

Knowledge about sexually transmitted diseases in rural and periurban communities of the Asaro Valley of Eastern Highlands Province: the health education component of an STD study

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SUMMARY

Community health education played a major role in a study of sexually transmitted diseases (STDs) and other reproductive tract infections which we conducted in rural and periurban communities of the Asaro Valley near Goroka in the Eastern Highlands Province of Papua New Guinea. We found that most women had little knowledge about STDs, which they often did not realize were sexually transmitted. Even major signs and symptoms were thought to be normal and many women had not sought treatment until irreversible damage was done. Knowledge of the complications of STDs, such as infertility and stillbirth, was also slight in these women. It is apparent that there is a desperate need for more reproductive health education at the community level. In developing our health education methods, we found that simple line drawings of male and female reproductive organs and of people with different signs of STDs proved useful. These were quick and easy to produce from readily available materials. It was important to separate men and women into different groups with educators of the same sex, and to create a very informal atmosphere, encouraging free-ranging discussion. Following health education and sensitive interviewing, almost all the women selected for the community-based study of the prevalence of reproductive tract infections consented to vaginal examination, even if they were asymptomatic. Additionally, many nonselected women requested examination.

Introduction

Previous studies in Papua New Guinea on sexually transmitted diseases (STDs) have suggested that the incidence of STDs, especially gonorrhoea and syphilis, is increasing (1,2) while chlamydial infections are also increasingly recognized (3-7). Since the introduction of the human immunodeficiency virus (HIV) into Papua New Guinea, HIV and AIDS (acquired immune deficiency syndrome) have now been diagnosed in almost all provinces of the country (8). A recent national study of sexual and reproductive behaviour conducted in rural communities indicated that levels of knowledge are low and that risky behaviours, including many sexual partners, forced sex and the sale of sex by women, are extremely

common (9). While there is variation in customary beliefs across the country, the reported sexual behaviour patterns were found to be similar.

We recently completed a community-based study of the prevalence of STDs and other reproductive tract infections among rural adults of reproductive age in the Asaro Valley of Eastern Highlands Province. Some of the laboratory results from this study are presented elsewhere in this issue and indicate alarmingly high levels of infection, with 25% of both women and men having chlamydial infections, and 45% of women suffering from trichomonal vaginitis (10). As informed consent was required for inclusion in this study, it was important that potential participants not only fully understood the study but also had

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knowledge and understanding of the biomedical model of STDs and the symptoms and consequences of STDs. An educational program was designed which had two main aims: firstly, to ensure that potential participants understood the reasons for the study and what their participation would involve; and secondly, to raise awareness about the transmission, treatment and prevention of STDs.

The following paper will attempt to describe the way in which the health education program was designed, developed and carried out. We have also included impressions that we developed about women's knowledge and perceptions of STDs, based on our experiences conducting the workshops, informal discussions with the people in the communities and individual interviews conducted as part of the STD study.

Development of the health education methods

For inclusion in the STD study a random selection process was used. However, all members of the village, whether selected or not, were encouraged to attend and participate in the education workshops.

Though no staff at the Goroka branch of the Papua New Guinea Institute of Medical Research (IMR) had a formal health education background, one member of the team (KH) was the professional health educator attached to the Division of Health, Eastern Highlands Province. She conducted training workshops for IMR staff in both teaching techniques and the development of visual aids for health education programs. The teaching techniques included lectures, group discussions, one-on-one health education, demonstrations and developing interviewing skills.

After the training workshops, we organized practice sessions in different community settings to assess the effectiveness of the different teaching methods and visual aids that had been produced. During these sessions there was ample opportunity to assess and decide which teaching methods were the most effective and which materials the most appropriate. Sessions were conducted at different times during the day to ascertain whether mornings, afternoons or evenings were

the best time to gather the appropriate audience together for STD health education.

Due to the sensitive nature of the issues being discussed it was decided that the participants should be divided into two groups, male and female, with each group run by health educators of the same sex. It was felt that this would facilitate a more relaxed environment to discuss sexual attitudes and beliefs frankly, with minimal embarrassment.

