
Title: Testing action media and entertainment education with autistic children

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Abstract:

This paper explores the efficacy of an intervention on HIV/AIDS and sexuality education with autistic children. A number of autistic children are sexually active, without realising the consequences of their actions, and this makes them vulnerable to HIV infection and pregnancy.

This intervention made use of entertainment education strategies, using puppet shows, theatre and music to educate autistic pupils at a school in Durban. The action media approach was used to involve pupils in the creation of the media product, in this case a music CD.

This paper details the origins and implementation of the project, as well as its efficacy.

INTRODUCTION

In an era where sex and sexuality are becoming increasingly pervasive, through bombardment by the mass media, society has adopted a less rigid attitude towards sexual activity. Consequently, this has led to numerous problematic factors: an increase in multiple sex-partners, increase in unwanted pregnancies, escalating rate of HIV transmission, and a younger age at which sexual debut occurs, to the point where young teens are participating in sexual intercourse, oblivious to the repercussions of their actions. We initiated a pilot project of a sexual awareness intervention to address these issues, seeking to educate, inform and ideally change behavioural patterns within a neglected focus group.

Formative research proved that there was a need for sex education amongst cerebral palsied children at A.M. Moolla Spes Nova School. These children were experiencing hormonal changes and sexual desires without a complete realization of the consequences. Furthermore, some pupils were indulging in inappropriate sexual behaviour, such as public masturbation or trying to touch teachers' or each other's genitalia. The significance of the entertainment education intervention arose to ensure that the pupils understood the consequences of acting on their hormonal urges. The intervention was implemented to improve their ability to effectively link a rational outcome to their sexual conduct.

In accordance with the *Soul City* model of initiating potential behavioural change, this project was structured via a multi-media approach, utilising an ongoing vehicle to ensure sustainability. The overall objective of *Soul City* "was to develop an ongoing vehicle that could promote social change, thus being not issue based but vehicle based" (Tufte, 2001:30).

At this point, it is imperative to discuss the condition of cerebral palsy, to gain greater understanding of our target audience, as well as insight into the difficulty of our task.

BACKGROUND INFORMATION: WHAT IS CEREBRAL PALSY?

From a biological perspective, cerebral palsy is an umbrella term describing physical disabilities arising from an intracranial lesion, resulting in paralysis, weakness, lack of co-ordination or functional deviation of the motor system. Damage to, or failure in development of a specific area in the brain before its maturation may occur before (e.g. certain medicines or alcohol consumption by the mother), or during birth (e.g. forceps delivery), or in early childhood (e.g. through an illness) (Gottlieb, Zinkus and Bradford, 1979). Consequentially, the brain's control over musculature and co-ordination of the body is disturbed. Brain damage may lead to difficulties of perception i.e. a deficit in ability to give meaning to what the child sees, hears or touches (Gottlieb, Zinkus and Bradford, 1979). This ultimately leads to learning disabilities, which requires specialised techniques to facilitate easier learning and the grasping of concepts. Sensory defects, such as loss of hearing, poor vision, inarticulation of speech and disturbances to the child's tactile abilities, as well as personality problems may also manifest.

A large proportion of cerebral palsied children have low cognitive levels, because of their handicaps. Surprisingly, though, some children may have an above average intelligence that is disguised by their disabilities, for example, some may experience involuntary facial movements that may give the illusion that they are retarded (Gottlieb, Zinkus and Bradford, 1979).

Cerebral palsy can be categorised as three forms:

Spasticity (damage to the cerebrum) - Increased tone of affected muscles, disordered movement and disturbed growth and development. It may affect the limbs on one side of the body (hemiplegia), or both arms to a lesser extent, and both legs to a greater extent (diplegia), or all four limbs equally (quadriplegia).

Athetosis (damage to the basal ganglia) – Lack of muscular control with frequent involuntary movements, which interfere with the normal movements of the entire body.

Ataxia (damage to the cerebellum) – Unsteady gait which results in difficulties relating to balance, co-ordination and depth perception (Gottlieb et al, 1979).

A combination of one or more of these conditions follows on a continuum from mild, moderate to severe. It is vital to take cognisance of the fact that no two children with cerebral palsy are alike. Due to this factor, our target group was not homogenous, with regards to the children's physical disabilities or cognitive abilities.

TARGET AUDIENCE

The target group for the project consisted of sixteen cerebral palsied pupils, between the ages of 13 and 19. There were equal numbers according to gender, eight boys and eight girls. Participants were chosen by the educators at AM Moolla Spes Nova School. The basis for selection was the pupil's extent of need for sex education, due to the onset of puberty, or previous inappropriate display of sexual behaviour.

