The Impact of the Cordillera Administrative Region IEC Program on the Reproductive Health Knowledge, Attitudes and Behavior of Single Adolescents

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ABSTRACT

Sinasabing ang panahon ng pagbibinata at pagdadalaga ay isang napakahalagang panahon sa buhay ng isang tao bago niya marating ang antas ng kaganapan bilang isang indibidwal. Kung gayon, ang kabataan ngayon ay produkto ng mga kaalaman at karunungang nakuha nila sa mga unang taon ng kanilang kabataan, gayundin ng proseso ng sosyalisasyon na kanilang kinaharap. Ang sosyalisasyon na ito'y nagmula sa mga pangunahing ahente tulad ng pamilya, paaralan, kaibigan at "mass media.

Sa papel na ito, tinatalakay ang kahalagahan na mataya ang kaugnayan at bisa ng kasalukuyang programa ng pamahalaan para sa pag-unlad ng mga kabataan. Partikular, binigyan ng pokus ang rehiyon ng CAR (Cordillera Autonomous Region) at ang programang "Reproductive Health, Information, Education ang Communication" na nagsimula noong 1997.

Bunsod ito ng pangangailangan ng suporta ng rehiyon sa kampanya para sa "reproductive health" at "safe motherhood".

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OVERVIEW OF YOUTH CONCERNS

The youth (15-24 years) is a stage in the life cycle of a human being which is most vulnerable to the influences of socializing agents. Although modern psychologists underscore the importance of early childhood **socialization** in the later development of the human personality (Freud, 1939), social psychologists maintain that the self and therefore, personality is a **social product** (Cooley, 1902; Mead, 1934). Social psychologists like Piaget (1969), basing his theory of cognitive development on his experiments with children, asserts that an individual passes through stages of cognitive development as one matures. He maintains that such cognitive development is achieved through interaction with the environment. Piaget further asserts that the content of what is learned at each stage of the development process depends largely on culture often defined as a people's way of life. Adolescence is the last stage before maturity. According to Piaget, it is at this stage that individuals are able to achieve formal abstract thought, can think in terms of theories and hypotheses, can manipulate concepts such as those of mathematics or morality, and can think about personal goals and even ideal social conditions - - a capacity that is often expressed in the idealism of the youth.

Thus the characteristics of the youth today largely reflect their learnings from early childhood and youth socialization processes which they received from socializing agencies first and foremost of which is the family, and those from the school, the peer group, and mass media. These social institutions exist in concrete socio-economic (e.g. social class), political (e.g. form of government), and demographic structures which affect their roles as socializing agents.

A well-adjusted, responsible and well-educated youth is the goal of any society since the roles they play as adults of the next generation will determine the development of that society. Yet, many erroneously conclude that these socializing agents are solely responsible for what the youth are today. Indeed, the major decisions that adolescents take regarding career and roles in life are subject to two levels of influences: (1) the macro structural environment as conditioned by the socio-economic and demographic conditions, which in turn, is a manifestation of the major decisions in the local political economy, and (2) the influences of the social institutions most importantly those coming from the home and the school (Raymundo, et.al, 1999). In the face of these influences, adolescents manifest their responses, also in two levels: (1) internalized

values, attitudes and beliefs about himself/herself and his/her role in society, and (2) behavioral manifestations in more adult roles and functions such as school performance, participation in the work market, and sexual and reproductive behavior.

Citing a few statistics on Philippine adolescents can illustrate the youth-specific social concerns of our country today. Some of them are:

- 20% of the 1995 Philippine population are aged 15-24 years, or 13.7 million adolescents. An estimated 10 million of adolescents are below the poverty line (Raymundo, et.al., ibid) or 73% of the youth are poor.
- Of the initial cohort of first graders, only 42% graduate from high school and 16.7% from college. (Raymundo, et.al., 1994).
- Adolescents are 1.5 times more mobile than the general population, often moving to cities and urban areas in search of jobs or economic opportunities (YAFS II, 1994).
- Female adolescents are the most mobile segment of the population. Fifty percent of female adolescents ever lived in an urban area in the 1980s when 36% of the population lived in urban areas (YAFS II, 1994).
- Over a third (24.9%) of total live births in 1994 are to women 15-24 years (Phil Health Statistics 1994, DOH/HIS).
- 37% of Philippine young men up to age 25 will have had sex with at least one other partner besides their wives, and a non-negligeable share will have paid for sex (Balk, et.al., 1994) thus exposing them to the risk of STD/HIV-AIDS.

These social concerns are likely to result from the way in which the youth are socialized and/or from the youth themselves as they respond to the stresses experienced from their environment. Hence the answer to the question: "Are the youth the **victims** or are they the **offenders**?" is important in order to assess the relevance and effectiveness of current government programs for the development of the youth.

THE REPRODUCTIVE HEALTH IEC PROGRAM OF THE CAR

The Reproductive Health (RH) Information, Education and Communication (IEC) Program in the Cordillera Autonomous Region (CAR)

in 1997 began to support the Region's goal of promoting reproductive health and safe motherhood. The IEC campaign aimed at increasing the awareness of, creating favorable attitudes towards, and improving behaviors on sex, sexuality and reproductive health. The target audiences of the IEC campaign were the married men and women aged 15-49, and the adolescent single girls and boys aged 15-24 living in 27 selected barangays in the provinces of Apayao, Kalinga and Ifugao.

