to separate the main content areas in the text. Secondly, on the left side of the page mark the source of text for each passage, e.g., focus group, Bukoba, 2 Feb. 1994, girls of 10-13 years. Third, cut on the line to separate the passages into individual data slips.

2. CLUSTER THE DATA SLIPS

Grouping/ordering: the data slips can now be grouped by their major themes; this can be done on tables, on the floor, or by pinning the slips onto soft boards. Next, they can be clustered into various other natural subgroupings that emerge as you put the slips together. Adolescent pregnancy might be subdivided into: effects on education, age at first pregnancy, parental and societal reactions, etc.

Titles: put titles on the groups and subgroups to help keep the different ideas organized.

2. CLUSTER THE DATA SLIPS

Prioritize: review the various subgroups within any of the major themes; determine what is most important to discuss first in the report. This ranking of importance might be done on the basis of range of responses (agree/disagree, strong/weak), typical responses (most frequent), or extremes of responses (quite apathetic, very affirmative, etc.). It can also be done by seeing how often the issue was mentioned by the respondents, how strongly they felt about the topic, how much risk in speaking openly was embodied in the responses to the topic, etc. (Note that it is possible, even desirable, to include diverse or opposing opinions/statements.

Write down: write out the lists of themes and sub-themes, including the key ideas in each of the sub-categories. This can be typed up as an intermediate outline to help in the final writing exercise.

4. SUMMARIZE DATA

- o tables and matrices to count how often themes/sub-themes were mentioned by the different focus groups
- o diagrams
- o flow charts
- o narrative text.

5. DRAW AND VERIFY CONCLUSIONS

- o identify associations between variables
- o look for logical chains of evidence
- o cross-check data with evidence from other sources including from quantitative methods).

THE GOFER COMPUTER SOFTWARE PROGRAMME

GOFER is one example of a useful software programme that permits the rapid search of files, to find particular words that can serve as guides to particular material.

For example, reference may be desired to all the information obtained thus far about a "Youth Health Centre" which seems to be one of the principal health service locations used by a particular segment of the adolescent population. The computer files may have many references to the "Youth Health Centre" in various interviews, group discussions, and other notes.

The *GOFER* programme can locate all the places where the Youth Health Centre is mentioned. *GOFER* will ask for the names of files or directories that should be searched, indicated according to how material has been filed in the computer. *GOFER* *win* then search through each file and each time it finds the expression, "Youth Health Centre", will note it on the screen. The paragraph or any size portion of that text can be selected. The text portion can be copied into a separate file and/or printed out as a paper copy. The programme then proceeds to the next place where "Youth Health Centre" appears. At the end of the search and retrieval, the *GOFER programme* presents a list of all the files in which the expression "Youth Health Centre" was found, and how often (which can be compared to the frequency with which other services are mentioned, for example). There is then a file — either a computer file or a paper file — of all materials concerning the Youth Health Centre. This feature will be helpful when compiling information on broader Issues.

GOFER is available from Microlytics, Inc., 2 Tobey Village Office Park, Pittsford, New York 14534, USA, tel: +1 800 828 6293.

TOPICS FOR THE ANALYSIS OF INFORMATION FROM THE USER/SYSTEM INTERACTION METHOD

Analysis of adolescent perspective

- o What *are* the key obstacles to a satisfactory experience as perceived by adolescents?
- o Are concerns expressed about confidentiality?
- o Are identified obstacles and concerns easily remedied or not?
- o Do they call for changes in the service itself, or in the way information is provided about the service?
- o Are there implications for staff training?
- o Are there implications for the way information or supplies *are made available*?
- o Are other kinds of change called for which are beyond the scope of local service management?

Analysis of health provider perspective

- o Are the health providers well attuned to the needs of young people who come to them?
- o Do the health providers recognize the difficulties that adolescents say they encounter when trying to get the help they need?
- o Are there some obvious and feasible changes that would help meet those needs?
- o What *are* their own views about the strengths and weaknesses of the services they provide for adolescents?
- o What do they believe are important to make the services adolescent-friendly?
- o Are they willing to make changes to make the services adolescent-friendly?

Part 2

Health provider questionnaire. The first requirement is to compare the views expressed by adolescents with those expressed by health providers and also with health providers' beliefs about adolescents' views. Topics that could be explored using the information from health providers are listed in *Box 23*. Health providers may know what adolescents like or dislike about the service but they may feel that other things are more important and this discordance needs to be determined and examined. Finally, it will be important to confirm through follow-up investigation whether adolescents are more satisfied once changes have been made.

Part 3

Objective information about the service. This information is important for identifying changes that are feasible, as well as current arrangements for service provision which appear to be satisfactory to adolescents. The information from these three parts should be collated, analysed and fed back to the clinics (without, of course, identifying individual staff as the source of problems).

The WHO Narrative Research Method

If the Narrative Research Method has been used, a story will have been generated and verified by a relatively representative sample of young people in the district about a key issue of adolescent sexual and reproductive health. The questionnaire generated will then have been administered to a larger representative sample of adolescents in the district. The age and sex, urban or rural residence, ethnicity, and any other relevant information about the respondents, will have been noted.

It will be useful first to subdivide the questionnaires according to the subgroup of respondents who completed them (see *Box 43*).

Box 43

SAMPLE DATA ANALYSIS OF QUESTIONNAIRES USED WITH THE WHO NARRATIVE RESEARCH METHOD

Age 10-14		Age 15-19		Age 20-24	
MALE/FEMALE		MALE/FEMALE		MALE/FEMALE	
MALE RURAL/MALE URBAN	FEMALE RURAL/FEMALE URBAN	MALE RURAL/MALE URBAN	FEMALE RURAL/FEMALE URBAN	MALE RURAL/MALE URBAN	FEMALE RURAL/FEMALE URBAN
Response to event:	1	Response to event:	1	Response to event:	1
	2		2		2
	3		3		3
	4		4		4
	etc.		etc.		etc.

The data analysts will then add up the first choices made for each item (or response) in the story sequence by each group of respondents. The aggregated information will provide a modified story for each group of respondents. The combined responses of the subgroups can then be examined separately.

For example, do the responses of the male respondents differ from those of the females in what they believe to be typical? The first question to the respondents may be — "What happens when the boy who has just met the girl asks to see her again?" The aggregated response of the female respondents may be that the girl is too shy to answer him; while that of the boys may show that most of them believe she will say "yes"; and so on through the story.

Carefully coded answer sheets will show differences (if they exist) in beliefs by the age, sex and locality of the respondents. These will have implications for the improvement of existing interventions, for example, for the provision of effective information skills, counselling, or other services, or the prevention and management of adolescent reproductive health concerns.

The implications of the major findings of the WHO Adolescent Health Programme, Narrative Research Study, conducted by affiliates of the World Organization of the Scout Movement (WOSM) and the World Assembly of Youth (WAY) carried out in 11 countries in the African Region, are presented in *Box 44*. In the left-hand column the aggregated finding (summarizing the first choice from all respondents combined) is presented for each major event in the story. In the right-hand column some of the implications for action from the findings are suggested. Some of the findings are truncated because of lack of space.

Further information is presented in *Annex 14 (Characteristics of computer software programmes to assist qualitative analysis)* and *Annex 15 (Tips for analysis of qualitative data on adolescent sexual and reproductive health)*.

Use of the "ANTHROPAC" software programme

For in-depth qualitative analysis, the process of exploring relationships can be done quickly, even with much more complicated materials, using the microcomputer programme *ANTHROPAC (42)*. *ANTHROPAC* has a wide range of different routines, which include the features listed in *Box 45*. In addition, *ANTHROPAC* contains a programme (Consensus) which may be used to examine the same questions explored above, e.g., are the responses of girls and boys sufficiently similar to be characterized as belonging to the same response set; or, are they indicative of two systematically different patterns of response? This computer programme also provides a means of substantiating quantitatively (i.e., eigen values of the M matrix) the conclusions drawn. *ANTHROPAC* is available from Analytic Technologies, 104 Pond Street, Natick, MA 01760 USA, tel: +1 508 647 1903, fax: +1 508 647 3154.

IMPLICATIONS FOR ACTION OF THE MAJOR FINDINGS FROM A NARRATIVE RESEARCH STUDY CONDUCTED IN 11 AFRICAN COUNTRIES

FINDINGS	IMPLICATIONS FOR ACTIONS
<p>1. After a meeting at a marketplace initiated by the boy who is 15, <i>the girl</i>, 13, is too shy to respond when he asks if he may see her again, but when she returns home and her mother asks her why she is late, she makes up a story.</p>	<p>1. Informing parents of the finding that the girl, who <i>has done nothing wrong</i>, is too frightened to tell her mother, may help to encourage dialogue at home.</p>
<p>2. After a period of two years and periodic meetings, the boy (now 17) and girl (15), have sex. She doesn't <i>really want to</i> but is afraid to stop him and doesn't really know what to say. He is thinking mainly of what he will be able to say to his male friends.</p>	<p>2. There is no communication between the two about their own real feelings. Had they explored these better, the sexual <i>intercourse</i> might have been avoided. The use of role-play before sexual relations start will help boys and girls understand each other's wishes better, and give them practice in developing verbal skills to prevent sex too early.</p>
<p>3. Just before having sexual <i>relations</i> the girl raises the issue of pregnancy, the boy tells her not to worry, and neither mentions or thinks about STD or HIV/AIDS.</p>	<p>3. It is essential that adolescents be better informed about their vulnerability to pregnancy, STD/HIV/AIDS, and that programmes link these problems together, as they all result from unprotected sex.</p>
<p>4. When the girl turns to the boy fearing that she is pregnant, he tends to back away from the situation.</p>	<p>4. The consequences for girls of having unprotected sex, and the boy's responsibility for it, needs greater attention in programming with boys.</p>
<p>5. The girl turns next to her best girlfriend for help, and the subject of self-induced abortion, or going to an unqualified person, comes up.</p>	<p>5. Abortion in such circumstances is likely to lead to disaster. Young people need to be able to trust adults and seek medical advice. The attitudes and knowledge of adults often need to be improved in order for them to be trusted and become a more acceptable source of help for young people.</p>
<p>6. Once the pregnancy is discovered by the girl's mother, she tells the father and the consequences for the girl are no longer in her hands. In some stories she is driven from home without any support - to a dismal and dangerous future.</p>	<p>6. There is a need for greater appreciation of the plight of an unmarried pregnant girl. She needs help to create a positive future by being allowed to stay with her family, and to return to school.</p>
<p>7. Nowhere in the aggregated story depicting the onset of sexual relations and a subsequent pregnancy does the girl or boy involved turn to health workers. Not for contraception, not for pregnancy care, not for abortion, and not for STD diagnosis.</p>	<p>7. What can be done to make health workers and health services (both prevention and care) more youth-friendly? Would greater confidentiality remove some of their fear? Do they need more skills in working with young people? Would a better understanding of adolescent sexuality make a major difference and/or improve relationships with parents?</p>

USING ANTHROPAC FOR QUALITATIVE ANALYSIS

Free list:	reads in list of domain items, computes frequency distribution.
Pile sort:	converts pile-sort data into aggregate and individual proximity matrices suitable to multi-dimensional scaling, both single and multiple pile-sort data <i>are</i> accommodated.
Ratings:	generates individually randomized questions — in answer to these questions, the respondent is asked to assign a score (rank) to each set of items.
Paired comparisons:	generates questions and to answer the respondent must evaluate each <u>pair</u> of items in a domain according to which has the most of some specified property.
Network:	generates questions and the respondent must evaluate the relationships among all pairs of actors in a social network.

ANTHROPAC also permits the entering and editing of numerical data sets using a simple editor (like a word processor, only easier) for constructing small-scale data files. If your survey is only 50 or 60 interviews, and is fairly short, data can be entered directly into the *ANTHROPAC* editor and some simple descriptive statistics derived, using the "Univariate" sub-routine. This permits the computation of all the frequencies, means and standard deviations from the survey reporting. "Scales" or composite measures of concepts can be created; compilation and sorting answers collected from informants, and creation of a "cognitive map" in the form of "multidimensional scaling", can also be undertaken.

Moving on from data analysis

The discussion in these *Doing* actions has focused on the collection, management and analysis of data, in order to prepare the evidence that can be provided on adolescent sexual and reproductive health to the appropriate users. It provides an assessment of what may be possible, rather than step-by-step instructions on how to go about it. The advice of Technical Advisory Group members, statisticians and other resource persons with expertise in data collection, management and analysis will be valuable in guiding this process efficiently and effectively.

An example of how the Government of Uganda has made use of the findings of a national situation analysis is provided below. *Equity and vulnerability: a situation analysis of women, adolescents and children in Uganda, 1994*, has become a vital resource for all those concerned with improving the situation of women, children and adolescents, whether from central government or districts, donor agencies or communities.

IMPACT OF UGANDA SITUATION ANALYSIS ON NATIONAL-LEVEL FOLLOW-UP BY THE GOVERNMENT OF UGANDA AND UNICEF

In 1994, the Government of Uganda and the Uganda National Council of Children, Ministry of Labour and Social Affairs, sponsored a national situation analysis of women, adolescents and children. The study was funded by UNICEF, and implemented by the Child Health and Development Centre, Makerere University.

This situation analysis was a highly participatory process of research and dialogue at the district level, and was based on recognition of the need to address the interlocking *issues* of poverty, health and education. The findings singled out six leading problems affecting social and physical health and well-being, along with their causes, and indicated the implications for action taking into consideration available resources and community strengths. The problems were: inadequate education, malnutrition of children, poor/insufficient parenting, behaviours of adolescents which put their health at risk, lack of voice for women, and poverty. Risky adolescent activities included early sexual behaviour, drinking alcohol, and dropping out of school. Consequences of these behaviours included adolescent pregnancy, infection with HIV and/or other STDs, early marriage, and unemployment due to lack of job skills.

In response to the findings of the situation analysis:

- o the Government has provided assistance to implement the Uganda National Programme of Action for Children (UNPAC) and to extend the development of programmes of action for children to districts and sub-counties.

- o UNICEF/Uganda has initiated a Basic Education, Child Care and Adolescent Development Programme which:

- *assists those working with adolescents to conduct an adequate situation analysis in order to raise awareness about the needs and concerns of adolescents.*

This is done during planning meetings at district level involving NGOs/community-based organizations working with adolescents, and district medical officers, youth officers and health educators. To date, support is being provided to 20 districts.

- *raises awareness of planners and service providers that HIV/AIDS is not the only problem confronting adolescents as revealed in the situation analysis.* This has been stressed in meetings with NGOs supported by UNICEF, many of which are expanding their activities to other adolescent concerns in addition to HIV/AIDS.

- *supports advocates of programmes that reflect on adolescents' reality by involving adolescents in programme development.*

- *addresses special categories of vulnerable adolescents, with particular emphasis on rural/out-of-school youth.* For example, a life-skills manual for out-of-school adolescents has recently been completed.

- *supports (with WHO/Uganda) an interministerial group to guide the development of a national youth policy which specifies policy and programme strategies for adolescent health.*

D. 5 DRAWING CONCLUSIONS

The conclusions from a situation analysis provide the basis for public health action. Drawing these conclusions requires a somewhat different approach from that required for more research-oriented data collection. Here judgements have to be made about what to do to improve policy and programmes, and the findings rarely point to clear-cut choices for one path or another. Decisions for action should be based on:

- o what issues are important;
- o what can be changed;
- o what do people want to change.

The Technical Advisory Group should schedule adequate time to thoroughly discuss the conclusions as it will be important to be able to explain and justify them to the Steering Committee. The conclusions will later have to be justified to decision-makers.

What issues are important?

It is timely to revisit the purpose and objectives of carrying out the situation analysis, as well as the process. Core issues were identified prior to the situation analysis, and sources, settings and methods were selected, based partly on these. Have the findings from the situation analysis confirmed that these issues *are* important? Have other issues emerged that were ignored or neglected at the outset?

While computers enormously accelerate the processing of the data collected, they have no capacity for making informed judgements and preparing conclusions. These are tasks which will be guided by professional experience, social values and ethical principles, and even political interests — all of which are eminently human attributes.

What can be changed or initiated?

The process of collecting information, interacting with adolescents and their communities, and analysing the findings, should provide information on what can be changed in the short and long term. Will it be the services, the information provided to adolescents, the skills of adolescents, the attitudes of parents, the policies, or some combination of these? How easily can these changes be made?

What do people want to change?

Public health action involves people. The situation analysis will have shown what sorts of changes various groups of people want. What do adolescents, communities and influential people want to change? Are these the same? Are

they complementary? If not, *are* they reconcilable? Can evidence from the data bring these different actors to consensus?

Taking action

Information about the situation itself is a persuasive basis for action. It needs now to be supplemented by information about feasibility. This has to be provided by the stakeholders — adolescents, parents and families, the community, programme implementers, and policy-makers. These various groups can all provide valuable information on different aspects of feasibility. In addition, they can often identify the sorts of actions which would catalyse the desired change. The situation analysis itself, its stated objectives, and the way it was undertaken, already provide some indication of the public health actions that should follow.

The following table lists some interventions contributing to the improvement of adolescent sexual and reproductive health that can be implemented by adolescents themselves, as well as by families, communities and health service providers.