INDIVIDUAL CASE HISTORIES

1. Respondent 1 (13yrs)

Mild brain damage

Attention Deficit Disorder (ADD)

Learning disabled, problems with conceptualisation and interpretation

Trained in functional independence skills/life skills

Cause: unknown

2. Respondent 2 (14yrs)

Spina Bifida

No bladder/bowel control

Developmental lag, however he has the performance level of a 10 year old

3. Respondent 3 (19yrs)

Mild Brain Damage

Attention Deficit Hyperactive Disorder (ADHD)

Has a great developmental lag, her intellectual capacity is low, has a short-term memory

Cannot read, visual-audio integration is poor.

Cause: Normal delivery. At 10 days of age, was admitted to hospital with bronchitis.

Due to hyperactivity, she fell twice, requiring sutures. Her handicap was noted at age 6.

4. Respondent 4 (16yrs)

Diplegic

Her potential was inhibited by her disadvantaged environment

Performs at a grade 6 level

Has problems with literacy and numeracy

5. Respondent 5 (13yrs)

Hemiplegic

Has poor learning abilities due to inadequate visual-auditory integration

Poor numeracy and literacy skills

Cause: Mother had high blood pressure during pregnancy, exacerbated by a prolonged labour.

6. Respondent 6 (13yrs)

Osteogenesis Imperfecta: brittle boned

Normal functioning, but due to her physical condition, she has been disadvantaged through absenteeism. Now has a developmental lag.

Cause: At 21 months of age, she fell while attempting to stand.

7. Respondent 7 (13yrs)

Spina Bifida

Moderate intellectual barrier

Couldn't meet mainstream requirements due to literacy and numeracy incompetence.

8. Respondent 8 (15yrs)

Spastic hemiplegic

Epileptic

Perceptual problems, short and long term memories are poor

Barriers in literacy and numeracy

9. Respondent 9 (14yrs)

Moderate brain damage

Hyperactive

Poor visual and auditory perception

Has barriers in all learning aspects, therefore trained in functional independence skills i.e. life skills.

Noticed hyperactivity when she started to crawl at 1 year of age – most medication is ineffective.

10. Respondent 10 (14yrs)

Mild brain damage

Mild Tourettes syndrome

Is impulsively aggressive

Has learning barriers in literacy and numeracy

Cause: neo-natal asphyxia

11. Respondent 11 (16yrs)

Diplegic

Trained in functional independence skills due to having barriers in all aspects of learning.

Cause: Mother was hypertensive and diabetic – premature delivery at 8 months. Was incubated for a week.

12. Respondent 12 (18yrs)

Spastic hemiparesis

Moderately intellectually impaired

She is also being trained in life skills, with pre-vocational training.

Cause: Mother bled during pregnancy, and she did not cry immediately after birth i.e. airways were not opened immediately after birth causing insufficient oxygen supply to the brain. At age 6, she had a fit, which is a possible contributing factor. She required a hysterectomy in 1996.

13. Respondent 13 (19yrs)

Muscular Dystrophy

Delayed milestones, muscular weakness

Absenteeism responsible for exacerbating his developmental learning areas.

Trained in functional independence with a bias in pre-vocational training

14. Respondent 14 (17yrs)

Spastic diplegic

Trained in functional independence

Poor visual and auditory integration/memory

Poor hand function

15. Respondent 15 (14yrs)

Cerebral palsy with ataxia

Barriers in learning therefore engaged in a life skills training programme, with a bias in pre-vocational training.

Poor visual and auditory integration

Has extremely short-term memory span

Cause: Polio, and did not cry at birth- had to be resuscitated.

16. Respondent 16 (14yrs)

Minimal brain dysfunction

Learning disabilities in areas like mathematics and reading

Involved in a pre-vocational training program, will be able to work in a protected workshop environment.