The IEC activities were largely conducted by the Local Government Unit's (LGU) Reproductive Health Program under the technical supervision of the Department of Health, and in collaboration with the DILG, DECS and POPCOM local offices and workers. The IEC activities conducted and directed to the adolescent single girls and boys consisted of:

(1) Conduct of youth symposia on sexuality in public schools in coordination with local DECS workers;

(2) Audio-visual Van (AV) showings of films with RH-related messages in various schools of the CAR (e.g. "Ang Pamana ni Mai-Mai" a film on responsible sexuality for adolescents);

(3) Contracted DZRK, a local radio station based in Tabuk, Kalinga with one radio program "Ang Kabataan Ngayon" for the airing of adolescent problems and views on sex, sexuality and reproductive health;

(4) Conduct of PODEV Week activities such as jingle writing and extemporaneous speech contests on RH and other population-related issues among students at elementary and high school levels including the out-of-school youth;

(5) Mobilization of local theater youth groups for the dissemination of RH messages through local songs and the production of AV documentaries for adolescents

(6) Making available to the youth IEC print materials on sexuality, sexually transmitted diseases and HIV-AIDS.

These IEC activities were planned, managed and monitored by the Provincial, Municipal and Barangay IEC Teams over the period 1997 to 2000. A baseline survey was conducted in 1997 to assess the levels of knowledge, attitudes and behaviors on sex, sexuality, reproductive health and contraception among adolescent single girls and boys in the 27 intervention barangays of the CAR before the implementation of the RH

IEC Program, and a post baseline survey was conducted in 2000 for the purpose of determining the impacts, if any, of these IEC activities among the reproductive health knowledge, attitudes and behaviors of the youth. (For a detailed information on the impact evaluation, please refer to: Z.C. Zablan, "The 2000 IEC Impact Survey in Apayao, Kalinga and Ifugao Provinces, a Project Final Report", DRDF, Inc., Quezon City, December 2000 which was submitted to UNFPA/Makati).

OBJECTIVES OF THE PAPER

(1) To assess the impact of IEC activities on the knowledge of, attitudes towards and behavior on sex, sexuality and reproductive health particularly STD, HIV-AIDS and reproductive tract infections.

(2) To assess the nature and levels of exposure in Population Education (POPED) in schools and its effect on awareness of specific contraceptive methods.

(3) To describe the information network adolescents use to learn about sex

METHODOLOGY

The study adopted a non-experimental Pretest-Posttest Design which allows for the examination of KAP changes over time. The 1997 KAP Baseline survey results are compared with the 2000 KAP Postbaseline survey results.

Time

$$\underline{\qquad\qquad}$$

$$O_1 \quad x \quad O_2$$

The 1997 Baseline survey was conducted in 27 intervention barangays in Apayao, Kalinga and Ifugao which covered **all** of the target clientele of IEC intervention. The 2000 Post-baseline survey involved a 25 percent sample drawn from the masterlist of all the target clientele. The sampling design used was the simple random sample without replacement (SRSWOR) drawn from the masterlist. Thus, the sample drawn from each barangay was proportional to the size of its clientele. Out of the 1,256 adolescent single girls 15-24 listed and interviewed in the 1997 Baseline survey, 350 were drawn and interviewed in the 2000 post-baseline survey. And out of the 1,509 adolescent single boys 15-24 listed and interviewed

in the 1997 Baseline survey, 350 were drawn and interviewed in the 2000 Post-baseline survey.

The 2000 Post-baseline survey response rates for both the adolescent girls and boys were 100.0 percent.

The study made use of the survey as its main field instrument which was used during face to face interviews of respondents contacted in their homes. Other survey instruments used were in-depth interviews of health service providers and LGU officials and focus group discussion (FGD) guides used to elicit in-depth information on adolescent knowledge, views and behavior. Data used in the paper were mainly drawn from the survey. The reader is referred to the Project Final Report for the full discussion of the evaluation.

EVALUATION RESULTS

1. Knowledge and Attitudes Towards Sexuality and Sex

Table 1 presents the levels and trends in knowledge and attitudes towards sexuality and sex. Awareness of female body changes while growing up was held by at least 3 out of 4 female adolescents, and of male body changes by at least half of male adolescents. Significant increases were observed in awareness in 5 out of 6 female body changes, and in 7 out of 8 male body changes over the 1997-2000 period indicating the probable positive impact of IEC messages on these topics among adolescents.

Knowledge of when in the menstrual cycle ovulation is most likely to occur (i.e. 2 weeks before menstruation) was generally low. In 1997, significantly more adolescent girls (37.8%) than adolescent boys (30.8%) knew when in the menstrual cycle ovulation is most likely to occur. By 2000, knowledge of ovulation among adolescent boys significantly increased to 37.1 percent, while that for adolescent girls increased insignificantly to only 40.9 percent. This implies that the IEC Program was more successful in increasing the awareness of ovulation among adolescent boys than among adolescent girls, such that by 2000, adolescent girls and boys had comparable knowledge of ovulation, but such levels of awareness are considered low.

There was no significant improvement in the feeling of having enough knowledge on sex over the 1997-2000 period among adolescent girls (29.4% in 1997 and 30.3% in 2000) but this feeling of having enough knowledge on sex significantly decreased (from 35.4% to 28.3%) among

Table 1: Levels and Trends in Knowledge and Attitudes Towards Selected Sexuality and Sex Indicators Among Adolescent Single Females and Males 15-24, 1997-2000, CAR IEC Project, June 2000 (% of Total Respondents)