INTERVENTIONS FOR ADOLES

Promotion	
Adolescent	<ul style="list-style-type: none"> > learn skills related to: o problem-solving/decision-making, managing emotions — fear, anger, anxiety, sexual attraction, love o interpersonal communication, including: how to seek assistance; how to be assertive; how to negotiate; how to respond to provocation o critical appraisal of media and peer influences o exploring attitudes and personal values > learn practical self-care and hygiene skills o learn vocational/entrepreneurial skills
Family	<ul style="list-style-type: none"> > provide.-adequate food, water, clothing, shelter, water/sanitation > listen to and discuss the concerns of adolescents > provide opportunities for adolescents to: <ul style="list-style-type: none"> o assume increased responsibility for household and personal tasks o practise social skills > provide information about growth and development > facilitate access to school, recreation, religious institutions, health services > communicate clear expectations, open to negotiation over time > "model" desired adult behaviours including interpersonal relationships, use of substances
Community	<p>School</p> <ul style="list-style-type: none"> > teach basic literacy and numeracy skills > provide information about health > provide skills training > facilitate access to health services > provide adequate toilet facilities, e.g., privacy, disposal, water <p>Community organizations</p> <ul style="list-style-type: none"> > provide supervised, safe places to: <ul style="list-style-type: none"> o socialize — have fun, play sports study, reflect, discuss, contribute to society > provide information about: <ul style="list-style-type: none"> o health, o legal rights, o community resources > provide opportunities to learn skills > facilitate access to health services and income-generating opportunities > provide training to family members, teachers, youth workers
Health services	<ul style="list-style-type: none"> > advocate to community leaders and other sectors for supportive policies and concerted programmes to promote healthy development > contribute directly to the delivery of interventions (such as information provision; skills building) outside health facilities

HEALTH AND DEVELOPMENT

Prevention	Care
<ul style="list-style-type: none"> > use condoms and contraception if sexually active > learn to recognize warning signs and symptoms of illness, and when to seek advice from health workers > practise responsible behaviour related to sexual activity, use of substances, diet, exercise, use of vehicles and machinery 	<ul style="list-style-type: none"> > care and support of others > learn first-aid measures for injuries > ask for information about care when needed, e.g., maternity care, STD treatment, substance-use treatment
<ul style="list-style-type: none"> > provide information about health and opportunities for discussion > facilitate access to health services including for immunization and monitoring of health status 	<ul style="list-style-type: none"> > care and support of sick family members > encourage participation of adolescents in diagnosis and treatment when needed
<p>School</p> <ul style="list-style-type: none"> > provide preventive commodities such as vaccines (e.g., tetanus), antihelminthics, nutritional supplements and condoms > monitor growth and development > provide nonjudgmental listening and support <p>Community organizations</p> <ul style="list-style-type: none"> > provide counselling > provide safe places to sleep 	<p>School and community organizations</p> <ul style="list-style-type: none"> > provide first-aid measures for injuries > provide transport and accompaniment to health services > detect health problems and refer to health services > offer group and individual counselling; organize support groups (e.g., for smokers, young people in violent home situations, adolescents living with AIDS) > provide opportunities for social integration (e.g., schooling and employment)
<ul style="list-style-type: none"> > monitor growth and development, and check on the state and function of teeth, hearing and vision > provide preventive commodities (such as vaccines, nutritional supplements, contraceptives and condoms) > provide information, advice and counselling > provide opportunities for adolescents to ask questions and to clarify any doubts > assess the possibility of the presence of health problems (such as STDs or depression) and/or unhealthy practices (such as injecting drug use) 	<ul style="list-style-type: none"> > detect/diagnose health problems and/or unhealthy practices > appropriately manage these conditions (this includes meeting the psychological needs of their adolescent patients, and helping them cope with the social implications of their conditions) > link up with and refer their adolescent patients to the next "level" of health service delivery > link up with and draw upon the support of organizations who could provide appropriate non-health services when required (such as legal and social support for adolescents who have been abused)



U. USING INFORMATION FROM THE SITUATION ANALYSIS

A situation analysis is undertaken with the aim of using the information generated to improve programmes and policies. Unfortunately, however, valuable information that has taken much time and effort to collect and analyse is often poorly used. This is a serious waste of resources and constitutes a breach of faith for the communities that participated in the process. The respondents, and the general population that they represent, deserve to get the benefit that was intended from the situation analysis.

Good information can be very influential and persuasive. Once the local community, local programmes, governments, NGOs, and international organizations become aware of the findings, they can respond more effectively, with informed choices, to the needs and problems of adolescents.

ACTIONS

- | | |
|---|-------------------------------------|
| 1 | Determining an information strategy |
| 2 | Preparing the report |
| 3 | Sharing information |
| 4 | Additional follow-up action |

U. 1 DETERMINING AN INFORMATION STRATEGY

A situation analysis represents an opportunity for raising awareness, extending "ownership" of the emerging evidence, and mobilizing resources and people for action. The results of the situation analysis should be disseminated as soon as they are available to several users identified earlier during planning, in a variety of formats, to inspire and support them in taking action. The existing communication channels for the dissemination of results can be identified and reviewed for suitability. In addition to the results, some information about how the situation analysis was undertaken, who was involved and how local capacity was strengthened, should be provided.

The Technical Advisory Group can consider different ways of sharing the information to ensure maximum and widespread use of the findings by:

- o those who have the power to make decisions on the actions
- o those who are directly affected by the recommendations, and
- o those who have participated in the process.

The groups to which the findings need to be disseminated were listed in *Action P.4*, and they include:

- o people, managers and service providers in the government and NGOs;
- o national-level planners;
- o youth and other community leaders;
- o the general public, parents and adolescents;
- o religious leaders;
- o partners who have been involved in reviewing care issues and setting objectives for the situation analysis;
- o the media;
- o professional and scientific associations, e.g., teachers, nurses, doctors, researchers;
- o donors.

Formulation a strategy for dissemination

In *Box 47* an example is provided of a strategy for the systematic dissemination of information about adolescent reproductive health, including results following a situation analysis. *FOCUS on Young Adults** is undertaking situation analyses on adolescent reproductive health in several countries and has developed a three-step approach to guide the communication of findings.

*The FOCUS on Young Adults Program supports building and strengthening reproductive health programmes for young adults. In addition to other materials on the reproductive health of young adults, the programme has developed guidelines for conducting country assessments. FOCUS on Young Adults is located at 1201 Connecticut Avenue, NW, Suite 50 1, Washington, DC 20036-4501, USA; fax: + 1 202 835 0282.

**STRATEGIES FOR DISSEMINATING THE RESULTS
OF THE SITUATION ANALYSIS**

STEP ONE: Determine the audience. Who needs what information about the reproductive health of young adults?	STEP TWO: Determine the information needs.	STEP THREE: Determine the most useful format for presenting information to each audience.
<p>Audiences may include:</p> <ul style="list-style-type: none"> o National and local stakeholders who are urging action , o National and local policy-makers o National or news media o National or local groups such as parents, teachers, health workers, local leaders, etc. o International organizations in their home offices or in other countries o International organizations working in the country 	<p>Information needs may include:</p> <ul style="list-style-type: none"> o Health needs of young adults o Behaviour patterns of young adults o Existing resources for young adults' reproductive health o Opportunities for improving the health of young people o Barriers to improving the health of young people o Successful approaches to improving the health of young adults 	<p>Formats may include:</p> <ul style="list-style-type: none"> o Country profiles and country reports o Policy briefing sheets, fact sheets, wall charts o Presentations, meetings, workshops o Working groups o Technical reports, papers, published articles o Media briefing kits and training workshops o Development of materials for parents, teachers, health workers, local leaders, etc. o Television and radio announcements, spots, interviews o Computerized information on disc or Internet

U. 2 PREPARING THE REPORT

The Technical Advisory Group and available members of the Steering Committee will need to review the results before finalizing even a preliminary report. A one- or two-day meeting should be convened to bring together all major participants of the Planning and Doing actions to present and discuss the main findings in order to finalize the report. Box 48 below provides an example of a proposed structure for such a meeting. Apart from improving the report, a meeting can stimulate the Steering Committee to consider follow-up action. In order to speed up action, it is advisable to produce at least two initial reports:

- a) a preliminary report, followed by
- b) a full technical report (which should include an executive summary).

SUGGESTED STRUCTURE OF A MEETING TO REVIEW FINDINGS

Item	% Estimate of time for discussion
1. Review the agenda for the meeting Restate	}
2. the original purpose of the situation analysis and its specific objectives	}5% }
3. Present the findings of the situation analysis of youth health	}
4. Present the preliminary recommendations, and how these were derived	} 15% }
3. Discussion of findings	}30% }
4. Discussion of preliminary recommendations	
7. Review of the meeting so far, summary of major points made	10%
8. Decisions and action required to finalize report Discussion of	20%
9. dissemination strategy	15%
10. Closure	5%

Adapted from Commonwealth Youth Programme, Youth Health: Analysis and Action. London 1995.

The preliminary report

This is a brief and early version of the full technical report. It can include the:

- o aims and objectives of the situation analysis;
- o major results;
- o discussion of conclusions and preliminary recommendations and how these were generated;
- o methods used and samples of the populations interviewed;
- o brief summary of the data collection (secondary and primary; the instruments used to collect data) what questions were asked, and who asked and answered them.

Sections of the preliminary report can be written as the field work progresses. Once the data have been analysed, only major findings that *are* firm should be included in this report. In the meeting that is convened to finalize the preliminary report, the main findings and recommendations should be clearly stated so that they are at the forefront of everyone's mind. They should be highlighted in this report, while there is still interest in the situation analysis.

The components of the full report for presenting findings to decision makers are listed below:

- o executive summary;
- o overall purpose of the situation analysis;
- o objectives of the situation analysis;
- o description of the organizational mechanisms used for the situation analysis, including funding;
- o samples selected, their *size, and* methods used for data collection;
- o the instruments pretested and used;
- o description of the field process;
- o description of the timing, logistics and instructions for field staff;
- o data entry process, including editing and time and human resource needs;
- o evaluation of data quality with a description of specific problems such as missing data and non-response. Commentary regarding constraints in response;
- o results, with discussion, analysis and interpretation of qualitative and *quantitative information collected, to include:*
 - a. the current context in which adolescents live;
 - b. the nature and magnitude of current adolescent sexual and reproductive health status and behaviour patterns; variations among different groups of adolescents; perceptions of the importance of different aspects of health;
 - c. the current responses to adolescent needs in different settings; • commentary on adequacy and opportunities for improvement;
- o conclusions and specific recommendations for action to improve the sexual and reproductive health of adolescents;
- o suggestions about how the information collected can be used for monitoring and evaluation, and for undertaking future situation analyses;
- o acknowledgements for the help and support received.

Writing the report:

Writing the report-Planning for the situation analysis will have taken into consideration the resource requirements for writing the report. Simple tips for writing the report are listed below.

Put the information in proper sequence
 Use clear language
 Prepare simple and attractive graphics
 Reflect back to objectives to ensure that they are addressed
 Consider the audience and make the report accessible and usable to them
 Reflect the various perspectives of the different sectors and population groups

U. 3 SHARING THE INFORMATION

Information can be shared in a variety of ways including:

- o presentations through: lectures, seminars, workshops, conferences, briefing sessions;
- o books, journals, monographs, newsletters;
- o mass media interviews in print, radio call-in programmes,
- o video recordings, audio-cassette recordings;
- o electronic media.

Box 49

POSSIBLE REPORT FORMATS

Format	Audience/users	Length
Short form (s)	general public, press, summary for planners	1 - 4 pages
Medium form	programme implementers	10 - 25 pages
Long form	libraries, interested programmes	50 - 100 pages
National and international data sets	policy-makers and planners, other researchers	

The study on the following page was highlighted in the "Doing" phase to illustrate the use of an innovative approach to complement traditional methods of collecting data. Here it is used to show how information can be disseminated, and action initiated to optimize the impact of the situation analysis.

MALAYSIA - STRATEGIC DISSEMINATION OF FINDINGS HAS IMPACT ON POLICY AND PROGRAMME

Elements of the dissemination strategy

Senior government officials

- o An executive summary was tabled to the Cabinet Committee on Social Issues chaired by the Deputy Prime Minister, the discussion of which prompted the preparation of a Cabinet Memorandum tabled to the Cabinet in the same month. Subsequent Cabinet deliberations have led to the formulation of strategy to promote and maintain optimal reproductive health for Malaysian adolescents towards the year 2000.
- o Information from the situation analysis has been used by the Prime Minister and Deputy Prime Minister in briefings to national and state leaders, NGOs, the private sector, and political and religious groups to build consensus on action needed for adolescents.
- o The findings have been incorporated into the Social Agenda which is dealing with other health-related issues such as substance use and juvenile delinquency.

Media

- o The Chairman of the National Population and Family Planning Development Board (NPFDB) gave a special interview to the press. Subsequent media coverage on radio, television and in newspapers, generated considerable public interest in adolescent social issues.

Governmental and nongovernmental programme executives

- o A high-level meeting was organized to present the findings and conclusions to stimulate action.

Community leaders

- o Seminars and workshops have been organized involving religious leaders and others working with adolescents at the community level.

Findings used as basis for programme development

<i>Finding</i>	Families and communities require support to improve overall functioning as well as specific assistance in understanding the changes associated with normal adolescent development.
<i>Actions</i>	NPFDB is revising and developing several training modules to include "Parenting of adolescents" and "Adolescent development". The Ministry of Youth and Youth Movement (NGO) is building the issues into its "Rakan Muda" community-level recreational and educational programme for youths.
<i>Finding</i>	Adolescents often need help to develop self-worth and respect for others, as well as specific knowledge and guidance regarding their sexuality and reproductive health,
<i>Actions</i>	The Ministry of Health is developing a special programme on adolescent health with a focus on healthy lifestyles, The Ministry of Education is reorganizing its Family Life Education programme in schools. The Department of Religious Affairs is orienting its religious and moral education to include health issues and to build adolescents' life skills and self-discipline. . A multi-media educational package for adolescents and youth to impart knowledge on Family Life Education is being explored.

U. 4 ADDITIONAL FOLLOW-UP ACTION

During follow-up the real value of the findings from the situation analysis, the sense of ownership that was created, and the capacity that was strengthened, will be tested. If the situation analysis is to be used to best effect to promote and improve adolescent sexual and reproductive health, all potential users need to know what has been learned and what action they can take.

There are several options for additional follow-up action, including building awareness, formulating advocacy strategies to influence policies, and developing or modifying programmes. These actions can take place sub-nationally also, to facilitate regionally-specific interventions. Building ownership of the results can facilitate cooperation between diverse partners. Repeated situation analyses can provide trends for monitoring the results of actions taken. The follow-up actions must include dialogue and participation of adolescents if programmes are to succeed. *Box 51* presents an example of the kinds of recommendations made through an interagency team to improve adolescent health.

Box 51

RAPID INTERAGENCY SITUATION ANALYSIS IN UKRAINE

Spurred by an alarming increase in HIV transmission among adolescents in Ukraine, an interagency team headed by UNICEF, with members from WHO and UNAIDS, undertook a preliminary situation analysis, primarily in one urban *area*, as the basis for action to improve the health of adolescents and young people.

The rapid situation analysis consisted of a review of existing literature and discussions with policy leaders, programme planners, service providers, young people, and the media, as well as observation of existing efforts. Among the notable findings were a dramatic increase in HIV infection and substance use (particularly illicit drug use) among young people; restrictions of movement placed on street children, young prostitutes and injecting drug users, and an overall approach which places responsibility for health and well-being on the state rather than the individual.

As a result, recommendations were put forth to facilitate the:

- o national mobilization of Government and organized civil society to make the child, adolescent and youth a national priority*
- o modification in systematic data collection according to a minimum of five-year age groupings (e.g., 10-14; 15-19; 20-24, 25-28) and sex, in order to improve the reporting of adolescent health status and behaviours*

o *development of a comprehensive, multisectoral and multidisciplinary approach* to promote the health and well-being of adolescents, with particular attention to the prevention of STD/HIV. The key components would aim to ensure the provision of clear and unbiased information to adolescents and their parents about a range of health conditions and behaviours, and to improve the social environment in which adolescents live.

With the Ministry of Family and Youth — the focal point for adolescents — having the major task of building consensus among interested governmental and nongovernmental bodies, the initial planned activities include:

- o setting up an independent, informal *public forum to discuss issues* related to adolescent health and development, such as sexual and reproductive health; child, adolescent and youth rights; and hazardous and harmful substance use
- o create a *youth information and resource centre and youth cafe*, to provide materials and resources for people who work with youth, as well as a place where young people can obtain information using Internet, videos and print materials, and discuss with other young people and adults; young people would also be able to design their own health education materials
- o modify health service delivery in an existing polyclinic (in an area of the city where young people at risk are concentrated) to make it more youth-friendly and to provide multidisciplinary support to youth at risk, with social and psychological counselling, information on healthy life and risky behaviours, confidential treatment of STDs, and reproductive health, and a harm reduction project for injecting drug users
- o national-level activities to stimulate discussion and evaluation of the needs and issues of children and adolescents, and country responses to these needs, including implementation of the Convention on the Rights of the Child, with particular attention to children and youth in especially difficult circumstances.

> **Inform policy-makers and opinion leaders.** The situation analysis will provide information that can be helpful to policy-makers, although their specific needs may vary, depending on whether they work in the health, education or justice sector, for example. A core package of information that is brief but substantive and action-oriented can be prepared for informing policy-makers. This would also facilitate decision-making on resource allocation. For sensitive topics, it is particularly important that the situation analysis identify the existing problems as well as the feasible solutions provided through the participative and consensus-

building process that was used. It will be helpful to indicate the views of the public and of professionals in all sectors who support change, especially where there is agreement. It may also be important to indicate the cost of *not* taking action.

District reviews

A situation analysis can be undertaken at a national level, or at a sub-national level in specific states, provinces or districts. As a follow-up to the national situation analysis carried out by the Government of Uganda in 1994 (example in *Action D 4* there is systematic and ongoing district-level planning and review of adolescent health activities based on a district situation analysis. District-level information is used to bring together the district representatives of the different ministries (health, education, social welfare) with the district planning officer, the chief administrative officer, NGOs and international organizations, to develop specific plans of action. These plans include complementary activities among the different sectors represented, and the identification of targets and monitoring indicators for tracking progress.