EDUCATIONAL AIMS OF AM MOOLLA SPES NOVA SCHOOL

The institution functions to equip the children in life skills training, as well as academic education, the former taking precedence over the latter. We had to ensure that our intervention was in accordance with the school's overall goals, which are as follows:

- To develop the pupil to be as independent as possible with regards to personal needs (self-help, dignity in basic functions such as eating, toileting, dressing, sex, mobility, sleeping, playing, interaction with others).
- Emotional development – building self-identity, self-respect, acceptance of self, strong, confident personality, assertiveness, responsibility and ability to make choices.
- To extend their physical capacities – hand functions, balance, mobility, independence in daily activities and control of the physical self.
- To develop their intellectual capacities – encourage critical thinking, creativity, and curiosity, to enhance power of reason, to dream and set goals, to challenge adversities.
- To develop scholastic elements – read, write, speak, communicate.
- To expand socially and personally.
- To develop their recreational skills and hobbies, which may serve as an induction to economic activity, to give creative expression to themselves (small

- self-employment ventures, in business or technical areas, or in sheltered and protective workshops).
- For all pupils to attain happiness through participating and contributing to society as respected citizens.

OBJECTIVES

One of the objectives of this intervention was to encourage abstinence from sexual behaviour and responsible sexual activity, through engaging the use of humour and the fear factor, while clearly reflecting the consequences of unprotected sex such as HIV/AIDS.

We also aimed at teaching the children about the concept of privacy of one's body, through the illustration and demonstration of the 'good touch, bad touch' concept. These concepts were illustrated through puppet and clown shows. Pupils were taught how to identify a bad touch and how to discern a bad touch from a good touch. Furthermore, emphasis was placed on pupils being able to identify that their close relatives, including their parents, could also touch them in a negative and unacceptable manner. This led to a brief discussion about rape; however, this concept was not our primary focus.

Another aspect that we focussed on was that of educating the pupils on how women get pregnant, and the prevention of pregnancy.

The intervention also emphasized the crucial objective of increasing the pupils' self-efficacy in the prevention of HIV/AIDS, exploring how HIV can be transmitted and prevented.

On a superficial level, the program appears to have drawn on too many concepts, however, considering the cognitive levels of these pupils, an HIV/AIDS intervention would not have been effectively received without contextualising it in relation to other health and development issues.

It is important to note that the initial objectives changed from the initial research proposal. This change was motivated by the evidence obtained from the formative research, which showed that pupils had some understanding of 'good touch-bad touch' scenarios, but lacked sufficient education in pregnancy and HIV/AIDS. The methodology also differs slightly from the research proposal. This was in response to the fact that we attempted to find the most effective options in educating the children, and this was only possible once we had acclimatised ourselves to the school's environment, and familiarised ourselves with the children's disabilities. This points to the importance of doing research with the target audience before designing an intervention.

INTERVENTION ACTIVITIES:

Our activities spanned over 4 weeks, through 5 phases.

Phase 1: Pre-evaluation interviews with staff and pupils

Phase 2: Puppet show and oral group assessment

Clown show and oral group assessment

Phase 3: Practice and recording of the HIV song at Highway Radio

Phase 4: Screening of *Soul Buddyz* and quiz/competition assessment

Phase 5: Post-evaluation interviews were conducted two weeks later

ANTICIPATED PROBLEMS

We anticipated a number of problems with this project:

- Unintended effects - although the programme was a sexual awareness intervention, formulated to serve as a prophylaxis for inappropriate sexual behaviour, educators and some parents were concerned that this intervention would encourage sexual activity. Due to an inability to adequately conceptualise new information, we were apprehensive that our programme might encourage deviant behaviour, due to the children's partial comprehensive capabilities.
- Difficulty in propagating the message effectively to the target group, due to the children's inadequate cognitive abilities, their low attention span (ADD), and their heterogeneity with regards to differing abilities and disabilities.
- Obtaining the target group's trust in a minimal amount of time, for the efficient exchange of information of a personal or embarrassing nature.
- Short time frame for the implementation of project – inadequate for intensive repetition and memory retention.

THEORETICAL FRAMEWORK

Educational strategies have often been accused of being excessively didactic and monotonous, with the authoritarian diffusion of information in a top-down manner. Similarly, health promotional strategies have also been guilty of employing a uni-directional approach in their information flow. Furthermore, they have been criticized for attempting to use dominant models in social psychology as blueprints in the implementation of the strategies, which places emphasis on individualism and assumes that all individuals are rational human beings (Airhihenbuwa and Obregon, 2000). In the case of this intervention, the target audience was not rational in their decision-making process. However, the contemporary health promotional paradigm is in the process of shaping its own framework through field experience (Airhihenbuwa and Obregon, 2000). An exciting, innovative approach has arisen, which utilises entertainment as a medium for the dissemination of information. This field is known as entertainment education (EE).

Also known as infotainment, edutainment and enter-educate, EE is defined as a strategic process of "purposively designing and implementing a mediating communication form with the potential of entertaining and educating people, in order to enhance and facilitate different stages of prosocial (behaviour) change" (Bouman, 1999 cited in Tufte, 2001).

