

Zigzaid - an Educational Game about AIDS for Children

In spite of the progress made in treating the different opportunistic illness in HIV syndrome, prevention remains the only real answer we have in stopping the spread of this disease. Programmes using new, innovative and interactive materials are necessary to reach a maximum number of people.

The widespread ignorance about AIDS, associated with tendentious and sensationalist information released by the media, has yielded the discrimination, in a cruel and prejudiced way, of individuals living moments of frailty, doubt and incomprehension. Many attempts have been made to reach the target public and make the information accessible. However, newspapers and magazines have often confused readers with misleading discussions about the origin, transmission and prevention of AIDS.

Recent surveys^{1,2} among children and adolescents from major cities in Brazil indicate that there is an alarming level of ignorance or misinformation about AIDS, as well as a distorted attitude regarding sexual relations, physical contacts and affection. A report by the World Health Organization³ notes a high proportion of cases detected among adults in the 20-29 year old age group which indicates that the disease was probably caught when they were about 15-19 year old.

It is thus clear that there is a dearth of proper information, suitable materials and adequate methods available to young people as regards AIDS. As a contribution to fulfil these requirements a game was developed by the present authors, involving teenagers in socially oriented educational activities. The objectives were to create a motivating material which encouraged group discussions, and also to provide correct information about the disease in a language accessible to the 10-14 year old range. An evaluation of the game was undertaken in a selected group of middle-school children.

Materials and Methods

a. Description of the Zigzaid game:

Materials. The game is made up of a *board* (with spaces numbered 1 to 23, some illustrated with a surprise card symbol, and others with directions such as "go forward", "go backward" and "wait"), two *dice*, six *pieces*, numbered *cards* 1 to 23 (one side with questions about

AIDS, and the other with both the answers and directions for the next move) and 18 *surprise cards*.

Question themes. The questions on the numbered cards may pertain to one of the following themes, illustrated on the background of the game board: *immune system* — where it is located and how it reacts to the virus; *transmission patterns* — entry of the virus in the organism through the sexual intercourse and the blood, removing the misconception of transmission through skin contact; *treatment; prevention* - use of condom and sterilized needles, information updating; *personal and social aspects*. Some questions have been included which deal with the problems of health care in Brazilian hospitals and the possibility that anyone may be infected by HIV virus. The latter aspect is based on the observation that the target group of the game considers itself immune to AIDS, as it does not include itself in any risk group, considering its behaviour patterns. Other questions, in which an opinion is expected, have also been included to create moments of reflection about the social and psychological conditions of the person with AIDS. These questions deal with visits to AIDS patients, importance of solidarity, and the participation of contaminated children in school activities.

Surprise topics. The surprise cards contain information related with matters such as virus, hemophilia, blood transfusion, drug action, patterns of transmission, working opportunities and other aspects related to the contaminated person.

Playing rules: The player should choose one piece and move it on the board according to the number shown on the rolled dice. If landing on a numbered space, another player should take the corresponding numbered card and read it aloud. The player who has moved his or her piece has a chance to answer. Someone should then read aloud the answer on the reverse side of the card, and the group judges if the first player has answered correctly. Landing on the surprise card space, the player should take a surprise card at the top of the stack, read aloud the information, place the card at the bottom of the

stack and play again. Landing elsewhere, the player should follow the instructions. The first player to arrive at the end is the winner. His or her prize is a condom.

Leaflet and mini-dictionary: A leaflet for parents and teachers was produced, aiming to pose questions and discuss topics such as the difficulty and discomfort felt by adults in discussing sex, the belief that such topics stimulate sexual practices, and the importance of hearing what children feel and think about it. A mini-dictionary containing words pertaining to sexual organs, sexual relationships and sexually transmitted diseases, was also included.

Evaluation of the Game

Sampling:

The sample included 34 children, 9 to 14 year old, attending 2 public and 2 private schools in the Rio de Janeiro State. Some children's names were randomly picked from 3rd, 4th, 5th and 7th grades and some volunteered themselves.

Procedure:

For a pre-evaluation of students' knowledge base regarding AIDS, each child was requested to answer oral questions. Researchers, attempting to remain neutral while explaining the rules and objectives of the game, observed and noted the children's behaviour and verbal expression. The children were encouraged to find their own solutions to the problems arising. In each school a group of 4 to 6 children played the game through completely.

Following the game the students were asked to reconsider the pre-evaluation questions. They were also asked to evaluate whether they had acquired any new knowledge and to write any comments on the importance of the game and whether they would play it again.