Decentralized planning is in process in several countries now, and district-level situation analyses have been conducted and used for planning and implementing maternal and child health programmes in the recent past in, for example, Bangladesh and Brazil. This Guide provides an opportunity for focusing more specifically on the needs of adolescents.

Monitoring action

One of the benefits of the situation analysis, depending on the extent to which data was collected, will be the availability of baseline information against which the progress and impact of programmes and policies can be assessed. Several areas of follow-up *are* particularly recommended:

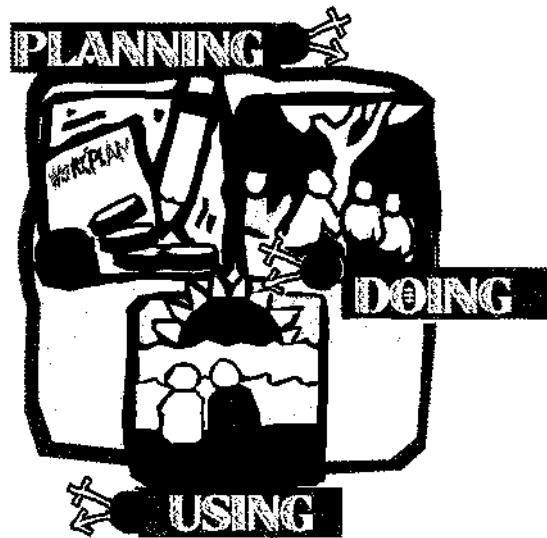
> **Programme implementation and subsequent assessment.** Once specific plans have been designed and strategies implemented in response to the findings of the situation analysis, appropriate indicators or descriptors from the study can be selected for monitoring. These could include indicators of:

- o input: financial, technical and managerial resources provided;
- o process: what is happening at the community and /or school and health facility level with adolescents;
- o effectiveness and outcome: e.g., what are the perceptions and behaviours of adolescents and community members in response to the new activities?;
- o impact: is there an improvement in the public health situation, (e.g., reduction in STDs, unwanted pregnancies, abortions, HIV seroprevalence).

> Monitoring other trends. Important factors which play a major role in the health of young people, including the level of education they receive, their training, employment, and economic well-being (status) will have been identified, and the way these factors interrelate will have been examined. It will be helpful to continue monitoring such issues in the future as important general indicators of the conditions adolescents experience.

A continuing role for the Technical Advisory Group/Steering Committee

The joint working experience and exchange of information of the Technical Advisory Group and Steering Committee may lead to their continued collaboration as a core group interested in adolescent health for the nation. They may wish to formally establish such a group, or simply devise a strategy for regular updates of information to monitor and contribute to the process of change.



CONCLUSION

The principal goal of conducting the situation analysis of adolescent sexual and reproductive health is to pave the way for action based on adolescents' (and other key actors') felt needs and problems, taking into account the particularities of their environments. The analysis should contribute to the creation of a climate in which programmes enhancing adolescent health can flourish, where information skills and services become increasingly accessible to young people in need, with the backing of the community. This situation analysis guide focuses primarily on adolescent sexual and reproductive health because of its centrality to adolescent health and development as a whole. But it will also be important to bear in mind other issues which will certainly be revealed as a result of such a situation analysis. Young people who are especially vulnerable to problems of adolescent sexual and reproductive health *are* also likely to be vulnerable to problems arising from the use of tobacco, alcohol or other drugs, to malnutrition, and to both accidental and intentional injuries. Those who are living in impoverished environments, and/or where the family structure is weakened, in situations of insecurity or violence, and those living on the street, need support and safety, and these factors will undoubtedly contribute to their sexual and reproductive health as well as their overall development and well-being.

It is also clear from what has been learnt so far in the field of adolescent health, that the greater the consensus across all sectors providing interventions, the more likely it is that an effective and sustainable approach to the health of young people can be achieved. The greater the consultation in the situation analysis and the sounder the information collected, the more likely that such consensus will be generated. The challenge now is to bridge the gap between the needs identified through situation analysis and taking action. This will benefit young people now and in the future, and through them, their societies as a whole.

ANNEXES

Acronyms

FAO	Food and Agriculture Organization of the United Nations
ILO	International Labour Organisation
IPPF	International Planned Parenthood Federation
YF	International Youth Foundation
OAS	Organization of American States
OAU	Organization of African Unity
Sida	Swedish International Development Authority
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VIPP	Visualization in Participatory Programmes
WHO	World Health Organization
YMCA	World Alliance of Young Men's Christian Associations
YWCA	World Alliance of Young Women's Christian Associations

ANNEX 1 WHO GRID METHOD FOR MULTISECTORAL PLANNING

The purpose of each of the three grids and the questions asked to help participants complete each one, are outlined below.

Grid 1: Problem identification

The purpose of *Grid 1* is to focus on the specific areas of concern.

o What are the current, major reproductive and sexual health problems of young people?

o How severe are the consequences for the individual affected? (Severity refers to the extent of physical, psychological or social harm.)

o What is the extent of the problem in the adolescent population (prevalence or annual incidence)?

o Which young people are particularly affected (age, sex, ethnicity, or environmental context)?

o Is there evidence of a trend (problem increasing or decreasing)?

o Can the problem be resolved through interventions?

o Is there sufficient information available to answer these questions? If so, where is it to be found and how can access be obtained?

o Is the available information specific enough to address the questions raised, e.g., is it sufficiently disaggregated by age and sex?

o Is it likely to have been gathered by sound methods and to be reliable and valid?

o Does it address a sufficiently broad segment of the adolescent population to be useful, or are the vulnerable groups likely to be under-represented?

Grid 2: Current responses to problems identified in Grid 1

The purpose of *Grid 2* is to identify and assess the quality of the existing responses to the specific problems referred to in *Grid 1*. The participants review the summary of *Grid 1*, row by row, and pinpoint the responses that they consider to be effective. Responses include any activity intended to prevent or reduce the problems, either directly or indirectly and could be any of the interventions listed in *Figure 1. Framework for country programming for adolescent health*, in the *Introduction*.

For example, if non-use of contraceptives among sexually active adolescents is identified in *Grid 1*, family planning services will be identified in *Grid 2* as a potential response. The group must determine the degree to which family planning services are currently reaching young people in need and their effectiveness.

o To what extent does the intervention reach adolescents in need?

o Has it been evaluated?

o How effective is it for those it does reach?

o What are its strengths and weaknesses?

o To what extent is information available to answer these questions?

o What is the quality and comprehensiveness of this information?

o Where is the information located and how can it be obtained?

Grid 3: Planning action to obtain missing information for the situation analysis

Grid3 helps identify, in order of priority, the information to be collected, analysed, synthesized and/or disseminated. It also assists identification of adequate existing sources of information and means of gaining access to them. It is suggested that summary sheets of *Grids/* and 2 be placed beside each other, row by row, in order to review the adequacy of information currently available, and to determine what needs to be done next to ensure that at the end of the situation analysis, those gaps are filled. Actions to acquire information should be prioritized according to their use for programme and policy development and modification.

Existing data is likely to suffer from a number of constraints, including poor quality and lack of representativeness, ultimately limiting its value and

necessitating careful interpretation. At this point, however, indicating what participants believe is known, on what basis these conclusions have been drawn, and where the original data maybe found, would be sufficient. Participants must be able to identify the domains in which too little is currently known.

In completing this grid, specific questions need to be asked with respect to the:

- o problems identified in *Grid 1*,
- o responses identified in *Grid 2*, and,
- o prioritizing the actions planned to collect the needed information. How this can be achieved in a participatory manner is synthesized in *Annex 2*

With respect to the specific problems identified in *Grid 1* it must be asked:

- o To what extent was the adolescent population most likely to be affected by the problem included in the database of existing information? A response to this question will include discussion of:
- o The degree to which the information was drawn from the whole population, or selected subgroups (e.g. students, girls only, urban only, etc.) and:
- o If it was from selected groups only, to what extent was it representative of the group in question?

- o Was the information sufficiently disaggregated by age and sex, in the way it was collected, interpreted and/or reported?

- o Were the methods used adequate to ensure the information collected was valid, especially for sensitive subjects?

With respect to the specific responses identified in *Grid 2*, answers should be elicited to:

- o Which major programmes have been evaluated?
- o To what extent is the intervention reaching or being used by, adolescents in need of them?
- o To what extent is it effective in preventing or reducing the relevant problem?

To help the participants prioritize the planned actions to collect the missing information, a set of questions may be posed. The first time, with regard to existing information; the second time, with respect to new research. The questions are as follows:

- o What specific alternative actions are proposed for retrieving information or acquiring new information?
- o What specific outcome would result from this course of action? For example, what specific information will become available as a result of the activity? Will the information be sufficiently valid, reliable and representative to be of significant value for making programming decisions?

- o What is the likelihood that taking the steps proposed would actually lead to the intended outcome, i.e., could the task be successfully accomplished given available resources?

- o How valuable would the information be if it were successfully obtained?

- o What costs are likely to be incurred if this activity was to be undertaken, including financial and human resources and political obstacles which may need to be overcome?

- o Are the human or institutional resources available for the task?

- o Will there be any political or social obstacles?

- o Is it feasible with respect to needs for money, people, technical expertise and time available?

Other techniques for setting priorities are referred to in *Annex 2*

GRID 1: EXAMPLES OF PROBLEMS IDENTIFIED

AREAS OF CONCERN	PHYSICAL	PSYCHOLOGICAL	SOCIAL	ECONOMIC	EDUCATIONAL	LEGAL
STAGE/EVENT						
1. Sexual maturation	precocious puberty; retardation; abnormality of sex organs; menstrual problems; circumcision	anxieties about body changes; fear of abnormality; stress in coping with sex education; female circumcision; puberty rites	changes in interpersonal relationships; maturity rites; change in traditions		lack of sex education; loss of concentration	some practices may be illegal, e.g., female genital mutilation but practised as tradition
2. Marriage/consensual union	fertility state	timing of decision; choice of partner; planning capabilities; tensions in arranged marriage	too-early marriage; pressure to reproduce; adequacy of housing; consensual unions	inadequate education/training/employment for adolescents; inadequate income for marriage	effect on education	minimum age of marriage constraints too low; lack of provision to protect abandoned women and children
3. Sexual intercourse	STD/HIV; infertility	feelings of inadequacy, immortality, deviancy; fear of STD/AIDS/ pregnancy, guilt	unprotected; social disapproval; promiscuity; homosexual relations		lack of knowledge about sexuality; risk of school drop-outs	below legal age; illegal types of sex
4. Contraception	uncertainty about hormonal interference with growth; side-effects; pregnancy because of failure	unaware of choices; feelings of immortality; fear for health; shyness; fear of side-effects, fear of service providers	lack of valid information; lack of access; social disapproval; indecision; male/female responsibility	high cost of services; high cost of product(s)	lack appropriate information and advice	information, advice, services or products unavailable because of age/marital status; appropriate means unavailable
5. Pregnancy	pregnancy complications; long-term sequelae	anxiety/fear; physical discomfort; embarrassment; fear of outcome	social disapproval; forced marriage; expulsion from family	loss of earning power; cost to maternal and child health	loss of schooling/training; need for specific education on pregnancy/child care	limited maternal and child health services access because of age/marital status; maternity benefits
6. Induced abortion	septicaemia, haemorrhage, long-term fertility effects	fear of danger to health, future fertility; shame, guilt	social disapproval; hazardous procedures used	cost of procuring safe abortion	lack of information about availability	restrictive laws; need for parental agreement
7. Spontaneous abortion/stillbirth	see above	fear for future fertility; guilt; mourning for loss	blame attached by others	cost of medical services		
8. Childbirth	prematurity, delivery complications	stress associated with birth; feelings of inadequacy; resentment of child/mate	age-specific fertility rates; inadequate help if hidden; social disapproval; loss of peer companionship	costs of procedure	loss of educational opportunities,	local restrictions; conditions to be met
9. Adoption		guilt, shame, depression	social disapproval			
10. Child rearing	high infant mortality and morbidity; inadequate child care	depression, loss of leisure, anxiety for health of child	isolation; dependence on others	loss of earning power; need for long-term economic support	loss of further education	legal status of child; inadequate male responsibility

GRID 2: EXAMPLES OF RESPONSES TO IDENTIFIED PROBLEMS

AREAS OF CONCERN	PHYSICAL	PSYCHOLOGICAL	SOCIAL	ECONOMIC	EDUCATIONAL	LEGAL
STAGE/EVENT						
1. Sexual maturation	screening for abnormality; treatment of dysfunction	reassurance regarding development	guidance in interpersonal relationships		information about maturation	
2. Marriage/Consensual union	health screening prior to marriage	premarital counselling	discouragement of dowry requirements; improvement in status of • women	training/employment for older adolescents; housing/employment assistance	adequate schooling/employment for older adolescents of both sexes; preparation for family life; planning; decision-making	compulsory secondary schooling for both sexes; age constraints to prevent too-early marriage
3. Sexual intercourse	accessible services and diagnosis/treatment for STD	counselling for sexual difficulties	encourage open discussion of anxiety; gender equity to delay too early relations		preparations for responsible sexual relations	awareness of legal responsibilities
4. Contraception	access to contraceptive counselling and other services	feedback from youth to providers regarding adequacy/quality	open discussion of appropriate choice and use of methods	affordable services and methods for youth	provision of acceptable channels of communication	review of legal constraints discouraging adolescent contraception
5. Pregnancy	provision of adequate maternal care	encouragement to reveal pregnancy to responsible adult; counselling	encouragement of open and informed review Of consequences of pregnancy		allowing pregnant adolescent girls to complete schooling	
6. Induced abortion	provision of optimal care	counselling about decision; post-abortion counselling when required	encouragement of open discussions of help with pregnancy and/or early abortion where legal			review of consequences of legal status concerning adolescent health needs
7. Spontaneous abortion/stillbirth	close monitoring for medical care of adolescent pregnancy at risk	counselling to reduce stress	guidance to spouse or family when needed			elimination of burial requirements inducing stress
8. Childbirth	safe delivery services	preparation for childbirth	counselling for marital/ family problems	economic assistance for mothers in need	return to school for adolescent mothers	
9. Adoption		counselling for parents	approval of adopters	economic assistance to avoid fostering, where feasible	assistance with costs	legal procedures; welfare of child is paramount
10. Child rearing	high infant mortality and morbidity; inadequate child care	counselling in child care	home help, day care	assistance if needed	provision for continuation of parental education	safeguarding legal status of child when mother is unmarried

GRID 3: EXAMPLES OF ACTION TO OBTAIN INFORMATION NEEDED FOR THE SITUATION ANALYSIS

AREAS OF CONCERN	PHYSICAL	PSYCHOLOGICAL	SOCIAL	ECONOMIC	EDUCATIONAL	LEGAL
STAGE/EVENT						
1. Sexual maturation	patterns of menstruation and ovulation study; sexual maturation in boys	cross-sectional study of adolescents of both sexes; information on puberty rites	sociometric study of early/mid-adolescents; anthropological study of maturity rites		experimental study of youth given and not given sex education; review of methods used and content provided	
2. Marriage/consensual union	prevalence of marriage/consensual union among adolescents of each sex; use of counselling services	cross-sectional study of newlyweds decision-making; attitudes of adolescents and adults	study of partners' families' views on reproduction	employment status of adolescents of both sexes; survey of use of economic assistance by couples; planning and use of assistance by couples	adolescent school enrolment of both sexes; effect on education of partner	enforcement of minimum marriage age; prevalence of dowry system
3. Sexual intercourse	prevalence of STD/HIV by age, sex and other contextual factors	survey of adolescents; narrative research, sexual event histories	patterns of adolescent sexual relations: protection against pregnancy/STD; views of adolescent/adult on these issues	use of prostitutes by youth; adolescents as sex workers; costs and consequences	provision of sex/family life skills and knowledge	enforcement of legal constraints on sexual intercourse with minors
4- Contraception	effect of hormonal contraception on maturation	choice and use studies by age and sex	prevalence of contraceptive use; User System Interaction Study of use of services by adolescents	subjective costs versus objective costs	quality and reach of information provided to adolescents about existing services	gatekeeper study of potential changes in legal access to products, services, information and counselling
5. Pregnancy	complications of pregnancy in adolescents compared with adults	comparative study of effect of pregnancy on young unmarried adolescents	decision-making in forced/arranged marriage; views of adolescent pregnancy; services, "outcomes; future plans	impact of costs of antenatal care on use of services by adolescents	comparison of pregnant girls allowed to remain in school and those expelled; short- and long-term consequences	rights and obligations of the father
6. Induced abortion	comparative outcomes of adolescents versus adults admitted to hospital for septic, incomplete abortions	beliefs about abortion among adolescents; pre-abortion survey of youth; psychological cost study of illegal abortions	User System Interaction Study where services legal; gatekeeper study of prevalence of and views about abortion among adolescents	costs and consequences of abortion among adolescents	public perceptions of attitudes towards abortion services for youth	review of law regarding abortion, consent
7. Spontaneous abortion/stillbirth	prospective study of causes and consequences	follow-up to pregnancy study; is severe reaction preventable?	beliefs about causes and consequences		nature of prenatal care provided to adolescents	
8. Childbirth	health status of adolescent's newborn versus newborn of adult mother	attitudes and practices of adolescent parents with unplanned child	effect on adolescent couples of parenthood	economic impact of child rearing	availability of parent training for adolescents	rights to aid of unmarried/married adolescent parents
9. Adoption	impact on child	impact on mother	pressures of adults for and against adoption	costs of keeping child versus giving to others	impact on mother and child education	legal rights to child of adolescent versus adult parent
10. Child rearing	infant morbidity and mortality in cross-section of young adolescent mothers according to marital status, desire for child, age of husband	comparison of young adolescent mothers with young adult mothers concerning child rearing	couple study of shared responsibility, plans for child, plans for future children	proportional budget expenditures comparing young adolescent couples versus young adults; effect on family earning power	availability and accessibility of education and training for adolescent parents	review of legal rights and responsibilities of adolescent mothers and fathers and their children

ANNEX 2 APPROACHES TO SETTING PRIORITIES

Various participatory methods may be used to reach consensus about priorities, e.g., the VIPP, the "normal group technique" or a variation of it known as the "multi-dot" (or "multi-pin") technique. These strategies help groups reach a consensus through the use of listing and ranking. A synthesis of these methods is given below.