This intervention made use of a multi-media approach, using performance art or drama, music (song), and a video screening. Our strategy also incorporated various elements from numerous theories, including those from the psychology paradigm, which will be briefly discussed.

We attempted to incorporate sense-making methodology into our intervention (Dervin and Frenette, 2001), by choosing a verbing approach over a nouning approach. The former term takes into consideration the circumstances, contexts and the manner in which people make and unmake sense from their experiential point of view. The latter term refers to a fixed understanding of a problem and its solution. This was

used in our pre-evaluative, formative research, where we obtained individualised, contextualised points of view.

Albert Bandura's social cognitive theory states that individual behaviour is the result of interaction among the elements of cognition, behaviour, environment and physiology (Airhihenbuwa and Obregon, 2000). This was important in our case, as the cerebral palsied children were seriously affected both physiologically and cognitively. Their behaviour was dependent on the severity of the disability and on environmental factors such as parental control, peoples attitudes towards them, including hierarchical factors pertaining to power. The cerebral palsied children are vulnerable to abuse, including sexual abuse and subsequent HIV infection, due to their varying dependence on others, as well as being easily coerced and manipulated by those with ill intentions. Here we see that the social cognitive theory does not suffice, due to the fact that many decisions of these individuals are dependent on the influence of others, such as family and teachers. The other concept central to social cognitive theory is that of self-efficacy, which is one's perceived ability to adopt a recommended behaviour. We attempted to mobilise the audience into gaining confidence about their ability to obtain control over their own sexuality.

The social cognitive theory, along with other conventional psychological theories, omits emotional aspects that affect a person's susceptibility to a message (Kincaid, 2001). We attempted to engage the pupil's emotions through the use of humour, on the premise that 'laughter is the best medicine'. According to Tomaselli (2002), "laughter is subversive", which enables humour to be an extremely effective form of communication, as it increases the palatability of severe, serious messages. With special reference to children, humour acts as a tool that increases their engagement with the activity at hand. We decided to incorporate humour into our scripts for the puppet and clown shows in this intervention. The *Soul Buddyz* video used in the intervention also contained humorous narrative elements. Kincaid (2001) states however, that emotion alone is insufficient to motivate change, as it could be distracting, therefore we validated the message with logic and factual input.

Admittedly, we practiced a top-down approach with regards to the puppet show and the *Soul Buddyz* screening. These were predominantly in accordance with one-way transmission models, such as the diffusion of innovations theory (Airhihenbuwa and Obregon, 2000), where information was imparted to the target group, with minimal feedback, until the post-activity evaluation. However, we attempted to incorporate dialogic interaction during the course of the *Soul Buddyz* screening. The clown show and the musical activity, however, were extremely interactive. The decision to include a *Soul Buddyz* screening was based on the fact that the entertainment industry uses the media for mass dissemination of information. Despite the fact that many messages are anti-social, the mass media plays a large role in many EE strategies, because pro-social messages have an equal chance of reaching the target audience if orchestrated correctly. Also, people tend to succumb less to persuasive pressure after observing others' resistance to it (Paisley, 2001). We intended for the members of the target audience to undergo the stages in parasocial interaction i.e. cognitive oriented parasocial interaction, behaviourally oriented parasocial interaction and affectively oriented parasocial interaction. According to Papa & Singhal (2000), these factors, in combination with referential involvement, tend to elicit a positive attitudinal and behavioural change in the audience's belief system.

Another pertinent theory that assisted us, social judgement theory, states that the degree of personal relevance of an issue affects an individual's self-concept and the importance that he or she assigns to an issue (Sood, 2001). The key concept of this theory is that of ego involvement. We clarified the fact that issues pertaining to

sexuality were of vital importance to the target group, as HIV, pregnancy and sexual abuse were issues that could directly impact on their lives.

Aspects of the participatory model were used in ascertaining problem areas that the audience had with regard to comprehending certain concepts pertaining to sexuality. This model centres around the strategy emanating from the target group, where the target group should be instrumental in the production process, management and planning of the communication activity (Servaes, 1995). This was achieved through the preliminary interviews where we were able to gauge issues that required education, through responses from the children. Another participatory factor was the choice of song, where we asked the children to choose a song that they liked. We then changed the words to suit our intervention, before introducing it to them. In this way, we ensured that they enjoyed the experience, as they were extremely enthusiastic and motivated to succeed in this endeavour.