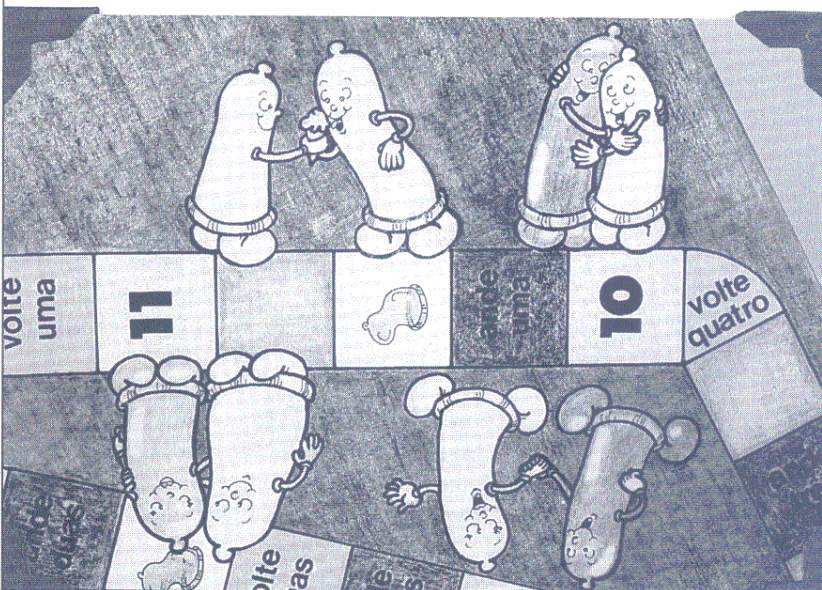
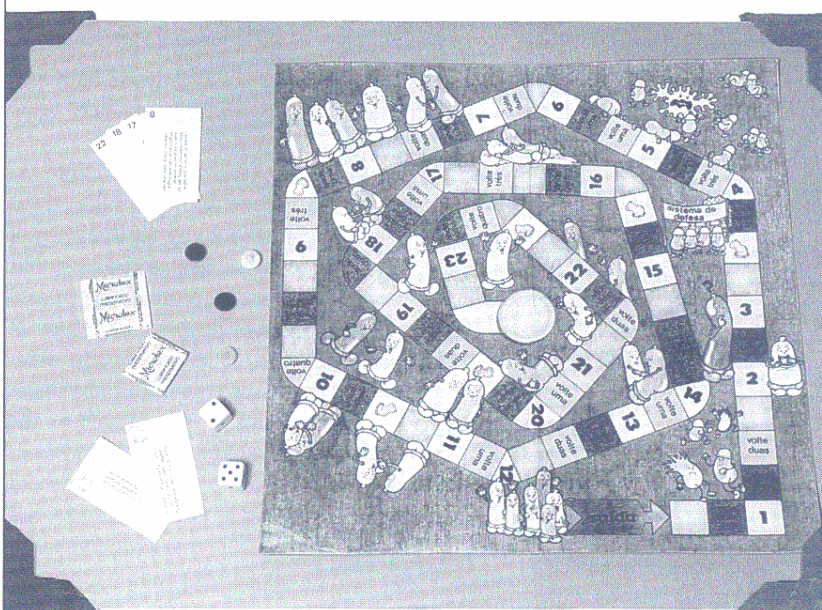
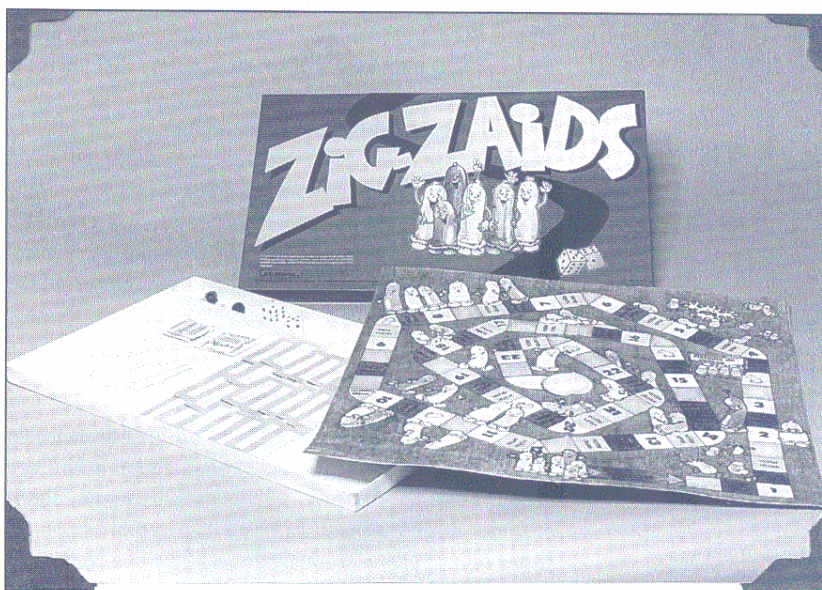
Results:

Comparing the sample students' knowledge before and after playing Zigzaidis revealed changes in their ideas and attitudes regarding transmission, prevention and treatment of the disease.