1. Synthesis of various methods
 - o List the significant information gaps identified by the workshop participants. This may already have been done. Alternatively, participants can be asked to write them down or indicate them in an open group discussion. A rapporteur should collate the list for all to see.
 - o Clarify the items in discussion: avoid advocating specific items.
 - o Rank the items in one or two ways:
 - each participant ranks every item on the list from most important (i.e., 1) to least important; ranks are then totalled and the summed ranks placed against each item on the master list, or:
 - participants are each given 3-5 pins or coloured stick-on dots and asked to go to the master list and put their dots or pins on the items they feel are most important. They can put all their dots on different topics or all on one topic if they wish to. Do not allow discussion or shifting of other person's markers.
2. An alternative way of reaching consensus is called target-oriented policy and programming (TOPP)
 - o A problem is identified which is represented graphically as a large paper tree-trunk. Participants then attach to the problem trunk representations of the causes of the problem as roots and consequences as branches. When several problems are presented in this way side by side, the consequence forest can be analysed with evident major priorities manifesting themselves with deeper roots.

ANNEX 3 LIMITATIONS OF SECONDARY DATA

Disaggregation of data by sex: data maybe insufficiently disaggregated by sex to show gender-related differences. Differences *'are* often important determinants of behaviour, vulnerability, and special needs for prevention and care.

Quality of data: generally, existing data do not deal well with sensitive subjects such as sexual behaviour. Determining how the information was collected and whether the method used was appropriate may be difficult. Use of inadequate methods, or poor use of good methods, is likely to reduce the validity and reliability of the information collected. For example, interviewing adolescents at home with family members nearby is likely to reduce the candour of their responses.

Representativeness: subjects may not be representative of the whole adolescent population. The more disadvantaged populations, who typically have greater health problems, are often inadequately represented in collected data. For example, adolescents living on the street, or those who have little access to health services, *are* under-represented in health statistics. For certain issues concerning both sexes, data may be collected for one sex only, for example, data on STDs is often collected from male patients only.

Risk of misleading information: a lack of representativeness in sampling may result in misleading conclusions. For example, in countries where induced abortion is largely illegal, it is not possible to determine from hospital data on septic or incomplete abortions, the proportion of adolescents among women in the population at large who have had abortions. This is because there is no way of knowing who among those seeking abortion eventually found their way to a hospital. It would therefore be inadvisable to make generalizations about adolescent abortion from hospital information — an example of how a little information may be a worse hindrance than none at all. In any case, information about abortion is likely to be under-reported for social reasons.

ANNEX 4 POTENTIAL SOURCES OF DATA BY TOPIC AND FORMAT

Possible sources of data	Possible topics of information	Likely formats for data
A. GOVERNMENT AGENCIES (especially planning units and libraries)		
Census bureau, Central Statistics Office	adolescent population by age, sex; rural/urban distribution; vital statistics; adolescent fertility rates; adolescent employment	adolescent population by age, sex; rural/urban distribution; vital statistics; adolescent fertility rates; adolescent employment
Ministry of Health (MoH) AIDS Control Programme	service statistics, health service utilization; morbidity and mortality by age, sex, and cause; abortion; contraceptive prevalence; sexual reproductive health-related policies; adolescent sexual attitudes, behaviour, condom use, HIV and STD incidence/prevalence statistics by age; sex/family life education activities for adolescents; condom-related policies and laws	annual reports, research and evaluation studies; adolescent programme documents; information education communication documents, curricula; pretest reports; consultant reports; planning documents; MCH/FP reports; KAP studies, other qualitative and quantitative research on HIV, STD; sentinel surveillance data; annual/quarterly reports; condom social marketing reports
Ministry of Education (MoE)	literacy and school enrolment levels by age and sex; drop-out/expulsion rates for pregnancy and/or marriage; reports on sex (or "family life") education; education policies and guidelines	annual reports; statistical profiles; family life education/sex education curricula or training materials; research or evaluation studies
Ministry of Youth and/or Ministry of Gender (or Division of Child Welfare)	youth organizations, status/involvement of youth in politics; sex and adolescent policies and laws; laws on sexual abuse	research or evaluation studies; situation reports; sometimes statistics
Ministry of Justice/Interior	legal statutes affecting adolescents; statistics on sex-related crimes involving adolescents	books of codified laws; sometimes research reports
Ministry of Finance and/or Planning or Ministry of Labour	investment in health, education, and youth sectors; employment, occupational and economic data by age and sex	national profiles; background to annual budget; development plans; research studies, consultant reports
National library or national archives	qualitative and quantitative data; social context; behaviours	research studies, including some by persons from outside the country; annual statistical reports for the country; official documents
B. INTERGOVERNMENTAL AGENCIES (IGOs)		
UN agencies (e.g., FAO, ILO, UNDP, UNESCO, UNFPA, UNICEF, WHO)	programme-specific statistics; contraceptive prevalence, condom supplies and distribution; often depend on secondary data	research studies, consultancy reports; situation analysis reports; annual reports; large-scale household surveys

Possible sources of data	Possible topics of information	Likely formats for data
Bilateral donors (e.g., Sida, USAID)	programme-specific statistics; training needs relative to adolescents; service coverage	large-scale research with data on adolescents (e.g., demographic and health surveys); evaluation reports; consultant reports
Non-UN organizations (e.g., OAU, OAS)	may have information for region, or countries within region, as in UN agencies	as for UN agencies
C. NONGOVERNMENTAL ORGANIZATIONS (NGOs)		
Research/evaluation studies, annual reports	programme-specific statistics; contraception, demography, reproductive health service data; fertility statistics; condom provision data (procurement, donations, distribution)	international/national population groups (e.g., IPPF, Population Council)
Youth-serving organizations (e.g., YWCA, YMCA, Scout Movement, Girl Guides, Red Cross/Red Crescent, World Assembly of Youth affiliates)	information education communication activities for out-of-school youth; organizational memberships; statistics on sexual reproductive health problems from hotline counselling services or peer education/counselling projects, etc.	annual reports; interviews with informed individuals; possible research or evaluation studies
Professional associations (doctors, nurses, midwives, teachers, social workers, etc.)	service statistics; policies and laws restricting services	annual reports; interviews with informed individuals
D. ACADEMIC INSTITUTIONS/PROFESSIONAL ASSOCIATIONS		
University departments, research institutes and libraries (especially medical and social science)	quantitative and qualitative data about specific regions and topics (e.g., abortion, sexuality, etc.); analyses of activities and public positions of cultural, religious and other social groups; policy assessments	undergraduate dissertations, postgraduate theses; published research papers, books manuscripts; computerized databases of relevant references
Technical/professional training institutions (e.g., schools of nursing, medical assistants)	qualitative and quantitative data about adolescents on specific topics or in small regions	unpublished dissertations by students, possibly located only in the original departments
Newspapers, magazines, radio, television	programming and written segments targeting youth; qualitative data about perceptions, rumours, myths, sexual beliefs; instances of sexual abuse; qualitative and quantitative data on readership and listenership among adolescents	letters to advice columns, articles, editorials, talk-show dialogue; audience surveys

Annex 5 PROBABLE SOURCES AND QUALITY OF
INFORMATION ON ADOLESCENT SEXUAL AND
REPRODUCTIVE HEALTH

Adolescent sexual and reproductive health issues	Most likely sources of existing data	Common strengths of existing data	Common weaknesses of existing data
A. Context			
Socio-cultural-economic-political	national library or archives; universities; mass media; NGOs	income distribution; status of women	value systems of society, especially about adolescents
B. Socio-demographic factors			
Distribution of adolescent population	census		not disaggregated by year; cannot see age-specific adolescent childbearing risks
Family structure	academic papers, anthropological studies	often data on middle-class urban families	may be less about rural families or extended families
Marriage patterns	census; academic papers; surveys; ethnographies		definition problem for "marriage"; less data on divorce
Education	Ministry of Education, UNESCO	enrolment data	often weak, partial reasons for drop-out
Employment	Ministry of Labour, ILO	formal sector employment	lack of information on informal sector
C. Psycho-social and physical development			
Physical maturation	Ministry of Health; academic research; FAO	simple height and weight measures, data on growth	less data on development
Psychological maturation	small research studies		little or no data
Social maturation	educational system; WHO, UNICEF, IYF		likely to be little or no data
Sexual maturation	academic studies; Ministry of Health		little data
D. Behaviour patterns			
Sexual behaviours	specific studies; AIDS Control Programme; UNFPA		little or no data
Fertility behaviours	surveys (e.g., DHS); Family Planning Association, IPPF		lack age-specific data; may only have data on married women
Health-seeking behaviours	Ministry of Health; surveys		little data specific for adolescents
E. Health status			
Fertility	Ministry of Health; Population Council; surveys (DHS)	service statistics	may only have data on married women; lack age-specific data

Adolescent sexual and reproductive health issues	Most likely sources of existing data	Common strengths of existing data	Common weaknesses of existing data
Morbidity (illness, injury)	Ministry of Health, Ministry of Justice (for child abuse); women's organizations		little or no data
Mortality	Ministry of Health		infrequent among adolescents; may be limited to maternal risk, underestimates abortion and violence

F. Institutional responses

1. Programme projects	UN agencies; youth-serving NGOs; reproductive health NGOs; women's organizations	service statistics	unrepresentative
Promotive and preventive activities			
Care and treatment	Ministries of Health, Education; IPPF; professional associations; Family Planning Association		unrepresentative
Rehabilitation of adolescents	Departments of social welfare, criminal justice; NGOs for youth in difficult circumstances		unrepresentative
2. Policies, laws and regulations			
National adolescent and sexual and reproductive health policies	Ministries of Youth, Health, Education		
Sexual behaviour and marriage	Ministries of Women, Health, Justice; law library		
Fertility and fertility regulation	Ministry of Health; professional associations; IPPF; Family Planning Association		
STDs and HIV/AIDS infection	Ministry of Health; AIDS Control Programme		
Criminal justice	Ministry of Justice		
Access to information and services	Ministries of Communication, Education		
School attendance	Ministry of Education; NGOs		
Employment and labour	Ministry of Labour; ILO; UNICEF; NGOs		

Annex 6 CENTER FOR DEVELOPMENT AND POPULATION ACTIVITIES: ADOLESCENT REPRODUCTIVE HEALTH COUNTRY ASSESSMENT: SCOPE OF WORK

The Center for Development and Population Activities (CEDPA) is coordinating country assessments on adolescents in nine countries in sub-Saharan Africa.

Objective of the assessment

The objective of these assessments is to present a situation analysis of adolescent issues in the selected countries, with emphasis on reproductive health, and to provide guidelines for promoting adolescent reproductive health care in the region. As part of the assessment, CEDPA will create and establish a database on NGOs currently serving or with the potential for serving youth in various capacities. Focus group discussions will be conducted to assess issues and potential adolescent interventions which could be introduced and supported by UNFPA and other donor agencies.

Scope of work

The assessment will be undertaken by consultants. The work will incorporate:

A. Literature review: A comprehensive literature review of papers and articles on the situation of adolescents in the relevant country, including analysis and synthesis of documents on adolescent reproductive health behaviour, sociocultural conditions of adolescents in employment, educational and training opportunities, and knowledge and sources of information for youth on reproductive health matters. The review should include both published and unpublished works, papers and articles from workshops, conferences, and symposiums, etc. In order to ensure that both published and unpublished materials are included, some secondary literature available outside the country will be provided. In addition, the consultants will review, at a minimum, the following publications:

- i) Demographic and Health Survey (DHSJ, including secondary analysis;
- ii) POPLINE (bibliographic database on population, family planning, and related health issues) abstracts and articles;
- iii) National Adolescent Fertility Survey now being analysed by Population Impact Project consultants;
- iv) any studies (published or unpublished) undertaken between 1990 and 1995.

B. Demographic data: Collection of demographic data from secondary sources regarding adolescents (i.e., percent of population, age of marriage, enrolment in school, occupations, etc). Key demographic statistics should be

presented in a disaggregated format whenever possible. Secondary sources of data can include DHS, National Adolescent Fertility Survey, National KAP Survey, UNICEF situational analysis, etc. Linkages should be made to analysis of STDs/HIV/AIDS data and adolescent reproductive health.

C. Policy; Review of legislation and social, economic, health and welfare policies regarding adolescents and of the sociocultural conditions of adolescents. This will include reference to existing legislation, if any, and any conventions signed by the country related to adolescents. Analysis of the implications of such legislation will be critical to understanding the possibilities and constraints regarding policy.

D. Field assessment: Field visits to conduct interviews and focus group discussions with key organizations in selected regions of the country. Guidelines and a list of preliminary survey questions are provided in the attachment. These tools will provide guidance to consultants during the fieldwork. The key activities to be undertaken during field visits will include:

- i) Meeting with several national NGOs that have a stated objective on adolescent needs and that provide services and run activities focused on adolescents. Focus group discussions should also be held with key stakeholders, e.g., service providers, youth, parents, local leaders.
- ii) Examination of the experience and impact of these programmes on youth and assessment of the organization's financial and management needs in terms of strengthening their capacity and increasing their effectiveness.
- iii) Identification of potential groups and organizations that have the potential and are willing to integrate adolescent services with ongoing activities
- iv) Identification of obstacles to implementation of adolescent services for reproductive health, be these sociocultural, legislative, medical, or economic.

E. Recommendations: The assessment report should include discussion of the findings of the reviews of the literature, policy and demographics, and a synthesis of the focus group discussions undertaken during fieldwork. Recommendations should highlight gaps in information including potential programme interventions and implications for advocacy, policy formulation and research.

The report should also include references, copies of questionnaires or survey instruments used during focus group discussions, and" an inventory of NGOs contacted during the assessment.

ANNEX 7 RECOMMENDATIONS REGARDING METHODS OF COLLECTING NEW INFORMATION

Adolescent sexual and reproductive health issues	Recommended respondents	Sampling options	Methodological options	Comments
A. Context				
Socio-cultural-economic-political	social scientists; community leaders; traditional leaders." politicians; journalists; youth	purposive; random from professional registers	Gatekeeper; key informant; focus group; mini-survey	generally adequate data available in secondary sources, but may not be specific to youth; expect low returns on surveys
B. Socio-demographic descriptor				
Distribution of adolescent population	Department of Census; Ministry of Youth, youth-serving organizations, youth, youth groups; urban and rural dwellers	hard-to-reach groups; stratified purposive (with maximum variation)	key informant; focus group; observation; mapping	secondary sources may be adequate; exception may be "hidden" populations, e.g., homeless, street children, substance abusers, commercial sex workers
Family structure	social scientists; traditional leaders, elders; parents; urban and rural dwellers; Department of Census; youth	random; cluster; stratified; purposive	focus group; mini-survey	general description in available statistics; here specific interest in structure of married youth, and perhaps more importantly, on familial, inter-generational relations
Marriage patterns	social scientists; Ministry of Women; women's groups; persons of both genders who are single, married, divorced, deserted, widowed; Department of Census	as above	as above	as above
Education	Ministry of Education; national teachers organizations, teachers, parent-teacher groups; pupils, non-attendees and drop-outs	stratified random; purposive (with homogeneous sample for school-goers, teachers and parents); strategy snowball for hard-to-reach groups)	focus group; key informant; free list, pile sort, rank order;	enrolment rates by age and sex available; reason for drop-out, etc., unknown; systematic qualitative methods appropriate
Employment	Ministries of Labour, Youth; social scientists, economists; occupational health experts; youth groups; persons of both genders working in the informal sector	informal sector(s) — random; cluster; stratified; purposive (snowball strategy)	focus group; mapping; key informant; observation; mini-survey or Gatekeeper with employers	general data on informal sector may be available; data may not be disaggregated by age and sex; focus may be on informal sector

Adolescent sexual and reproductive health issues	Recommended respondents	Sampling options	Methodological options	Comments
C. Psycho-social and physical development				
Physical maturation	Ministry of Health; medical scientists; nutritionists; medical anthropologists	random; stratified by age, gender, ethnicity, class	anthropometric survey; focus group	generally expected that data on physical growth, etc., available in secondary services; cultural reasons for gender differentials in nutritional status may require research
Psychological maturation	Ministry of Health; psychologists and psychiatrists; social psychologists; other social scientists; youth-serving organizations, youth groups	see socio-cultural-economic-political	as above	as above
Social maturation	social scientists; youth-serving organizations, youth groups	see above; random; stratified; purposive in hard-to-reach groups	see above; observation; network analysis; key informant; mapping; focus group; free list, rank ordering	see above
Sexual maturation	Ministry of Health; medical specialists, obstetricians/gynaecologists; youth	Gatekeeper; purposive; stratified random	focus group; key informant interview; mini-survey; body mapping	need to protect anonymity
D. Behaviour patterns				
Sexual behaviours	national AIDS Programme; social scientists; Ministry of Health; obstetricians/gynaecologists; youth-serving organizations, youth groups; family planning providers, condom sellers; health educators; youth	stratified random; purposive (snowball strategy for hard-to-reach groups)	gatekeeper; focus group; key informant; panel; free list, pile sort, rank order; mapping; event history	need to protect anonymity; sensitive topic, qualitative methods especially appropriate
Fertility behaviours	Ministry of Health; obstetricians/gynaecologists; youth-serving organizations, youth groups; family planning providers, condom sellers; traditional birth attendants; adolescents	stratified random; purposive (homogeneous sample)	Gatekeeper; mini-survey; key informant; focus group; free list, pile sort, rank order; mapping; Narrative Research; User-system Interaction; case-studies; event history	need to protect anonymity; sensitive topic, qualitative methods appropriate; expect low return rates on questionnaires