Sexuality Indicator	Female		Male	
	1997	2000	1997	2000
Ncase	*1256*	*350*	*1509*	*350*
1. Knowledge of *female* body changes				
a. Enlargement of the breasts	85.9	96.3	NAP	NAP
b. Hairy growth in arms and legs	39.1	30.3	NAP	NAP
c. Hairy growth around vagina	61.7	80.3	NAP	NAP
d. Pimples on face, neck, back	50.1	73.4	NAP	NAP
e. Menarche	71.7	72.3	NAP	NAP
f. Increase desire for sex	23.6	26.9	NAP	NAP
2. Knowledge of *male* body changes				
a. Enlargement of the penis & scrotum	NAP	NAP	57.2	68.6
b. Voice change	NAP	NAP	73.2	90.0
c. Hairy growth in scrotum, around the anus and penis	NAP	NAP	54.5	75.7
d. Pimples on face, neck, chest & back	NAP	NAP	47.9	61.4
e. Hairy growth on body, legs & face	NAP	NAP	39.5	54.0
f. Enlargement & growth of muscle	NAP	NAP	48.4	56.6
g. Sex organ begin to produce sperm	NAP	NAP	39.4	42.6
h. Having "wet dreams"	NAP	NAP	32.8	42.6
2. When in menstrual cycle pregnancy is most likely to occur? (C10)				
% "2 weeks before next menses"	37.8	40.9	30.8	37.1
3. Do you feel you have enough knowledge on sex? (C12)				
% Yes	29.4	30.3	35.4	28.3
4. % Agreeing to: (C11b-e)				
a. It is alright for me to feel sexually attracted to another person	50.2	58.9	51.0	62.0
b. It is a wife's duty to have sex with husband whenever he wants it	43.5	37.4	41.7	42.9
c. It is alright for man to have extramarital sex	8.9	4.9	19.5	9.1
d. It is alright for a woman to have extramarital sex	4.8	5.1	10.9	4.0

Note: NAP means Not Applicable

adolescent boys. This feeling of inadequacy among boys may have arisen from more awareness of the intricacies of human anatomy and physiology and of the socio-psychological aspects of sexuality arising from exposure to IEC messages. More IEC exposure and better IEC materials are needed for adolescent boys to satisfy their need for information. The absence of change in feelings of sexual adequacy among adolescent girls was supported by a similar absence of change in their levels of knowledge of ovulation and pregnancy risks both of which appear to need improvement. Nevertheless, 1 out of 7 adolescents still felt they had no enough knowledge on sex.

In 1997, half of adolescent girls and boys thought it was alright to be attracted to another person and this level significantly increased to around

6 out of 10 adolescent girls and boys by 2000. There was a significant decline in the proportion of adolescent girls agreeing that "it is a wife's duty to have sex with husband whenever he wants it" but there was no significant change in this attitude among adolescent boys indicating that the increasing trend in attitudes toward sexual equality occurred among girls but not among boys. IEC messages on sexual equality need greater emphasis for the boys. Still, around 4 out of 10 adolescents accept sexual subordination of the wife by the husband.

Over the 1997-2000 period, there was a trend towards decreasing approval of extramarital sex among adolescent girls and boys, and this negative attitude was equally held for a man and a woman, especially among the boys. The IEC messages appear to have been successful in promoting disapproval of extramarital sex and in shattering the sexual double standard among adolescents.

2. Attitudes Towards Pre-marital Sex, Virginity and Abortion

Data in Table 2 show that there was greater disapproval of premarital sex among adolescent girls (87.4%) than among adolescent boys (76.0%) in 2000.

Virginity for a woman before she gets married was considered important to significantly more adolescent girls (100.0%) and boys (96.9%) than virginity for a man before he gets married to adolescent girls (83.1%) and boys (75.4%). This finding indicates that non-negligeable proportions of both adolescent girls (16.9%) and boys (21.5%) still believed in the sexual double standard where virginity before marriage is expected more from a woman than from a man.

Only a few adolescent girls (6.6%) and boys (4.6%) unconditionally approved of a woman having an abortion. However, 4 out of 10 adolescent girls (43.4%) and boys (39.4%) approved of abortion when the life of the mother is in danger, and around 10 percent approved if the child may be deformed or pregnancy is a result of incest or rape. Only a few (5% or less) approved of abortion for reasons of economic stability of the couple or of the marital status of the woman or the father of the child.

3. Experience of Pre-marital Sex and Contraceptive Use

Table 3 presents trends in premarital sex experience and contraceptive use among single adolescent girls and boys over the 1997-2000 period. The results show that the level of premarital sex experience among

Table 2: Levels in Attitudes Towards Premarital Sex, Virginity and Abortion Among Adolescent Single Females and Males 15-24, 2000, CAR IEC Project, June 2000 (% of Total Respondents)

Indicator *Ncase*	Female *350*	Male *350*
1. Approve of woman having sexual intercourse before marriage? (C13)		
Approve	6.9	14.3
Disapprove	87.4	76.0
Depends	6.3	9.7
2. How important is virginity for a woman/for a man until he/she gets married? (C27)		
For a woman	100.0	96.9
For a man	83.1	75.4
3. Approve of a woman having an abortion? (C28)		
% "yes", unconditionally	6.6	4.6
Approve of abortion if.....		
a. Woman is single	2.9	3.7
b. Woman and man are both too young	3.7	3.7
c. Life of mother is endangered	43.4	39.4
d. Child may be deformed	15.1	13.4
e. Pregnancy is a result of rape	8.6	7.7
f. Pregnancy is a result of incest	10.3	8.0
g. Father of child is married to another	5.1	3.7
h. Father of child is not husband but single	4.9	2.6
i. Couple are married but unable to afford another child	4.3	3.1
j. Couple is married but does not want anymore children	3.7	4.0

adolescent girls was kept at 2 percent over the 1997-2000 period, while that of adolescent boys declined but insignificantly from 12.4 percent in 1996 to 9.7 percent in 2000.

Use of contraception during the last premarital sex episode increased slightly among adolescent girls over the 1997-2000 period from 0.4 percent to 2.0 percent, while contraceptive use among adolescent boys drastically declined from 9.6 percent to 0.6 percent. The IEC Program appears to have effected a slight favorable behavioral change among adolescent girls in terms of more protection from pregnancy while among adolescent boys, the IEC Program was very unsuccessful in changing their contraceptive behavior.