It was interesting to find that only after the game, embracing, eating with or playing with an individual with AIDS was not referred to as risky behaviour.

Before the game, 20.6% characterized AIDS as a disease that may kill. After the game, only 5.8% expressed this limited notion. Before the game, 8.8% of the students gave prejudiced opinions and after playing the game no one did so. The concepts of friendship, love and affection for individuals with AIDS were present in reports made after the game.

Of the 54 comments expressed during the post-evaluation: 14 (25.9%) concerned transmission, 7 (13%) prevention, 2 (3.7%) treatment, 10 (18.5%) concerned the importance of the disease and its curability, 12



(22.2%) proposed general recommendations, 8 (14.8%) stated they had learned a lot without specifying what, and 1 (1.9%) indicated that the student had learned little.

As regards the attitude in relation to the playing situation itself, out of 22 children that answered about their interest in the game, all revealed themselves highly motivated, characterizing the game as "very interesting", "very amusing" or "very good". Concerning the interest in playing it again, out of 11 students that answered the question only one said "no".

Discussion

The results show that the game Zigzaidis can help increase knowledge regarding HIV infection in this age group. Most importantly, it generates discussion about attitudes and ideas such as friendship and affection on issues relevant to individuals with AIDS. The context of this game also favours greater ease in speaking about sexual relations and concerns.

It is, therefore, expected that the game be a very useful resource in health education of teenagers.

According to the World Health Organization³ the majority of young people still do not realize the effects of HIV on their lives. Social taboos and the difficulty of talking about sex are serious problems faced by public health educators in their efforts to prevent and control AIDS, specially if working with people from 10 to 24 years old. Cultural traditions, beliefs, fears and other difficulties can prevent the young from informing themselves about HIV sexual transmission, as well as the methods and attitudes of prevention. Parents and community leaders may be reluctant to communicate about sexual questions, claiming that youngsters are not sexually active. They may be afraid that programmes of prevention which include sexual education may stimulate sexual activity. These barriers often delay discussions about sex and AIDS until after the first sexual relations. In the interests of promoting prevention, it is desirable that the young be conscious about their sexual choices and their consequences **before** the first sexual experience.

The above arguments are also valid for the Brazilian socio-cultural reality, making it necessary and urgent that the correct information be easily available to children and adolescents at an educational level. In some countries (Holland for example) videos, leaflets and story books are available in every school.

Those who most helped to develop this game were the teenagers, as they furnished the prime indicators towards the effects of the game. Care was taken not to spread panic among those who were discovering sexuality, so as not to associate sex with death. Special emphasis was given on the need for solidarity and cooperation in human relationships.

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As regards the use of this game in schools as a resource for children learning about AIDS, it is necessary to investigate what teachers think about the subject, and whether they are prepared or not to talk about it. From seminars on health education and visits to schools, it became evident that there are not suitable educational tools nor information currently available to support this game in most Brazilian schools. However, there is a special interest by the teachers, as well as availability, to work on this project. In fact, a teacher's association in Rio de Janeiro is intending to survey the teacher's knowledge about AIDS, as well as their capacities of teaching about this theme in order to create specific training materials for them.

Although this game brings forth an easier understanding of AIDS, further possibilities of using it in schools must be explored. A project is presently being developed, whose emphasis is on the pre-adolescents' conceptions on themes related to AIDS, such as sexuality, blood transfusion and death. It is hoped that this investigation will promote a broad discussion on the role of the school in providing knowledge and in developing moral values. The underlying principle is that preventive education constitutes the best way to fight AIDS.

This game was developed in order to implement such education in an attractive and interesting manner.

References

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Acknowledgments

We wish to thank the valuable support of Mr Ranulfo Cardoso Jr and Mr Flavio Braune Wiik, from the Brazilian Interdisciplinary AIDS Association. Besides furnishing materials, they brought us closer to the reality of organizations working towards a greater comprehension of the effects of AIDS on society.

Simone S. Monteiro is postgraduate research student in Social Medicine; Sandra M. Rebello is undergraduate research student; Virginia T. Shall is Associate Researcher (Health Education), Instituto Oswaldo Cruz - Fiocruz, CP-926, CEP-20010, Rio de Janeiro, Brazil.

RÉSUMÉ

“Zigzaid” : un jeu éducatif pour les jeunes sur le SIDA

Malgré des progrès enregistrés dans le traitement des diverses maladies du syndrome d'immunodéficience acquise (SIDA), la prévention reste la seule « arme » véritable pour lutter contre l'extension de la maladie.

Des programmes exploitant des outils attirants et interactifs sont toujours nécessaires pour atteindre un maximum de personnes par le biais de supports variés.