Adolescent sexual and reproductive health issues	Recommended respondents	Sampling options	Methodological options	Comments
Health-seeking behaviours	Ministry of Health, health workers, traditional healers, pharmacies; youth-serving organizations, youth groups, youth	stratified random; cluster; purposive;	User System Interaction; observation; free list, pile sort-participatory matrix; key informant; Gatekeeper	many youth do not or cannot use public sector services; the informal and private sector will be of particular interest; several qualitative methods lend themselves to identifying use patterns
E. Health status				
Fertility	Ministry of Health; UNFPA, Family Planning Association, IPPF; demographers, Department of Census; adolescent mothers and fathers	stratified random; purposive (homogeneous sample)	User System Interaction; mini-survey; free list, pile sort, rank order; focus group; case-studies; key informant	
Morbidity	Ministry of Health, health programmes, health units; adolescents	as above	as above	as above
Mortality	Ministry of Health, health programmes, health units; Department of Census; community leaders; NGOs	stratified random; sampling of providers; purposive	focus group; key informant; mini-survey; verbal autopsy	official statistics may be unrepresentative; death due to abortion, violence, etc., likely to be under-reported; qualitative methods to explore underlying patterns, contributory causes
F. Institutional responses				
1. Programmes, projects		random sampling possible, since projects can be identified		
Promotion and preventive activities	Ministries of Youth, Health; NGO-coordination bureau; youth-serving organizations, youth groups	stratified random	Gatekeeper; mini-survey; focus group; key informant; free list, pile sort, rank order	selection bias among those using services possible
Care and treatment	Ministry of Health; youth-serving organizations, youth groups; health workers, traditional health providers, medicinal drug sellers	as above	as above	as above

Adolescent sexual and reproductive health issues	Recommended respondents	Sampling options	Methodological options	Comments
Rehabilitation of adolescents	Ministry of Health; psychologists and other social scientists; youth-serving organizations, youth groups; national AIDS Programme	as above	as above	as above
2. Policies, laws and regulations	generally, the elements listed here are applicable to consideration of all domains in policy, law and regulations	stratified random; purposive	Gatekeeper; mini-survey of national figures; focus group; key informant interviews	important to keep in mind the de jure versus de facto nature of applications in this domain; national survey of key decision makers may be possible
National adolescent and sexual and reproductive health policies	Ministries of Health, Youth, Justice; youth-serving organizations; NGOs	as above	as above	as above
Sexual behaviour and marriage	Ministries of Youth, Justice; youth-serving organizations, youth groups	as above	as above	as above
Fertility and fertility regulation		as above	as above	as above
STDs and HIV/AIDS infection	Ministry of Health; national AIDS Programme, health educators with AIDS groups	as above	as above	as above
Criminal justice	Ministry of Justice, police, judiciary; social scientists; journalists; youth groups	as above	as above	as above
Employment and labour	Ministries of Labour, Commerce, Youth, employers, labour unions, ILO	as above	as above	as above

ANNEX 8 COMMONWEALTH YOUTH PROGRAMME: ASIA CENTRE CHANDIGARH, INDIA

ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH QUESTIONNAIRE FOR PARENTS - Highly Confidential

(Note: The present study is being jointly conducted by the Commonwealth Youth Programme and other organizations working in the field of adolescent health. The study has been designed to improve the reproductive and sexual health of the adolescents aged 14-24 years. The issue of reproductive health is of global concern today and the study is an effort towards a better future for our younger generation.

HIV/AIDS is spreading rapidly in absence of any medical breakthrough to treat the dreaded syndrome and its geometric rate of spread. The issue is especially of a bigger concern to the developing countries like ours where illiteracy and lack of communication become a major hindrance to prevent the epidemic.

The study having a noble concern, it is expected that you will furnish information to the best of your knowledge. By filling out the questionnaire you will be doing your duty towards humanity. The study is being simultaneously conducted on adolescents, teachers, health providers and key informants. It will be highly appreciated if you can provide us with your responses at the earliest).

- > **The information provided should be objective and general, and not the personal revelations.**
- > **Wherever a Box is drawn, you are just required to tick (S) your option/ answer**
- > **You could always mark more than one option wherever appropriate**

Qn. 1. What do you believe are the most important goals for the adolescent boys and girls today?

- Ans. 1. a. Healthy family life
 b. Good career
 c. Earning a lot of money/power
 d. Serving the society
 e. Seeking pleasure
 f. .Any other, please specify_____

Qn.2 Do you feel that there are any particular threats to their physical, psychological or social well-being?

- Ans.2 a. Yes
 b. No

If Yes, what?

- a. Dreaded syndrome like HIV/AIDS
- b. Insecure future in terms of career
- c. Road accidents
- d. War
- e. Natural calamities
- f. Drug abuse
- g. any other, please specify: _____

Qn.3 All boys and girls go through a period of change in adolescence in which they start looking like men and women. These sexual changes bring risks with them. These risks include unwanted pregnancy and sexually transmitted diseases like HIV/AIDS. What precaution do you suggest for adolescents?

- Ans.3
- a. Safe sexual behaviour
 - b. Avoiding high risk activities like hell-driving, taking to drugs, etc.
 - c. Becoming more health conscious
 - d. Knowing of legal implications of anti-social acts
 - e. Any other, please specify: _____

Qn.4 What kind of help do you find as most appropriate?

- Ans.4
- a. Counselling and knowledge of importance of life
 - b. Importance of ethics and morals in life
 - c. Knowledge of reproductive and sexual health matters
 - d. Knowledge of health facilities available
 - e. Keeping them busy in extra-curricular activities like sports, dramatics, etc.
 - f. Any other, please specify: _____

Qn.5 Who should take the lead in providing such knowledge?

- Ans.5
- a. Parents
 - b. Teachers
 - c. Health providers
 - d. Police/Law protectors
 - e. Peer group
 - f. Religions/Cults
 - g. Government
 - h. Any other, please specify: _____

Qn. 6 Would you like to see people from health, education, religious affairs and other sectors working together to provide some information and health

services to young people or do you feel this is a matter that should be left to the family?

Ans.6a. Yes, they should work together

- b. No, it should be left to the family
- c. Undecided

Qn.7 Would you like to have more information about adolescent behaviour today and about their health and development?

Ans.7a.

- a. Yes
- b. No
- c. Undecided

Qn.8 What role would you like to play as a parent?

Ans.8a. Counsellor

- b. Friend
- c. Caretaker of health
- d. Informer to the adolescents of the reproductive and sexual health *issues*
- e. Informer to the child of same sex (father to son and mother to daughter)
- f. Leader
- g. Any other, please specify _____

Qn.9 What is your educational qualification?

Ans.9

- a. Illiterate
- b. Under Matric
- c. Under-graduate
- d. Graduate
- e. Post-graduate/Professional
- f. Any other, please specify: _____

Qn. 10 What suggestions would you like to give in this context?

Ans.10 _____

ANNEX 9 SAMPLE TOPIC GUIDE FOR FOCUS GROUP DISCUSSIONS*

Introduction

Focus groups are particularly useful for obtaining data on social norms and cultural expectations with respect to various issues. They are not suitable for the collection of accounts of individual behaviour, except in very general terms. They can often identify areas in which there is agreement or disagreement between members of communities; for some participants, being in such a group will be their first opportunity to discuss certain issues, so there is often lively debate. The coverage of topics for focus groups overlaps considerably with those identified as being suitable for individual interviews, with the obvious exception of the more personal aspects of past and present behaviour. In this research programme, focus groups will be conducted with young people, as well as such other groups that the rapid assessment process might identify.

Young people

background information:

- o age, sex, marital status, and ethnic/language group;
- o where they have lived and where they live now;
- o with whom they have lived and with whom they live now;
- o what sort of schooling they have received/are receiving;
- o what they plan to do in the future;
- o whether they are earning money at present and, if so, doing what.

lifestyle and social networks:

- o with whom people like them spend time;
- o what sorts of activities they participate in;
- o ask them to describe a typical week in their lives; is this reasonably typical of people of their age in their community; if not, how does it vary;
- o find out how many friends they have and how much time is spent with friends (mixed or same sex);
- o how much and how regularly they drink, if at all;
- o what they enjoy doing the most and the least.

Sexual norms and dominant values:

- o at what age boys and girls start to "go out" together (find out what is meant by "going out" together, does it imply exclusivity, any implications for their future relations, etc.);

* Excerpt from "Social and contextual factors affecting risk-related sexual activity amongst young people in developing countries—Appendix II: topics for focus group discussions". World Health Organization/Global Programme on AIDS, Office of Intervention Development and Support, General Protocol, 13 May 1993.

- o typically, do young people who are "going out" together have sex with each other (note that this area may need careful probing since what is meant by "having sex" may vary between cultures);
- o at what age they would typically start having sexual relations;
- o why do young people have sex;
- o do young people experience any forms of pressure to have sex; if so, from whom, etc.,
- o do young people get sexual experience in ways other than with someone with whom they are "going out", (if so, how, with whom, what proportions, etc.);
- o is it generally acceptable for young people to have sexual relations when they *are* not married; what do other young people think, what do older people think, etc.;
- o are there differences in any of these areas between males and females;
- o how do young people learn about sex, are there classes in schools or elsewhere, are they useful;
- o would the introduction of classes on sexual issues be useful (if not available already); what sorts of issues should be dealt with, who should do the teaching;
- o on whom do they rely for information; *are* there magazines, papers, films, videos, etc., which are used by young people for information about sexual matters;
- o what advice do they receive regarding how to do it, or when to do it, from whom;
- o are there people available for advice and support in terms of sexual activity and related issues (such as contraception);
- o how many young people in their community get pregnant before the *are* married;
- o what is the reaction of others, how can they prevent this, what are the arrangements if someone does get pregnant (who looks after the child, father's role, etc.);
- o have HIV and AIDS made much of a difference to the ways in which young people behave;
- o from where do they learn about HIV and AIDS;
- o what is the prevalence of same-sex sex in their communities; how is it regarded.

Other groups

The consultation at the end of the rapid assessment process will identify which other groups, besides young people, should be involved in focus group discussions. The following guidelines should be used as a basis for these focus group discussions, although they will need to be carefully adapted to suit the people being interviewed, who may include teachers, parents, community leaders, and others.

for all groups:

- o what do they think about young people having sexual relations, are there circumstances in which this is unacceptable, acceptable; what effect does age have, is it different for males and females;

for groups of teachers:

- o find out level of involvement of group members, how much experience, how much time is devoted to sexual issues and in what context (science, biology, religion, etc.); what is the basis of teaching about sex, what are they trying to achieve, what issues are covered in the teaching, would they describe it as a moral issue or a purely practical matter; how easy or difficult is it to talk to young people about these matters; do boys and girls differ, in what ways; what ages are best for dealing with the different issues involved; do they believe the input is effective, why, why not;

for parents and/or other relatives:

- o details of children or other relative(s) with whom they have close ties; to what extent do they discuss sex with their children, or with nephew/ niece/other, what sorts of issues are discussed, who initiates discussions; at what ages are different issues raised; what are their views on sex between young people, are there circumstances where it is encouraged or discouraged; do they know whether their own child has had/is having sex, who is/are the partner(s), how do they feel about this, do they try to encourage or discourage it, (if they don't think so) how would they react if they discovered that their child was having sex, what would they do about it, how would they react if their child became pregnant (or made someone pregnant) before they were married; what do they think of same-sex activity among young people; do young people generally receive enough sex education, who should be responsible for this, should schools do more, who else should be involved, what issues should be covered at which ages, should coverage be different for boys and girls.

for community elders/leaders:

- o details of position in community, etc.; what is the general level of sexual activity among young people in the community, at what ages do people begin to be sexually active, why do young people have sex; have things changed over the past years, if so, how, why, are matters better or worse than they were, in what ways, what do they think should be done about it; should there be greater discussion with young people about sexual issues, if so, who is best to do this, why, any other relevant issues.

ANNEX 10 ANALYSIS OF INFORMATION OBTAINED THROUGH WHO USER SYSTEM INTERACTION METHOD

Adolescent questionnaire

In the information provided by the adolescents who use services, information on the following topics should be analysed:

- o What does the client consider to be the key obstacles to a satisfactory experience?
- o Are they easily remediable or not?
- o Do they call for changes which could be made at the service itself, or in the way the service provides information to young people before they use the service?
- o Are there implications which would suggest training needs for staff?
- o Are there implications for the way in which information or supplies *are* made available?
- o Are concerns expressed about confidentiality?
- o Are other kinds of changes called for which *are* beyond the scope of the local service management?

Health provider questionnaire

The first requirement is to compare the degree of concordance between the views expressed by adolescents and the beliefs about those views expressed by the service providers:

- o To what extent are the health providers well-attuned to the needs of young people who come to them?
- o Do they recognize the same difficulties in providing the help the adolescents believe they need? Are there some obvious and feasible changes that would help meet those needs?
- o The providers will also be asked their own views about the strengths and weaknesses of the service for adolescents. Even if they know what adolescents like or dislike about the service, they may feel that other things *are* more important. If so, what *are* they?
- o Are they amenable to change?
- o Is it likely that if those changes were made, adolescents would be more satisfied?

ANNEX 11 ADDITIONAL DETAILS ABOUT PRIMARY INFORMATION COLLECTION METHODS

This Annex presents further guidelines and examples of the various primary information collection methods referred to in *Act/on D. 2*. It is not intended to be a complete manual of research methods. The methods suggested can be carried out reasonably effectively by persons who do not have advanced degrees in the social sciences, but would benefit from the active involvement of trained social scientists.

Key-informant interviewing

Open-ended, key-informant interviewing is an effective means of starting a situation analysis. It assumes that prior consideration has been given to selection of key informants. For example, while seeking out background materials, you will meet various people who have first-hand knowledge about adolescents and those who interact with them. You can start with officials in government ministries, e.g., Health, Social Welfare, Education, Justice, Labour, Religious Affairs, etc., and include NGOs and community organizations. You should arrange to have relatively formal (but not highly-structured) interviews with those persons and take careful notes. Search for those who are knowledgeable about organizations and the client community.

TYPES OF KEY INFORMANT

* * PEOPLE IN THE TARGET POPULATION
 * * PEOPLE IN DIRECT CONTACT WITH TARGET POPULATION - OUTREACH WORKERS IN NGOs, GOVERNMENT AGENCIES, TEACHERS, ETC
 * * RELIGIOUS, POLITICAL AND COMMUNITY LEADERS, ADMINISTRATIVE GOVERNMENT OFFICIALS, MEDICAL OFFICERS, SOCIAL WORKERS; ACADEMIC RESEARCHERS
 * * PERSONS INVOLVED IN THE LOCAL SCENE, E.G., TAXI DRIVERS, VENDORS, RICKSHAW PULLERS

Many of the questions directed to organization leaders can be usefully asked of community-based workers as well. However, with community-based workers, it is very important to know in detail about their daily activities and the people with whom they come into contact. Below are questions that may be used for some in-depth research, should it be undertaken.¹

- o **"I'd like to get a clear picture of your daily work...could you give me a typical day...like yesterday...what did you do first? Could you give me a "play-by-play" description?" (This form of question often requires a lot of extra "probing" to get a fairly full account of activities.)**
- o **"You probably know a few adolescents (both male and female) who are homeless, live on the streets, and perhaps even engage in commercial sex. Could you pick an example and tell me about the person — their lifestyle, attitudes, anything you know about their knowledge of AIDS and things like that?"**
- o **"In your outreach activities you probably have various different kinds of meetings with different types of youth or youth groups....could you describe a "typical" meeting you have had recently? For instance, who was there? What was**

¹ *Very often, the best way to get the basic information for a situation assessment is not by asking informants direct questions. The most useful information may arise in connection with informants' descriptions of "what's happening" at the scene of action where your intervention will be targeted. Therefore, some of the information gathering steps outlined here are intended to gather broader, contextual, descriptive information, from which the answers to the specific questions can be extracted.*

- the purpose of the meeting? What was decided? Were there any big arguments or differences of opinion? What else happened?"
- o Where are adolescents found within the intervention area? Where do they live? Where do they engage in the risk-taking behaviours (sex, drug injecting, and others)? Can they be contacted at their usual living places? At the risk-taking sites? In what other kinds of places are they likely to be located?
 - o What are the main subgroups in the target population? Are there formal organizations among these subgroups?
 - o To what extent are risk behaviours carried out in groups? If they are carried out in groups, are there clear decision-making leaders? Which kinds of individuals seem to be in control of these risk-taking situations?
 - o What are the possible channels of access to the target population? Are there any organizations that are in regular contact with the client population, or parts of that population?
 - o What kinds of persons or organizations are the "gate-keepers" who might bar the way, or pave the way, to contacts with individuals and groups in the client population?

A frequently asked question is, "How many key informants are enough?" There is no ready answer/ The general rule of thumb in qualitative research is, to the point of redundancy, i.e., until you find yourself receiving the same answers from informants.

For in-depth research, especially with adolescents, the quality of the data will depend on establishing a mutual sense of respect and trust. This may require an investment of time and patience, but can yield a remarkable return.