The most important reason adolescents gave for not using contraception was that they "did not expect to have sex" which is very characteristic of the risk-taking behavior of adolescents. To adolescents, use of contraception removes the aura of spontaneity and romance and reduces sex to a calculated behavior as gleaned from "wanted to use but could

Table 3: Levels and Trends in Pre-Marital Sex and Contraceptive Use Among Adolescent Single Females and Males 15-24, 1997-2000, CAR IEC Project, June 2000 (% of Total Respondents)

Indicator	Female		Male	
	1997	2000	1997	2000
Ncase	*1256*	*350*	*1509*	*350*
1. Ever had Pre-marital sex (C15)				
% "Yes"	2.2	2.3	12.4	9.7
2. Use of FP methods during last episode of PMS? (C16) *Asked of those with PMS experience only*				
% "Yes"	0.4	2.0	9.6	0.6
3. Reason for not using FP during last PMS (C17)				
a. Did not expect to have sex	nd	0.9	nd	6.8
b. Did not know where to get them	nd	0.6	nd	0.3
c. Partner objected/planned to marry each other	nd	0.0	nd	1.7
d. Wanted to use but could not under the circumstances	nd	0.5	nd	0.3
e. Sex is not fun with contraception	nd	0.3	nd	0.3
f. Other	nd	0.0	nd	0.3
4. Should government clinics provide contraceptive services to single people? (C26)				
% "Yes"	nd	47.7	nd	63.4

not under the circumstances". Among the boys, the partner's objection, or their plan to marry the sex partner was the second most important reason for not using contraception. The sexual stereotype that protected sex is only for prostitutes and the lack of negative sanctions on pre-marital pregnancy as a means to precipitate marriage may be the reasons for non-use of contraception. The adolescent's lack of knowledge of where to get contraceptives and the reasons that sex is not fun with contraceptives were reasons given by only a few adolescents.

Almost half of adolescent girls (47.7%) and almost two-thirds of adolescent boys (63.4%) thought that government clinics should provide contraceptive services to single young people like themselves. Although the current RH policy has expanded the coverage of FP services to include the unmarried young people, adolescents reported (in the focus group discussions of the study) that FP service providers were reluctant in providing contraceptives to the young and unmarrieds.

4. Knowledge of Sexually Transmitted Diseases (STD) and HIV-AIDS

Table 4 shows significant increases in the knowledge of STD among adolescent girls and boys over the 1997-2000 period. In 1997, 2 out of 3 adolescent girls and boys knew about STD while in 2000, 4 out of 5

knew about STD. Half of the adolescents in 1997 and 2000 knew of STD as AIDS, but the recognition of STD as syphillis was held by over a third of adolescents in 1997 which grew to around half by 2000. Recognition of STD as gonorrhea started low (14-20%) in 1997 and grew to around a third by 2000. This indicates that the IEC program was more successful in increasing adolescent recognition of STD as syphillis and gonorrhea but did not increase their recognition of it as AIDS.

The IEC Program was also effective in increasing adolescent knowledge of the symptoms of STD. Significant increases in levels of recognition included vaginal itching, feeling of weakness, painful urination and sores in the sex organs for adolescent girls covering 25 to 40 percent among them. Among adolescent boys, knowledge of STD symptoms over the 1997-2000 significantly increased for all STD symptoms the highest of which were painful urination, penile discharge and feeling of weakness involving 40 to 50 percent of the boys.

Awareness of the modes of STD transmission over the 1997-2000 likewise increased significantly among adolescent girls and boys. These modes included: sex with prostitutes, sexual intercourse, sex with more than one partner, blood transfusion and infected needles/syringes. Adolescent girl's knowledge tended to be higher than that of adolescent boys indicating that girls profited more from the IEC Program than boys. However, no change was observed in the recognition of sex with same sex as a mode of STD transmission among boys and girls.

There were significant increases in levels of knowledge of what one with STD should do. These included: consultation to a doctor, visit to an STD clinic and sexual abstinence. The IEC Program materials appeared to have created this awareness for 22 to 77 percent of adolescent girls and 25 to 71 percent of adolescent boys.

Knowledge of how to prevent getting sick of STD increased significantly over the 1997-2000 period. This included avoidance of sex with prostitutes, maintenance of one sex partner and use of the condom among adolescent girls and boys, and limitation of sex with a "clean" partner among adolescent boys only. Again, adolescent girls profited more from the IEC Program than adolescent boys in the sense that the girls' levels of awareness were higher than those of the boys'. It is worth noting that far fewer adolescents recognized the use of condoms in the prevention of STD than the selection of sex partner as a means of STD prevention which indicates their preference for social restraint over technological dependence.

Table 4: Levels and Trends in Knowledge of STD Among Adolescent Single Females and Males 15-24 by Province, 1997-2000 CAR IEC Project, June 2000 (% of total Adolescent Single Females 15-24)

STD Indicator	Female		Male	
	1997	2000	1997	2000
Ncase	*1256*	*350*	*1509*	*350*
1. Know about diseases associated with sex or STD? (D5)				
% "yes"	65.7	82.0	66.1	78.0
2. Local names given to STD (D6)				
a. AIDS	54.5	59.7	52.6	44.9
b. Syphillis	35.7	54.3	35.6	47.4
c. Gonorrhea	20.0	34.9	13.5	30.3
d. Herpes	15.9	17.4	12.0	18.0
e. Tulo	9.8	13.4	11.7	25.7
3. Symptoms of STD known (D17)				
Vaginal itching	26.4	43.1	-	-
Excessive vaginal/penile discharge	24.6	24.9	22.3	38.0
Feeling of weakness	32.9	37.1	28.2	38.0
Painful urination	29.2	40.9	35.8	50.6
Sores in sex organ	20.9	22.3	23.6	26.3
Abdominal pain	11.0	24.0	11.7	16.3
Body sores	10.8	12.3	7.9	16.6
4. How can one acquire STD (D8)				
Sexual intercourse	34.4	42.3	24.4	30.0
Sex with prostitutes	37.5	64.3	44.4	58.9
Sex with >1 partner	31.7	48.6	32.2	45.4
Sex with same sex	13.1	14.9	13.5	15.4
Kissing	14.2	12.0	10.4	8.6
Public toilet bowls	16.4	17.7	12.9	11.1
Blood transfusion	16.4	40.3	17.2	33.4
Injections/needles/syringes	20.8	24.6	15.1	19.7
Use of unclear water to wash	6.8	9.1	8.3	8.9
5. What a person should do hen he/she finds out he/she has STD (D9)				
Consult a doctor	57.8	76.9	58.3	70.6
Visit a STD clinic	18.3	41.4	19.2	33.1
Avoid sexual intercourse	15.6	22.0	14.2	24.9
Take antibiotic	9.1	7.1	10.7	9.4
Take a rest	5.8	4.3	5.6	6.0
Take herbal concoctions	3.4	3.4	3.7	3.1
Consult a hilot	4.5	2.9	4.8	3.1
Do nothing	0.7	0.0	0.0	0.3
6. How one could avoid getting STD (D10)				
Avoid sex with prostitutes	45.2	71.1	48.4	59.7
Maintain one sex partner	36.0	56.9	30.8	48.9
Avoid sex with same sex	23.9	20.0	18.2	18.9
Use a condom	13.8	26.0	15.4	28.0
Avoid possible source of infection	23.6	24.6	23.4	20.0
Limit sex with a "clean" partner	10.6	12.6	12.2	17.7
Take antibiotics before sexual contact	7.5	4.3	7.8	2.9