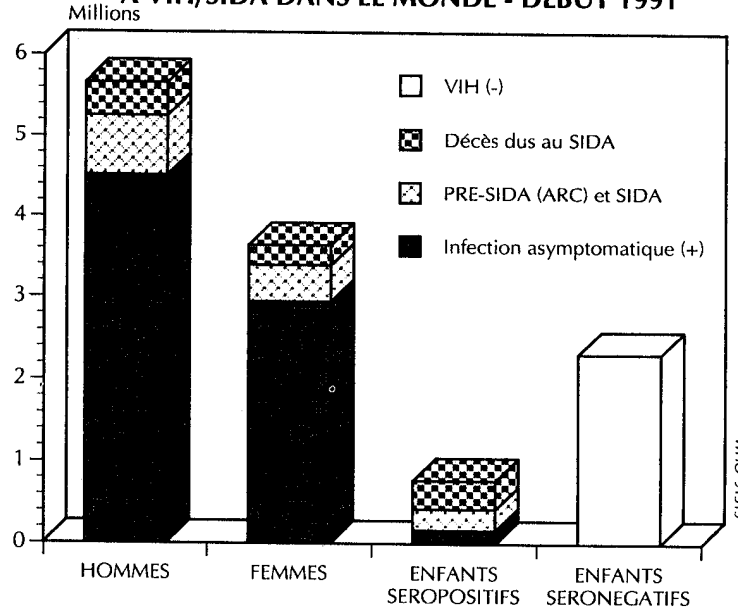
Ressentant un manque d'outils novateurs pour informer et sensibiliser les jeunes adolescents (10 - 14 ans) sur les divers aspects du SIDA, les auteurs ont créé le jeu « Zigzaid ». Un jeu éducatif, fondé sur le principe du « jeu de l'oie », « Zigzaid » est conçu de manière à incorporer le maximum de dialogue et d'échange au sein d'un groupe restreint (6 personnes) de jeunes. Le langage utilisé est celui des jeunes, et les aspects psycho-sociaux sont couverts aussi bien que les aspects plus techniques sur la transmission et la diffusion de la maladie.

Une première enquête auprès d'enseignants montre une réaction positive et une réelle motivation pour incorporer le jeu dans leurs programmes d'information sur le Sida. Il a été noté, pourtant, qu'une formation spécifique pour favoriser l'exploitation maximale du jeu était nécessaire et qu'il existe au Brésil un manque de matériels et de formations sur le Sida en général.

Les auteurs proposent la mise en place rapide de tels programmes ainsi que la réalisation d'une étude sur les attitudes des jeunes face à cette maladie afin de mieux adapter les programmes de prévention qui seront mis en place. Le processus pour mettre en œuvre cette étude est actuellement en cours.

Source : WHO/GPA
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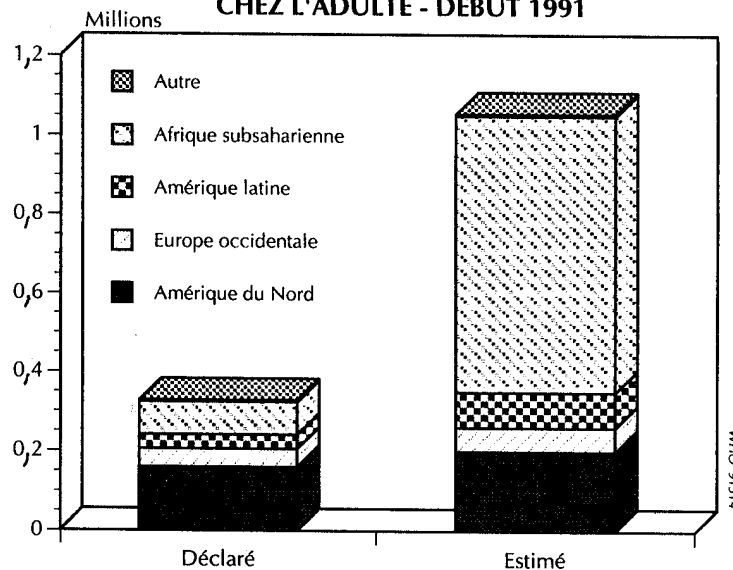
NOMBRE ESTIMATIF CUMULE DE CAS D'INFECTION A VIH/SIDA DANS LE MONDE - DEBUT 1991



Les différentes colonnes indiquent la situation début 1991 chez les hommes, les femmes et les enfants porteurs du VIH, ainsi que le nombre estimatif d'enfants séronégatifs nés de femmes infectées.



NOMBRE DECLARE ET ESTIME DE CAS DE SIDA CHEZ L'ADULTE - DEBUT 1991



La colonne de gauche indique la répartition des 350 000 cas de SIDA notifiés à l'OMS au mois d'avril 1991 dans les différentes régions du monde; celle de droite indique la répartition du million de cas de SIDA chez l'adulte qui seraient déclarés dans ces régions.