You go back to your best key informants. By this time you may have had several contacts with some of these special informants. Continue to collect vocabulary lists, definitions and word usage until you have materials in the domains of interest.²

This process will provide insight into behaviour in the course of the interview and clarify the meaning of specific terms. It is invaluable to learn the vernacular of youth. While you don't need to imitate it, you need to be sure that your communications are clear and understood. Some of the language commonly used by young people may be helpful in survey instruments. Additional questions which might be posed to adolescent informants include, for example:

KEYS TO SUCCESS IN KEY INFORMANT INTERVIEWING

- ** REPEATED CONTACTS DEVELOP SOCIAL RELATIONSHIPS
- ** INFORMANT IS EXPERT, RESEARCHER IS LEARNING
- ** TRY TO GET KEY INFORMANT TO "OPEN UP" - NARRATIVES, STORIES, CASE HISTORY, LIFE HISTORY
- ** GET "LISTS", E.G., VOCABULARY
- ** PROBE AND FOLLOW UP ON STATEMENTS
- ** RECORD AS MUCH AS POSSIBLE
- ** AVOID STRUCTURED LISTS, FOCUSED QUESTIONS — I.E.. FREE FORMAT, INFORMANT LEADS
- ** BE NON-JUDGEMENTAL

² Lists or names of all the elements in a domain can also be obtained through a more structured exercise of free listing, e.g., by asking an informant to list all the sexually transmitted illnesses common to youth or all the names for a specific STD. (See section below, j)

Norms and language related to risk-taking behaviours:

- o **What are the special "norms" and "values" connected with the risk-taking behaviours? For example, do the various people involved in sex acts, drug injection behaviours, etc., expect to have longer-term social relations of any kind? What kinds of "payment" besides money are exchanged?**
- o **Which of the special norms affecting behaviours are the same as those in the general population? Which are specific to this client population and their situation?**
- o **What are the names or labels attached to the different types of people in the client population, including their "customers", "managers", "bosses", and other actors on the behavioural scenes?**
- o **What are the key terms used to describe risk-taking behaviours, paraphernalia and related matters?**

Individual and structural determinants of risk behaviours:

- o **To what extent is the target population aware of the risky nature of its behaviours? What information does it seem to lack concerning STD transmission and methods of prevention?**
- o **What information do youth have regarding health maintenance and health resources?**
- o **Are there structural obstacles — e.g., organizational features, power of gang-lords, or lack of key materials (e.g., availability of condoms) — that make behavioural changes difficult. What are the obstacles to change?**

Communication channels:

- o **What are the usual communication channels through which information reaches adolescents?**
- o **Are there any other communication channels that could be activated to reach them with information (or supplies)?**
- o **What are the main sources of health-related information and supplies and services (if any) for the target population?**

It should be understood that if in-depth research is undertaken with special populations, the questions to be answered are likely to change as experience with the population is gained.

The key-informant methodology is the single most powerful ethnographic data-gathering tool. Although individuals vary considerably in their "natural" interviewing skills, the techniques of key-informant interviewing can be taught to persons ranging from near-illiterate community people to the highly educated. The most effective training methods are usually a combination of role play, trial-and-error, and continued practice under supervision.

Mapping/Matrix

A strategy that may be used to establish rapport, especially with hard-to-reach groups such as street children, is to engage key young informants in a community mapping exercise. If an ordinary city map is available, and not too out of date, it might be used to pinpoint locations where street youth are to be found.³ Establishing rapport and broadening contacts in such an adolescent community may be accomplished by a "walkabout" for the mapping

exercises. It also provides an opportunity to ask your key informant if she or he can introduce you to other people. At this time, with the help of your youth leader, you can seek/make contact with other adolescents in the community, with gatekeepers and others — some of whom may become good key informants in the continuing data-gathering. Often the most productive encounters will happen when walking among adolescents in the community—in their "native habitat". Information about usual behaviours, recent events, daily activities and significant local persons all emerge much more naturally when you are in the community with a young person familiar with the neighbourhood.

Each walk expands learning about adolescents' actions and language, and increases the familiarity of the community with the situation analysis effort. If the situation analysis team plays a "low-key role", the community will become less suspicious, and more willing to "open up" and provide important information.⁴ It is useful in the early weeks of information gathering to continually increase contact with key informants. This includes repeated contacts or discussions with them, as well as the searching out of other key informants, particularly new *types* of key informants.

Story and sentence completion, photonovella, body-mapping

Story and sentence completion exercises are most commonly used in individual interviews, although they can also be applied in group settings to stimulate discussion. Like the narrative research technique, the typical story or sentence to be completed requires the respondent to think about behavioural choices, e.g., two adolescents who meet at a disco and have a good time dancing together — what happens next?

The photonovella technique uses serial photographs with quotations added in cartoon-style balloons to tell a story which can then be used to trigger discussion. Alternatively, the balloons can be left blank and a participatory group process used to fill in the words of the actors in the pictures. Single drawings or photographs may also be used as the starting-point for an adolescent to describe his/her perceptions of what the picture shows. Typical pictures might illustrate a pregnant girl in a secondary school uniform, an adolescent boy looking at a display of condoms, an adolescent boy and girl in a room with a bed, etc. Respondents can be asked about preceding events that might have led to the scene portrayed, what the future might be for the persons in the picture, and how the chain of events could be changed or prevented.

Body mapping is an interview technique which can elicit non-verbal information from respondents; it acknowledges that we do not all think in words or express ourselves most effectively with words. It has advantages, especially in terms of identifying deeply-held

POSSIBLE FEATURES TO INCLUDE IN MAPPING

- ** MAIN STREETS, SCHOOLS, YOUTH ORGANIZATIONS
- ** BOUNDARIES BETWEEN ETHNIC GROUPS, YOUTH GANGS
- ** LOCATIONS WHERE YOUTH GATHER FOR VARIOUS ACTIVITIES E.G., DRINKING, SEX, DRUG USE
- ** SITES WHERE YOUTH PURCHASE ALCOHOL, DRUGS, CONDOMS
- ** LOCATIONS OF STD CLINICS, SOURCES OF OTHER HEALTH SERVICES

³ Maps, like fieldnotes, are particularly sensitive, confidential information. Protect your maps carefully from unauthorized persons.

⁴ Very often the continuing interaction style of "interested neutrality"—particularly clear avoidance of any judge mental attitudes or criticism — is sufficient to win the confidence, even the friendship, of individuals in the client community. Interviewers/data gatherers should *never* identify the names of individual informants and the information they have given. All interview notes and written information should be kept locked and secure from other persons. The confidentiality of all such materials should be guarded very carefully.

perceptions of body anatomy, the physiology and working processes of the body, and the process of illness transmission and breakdowns in body defences. Body mapping uses a very simple outline drawing of a young adult male body and another of a young adult female body; each drawing on a separate page. These drawings do not include facial features, breasts or genitalia. As hair and body forms vary in different parts of the world, it may be useful to work with a local artist to be sure that the outlines are typical for the region. At the time of an interview, the respondent can be asked to draw various features on the map that illustrate his/her perceptions of anatomy and physiology, e.g., the reproductive parts of the body, the sexual parts of the body, which *areas* change during puberty, the parts of the body first affected by HIV/AIDS, what happens during menstruation, how contraceptives work, etc. Depending on literacy, either the respondent or the interviewer can put in labels for the content drawn by the respondent. It is useful to request that the labels be created using the preferred terms of the respondent, which will often be vernacular.

Focus groups

The use of focus groups has become a familiar and popular qualitative research strategy. In general, group techniques may provide a rapid opinion source, and group interactions can stimulate the responsiveness of the various participants. With adolescents, a well facilitated group is capable of generating reliable, valid and accurate information, even about potentially sensitive and embarrassing topics such as sexuality. Difficulties include lack of privacy, and desire for social acceptability affecting answers about any individual's own personal behaviours.

Focus groups are generally limited to 6-12 people for best participation. They are particularly useful for:

- o obtaining general background information about a topic of interest;
- o diagnosing the potential for problems with a new service;
- o generating impressions of products, programmes, services, institutions, etc.;
- o learning how respondents talk about the subject; this may facilitate the design of questionnaires, survey instruments, or other research tools that might be employed in more quantitative research;
- o interpreting previously obtained quantitative results.

Focus groups *are* useful for identifying beliefs, attitudes and group behaviours about specific issues. The principle advantages of focus groups include;

- o direct contact between the group participants and the researcher; opportunity for clarification of responses, follow-up questions, probing, observation of non-verbal response;
- o open-response format captures large amounts of data in respondents' own words; can reach deeper levels of meaning, make important connections (often made by respondents themselves), and identify often subtle differences in expression or meaning;
- o focus group respondents may act as stimuli to others; can result in data, ideas that would not necessarily emerge in individual interviews;
- o focus groups can be flexible; examine wide range of topics with a variety of individuals in a variety of settings;

- o In contrast to complex statistical analysis, the results of focus groups *are easy* to understand because the responses *are verbal*.

This method is not without its limitations, however, which too frequently leads to its abuse. Prior planning and some training *are* needed for the facilitator and note-taker (rapporteur), so that the session does not shift from a discussion among participants to a group interview. This has proven to be the most flagrant error in implementation. Group interviews; i.e., responding to a long series of questions, are not as useful or revealing of participant beliefs as guided discussions around a limited number of topics of intense interest to the participants. Other disadvantages of the focus group technique include:

- o the small numbers of respondents and the often convenience-based selection of participants limit the possibility of generalizing findings to a larger population;
- o responses from members of a group are not independent of one another; i.e., they may be biased due to the dominance of one or more members;
- o the moderator may provide clues/cues about what types of responses and answers are desirable, thus biasing responses;
- o the open-ended nature of responses may make summarization and interpretation of results difficult.

Personal life history/sexual event history/case-study

In their most extensive form, personal life histories (such as sexual event histories or examples of health management) consist of individual case-studies derived from multiple, in-depth interviews with a small number of respondents. Advantages of this method include not only the potential for exploring many areas of concern to the researcher, but also for following up on unexpected topics introduced by the respondent. Difficulties include the time involved to collect detailed histories, the small size of a feasible sample, and the organization, management and analysis of textual data. But the insight provided by a well chosen, purposeful example makes the effort very worthwhile.

Episodes and events

Often informants tell "stories" or narratives about specific events. The narratives are often told in order to illustrate a *set* of features important to the story-teller about a place, a type of person, or other sociocultural topic. A narrative might, for example, provide information about a location to which young people go to inject drugs and about fears of the police. Such narratives or "episodes" are very useful for understanding the situations and contexts in which actions take place, and for providing concrete examples.

A story will consist of all the actions, behaviours, conditions and events told by the informant that have a "beginning", a "development", and an "ending". In all societies, people tell stories; and *are* often willing and able to do so. The story may serve as a platform for more questions, or "probes". Open-ended interviewing about such episodes brings out information concerning informants' perceptions and evaluations of behaviours and attitudes, about people's sexual orientation and about a great many other elements that we often cannot obtain from direct questioning. Below is a list of potential types of episode that may be especially useful for learning about your community and the special features of the client population.

Type of episode	From whom?	Intended usefulness
Encounters with individual male customers	sex workers	understanding the potential for "negotiating" condom use
Drug-injecting episode	drug user	understanding the potential for transmission of HIV through needles
Picking up a woman for sex	young males, migratory workers, etc.	examining the range of different types of sexual encounter, in relation to types of risk, and possible risk-reduction
Instances of danger of unwanted sex	unprotected women, young girls, young boys	identifying means of developing defences against unwanted (risky) sexual encounters
Individual patients presenting with possible STDs	health providers who treat patients with possible STDs	seeking interventions involving health providers; understand their attitudes toward promoting condom use

Case-studies, life histories, sexual event histories

Case-studies are a common feature of community-based health care research. Very often case histories involve many different events and episodes. They can be gathered from key informants in the community, without referring to medical records. Suppose you have had two or three conversations with an adolescent involved in commercial sex. She seems to trust you, and she likes to talk about herself. (Many people will be happy to relate their "life history" to you if they trust you, and believe that you are sincerely interested.) So you say:

"Now you've told me some things about your life here in _____. It is very important for us to understand daily life here. I am very interested to hear more about your earlier life. You said you came from _____ [another city]. Could you tell me about what you did there? And some of the people you were with, and so on?"

Sometimes a person will tell you their whole life history, after they begin thinking about their earlier years. Here *are* some of the things you may discover, most of which you would find almost impossible to discover in structured interviews:

- o the initial situations (and influences) that led to her becoming a sex worker;
- o the transitions or "stages" in such a life;
- o the motivations (and constraints) affecting her continuing as a sex worker, the possible motivations for change, including condom use, and her feelings about power or powerlessness;
- o episodes of seeking treatment for STDs; these treatment-seeking behaviours may come out quite naturally in the course of her life history narrative; whereas, in a structured interview she might deny that any such events had occurred.

Structured, systematic qualitative strategies

In addition to the methods discussed above — used largely when in-depth research is needed — more systematic, structured qualitative research approaches have recently been developed. These include free listing, pile sorting, multidimensional scaling, and various strategies for the rating and ranking of items in a domain. The use of some qualitative methods for initial research or subsequent monitoring has a number of advantages including the likelihood that:

- o informants often consider these methods, like pile sorting, to be fun — "like a game";
- o the research team may enjoy acquiring new skills, which may also involve the use of an interesting microcomputer programme such as ANTHROPAC, which is user-friendly and can be used easily by reading the software manual in combination with this Guide; it will however, be helpful if a member of the research team has some experience with such computer-based programmes;
- o structured methods are particularly useful for getting a clear picture of the relationships and patterns in the special vocabularies of especially vulnerable groups such as injectable drug users and sex workers;
- o users of this Guide are also directed to the paper entitled **Systematic data collection** (44) which discusses these methods at length.

Step one: free listing: inventory of a domain

Exploration of any domain begins with key-informant interviewing. In addition to the general collection of vocabulary, informants may be specifically asked, for example, to name — i.e., to free list — all the general illnesses and ailments they can think of. Often even such simple questions require prompting, re-phrasing and explanation.

Conducting a free-listing exercise can produce a near-exhaustive inventory of items in a domain (in this case the words and phrases used to describe illnesses), as well as identify symptoms and treatment strategies. Generally, interviews with 20-25 key informants will lead to a point of redundancy, i.e., additional interviews fail to produce any new information. This method provides a measure of the relative frequencies and importance of the items in the domain.

One of the more effective techniques in open-ended interviewing is that of asking informants for lists of things to assist in defining the content and boundaries of a domain. The most mundane, ordinary topics can suddenly come to life when an informant tries to list a series of elements, "types", or features. Ordinarily the domain should be defined by the informants, i.e., youth in this instance, and in their own language rather than that of the investigator. In the area of information related to adolescent sexual and reproductive health, there *are* many topics for which vocabulary lists should be collected. Some lists that *are* likely to be useful are provided on the next page. Many other lists of vocabulary are available.

In brief free listing is a cost-effective strategy for generating a wealth of information for defining new or relatively unknown domains. It is also an excellent technique for ensuring that the concepts and vocabulary in the domain *are* culturally relevant, and also provides a strong source of cognitive data in terms of frequencies and ordered properties of the lists generated.

SOME USEFUL VOCABULARY LISTS

Domains (lists)	From whom?	Likely usefulness
Types of prostitute	prostitutes, taxi-drivers, other "street people"	to find all the different "sub-groups" with whom your programme will be working; to identify the involvement of youth in commercial sex
Common causes of violence against youth, both male and female	adolescents, service providers	to broadly assess the causes and consequences of violence directed toward youth
Types of sex act	adolescents, prostitutes, street children	to identify specific vocabulary in relation to risk-taking behaviours
Ways of referring to sexual act	schoolchildren; various community people	to know appropriate words (expressions) to use in education messages to different groups
Types of recreational substances that youth abuse	adolescents; community-based service workers; taxi drivers and other street people	to know sites and sources of substances commonly abused; relative degree of risk associated with substance abuse
Types of drug user	drug users themselves	to search for different behaviours, that signal different degrees of "risk-taking behaviour"
Types of sexual and reproductive health problem	adolescents, service providers, counsellors	to identify the illnesses known to adolescents; to begin to develop an understanding of adolescent explanatory models of sexual and reproductive health

Step two: pile sorting and organization of the items in a domain

To obtain more systematic information on the domain of illnesses in the above example, a set of cards representing the most commonly mentioned illnesses can be prepared to aid respondents in a card-sorting procedure. Respondents are asked to sort the cards into as many piles as they wish, using whatever criteria they desire. There is no right way or wrong way to sort the cards. These structured interviews with cards should also include a series of questions — such as, "why do these seem similar to you?" — and systematic probing as to the criteria for selection, and sorting based on seriousness, treatment, gender and transmission, for example.

During the course of each pile sort a record should be kept of how many piles were made, and which illness was placed in which pile. This data is used to construct a matrix showing how many times each illness was grouped with others in the same pile sort. The greater the number of times items are placed in the same pile by independent respondents, the closer they *are* conceptually.

For most of the lists, samples of 5 or 6 or perhaps 10 informants will be sufficient, unless some important, systematic differences between two types of informant is observed. In which case, the sample of informants should be expanded to include about 10 in each of the two groups of informants. Incidentally, where there *are* many illiterate persons, the pile sorting can still be carried out, but the words for the drugs (or types of place, types of customer, or other words) should be illustrated with simple drawings. The pictures can then be used by the illiterate respondents as a means of recognizing and remembering the names of the items.

Analysis of the card sorting is most easily carried out using ANTHROPAC (43). Each card (word) is given a number and these numbers are entered into the computer programme. Details regarding the ANTHROPAC analysis are given in *Action D. 4*.

Multidimensional scaling

This matrix of similarities or "proximities" constructed by pile sorting can be converted into a cognitive map by multidimensional scaling. The number of times two illnesses have been placed in the same pile can be transformed into distances; items which never occur together would be expected to be quite far apart. Using ANTHROPAC, this matrix can be constructed and displayed as a cognitive map.

Cognitive maps are useful for exploring the patterns and relationships among illnesses. Exploration of how and why people group illnesses can help improve understanding of their "explanatory models" of illness, sequences of illness development, and health care-seeking behaviors.