Table 5 shows significant increases in the knowledge of HIV-AIDS among adolescents over the 1997-2000 period. However, adolescent boys appeared to have learned more about HIV-AIDS from the IEC Program than adolescent girls over the 1997-2000 period although modest increases in knowledge were also shown by adolescent girls.

Table 5: Levels and Trends in Knowledge of HIV-AIDS and on Diseases Acquired Through Sex, Among Adolescent Single Females and Males 15-24, 1997-2000 CAR IEC Project, June 2000 (% of total respondents)

HIV-AIDS Indicator	Female		Male	
	1997	2000	1997	2000
Ncase	*1256*	*350*	*1509*	*350*
1. Ever heard of disease AIDS (D11)				
% "yes"	79.8	91.4	73.7	87.1
2. How you think AIDS is acquired? (D12)				
Sex with prostitutes	59.6	72.9	53.4	62.0
Sex with >1 partner	44.9	57.7	40.8	55.7
Sex with same sex	20.7	21.4	16.5	21.4
Kissing	17.8	18.9	15.3	12.6
Public toilet bowls	22.8	20.0	17.8	15.1
Blood transfusions	39.0	55.4	35.7	44.6
Injection	21.4	35.4	19.7	24.6
Infected needles	17.8	34.6	20.0	29.7
Sauna/massage parlor	7.4	6.0	9.2	9.1
Contact with infected belongings of Person with AIDS	23.7	36.9	22.1	24.9
3. Who are likely to get AIDS? (D13)				
Prostitutes	58.0	73.4	54.7	65.4
Sex with prostitutes	32.4	51.4	36.6	39.7
Those who have blood transfusion	22.8	46.3	26.0	33.7
Babies with HIV+ mothers	16.4	34.6	12.0	0.0
Homosexuals	18.9	30.0	18.1	21.4
Drug users	26.8	32.9	26.1	38.3
Partners of OFWs	17.7	22.6	13.3	23.7
Those with >1 partners	34.4	44.3	26.1	40.9
No one	1.4	0.9	0.6	0.3
4. Is AIDS curable? (D14)				
% "yes"	32.0	7.7	27.8	7.4

Significant increases over the 1997-2000 period in the recognized HIV-AIDS modes of transmission were observed among adolescent girls and boys. The modes of transmission recognized for STDs were similar to those for HIV-AIDS but their levels and rates of increase were higher for

HIV-AIDS than for STDs perhaps in view of the greater seriousness of HIV-AIDS than of STDs. It is also likely that IEC materials for HIV-AIDS were more instructive, interesting and impressive than those of STDs.

Recognition of the likelihood of contracting HIV-AIDS for all risk groups significantly increased over the 1997-2000 period among adolescent girls. However, among adolescent boys, significant increases in the recognition of contracting HIV-AIDS among risk groups were limited only to prostitutes, blood transfusions, drug users, OFW partners and multiple sex partners. The levels of risk recognition among adolescent boys were lower than among adolescent girls indicating the limited impact of IEC materials and education approaches on HIV-AIDS among adolescent boys.

The misconception that AIDS is curable was held by around 3 out of 10 adolescent girls and boys in 1997. This significantly declined to around 7 percent in 2000 indicating the effectiveness of the IEC Program in shattering this misconception.

5. Experience of Reproductive Tract Infections (RTI)

Table 6 Panel A shows that almost all (99.1%) of adolescent girls experienced RTI or reproductive malfunctions in 2000. These consisted of dysmenorrhea (or painful menstruation), irregular menses and painful urination. Excessive vaginal discharge was experienced by far fewer adolescent girls. Over the 1997-2000 period, a significant decline in excessive vaginal discharge was reported. Although painful urination was likewise on a decline, this was not statistically significant. Only 20.6 percent of adolescent girls ever consulted a health personnel about RTI or reproductive malfunctions in 1997. This level declined to about half (11.4%) by 2000. It would appear that menstrual problems were not being consulted to health personnel, and the significant decline in medical consultation over the 1997-2000 period was due mainly to significant reduction in vaginal discharge and less importantly to painful urination. The health personnel most often consulted about RTI/reproductive malfunctions were the general practitioner (6.4%), the OB-Gyne (2.0), the hilot (1.7%) and the midwife (1.4%).

Table 6 Panel B shows that only 36.6 percent of adolescent boys ever experienced RTI/reproductive malfunctions in 2000. These consisted of painful urination, infection from circumcision, penile discharge, itching in the genital area, low sperm count and delayed or premature ejaculation. Significant declines were reported on painful urination and penile discharge symptoms experienced over the 1997-2000 period indicating a probable reduction in exposure to RTI risks as a result of greater RTI awareness.