The visual aids were developed using locally available, inexpensive materials. The types of teaching aids developed included cardboard models and puppets, line drawings of basic reproductive anatomy and drawings of people engaging in various activities or showing signs and symptoms of disease. These materials were used to tell stories and to demonstrate various technical points. Both wooden penis models and bananas were used for condom demonstrations.

At the start of each session, we explained that the pictures would be quite explicit and therefore potentially embarrassing, but that this was necessary in order to adequately discuss the problems posed by STDs. Those who thought they may be offended were then given the opportunity to leave if they wished.

In spite of this, following one of the practice sessions we received complaints from a small number of the villagers regarding the explicit nature of the material we were using, although other people in the same village assured us that the materials were not offensive. Because of this, we then tried bringing village representatives to visit the IMR to review the materials before conducting the village workshops, in order to gain permission to use the teaching materials in their village.

During the practice sessions we became aware that adults were often distracted by their young children who were not participating in the workshops. In response to this we introduced videos suitable for children which were shown in a separate location while the workshops were in progress.

Findings

Very early in the study we recognized that

the health education component was playing a major role in recruitment, as the majority of women selected for the study who had attended the workshops readily agreed to participate after they understood the problems associated with contracting an STD. This was in contrast to those women who had not attended (usually because they were absent from the village on the day the workshop was held). These women were less interested in participating unless they were symptomatic at the time. Further, many women not selected for the study presented themselves at the study clinic and requested to be included in the study after being involved in the health education program.

The training workshop and practice sessions were extremely useful in developing our methods and visual aids. We became comfortable using several different styles and teaching techniques which gave us greater flexibility when running the workshops, allowing us to switch between methods while the workshops were in progress, to ensure that important points were understood.

The cardboard models and puppets were not as convenient as the line drawings, because they took longer to prepare and had technical problems which often distracted the audiences. Consequently, we preferred using the line drawings, which proved to be very easy for the participants to understand.

Matters relating to sex and sexuality were considered very sensitive, and could not be discussed in a mixed sex group. We found that separating men and women made it acceptable to discuss these issues frankly and without apparent discomfort or embarrassment among either women or men. However, if men walking past came too close, the women reacted by giggling and shouting at them to go away. Discussions would stop until the men were out of hearing distance.

We found that bringing leaders from the selected villages into the IMR for a tour of our facilities and demonstration of the materials we intended to use was beneficial. We were able to adjust our teaching styles and materials if necessary to make them appropriate to a particular village. We had no further complaints about the pictures being too explicit, and participation at the workshops

also increased, presumably because of more enthusiastic support from the leaders. During the tour, we included a visit to the clinic where examinations would be performed, and this may have helped to demystify this component. The tours also allowed discussion regarding where in the village the workshop should be held, and the need for separate locations for men and women. Conflicting events such as a brideprice payment or ceremonies following a death were taken note of and our schedule adjusted as required.

In some villages the adults tried to exclude young teenage girls from the health education sessions, but accepted them when it was pointed out that they would soon be women and would need to know these things too, and were therefore just as important to include as the older women. In some villages, mothers encouraged their daughters who were in community schools to attend these workshops as they thought it was more important for them than their school lessons.

The sessions were structured fairly loosely, with frequent opportunities for questions and discussion. This resulted in laughter and sharing of stories, allowing an informal atmosphere to develop, and was very useful in relieving any residual embarrassment or discomfort, as well as allowing clarification of particular points.

The vast majority of women had no experience of using condoms and most had never even seen one. It was therefore important to demonstrate their use, and also to get the participants to handle them and, if possible, practise putting them on the models. We found that bananas worked better than wooden penis models, because the women were less embarrassed handling them. Many women also asked about the availability of an alternative which could be used by women (e.g. female condoms) because they considered that men were unwilling to use male condoms.

We used videos in two different ways, both of which were valuable. Firstly, we used them to attract people to the workshop and to provide general entertainment, particularly for the children while the parents were attending the workshop. After introducing this idea we encountered far fewer problems with children

interrupting their parents, thus allowing the parents to focus on the education sessions. Secondly, we used them to provide information about STDs and AIDS. The video on AIDS produced by ADRA (Adventist Development and Relief Agency) was very useful as it is produced in 'tok pisin' (Melanesian Pidgin), which is obviously essential in most villages. Timing of videos was important, and while a fairly exciting and dramatic video was useful at the beginning to attract and hold the crowd while we were setting up, the AIDS video was best saved until last, since, if played early on, it would distract the discussion from other, less dramatic STDs.