Elements of reception theory informed our attempt to limit polysemy, encourage an active reception process, and try to understand the manner in which the children produced and understood meaning (Tufte, 2001). The polysemy was reduced by the simplicity of the messages and our attempt to avoid ambiguity. By analysing the children's case histories, we were able to ascertain their cognitive abilities in the acquisition of meaning. We used intertextuality by referring to the same characters in the puppet and clown shows, to encourage the children to view all the activities as being interlinked with regard to concepts, to avoid confusion.

With regard to music, it is evident that song and dance have multiple effects in mobilising people physically, emotionally, as well as cognitively, therefore it is an effective communication medium (Singhal and Rogers, 1999). The John Hopkins University and the Population Communication Services have used music videos to promote sexual responsibility among teenagers in developing countries, since the mid-1980s (Singhal and Rogers, 1999). We decided to adopt a similar approach, using music as a medium for a social message. However, the pupils were also actively involved in the production and performance of the chosen song. This component of the programme falls within the paradigm of action media, which draws from many social theories in the cultural and media studies paradigm, including the participatory approach, semiotics, ideology, social change, and understanding communication processes (Parker, 1997).

Action media is viewed as a "methodology for the development of media products that integrate the interests of both the communicator and representatives of target audiences within a health promotion context" (Parker, 1997:n.p.). We fulfilled the criteria of this methodology, in the sense that we defined the 'sufficiently homogenous' target group, collaborated with the group in empowering them to choose their preferred song, which they would later perform, and finally we composed lyrics pertaining to a health issue. Another important aspect to action media is the fact that the final product must be able to slot into the existing infrastructure, to be used in other community-based activities (Parker, 1997).

METHODOLOGY

Patrick Coleman (1999) states that when an edutainment intervention is implemented it should follow the basic format of identifying a problem, finding the objectives together with the correct target audience to fit the message, followed by an evaluation of the success of the message in fulfilling its objectives. His criteria for the success of an intervention, includes the following seven points:

1) Use a research based scientific method.

We used a multi-method approach using elements from numerous theories, which have been discussed under the theoretical framework above. Qualitative research was also effectively conducted amongst teachers and pupils. We delved into comprehensive background information on cerebral palsied children, as well as detailed research into their knowledge of HIV, pregnancy, rape, and the concept of 'good touch and bad touch', which was subsequently analysed.

2) Choose the correct medium to reach its intended audience.

Interviews conducted with teachers showed that the most efficient method of educating and entertaining was via puppet shows and song and dance.

3) Use a multi-media approach, and

4) Use a popular medium to reach your audience

Given the limited budget and the time constraints, the project was formulated to fit the paradigm of a multimedia intervention. We used a puppet show, a clown show, music and television.

5) Enlist professionals with experience.

Teachers assisted with guidelines to ensure that the entertainment education intervention was not beyond their cognitive level; furthermore, teachers assisted with information on how previous educational methods were used.

6) Conduct base line research and end-of-project surveys to evaluate the success.

Post evaluation quizzes were given after each activity. In addition, detailed interviews were conducted to identify the pupils' differences in perceptions after the program.

7) Ensure that the message delivered is in line with the prevailing social values and norms.

Prior to the execution of the programme, we obtained permission from the school and the participants' parents. Indemnity forms were filled in, absolving the school from all blame in the advent of us being injured on the premises.

Research and interviews with the nurses and principal showed that the topics covered in this programme complied with the norms and values of the school. Each activity, questionnaire, quiz, and interview was screened by the head of the school. This guideline ensured that a pro-social content dilemma was avoided, as the educating process did not differ from those initiated by the principal and staff.

Initially, we proposed to use role-playing activities with the children, enacting scenarios to shed light on how they should react when placed in certain situations, or how to act appropriately with regards to sexual etiquette. After much deliberation, deviation from our original pre-planned methodology seemed inevitable. We decided to omit the role-playing aspect in order to minimise unintended effects.

According to Singhal and Rogers, "undesirable and unintended consequences sometimes result from the diffusion of pro-social messages" (1991:221). In this context, we realised that certain pupils may view the negative display of particular behaviour as setting precedents for normality, thus exemplifying 'appropriate' behaviour. Also, due to the children's difficulty in ascertaining positive from negative

behaviours, we decided to limit the amount of negative content, focussing rather on positive reinforcement. It has also been postulated by Paisley (2001), that frequent emphasis of negative aspects may lead to desensitisation, therefore, we attempted to avoid this. Another potential inhibitor to the success of the role-playing was the time allocation set aside for this activity. The role-playing activities were scheduled for two days of the second week of our programme. This would have implied that a total of four hours would have been available for the actual process. This was undoubtedly a mammoth task seeing that the children required a longer period of time for repetition, to compensate for their low memory capacity, ADD and difficulty in conceptualisation.