Rating and rank ordering items in a domain

To examine the degree of seriousness of illnesses and other characteristics, a variation on the pile sorting described above can be employed. Instead of simply grouping the illnesses, respondents *are asked* to arrange the items in terms of their perceptions of high, intermediate and low severity. These interviews may also include a series of questions relating to why these illnesses seem most serious. These ratings provide additional information about how respondents conceptualize — and presumably react to — different problems. They also serve as a means of establishing health or other priorities.⁵ These structured methods can also be incorporated neatly into the quantitative survey.

Mini-survey

In some situations, particularly regarding difficult-to-reach and "elusive" populations, a structured survey may not be feasible. But careful key-informant interviewing and focus group discussions might produce sufficiently effective and interpretable information. However, there *are* several reasons why one or more small-scale surveys should be included.

- o A structured, quantitative survey can be a powerful test (and validation) of key-informant interviews.
- o While it is practically axiomatic that key-informant interviewing will uncover important information that surveys cannot capture, a carefully planned survey will produce important new information, beyond key-informant data.

This strategy of ranking and establishing priorities could also be used in the Technical Advisory Group and the Steering Committee to facilitate discussion and consensus-building on priorities for the situation analysis.

- o Some colleagues may be wary of key-informant data, if they are much more familiar with "quantitative" research methods.
- o The funding agency may require that some quantitative data be provided to support the qualitative materials.
- o A well-executed survey, even if the sample is small, can enable a fairly accurate estimation to be made of the "average levels" and range of variation in key aspects of the client population's knowledge, attitudes and behaviours.
- o A structured survey operation can serve as a "pilot test" for developing a quantitative baseline survey, which will be essential for evaluation purposes at the project's later stages.

If possible, the data-gathering team should enlist the interest and cooperation of adolescents for conducting the survey — particularly among other young people. They can help to:

- o identify the main questions for which quantified data is needed. One of the areas most likely to be of interest is that of the client population's knowledge about risks, awareness of condom use, and reasons for not using condoms.
- o make a quantified assessment of the perceived needs of adolescents.
- o develop a relatively short set of questions, using appropriate vocabulary as suggested by the "committee" of adolescents. Particular care should be taken to ensure that the correct local words are used for "condom", "person with whom one has sex", "the sex act" and other sensitive topics. The committee should be able to advise concerning other points of vocabulary.
- o test the survey format and questions. If the committee consists of five individuals, each member could collect one or two interviews; if the target area is large, then the pretesting of the interview schedule should be larger. Committee members should be asked to remain entirely neutral, and not to prompt for answers, other than when using the probing questions that have been agreed on ahead of time.
- o review the results of the "pretesting". Their views of the credibility of the answers will be useful. The following questions should be raised with the committee:
 - a. Would the answers to the questions about awareness of condom use be different if the question had been asked using different terminology?
 - b. Do these answers seem to reflect an accurate picture of the individual's knowledge and attitudes?
 - c. Do the answers point to important information that is needed in addition to the questions included thus far?
 - d. Do the answers give some surprising results that call for expanding the interviews to other parts of the population?

A mini-survey is any small-scale structured interview operation carried out with a small specialized set of informants. For example, suppose it has been found that there are approximately 20-25 health care providers in the target *area*, including small government and private clinics, traditional healers, non-traditional unlicensed practitioners, and medical doctors. Suppose also that the key informants have stated that (at various times) they go to most of those different providers. If the intervention plans call for some attention to STDs, a special interview concerning the types of patient, presenting complaints and usual treatment should be undertaken.

- > **If possible, a check should be made with a qualified medical person who can identify and describe the inventory of STD signs and symptoms usually encountered in the target area, and the expected treatments and other pertinent information.**
- > **The target vocabulary of symptoms, signs and illness names related to STDs should be constructed. Respondents should also be asked how they present the illnesses, or the symptoms, if they go to a doctor or healer.**
- > **With the help of the "advisory committee", a set of questions to ask of the different types of healers, clinics and other practitioners should be constructed. This should be a short set of questions, to obtain information as follows:**
 - a. **Do patients come to you for treatment of any of the following _____ (signs, symptoms, illnesses)? If yes, about how many per week?**
 - b. **What kinds of people — age, sex, and other characteristics?**
 - c. **Which *are* the most common of these complaints?**
 - d. **What is your diagnosis for these signs/symptoms?**
 - e. **What treatments do you prescribe? Do you provide or sell those medications?**
 - f. **Do these treatments usually succeed in "curing" the problem? How quickly?**

Suggestions for carrying out a structured survey include enlistment of people from the client population for the planning and execution of the data-gathering. The earlier that community involvement is secured, the better the chances for expanded community participation in the intervention programme, so crucial for success.

Verbal autopsies

The death of an adolescent is a relatively rare event. It is thus also a significant event, requiring investigation to determine the cause. This is especially true of the deaths of adolescent (and frequently unmarried) females. A verbal autopsy refers to a method of retrospective interview with individuals who have attended a death and can describe what happened in the hours, days or weeks preceding death. A most likely cause of death is then inferred from the sequence and the combination of symptoms and events reported.

Emphasis should be placed on the need to accumulate relevant information, which is as precise as possible, on the timing, duration and gradation of each of the symptoms preceding death. It is important to focus on the logical sequence of events; and to preserve the local idioms describing the context and sequence of events. If the death is suspected of being attributable to the complications of abortion, focusing on the menstrual status at the time of death (e.g., menstruating regularly, amenorrhoeic or pregnant), as well as on the exact circumstances of the death, may be useful.

Data on all recorded adolescent deaths should be reviewed and clarified by three physicians. Diagnosis should be written in full, with primary and underlying causes if necessary, on separate forms. These forms should then be compared. If two of the three diagnoses agree, the original diagnosis is retained. Otherwise, additional information may be required to resolve the issue.

CARIBBEAN YOUTH HEALTH SURVEY



*This survey is confidential and anonymous
(this means you cannot be identified).*

To all students:

Hundreds of students are taking part in this important survey. The survey will give you a chance to voice your thoughts and concerns. Your answers will help your community understand what services and programs teens need and want.

This is *NOT* a test. Your name will *NOT* be on the survey. No one will know your answers. Please be as honest as you can. Your participation is voluntary and you do not have to answer a question if you do not want.

Thank you for your help. It is the **MOST IMPORTANT** part of this project.



r

MARKING DIRECTIONS

- * Mark your answers with a pencil.
- * Make dark marks that fill the box.
- * Erase cleanly any answers you want to change.

Correct Mark

Examples:

Incorrect Mark

ABOUT YOU AND SCHOOL

These are some general questions about you, what you like to do, and how you feel about school.

1. Name of your country:

- Antigua
- Barbados
- Dominica
- Jamaica
- St. Lucia
- Trinidad and Tobago
- Other _____

2. Name of your school:

3. How do you describe yourself? (*Mark one.*)

- Black or African
- White
- East Indian
- Asian (e.g. Chinese)
- American Indian (e.g. Caribbean, Aruwak)
- Other _____

4. How **old** are you?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> 10 years old or younger | <input type="checkbox"/> 16 years old |
| <input type="checkbox"/> 11 years old | <input type="checkbox"/> 17 years old |
| <input type="checkbox"/> 12 years old | <input type="checkbox"/> 18 years old |
| <input type="checkbox"/> 13 years old | <input type="checkbox"/> 19 years old |
| <input type="checkbox"/> 14 years old | <input type="checkbox"/> 20 or older |
| <input type="checkbox"/> 15 years old | |

5. What is your sex?

- Female Male

6. Are **you**: (*Mark one.*)

- Catholic
- Fundamentalist Christian
- Other Christian (Anglican, Methodist, Presbyterian, etc.)
- Hindu
- Moslem
- Other non-Christian
- None

7. What grade are you in now?

- I am not in school > Skip to #21 (page 3)
- Pre form (grade 6 or less)
- Form one (grade 7)
- Form two (grade 8)
- Form three (grade 9)
- Form four (grade 10)
- Form five (grade 11)
- Form six (grade 12)

8. How long does it take for you to get to school in the morning?

- Less than half an hour
- Half an hour to an hour
- More than one hour

9. How do you get to school?

- Bus or mini-van
- Car or taxi
- Bicycle
- Walk

10. During the school year, how many hours per week do you work for pay?

- I don't work for pay.
- 1 - 4 hours a week
- 5-9 hours a week
- 10-20 hours a week
- Over 20 hours a week

11. In general, how hard do you try on your school work?

- I don't try very hard.
- I try hard enough, but not as hard as I could,
- I try very hard to do my best.

12. What kind of student are you?

- Below average
- Average
- Above average

> Go on to next page.

13. Are you in any organized activities after school?

- Yes, often
- Yes, sometimes
- No

14. Do you like school?

- Yes, I like school a lot.
- Yes, I like school some.
- Yes, I don't like school very much.
- Yes, I hate school.

15. Do you plan to finish high school?

- Yes,
- No
- I don't know

16. In the past year, has a teacher gotten to know you really well?

- Yes
- No

17. Do you get along with your teachers?

- Yes,
- Somewhat
- No

18. Do you have trouble getting your homework done?

- Always
- Sometimes
- Never

19. Is keeping up with your school work hard because you have trouble reading?

- Yes
- No
- Sometimes

20. Have you ever been in any classes for learning problems or behavior problems?

- Yes,
- No



TOBACCO, ALCOHOL, AND OTHER SUBSTANCES

The use of alcohol and drugs is a major issue for many teenagers. Please help us understand this issue by answering the following questions honestly and completely. Remember, your answers will be kept secret

21. How often have you used the following things during the past year (12 months)?

	Never	Once or A Few Times	Monthly	Weekly	Daily
a. Cigarettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Chewing tobacco or snuff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Beer, wine, hard liquors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Marijuana (weed, grass, pot)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Inhalants (glue, gas, paint, aerosols)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Amphetamines (speed, ice)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Hallucinogens (LSD, acid, PCP, dust)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Bindro (matts, hex)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Cocaine (coke, crack, toot, snow)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Heroin, morphine, codeine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Injected an illegal drug (shot up with a needle)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Sedatives (downers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Steroids (juice, raids)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



22. In the past 5 years, has one or both of your parents ever had problems because of the following?

- | Yes. | No. | |
|--------------------------|--------------------------|------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Drinking |
| <input type="checkbox"/> | <input type="checkbox"/> | Mental health problems |
| <input type="checkbox"/> | <input type="checkbox"/> | Drug abuse |
| <input type="checkbox"/> | <input type="checkbox"/> | Violence |

23. How much beer, wine or hard liquor do you usually drink at one time?

- I never drink beer, wine or hard liquor
- One glass, can or drink
- Two or three
- Four or five
- Six or more glasses, cans or drinks

24. Do you ever drive a car, ride a bike, drive a boat, or use water or jet skis after you have been drinking or doing drugs?

- Yes No

25. Do you ever ride with someone in a car, boat or jet skis when they are high on alcohol or drugs?

- Yes No

26. How many drinks of beer/wine/hard alcohol make it unsafe to drive a car, boat, ride a bike, or use jet skis?

- Any drinking is unsafe.
- 1 -2drinks
- 3-4drinks
- 5 or more drinks

27. Have you ever had any of the following problems from drinking or drug use? (Do not count drugs a doctor told you to use.)

- | Yes, | No. | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | An accident or injury |
| <input type="checkbox"/> | <input type="checkbox"/> | Emotional/behavioral problems for which you needed help |
| <input type="checkbox"/> | <input type="checkbox"/> | School (failing grades/trouble with teachers) |
| <input type="checkbox"/> | <input type="checkbox"/> | Friendships (loss of friends) |
| <input type="checkbox"/> | <input type="checkbox"/> | Breaking up with a boyfriend or girlfriend |
| <input type="checkbox"/> | <input type="checkbox"/> | Work (kicked out of work) |
| <input type="checkbox"/> | <input type="checkbox"/> | Legal (get picked up by the police) |
| <input type="checkbox"/> | <input type="checkbox"/> | Family (fights with parents) |
| <input type="checkbox"/> | <input type="checkbox"/> | Becoming violent |
| <input type="checkbox"/> | <input type="checkbox"/> | Your health getting worse |

Sex is often an important part of people's lives. Though it is very private, we hope that you will share some information with us so we can better understand the concerns and questions of people your age. Remember that your answers will be kept private.

28. Have you ever had any kind of sexual experience (such as kissing, petting) with a male?

- Yes No

29. Have you ever had any kind of sexual experience (such as kissing, petting) with a female?

- Yes No

30. Which best describes your feelings? Please answer whether you have had sexual intercourse or not.

- I am only attracted to persons of the same sex.
- I am equally attracted to persons of both sexes.
- I am only attracted to persons of the opposite sex.
- I am not sure. I don't understand the question.

31. Have you had sexual intercourse ("gone all the way")?

- Yes *Answer questions in shaded boxes on next page*
- Yes, but a long time ago
- No, because (mark, all that apply):

- I want to wait until I am older.
- I want to wait until I am married.
- I am not emotionally ready for it.
- I don't want to risk becoming pregnant/getting someone pregnant.
- I haven't met anyone that I want to have sex with.
- I haven't had the opportunity to have sex with someone I like.
- Fear of disease.
- My religious values are against it.
- My parent's values are against it.
- I want to, but no one has asked me.
- I would feel guilty.
- I just don't feel like it (don't feel the need to have sex).

> (Skip the shaded boxes and go to page 6, question #43)

Answer the questions in the shaded boxes if you have had sex with anyone at anytime in your life. If you have never had sex with anyone, skip the shaded boxes and go to the next page (question #42).

32. The first time you had intercourse, were you forced into it against your will?

- Yes
- Sort of
- No

33. How old were you the first time you did it (had sexual intercourse)?

- 10 years old or younger
- 11 years old
- 12 years old
- 13 years old
- 14 years old
- 15 years old
- 16 years old
- 17 years old
- 18 years old
- 19 or older

34. How many people have you had sex with during your life?

- 1 person
- 2 people
- 3 people
- 4 people
- 5 people
- 6 or more

35. How often do you and/or your partner use a birth control method?

- Always
- Sometimes
- Never

36. The most recent time you had sex, did you or your partner use any of the following methods of birth control or protection? (Mark all that are true for you.)

- We didn't use anything
- Condoms (rubbers)
- Withdrawal (pulling out) or rhythm (safe time)
- Douches (Pepsi, Coca-Cola)
- Birth control pills, Depo Provera (the shot), Norplant or an IUD
- The sponge, cream, diaphragm or female condom
- morning-after pill or RU486

37. When you don't use birth control or protection, what are the reasons? (Mark all that are true for you.)

- I just don't think of it
- I want or my partner wants to have a baby.
- I don't think that I or my partner will get pregnant or get a sexually transmitted disease.
- Having sex is unexpected, not time to prepare.
- My partner doesn't want to use birth control.
- It is wrong to use birth control.
- I don't know how to get protection or am too embarrassed.
- I can't afford to buy protection.
- I worry about the side effects of birth control.
- It is my partner's problem, not mine.
- I got drunk or high.
- I always use birth control.

38. How many times have you gotten someone pregnant, or been pregnant?

- never > Skip to #43 (next page)
- one time
- two times
- three or more times
- I don't know



>Go on to next page.

39. What happened with the pregnancy? (If more than one pregnancy, refer to the youngest child.)

- One of us kept the baby
- We are raising the baby together
- One of our families is raising the baby
- The baby was placed for adoption
- The baby was placed for foster care
- Abortion
- Miscarriage (the baby died)
- Pregnant now and not sure what to do
- I don't know what happened

40. Who looks after the child when you are in school, busy or just can't do it? (Check all that apply.)

- I don't have a child.
- I'm not raising the child
- Changes from day to day
- One of our families
- Friends or neighbors
- Day care center
- I take the child with me
- I leave the child alone for a while

41. How often do you spend time with your child?

- I don't have a child
- Every day
- A few times a week
- Once a week
- A few times a month
- Once a month
- Less than once a month
- Never

For Boys Only:

42. Do you give anything towards your child's support?

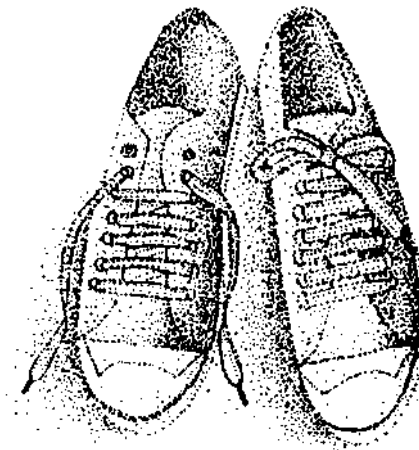
- I don't have a child
- No - I don't or can't give anything
- Yes - I give the following things:
(mark all that apply)
 - I give money
 - I give food
 - I give babysitting and childcare
 - I give clothes
 - I give love and attention

43. Have you ever been physically abused or mistreated by anyone in your family or anyone else? Physical abuse is when someone causes you to have a scar, black and blue marks, welts, bleeding, or a broken bone.

- I have not been physically abused.
- I have been physically abused by:
(mark all that apply)
 - an adult who lives with me
 - another adult who does not live with me
 - a brother, sister or other teenager who lives with me
 - a boyfriend, girlfriend or other teenager who does not live with me

44. Have you ever been sexually abused? Sexual abuse is when someone in your family or someone else touches you in a place you did not want to be touched, or does something sexually which they shouldn't have done to you, or forces you to touch them sexually or have sex with them.

- I have NOT been sexually abused.
- I have been sexually abused by:
(mark all that apply)
 - an adult who lives with me
 - another adult who does not live with me
 - other, sister or other teenager who lives with me
 - a boyfriend, girlfriend or other teenager who does NOT live with me



> Go on to next page.

The next questions ask how often you have done different things the past year.