However, there was also a drastic reduction in consultation to a health personnel about them, from 13.3 percent in 1997 to 4.3 percent in 2000. The general practitioner and the barangay health worker were the health personnel most likely consulted about these RTI symptoms experienced. It would appear that while adolescent boys were successful in reducing their exposure to RTI risks and therefore their experience of RTI/reproductive malfunctions, they were not quite vigilant in seeking medical intervention for these symptoms experienced. Thus, the IEC Program needs to put more stress on the importance of early medical intervention for RTI.

SOURCES OF INFLUENCE

1. Population Education (POPED) in School

Table 7 shows that 4 out of 5 (80.6%) adolescent girls were exposed to POPED in school compared to only more than half (56.3%) among adolescent boys in 2000. Most of adolescents who were exposed to POPED in school claimed that this was integrated in their regular school subjects. Invariably, 8 out of 10 adolescent girls and 5 out of 10 boys were exposed to topics on the female or male reproductive system, and 5 to 7 out of 10 to family planning methods and STD. The broader aspects of POPED, particularly the relationship among population growth, resources and environment as well as the effects of family size on family wellbeing were reportedly given to only 4 out of 10 adolescent boys and to 6 out 10 adolescent girls.

Of the family planning methods available in the country, 7 out of 10 adolescent girls and 4 to 6 out of 10 adolescent boys reported having learned about the pills, condom and IUD; and 4 to 5 out of 10 adolescent girls and 3 to 4 out of 10 adolescent boys reported having learned about the injectable, female sterilization, male sterilization and calendar rhythm methods. Fewer adolescents reported having learned about Lactational Amenorrhea Method, withdrawal and breastfeeding.

The 69.4 percent adolescent girls who were taught FP methods in school reported that 51.4 percent received this information while they were 1st to 3rd year high school. The 48.6 percent adolescent boys who were taught FP methods in school reported that 42.3 percent received this information while they were 1st to 4th year high school.

The findings indicate the lower exposure of adolescent boys than girls to POPED and to instructions about the reproductive system and FP methods, and to a significant decline in FP method instruction over the 1997-2000 period.

Table 6: Levels and Trends in Reproductive Tract Infections/ Malfunctions Among Adolescent Single Females and Males 15-24, 1997-2000 CAR IEC Project, June 2000 (% of Total Respondents)

RTI Indicator	Female	
	1997	2000
Panel A. Females *Ncase*	*1256*	*350*
1. RTI/Malfunctions experienced (D1)		
a. Painful urination	22.8	18.0
b. Excessive vaginal discharge	14.5	6.4
c. Dysmenorrhea	nd	56.9
d. Irregular menstrual period	nd	23.7
e. Painful intercourse (among those with PMS.)	nd	0.6
2. Ever consulted a health personnel? (D2)		
Yes	20.6	11.4
No	nd	87.7
No sign/symptom experienced	nd	0.9
3. Which health personnel did you consult? (D3)		
OB-Gyne	nd	2.0
General Practitioner	nd	6.4
Hilot	nd	1.7
Herbolario	nd	0.6
Nurse	nd	0.3
Midwife	nd	1.4
RTI Indicator	**Male**	
	1997	2000
Panel B. Males *Ncase*	*1509*	*350*
1. RTI/Malfunctions experienced (D1)		
a. Painful urination	27.6	18.0
b. Low sperm count	nd	2.0
c. Infection from circumcision	nd	3.7
d. Itching in the genital area	nd	2.6
e. Penile discharge	14.7	3.1
f. Genital warts/ulcers	nd	0.6
g. Impotence	nd	0.0
h. Delayed/premature ejaculation	nd	1.2
2. Ever consulted a health personnel? (D2)		
Yes	13.3	4.3
No	nd	32.3
No sign/symptom experienced	nd	63.4
3. Which health personnel did you consult? (D3)		
Urologist	nd	0.0
General Practitioner	nd	3.7
Hilot	nd	0.0
Herbolario	nd	0.0
Barangay Health Worker	nd	0.6

Table 7: Levels and Trends in Exposure to POPED in School, Subjects Offered, and FP methods were taught Among Adolescent Single Females and Males 15-24, 1997-2000 CAR IEC Project, June 2000 (% of Total Respondents)

POPED Exposure	Female		Male	
	1997	2000	1997	2000
1. Ever had POPED in School? (C18)				
% "yes"	nd	80.0	nd	56.9
2. How was it offered? (C19)				
a. Special subject	nd	10.3	nd	8.6
b. Part of the regular subject	nd	70.3	nd	47.7
c. No POPED exposure	nd	19.4	nd	43.7
3. What topics were offered in school? (C20)				
a. Female reproductive system	nd	76.9	nd	49.1
b. FP methods	58.2	69.4	55.7	48.6
c. STD	nd	66.3	nd	45.4
d. Population and resources	nd	65.1	nd	40.6
e. Effects of family size on wellbeing	nd	64.3	nd	40.9
4. What FP methods were taught? (C22) (% of those who were taught FP methods)				
a. Pills	64.7	67.7	nd	56.6
b. Condom	nd	61.1	nd	50.3
c. IUD	nd	67.1	nd	41.1
d. Injectable	nd	40.3	nd	28.3
e. Ligation	nd	52.6	nd	35.7
f. Vasectomy	nd	36.9	nd	34.6
g. Calendar Rhythm	14.5	35.7	nd	24.6
h. Lactational Amenorrhea Method	nd	9.4	nd	4.0
i. Withdrawal	nd	26.9	nd	26.3
j. Breastfeeding	nd	19.4	nd	10.6
5. Level of schooling when first received FP instruction (C21)				
a. Elementary (Grade 2-6)	nd	4.5	nd	3.9
b. First year high school	nd	13.7	nd	6.3
c. Second year high school	nd	20.7	nd	16.5
d. third year high school	nd	17.0	nd	11.3
e. Fourth year high school	nd	6.9	nd	8.2
f. College 1-3	nd	6.0	nd	2.6
g. Never taught FP	nd	31.3	nd	51.0

*nd means "no data".