Questions from the women, both in group discussions and in private interviews, revealed that the level of biomedical knowledge about STDs and reproductive health in this community was poor. We found that most women had extremely limited knowledge of the basic anatomy and physiology of the reproductive tract, particularly the internal organs. They had some knowledge of the mode of transmission of STDs (recognizing that STDs could be sexually transmitted) but even this was limited, as many appeared not to realize the ease with which STDs were transmitted, and that they were themselves at risk from their partner's sexual behaviour. They frequently did not recognize the symptoms of STDs, especially vaginal discharge, which was thought to be normal; nor did they realize the importance of obtaining treatment immediately. As a result, many women did not seek treatment until irreversible damage was done. Some problems, especially infertility and stillbirths, were not recognized as being complications of STDs or other reproductive tract infections. Many women asserted that before our session they had not realized that STDs could cause the wide range of problems, particularly infertility, which we had discussed.

A detailed analysis of risk behaviour and the relationship to confirmed infection in this community is beyond the scope of this article. However, during the workshops and the individual interviews, the high frequency of risky behaviour identified by others (9,11) was confirmed. This included large numbers of sexual partners, particularly for men and young women, with condoms virtually never used.

While many expressed disapproval, in this community it appears to be the norm that men may have as many sexual partners as they wish, even after marriage, although women are expected to be faithful to their husbands.

Conclusions and recommendations

1. There is an enormous need for widespread community-based sexual and reproductive health education in rural areas. The level of accurate knowledge of STDs and other reproductive health matters among women was low and was insufficient for them to know how best to prevent the acquisition of STDs, how to recognize them and what to do about them. Women appeared to be completely unaware of the relationship between STDs and infertility and were particularly concerned because infertility is a common problem in this area, and one with disastrous consequences for women. It may be that the fear of infertility will be a greater motivator for safer sexual behaviour than the fear of AIDS, which may at this point seem a relatively remote threat.
2. It is not necessary to invest vast resources into the development of health education materials. Local production of visual aids using readily available materials is inexpensive, quick, convenient and effective. What is required are highly committed educators who are responsive to the concerns of the community and who are able to create an atmosphere in which the participants are not afraid or embarrassed to discuss their concerns.
3. Involving village leaders in the workshops, and particularly gaining their permission for using potentially offensive materials beforehand, results in greater enthusiasm and cooperation from the community.
4. Potentially embarrassing and sensitive subjects such as STDs and sexuality are best discussed in small single-sex groups with health educators of the same sex. Neither men nor women were comfortable when members of the opposite sex came too near. In our communities, the groups were small and we held only one group for each sex. However, in some situations it may be advantageous to run separate

single-sex groups for teenagers. This may allow the younger people to discuss issues and ask questions which they are too inhibited to ask with their elders present.

5. Allowing opportunities for questions and discussions will usually result in improved understanding of important points as it allows misunderstandings or misconceptions to be aired. It will also encourage the participants to identify their major concerns, and thus allow tailoring of the workshop to meet these needs.
6. The content should include basic anatomy and physiology, transmission, symptoms and signs, and prevention. The importance of treatment and complications, particularly infertility, should be stressed. Most importantly, prevention should be a key message: the advantages of one, mutually faithful sexual partner, and the use of condoms, with a condom demonstration.
7. It should be recognized that knowledge in itself is insufficient. People also require the means with which to take action to protect themselves from acquiring STDs. While having only one, mutually faithful, lifetime sexual partner ensures safety, this is not a realistic goal for many people, particularly those who may be at risk from their partner's behaviour rather than their own. At the absolute minimum, ready access to good quality, inexpensive condoms is required. This would facilitate safer sex practices in situations where men are willing to use them. However, it is doubtful whether the majority of women in this society are able to negotiate condom use by their male partners, and a female-controlled method such as the female condom should also be made readily available as soon as possible. It is to be hoped that, in the long term, education and other social processes will result in changes in accepted norms which will lead to reduction in risky behaviour, particularly coercive sex both in and out of marriage, and give women, as well as men, greater control over their own sexual health.

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