45. How often have you done the following during the past year (12 months)?

	Never 1	Once or Twice 2	Three or More Times 3
a. skipped school without an excuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. cheated on a test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. deliberately damaged property that didn't belong to you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. been in a fight where weapons were used (guns, knives, razors, bats, chains)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. took something from a store, shop, or supermarket without paying for it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. stole something from your parents or other family members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. went into a house or building to steal something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. run away from home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

46. During the past month (30 days), did you carry a weapon such as a gun, knife, club, stick or bat to school?

- Never
- A few times
- Almost all of the time

47. Do you carry a weapon at times other than at school?

- Never
- A few times
- Almost all of the time

48. During the past month (30 days), what kind of weapon did you carry most often?

- a handgun
- other guns such as a rifle or shot gun
- a knife or razor
- a club, stick, bat or pipe
- some other weapon
- I did not carry a weapon in the past 30 days

49. Have you ever belonged to a gang?

- No
- Yes, but not anymore
- Yes, I still do

50. How many times have you been knocked out or unconscious from a fight or violence? (*Don't count a sports match.*)

- I've never been knocked out or unconscious
- once
- twice
- three or more times

51. How many times have you been stabbed or shot?

- I've never been stabbed or shot
- once
- twice
- three or more times

> Go on to next page

The next questions ask you how much you worry about different things that might happen in your life. For each thing, tell how much you worry about it.

52.1 worry about...

	Not at all 1	Somewhat 2	A lot 3
a. my own drinking and drug use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. my mother or father's drinking or using drugs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. being physically abused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. being sexually abused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. all the fighting and violence I see in my home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. the violence in my community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. the drinking and drug use in my neighborhood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. getting or making someone pregnant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. getting AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. being treated unfairly because of my race or religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. my parents leaving me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. getting a job when I'm older	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. passing Common Entrance/CXC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your Feelings

53. In general, do you see yourself as a person who is...? (Mark only one.)

- happy
- sad
- angry
- irritable

54. During the past month, have you felt so down or discouraged that you wondered if anything was worthwhile?

- Yes, to the point that I have just about given up.
- Some, enough to bother me.
- Almost never

55. Do you ever think about hurting or killing someone?

- never
- some of the time
- almost always

56. Have you ever tried to kill yourself (commit suicide)?

- No
- Yes, once
- Yes, more than once

57. When was the last time you tried to kill yourself?

- I never tried to kill myself.
- I tried within the last 6 months.
- I tried within the past year.
- I tried more than a year ago.

> Go on to next page

58. Has anyone in your family ever tried to kill them selves?

- No
- Yes, and they lived
- Yes, and they died

59. Have any of your friends ever tried to kill them selves?

- No
- Yes, and they lived
- Yes, and they died

60. Do you think you'll live to be at least 25 years old?

- Yes
- No

61. If you had to move to some other neighborhood, how happy or unhappy would you be?

- unhappy
- it would make no difference
- happy

65. Do you think of yourself as a religious or spiritual person?

- not at all
- somewhat
- quite a bit
- I don't know

66. In the last three months, how often did you go to religious services?

- never
- 1 - 3 times
- 4-6 times
- more than 6 times



Your Family

64. How many people live in the same house with you?

- | | |
|--|------------------------------------|
| <input type="checkbox"/> 1 person (I live alone) | <input type="checkbox"/> 6 people |
| <input type="checkbox"/> 2 people | <input type="checkbox"/> 7 people |
| <input type="checkbox"/> 3 people | <input type="checkbox"/> 8 people |
| <input type="checkbox"/> 4 people | <input type="checkbox"/> 9 or more |
| <input type="checkbox"/> 5 people | |

65. Whom do you live with MOST of the time?

(Mark all that are true for you.)

- Two parents (birth parents, adoptive parents and/or step parents)
- One parent - mother only
- One parent - father only
- Other adult relative (grandparents, aunt, uncle, etc.)
- Other adult not related to me (foster parent, older friend, etc.)
- Other youth (brothers, sisters, step brothers, step sisters, friends, etc.)
- I live alone

66. How many other people sleep in the same room with you?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> 1 sleep by myself | <input type="checkbox"/> 5 - 6 others |
| <input type="checkbox"/> 1 other person | <input type="checkbox"/> 7 - 8 others |
| <input type="checkbox"/> 2 other people | <input type="checkbox"/> 9 or more |
| <input type="checkbox"/> 3- 4 others | |

67. Where do you usually sleep?

- in my home
- at other people's homes (a friend)
- on the street
- hostel

68. Are your parents...?

- living together
- living separately or apart
- one of my parents is dead
- both of my parents are dead
- I don't know

> Go on to next page

RELATIONSHIPS WITH OTHERS

These are some questions about your feelings and your relationships with others.

69. How much do feel...?

	Very Little 1	Some 2	A Lot 3	Does Not Apply to Me 4
a. your <u>mom</u> cares about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. your dad cares about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. other family members care about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. adults in the neighborhood care about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

70. How much do feel...?

	Very Little 1	Some 2	A Lot 3	Does Not Apply to Me 4
a. you can tell your <u>mom</u> about your problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. you can tell your dad about your problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. your friends care about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. your teachers care about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. your priest or minister cares about you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

71. How much do...?

	Very Little 1	Some 2	A Lot 3	Does Not Apply to Me 4
a. people in your family understand you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. your family pays attention to you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. you want to run away from home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

> Go on to next page

General Health

72. In general, how is your health?

- | | |
|-------------------------------|------------------------------------|
| <input type="checkbox"/> poor | <input type="checkbox"/> good |
| <input type="checkbox"/> fair | <input type="checkbox"/> excellent |

73. Do you have a condition (handicap, disability, chronic illness) that limits you doing the same things that other people your age do such as school, sports, getting together with friends?

- No
- Yes - please describe your condition:

74. How many times per week do you work, play or exercise hard enough to make you sweat and breathe heavily?

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> Never | <input type="checkbox"/> 3 to 5 times |
| <input type="checkbox"/> 1 or 2 times | <input type="checkbox"/> 6 or more times |

If you are a ♀ to question #75.

76. Do any of the following cause you regular problems (more than once or twice a week)?

	Hardly Ever 1	Sometimes 2	A lot 3
a. I get headaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I get toothaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I have acne (bumps, pimples, zits)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I have trouble seeing (even with glasses)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I have trouble hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. I get stomach (belly) aches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. I have trouble breathing (wheezing, allergies, asthma)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. I have a heart problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. I am not getting enough sleep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. My body is not developing as fast as my friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. My body is developing much faster than my friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. I have difficulty using my hands, arms, legs or feet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For Girls Only

75. Have you started your menstrual periods?

No > Skip to #76 below
Yes

(A) How old were you when your menstrual period started?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> 9 years old or less | <input type="checkbox"/> 13 years old |
| <input type="checkbox"/> 10 years old | <input type="checkbox"/> 14 years old |
| <input type="checkbox"/> 11 years old | <input type="checkbox"/> 15 years old |
| <input type="checkbox"/> 12 years old | <input type="checkbox"/> 16 or older |

(B) Do you have such pain during your periods that you do the following? (Mark all that apply.)

- Stay home from school a day or more.
- Go to sick room or nurse at school or work.
- Take medicine for the pain.
- Go to a doctor.
- Become moody, anxious, cranky.

> Go on to next page

Medical Care

77. Where do you usually go for medical care?

- Nowhere
- Public clinic (health center, health post, dispensary, polyclinic)
- Hospital
- Private doctor
- Traditional healer, herbalist, bush doctor, Obeah man

78. If you needed contraception, where would you most like to get it? (Mark only one answer)

- | | |
|---|--|
| <input type="checkbox"/> Doctor's office | <input type="checkbox"/> Drug store or pharmacy |
| <input type="checkbox"/> Public health clinic | <input type="checkbox"/> Public bathroom |
| <input type="checkbox"/> Family planning clinic | <input type="checkbox"/> Mini-mart, supermarket, grocery store |
| <input type="checkbox"/> Youth clinic | |

79. When did you last..."

	Never/Don't Remember	Over Two Years Ago	1-2 Years Ago	Within last 12 Months
a. have a regular checkup (physical examination)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. see a herbalist, bush doctor or healer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. have your hearing checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. have your eyes checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. see a dentist for your teeth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. get counseling or mental health services (e.g. child guidance services for emotional problems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. IF YOU ARE A GIRL, have a vaginal (pelvic) exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

80. Do you think the following things are true?

	Yes	No	Not sure
a. If I tell a <u>doctor</u> something personal, my parents will find out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. If I discuss my opinions about sex with my <u>teacher</u> , others in school will find out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. If I tell a <u>nurse</u> something personal, others in the clinic, school or community will know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. If I tell a <u>peer counselor</u> something personal, other people in school will find out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. If I tell a <u>guidance counselor</u> that I am having a problem, other people in school will find out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. If I tell my <u>parents</u> something personal, others in the neighborhood will find out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

> Go on to next page

Nutrition

81. Think about all the foods you ate yesterday, including meals and snacks at home, at school, at restaurants and anywhere else. Did you eat or drink the following things YESTERDAY?

	No	Yes Only Once	Yes Twice or More
a. cheese, yogurt, ice cream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. eggs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. dried beans, peas, peanut butter, peanuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. beef, pork, goat, lamb (includes hamburgers and hot dogs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. fish, chicken, turkey, venison	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. breads, rice, macaroni	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. fruits, berries, fruit juice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. candy, soft drinks (not diet), bag/boxed drinks, cakes, pies, sweet rolls, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. potato chips, pretzels, corn chips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. potatoes, breadfruits, yams, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. cereal (such as corn flakes) or porridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Caribbean foods (macaroni pie, beans and rice)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

82. Do you think your weight is...?

- about right I need to GAIN weight
 not sure I need to LOSE weight

83. When I look at myself in the mirror, in general I feel...?

- happy with the way my body looks
 just o.k. with the way my body looks
 not happy with the way my body looks

84. Do you do any of the following to lose weight or keep from gaining weight? (Mark all that apply.)

- Take things that make you have bowel movements or diarrhea.
 Make yourself vomit or throw up.
 Take pills that make you pee a lot.
 Take diet pills to lose weight.
 Diet or exercise to lose weight.
 Exercise to lose weight.

85. How often do you go hungry because there is not enough food in the house?

- Never hardly ever
 sometimes
 a lot

86. How often do you eat breakfast (solid foods)?

- about every day
 a few times a week
 hardly ever

87. Why do you skip breakfast? (Mark only one.)

- I don't skip breakfast.
 I don't have time for breakfast.
 I can't eat that early in the morning.
 There is not enough food in the house to eat breakfast.

ANNEX 13 INFORMATION ABOUT STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES (SPSS)

SPSS inc. is a multinational software products company that provides statistical product and service solutions. SPSS is a complete toolkit for producing statistics and reports for use in surveys of all types.

Survey researchers use the SPSS to:

- o reduce the time required to collect and prepare data for analysis
- o reduce the *errors* involved in coding data
- o thoroughly analyse data using in-depth statistics and charts
- o present results clearly, using flexible reports and graphs.

Features of SPSS package

SPSS comes with a number of add-on modules — including the trends, tables and categories modules — in addition to the base module. The graphics module is incorporated into the base module. The statistics module is separate from the base module and divided into advanced statistics and professional statistics. The base, trends, advanced statistics, professional statistics, tables and graphics modules are available for IBM-compatible microcomputers.

Data management capabilities include: •

- O detailed labelling of variables and data values, additional documentation of data sets, storage of data and documentation in system files
- o flexible definition of missing data codes
- o permanent and temporary transformation of existing variables and computation of new variables; conditional and looping structures for complex data transformations
- o reading raw data files in a wide variety of formats e.g., numeric, alphanumeric, binary, dollar, date, and time
- o reading hierarchical and other non-rectangular raw data files
- o reading, combining, outputting multiple files
- o reading matrix for input to procedures
- o flip command to switch to column and rows in a data set
- o macrofacility to build customized block of SPSS syntax elements and to control the execution of these blocks
- o ability to read and write to compressed files.

Statistical procedures for data analysis include:

- o the EXAMINE procedure to explore data sets before deciding on the course of data analysis to perform
- o descriptive statistics, frequency distributions, and *cross* tabulations, bar charts, histograms and scatter plots
- o the RANK procedure, which produces ranks, normal scores, average scores, and percentiles for numerical variables

- o T-tests, univariate and multivariate analysis of variance and covariance, including repeated measures and nested designs
- o multiple regression, nonlinear regression, constrained nonlinear regression o loglinear models for discrete data, probit models
- o factor and principle components analysis, discriminant analysis, cluster analysis, multidimensional scaling
- o nonparametric tests.

Besides these capabilities, SPSS add-on modules feature:

- o tables to produce simple or complex tabulation formatted for presentation
- o trends including time-series plots, plots of autocorrection, partial autocorrection, cross-correlation function, smoothing, seasonal regression, Box-Jenkins methods, spectral methods and forecasting.

ANNEX 14 CHARACTERISTICS OF COMPUTER SOFTWARE PROGRAMMES TO ASSIST QUALITATIVE ANALYSIS

MAIN FUNCTIONS:

- o attaching codes to segments of text
- o searching for text segments according to codes
- o reassembling segments according to codes

ENHANCED FUNCTIONS:

- o searching for multiple codes
- o searching for a particular code sequence
- o searching selectively
- o counting frequency, co-occurrence of data codes

PREPARATORY FUNCTIONS:

- o importing files
- o numbering lines of text
- o printing with line numbers and "hidden codes"

HOUSEKEEPING:

- o retrieving files; saving
- o changing the directory
- o selective printing

Many of these functions can be performed with a standard word processing programme. What is required is some discussion and thought as to the use of the capabilities of the software, to facilitate the organization and management of qualitative data as it is being entered. Standard functions would include the following:

ANNOTATIONS: ID initials and number; 50 lines

AUTOTEXT: inserts text, etc., from glossary you create, e.g., codes

BOOKMARKS: mark selected text with invisible bookmarks, i.e., codes; use for cross-referencing

BULLETS: to visually set off text

DOCUMENT SUMMARY: includes keywords and comments

FILE SEARCH

FOOTNOTES

GO TO: bookmark, annotation, reference

HEADERS/FOOTERS

INDEXING

MULTILEVEL LISTS: i.e., multiple codes

LINE NUMBERING

CUT & PASTE

TEMPLATES: standard style, e.g., cover sheet

PASSWORD PROTECTION

The purpose of using such functions is not only to ease the reading of the text and highlight substantive points, but also to ease the reorganization and analysis of the material. This is done initially by searching and retrieving all relevant materials relating to a domain of interest and creating (a) separate file(s) by theme. One major advantage of storing all interviews and other materials in computer files is that very specific items can be found easily, using a general search programme.

ANNEX 1 5 TIPS FOR ANALYSIS OF QUALITATIVE DATA ON ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH

- Enter the interview material with identifying information about the interviewer and the person interviewed (e.g., initials for the interviewer, and sex, age and education for the person interviewed) in a simple format in a word processing package or editor programme. Avoid italics, bold font and other formatting niceties. Each interview is another computer file, and should be named logically. If a computer is not being used, simply type each interview separately.
- Gather together all material on a single topic, with enough surrounding text to ensure that the response is not taken out of context. Some computer packages, such as Text Collector, make this step easy. Others require a heading or marking of some sort, but essentially produce the same output: a file on a single topic. Repeat for each topic.
- If the sample is stratified in any particular way, e.g., low class versus middle/ high class, or rural versus urban, then the topical file must be separated into these major groupings and analysed accordingly.
- Read this material over and over again until the most common responses are clear. The less common ones should also be noted. If there is a large number of texts to analyse, it is valuable to count the types of responses, simply to confirm which is the majority response and what the minority ones *are*. Do this repeatedly for each topic.
- Write a summary interpretation of the response. It is useful to retain good examples as illustrative quotes. If material is not based on transcriptions of actual speech, it cannot be labelled as a quotation.
- Compare responses across the major strata, e.g., by gender, class, etc. Think about the source of these differences in terms of the backgrounds of the respondents.
- Look for contradictions. Sometimes the earlier part of an interview or questionnaire includes responses that contradict those found later. This may occur because the person being interviewed gradually decides to open up as the interview progresses and he/she comes to trust the interviewer a little more. These contradictions tell us which issues may be especially sensitive.
- Look for silences. These occur when the issue is unknown, there is no vocabulary with which to discuss it, or it is far too embarrassing to discuss. This is information too. For example, young people might be asked what kinds of sex they consider to be safe. The responses may list intercourse with condoms, intercourse with contraceptives, intercourse with girls/boys you know, but skip masturbation. Masturbation may simply be too sensitive an issue for discussion.

- Look for themes by gender that reveal gender role conditioning. For example, girls may usually respond with romantic notions and boys with statements reflecting a concern with prowess and reputation. Romance associated with sex for male adolescents may well be a "silent" area, one in which they have little experience, *or* little vocabulary for discussing.
- Look for themes reflecting power issues, e.g., who is dominant in a particular situation. This may reflect age differences, gender, social status or other ways of determining dominance.
- Look for context. In what settings does the respondent claim X took place or could take place? Does the response change by context? For example, girls may feel it is expected and "right" for boys to rape a girl who walks alone at night, but not during the day. If data on a single topic has been gathered in different ways, examine the different results. Do they agree, disagree? What could account for the disagreement?
- When interpretations *are* under way, check these with the consultant group of adolescents who are associated with the project. Ask them if the interpretation seems correct. Listen to their views.

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READER EVALUATION FORM

COMING OF AGE: FROM FACTS TO ACTION FOR ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH

Name: _____

Organization: _____

Address: _____

Telephone: _____ Facsimile: _____

E-Mail: _____

What did you think of the Guide?

Have you or do you have any plans to use it (to carry out an analysis of adolescent sexual and reproductive health)? Please describe.

How could the Guide be improved? Please specify.

Content

Structure

Layout

Please provide names and contact information of individuals and/or organizations for whom the Guide could be useful.

Any other comments? Please write your comments on the other side of this sheet.



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