2. Institutional Influences on Knowledge about Sex

Table 8 shows that around half of adolescent girls claimed their teachers, mothers, doctor/nurse/midwife and friends of the same sex were the persons most helpful in what they knew about sex. In contrast, over half of adolescent boys claimed friends of the same sex as their most important source of information on sex with one-fifth to a third of them claiming the doctor/nurse/midwife, teacher, mother and father as their sources. It is worth noting that adolescents did not find religious ministers/ priests as important sources of information about sex. The importance of doctors/nurse/midwives as sources of information about sex may be traced to the IEC Program activities directed at adolescents.

Books and FP materials were the two most important sources of information about sex reported by adolescent girls and boys, although

Table 8: Levels of Exposure to Other Sources About Sex Among Adolescent Single Females and Males by Province, 2000 Car, June 2000 (% of Total Respondents)

Other sources of exposure	Female	Male
Ncase	*350*	*350*
1. Person(s) most helpful in what R knows about sex (C23)		
a. Teacher	50.0	26.9
b. Mother	47.4	21.7
c. Doctor/Nurse/Midwife	45.7	33.4
d. Friends (same sex)	46.6	52.9
e. Father	18.9	19.7
f. Sister	19.7	6.3
g. Guidance counsellor	16.7	8.6
h. Older relatives	14.6	12.9
i. Boyfriend	10.3	1.7
j. Friends (opposite sex)	9.1	10.0
k. Brother	5.1	12.0
l. Priest/Minister	4.3	2.3
m. Peer counsellor	3.1	5.4
2. Materials considered as important sources of information about sex (C24)		
a. Books	53.7	37.1
b. FP materials	46.3	36.0
c. Magazines	31.7	23.5
d. TV	30.6	30.9
e. Radio	28.6	25.1
f. Comics	25.4	26.0
g. Movies	19.4	28.6
h. Newspapers	17.7	10.9
i. School charts/films	13.4	12.3
3. Person(s) most likely consulted for instruction/information about sex (C25)		
A Female		
a. Doctor/nurse/midwife	45.1	NAP
b. Friends/married friends/those with experience	25.7	NAP
c. Mother/Parents/Teacher	14.3	NAP
d. Books	8.6	NAP
e. Religious leaders	2.5	NAP
f. No need/NR	3.7	NAP
B. Male		
a. Doctor/nurse/midwife	NAP	29.7
b. Health worker, FP health personnel	NAP	9.4
c. Teacher/guidance counsellor	NAP	5.1
d. Parents, relatives	NAP	13.1
e. Friends (male & female)	NAP	28.9
f. FP materials	NAP	2.9
g. Comics. Magazines, radio, TV	NAP	4.6
h. Minister, priest	NAP	0.6
i. No need/NR	NAP	5.7

significantly more girls (46-54%) than boys (36-37%) cited these sources. Magazines, TV, radio, comics and movies ranked second in the order of importance as sex information sources for both adolescent girls and boys.

The persons adolescents most likely consulted for instruction and information about sex were the doctors/nurses/midwives and friends indicating the preference of adolescents to consult those with knowledge about and experience on sex. Parents, teachers and relatives were second in the order of preference for consultation on this matter, and hardly any would consult a priest/minister.

The findings indicate that adolescent girls were more likely to learn about sex from the home, the school and from health workers, while adolescent boys were more likely to rely on peers and health workers. Reliance on mass media sources were of second order of importance as sex information sources. This indicates the need for the IEC Program to make more use of friends/peers of adolescent boys as sources of information on sex in as much as the boys have higher premarital sex activity than girls.

3. IEC Program Inputs

Mass media exposure is an important aspect of life of the adolescents. Data in Table 9, items 1-7 show that during the last month, around 9 out of 10 adolescent girls and boys listened to the radio; 7 out of 10 watched TV or home video; 8 out 10 adolescent girls read newspapers/ comics/magazines/pocketbooks while 6 out 10 adolescent boys did the same; over half of adolescent girls and boys watched movies; and only 1 out 6 adolescent girls and 3 out 10 adolescent boys watched x-rated. It would seem that adolescent girls and boys were similar in their exposure to radio, TV, and movies. However, significantly more adolescent girls than boys read newspapers/comics/pocketbooks, while significantly more adolescent boys than girls watch x-rated movies.

Exposure to IEC Program materials and participation in IEC Program activities differed in a few aspects. Data in Table 9, items 8-14 show that adolescent girls were more exposed to IEC Program inputs from radio than adolescent boys, while both were equally exposed to video materials shown by the audio visual van (AV). Three out of 10 adolescent girls and boys viewed "Mai-Mai", an AV van film on adolescent sexuality, and 3 out of 10 adolescent girls viewed "Hamon sa Pagbabago", a film on male involvement but more of the adolescent boys viewed the film.

Participation rates in IEC Program activities were similar among adolescent girls and boys. Symposia on adolescent sexuality in public schools were activities participated in by girls (26.9%) and boys (25.6%) the most, with 1 out of 6 adolescent girls and 1 out of 8 adolescent boys participated in FP Day activities, and only 8 out of 10 adolescent girls and boys participated in POPDEV Week activities.

Of the IEC Program inputs, messages from radio had the largest coverage, video materials second, and adolescent symposia third largest in coverage. None of these IEC activities, however, covered more than half of the adolescent target audience of the IEC program.

Table 9: Levels of Exposure to IEC Project Inputs Among Single Females and Males, 2000 CAR, June 2000 (% of total Single Females/Males)

IEC Input		Female	Male
1. During the last month, how often did you... Watch TV? (B11a)			
Regularly		23.1	24.9
Occasionally		51.4	47.1
Never		25.4	28.0
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
2. Listen to the radio? (B11b)			
Regularly		31.1	23.4
Occasionally		60.9	63.7
Never		8.0	12.9
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
3. Read newspaper? (B11c)			
Regularly		17.1	8.3
Occasionally		63.1	52.6
Never		19.7	39.1
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
4. Read comics/magazine/pocketbooks? (B11d)			
Regularly		17.1	5.4
Occasionally		63.1	54.6
Never		19.7	40.0
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
5. Watch movies? (B11e)			
Regularly		6.3	6.0
Occasionally		46.3	48.6
Never		47.4	45.4
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
6. Watch home video? (Beta, VHS) (B11)			
Regularly		9.4	15.1
Occasionally		47.7	58.0
Never		42.9	26.9
TOTAL	**%**	**100.0**	**100.0**

7. Watch X-rated films? (B11g)			
Regularly		7.4	2.6
Occasionally		8.9	29.7
Never		83.7	67.7
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
8. Since 1997, ever heard of IEC messages on radio on adolescent sexuality and family health? (B12a)			
Yes		48.9	30.6
No		51.1	69.4
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
9. Heard School-on-the-Air Program on RH radio? (B12b)			
Yes		29.7	21.4
No		70.3	78.6
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
10. Viewed video materials shown by AV van? (B12c)			
Yes		30.6	28.3
No		69.4	71.7
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
11. Ever viewed the following AV Van films? (B12ca-e)			
(a) Mulanay (Doctors to the Barrio/Abortion)			
Yes		18.6	3.4
No		12.0	24.9
Never viewed AV van film		69.4	71.7
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
(b) Mai-Mai (Adolescent sexuality)			
Yes		4.3	4.0
No		26.3	24.3
Never viewed AV van film		69.4	71.7
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
(c) Saan ka Pupunta (MCH-FP)			
Yes		5.1	12.6
No		25.4	15.7
Never viewed AV van film		69.4	71.7
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**
(d) Hamong sa Pagbabago (Male involvement)			
Yes		30.6	0.0
No		0.0	28.3
Never viewed AV van film		69.4	71.7
TOTAL	**%**	**100.0**	**100.0**
	N	**350**	**350**

(e) Baby Boom (MCH, FP-RH)		
Yes	1.4	3.7
No	29.1	24.6
Never viewed AV van film	69.4	71.7
TOTAL %	**100.0**	**100.0**
N	**350**	**350**
12. Participated in Symposia for adolescent sexuality in public schools? (B12d)		
Yes	26.9	25.7
No	63.1	74.3
TOTAL %	**100.0**	**100.0**
N	**350**	**350**
13. Participated in POPDEV Week Activities? (B12ea)		
Yes	**8.0**	**8.1**
1. Contest: slogan, singing, quiz bee	1.7	4.5
2. Seminars, mother's class	5.1	1.5
3. Drama, nutrition month, fun run, parade, games	1.1	2.6
Did not participate in any POPDEV Week activity	**92.0**	**91.9**
TOTAL %	**100.0**	**100.0**
N	**350**	**350**
14. Participated in FP Day Activities? (B12eb)		
Yes	**16.9**	**13.2**
1. Lectures, seminars for adolescents	7.4	9.1
2. Slogan contest, jingle writing	2.0	1.5
3. Nutrition class	2.0	0.0
4. Quiz bee	1.1	0.0
5. Parade	3.4	2.6
6. Tree planting	0.9	0.0
Did not participate in any FP Day Activity	**83.1**	**86.8**
TOTAL %	**100.0**	**100.0**
N	**350**	**350**

SYNTHESIS

The IEC inputs of the LGU/RH Program covered at most half of the adolescent girls and at most 31 percent of adolescent boys while the POPED Program in these barangays reached 56 to 81 percent of adolescent boys and girls, respectively. Knowledge about sex among adolescent girls came primarily from teachers and mothers and primarily from friends of the same sex for adolescent boys. Adolescent girls and boys likewise derived knowledge about sex from doctors/nurses/midwives or health workers of the RH Program. Books and FP materials were likewise cited as important sources of information about sex of adolescent girls and boys.

Knowledge of sexuality, sex and sexually transmitted diseases increased, and attitudes towards them became more favorable on account of the IEC program inputs, POPED activities and the influences of teachers, health workers, parents and relatives. Pre-marital sex behavior was maintained at a low level among adolescent girls and declined significantly among adolescent boys over the 1997-2000 period. Likewise, experience of reproductive tract infections/malfunctions among adolescent girls and boys significantly declined over the 1997-2000 period. However, consultation to a health personnel about RTI also declined significantly. It is possible that the IEC Program was successful in creating awareness of the nature of reproductive tract malfunctions among adolescent girls, 80 percent of whom complained about menstrual disorders. Thus they felt little need to consult a medical professional about these disorders. However, for one third of adolescent boys with RTI/malfunctions in 2000, only 4 percent consulted a health professional. It would appear that more RTI counseling and curative services are needed for adolescent boys in as much as they have demonstrated higher premarital sexual activities than adolescent girls, even if such activities have declined by 2000.

CONCLUSIONS

The RH IEC Program was successful in increasing the awareness of and in creating favorable attitudes towards sex, sexuality and the prevention of sexually transmitted diseases, as well as reduced the incidence of premarital sex and reproductive tract infections/malfunctions. It was not quite successful, however, in improving contraceptive practice and medical consultation for RTI, especially among adolescent boys. The modest impact of the RH IEC Program among adolescent boys may be traced to the high influence they derive from peers, an institution which

has until now not been given due consideration by government youth development programs. The home and the school are institutions that are often included in the planning and implementation of government youth programs, but the Church is often excluded in the planning and implementation of government sexuality and sex education programs. Considering the low levels of awareness, favorable attitudes and practice of reproductive health in the CAR, there is need to involve all stakeholders in the formulation of policies and in planning of local programs for the youth on sex, sexuality and reproduction.

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