Upon the decision to explore other creative outlets, which would cater for the needs of this particular target group, we substituted the two role-playing activities with a puppet show and a comedy show. Simple messages were used to increase compliance and comprehensibility amongst the target audience.

The following salient points were integral to our message formulation:

- simplicity of message
- humour
- repetition
- interaction/participation of pupils
- positive, vibrant attitude on our part
- multi-dimensional approach i.e. different types of activities

Our message construction comprised of a combination of awareness, instruction, and persuasion, as promoted by the EE researchers Atkin and Rice (2002). We informed the audience on factual matters while simultaneously advocating what to do, how to do it and, why. Infrequently, we used fear appeals as a motivational tool, for example, through enlightening the audience that HIV/AIDS is incurable, thus leading to imminent death. Atkin and Rice (2001) stipulate that fear appeals are only effective if accompanied by self-efficacy instructional material. We incorporated this aspect of self-efficacy by advising the audience on how to prevent HIV infection.

PHASE 1: PRE-EVALUATION

Pre-evaluation proved important, as it completely changed the initial objectives of this edutainment intervention. Strategic qualitative research was conducted through detailed twenty-minute interviews, with thirteen of the sixteen selected pupils. This process shed light on essential topics.

Constructive qualitative research conducted with six teachers (including the principal, nurse, and music teacher) reflected that music, song and dance was an effective medium in entertaining and educating cerebral palsied children. Taking into consideration the fact that most of these children had severe learning disabilities, entertainment, specifically music, eliminated the pressure often placed on these pupils to grasp key concepts.

Kincaid (2001) identifies the purpose of formative research as clarifying the orientation of a programme at an early stage, and identifying the central challenges and directions. Formative research can also reveal further recommendations about programme directions and implementation after a trial intervention. According to Tufte (2001), the audience is vital to formative research; therefore, we implemented pre-evaluatory interviews. Furthermore, these interviews had to be structured within

an appropriate context of simplicity, repetition and friendliness, in order to gain the pupils' trust.

Observational interviewing established an essential foundation in this program as some pupils responded through non-verbal cues, due to speech inarticulation. Body language and gestures were used to communicate with us during the interview. Observational interviewing also allowed us to ascertain when questions should not be imposed too harshly and when the question required a persistent approach.

Ideally, interviewing can fall within the five different contextual approaches, namely, knowledgeable, attitudinal, specific or structural, codes and open interviews. This programme required an open interview. Pupils were asked questions in general about their personal lives and were free to ask questions in return. This developed a genuine sense of trust and liberty among the pupils. The next approach used was the knowledgeable and more structural approach. A detailed list of questions was compiled, ensuring that all questions served a valid purpose, while being unambiguous. Furthermore, questions were also structured to adequately test pupils' knowledge.

The pre-evaluation was conducted with thirteen out of the sixteen pupils in the sample group. Two pupils were not initially interviewed, as parental consent had not been obtained at that particular time. One of the interviewees was only partially interviewed, as he left the interview before it had ended. The overall understanding of the respondents of the issues surrounding HIV/AIDS and sexuality is summarised in the following results:

- Difference between a good touch and a bad touch: 77% of the pupils had a relatively good understanding of these concepts, while 15% displayed no understanding and 8%, a partial understanding.
- Rape: 54% of the sample had a good idea of what rape was, however the remaining pupils were equally divided in having a vague idea of this concept, or possessing no knowledge about it.
- Causes of HIV: Only 15% of the group were knowledgeable in this area. The majority of the sample, 62%, understood some aspects of the causation, while 23% stated that they did not know.
- HIV prevention: 8% was able to correlate the relationship between the causes and prevention of HIV. 38% of the group understood certain aspects, while 54% of the pupils displayed no knowledge or confused knowledge on HIV prophylaxis.
- Cause of pregnancy: 17% displayed good understanding of sex and causes of pregnancy. 54% of the sample group did not know how women became pregnant, 29% had a partial understanding, for example, they would state sex as being the reason, while being unable to explain what sex is.
- Prevention of pregnancy/contraception: 15% confidently explained the methods that could be used in preventing pregnancies. 47% were able to mention a few methods, however 38% revealed a complete lack of knowledge in this area.

The formative research indicates that the vast majority of the pupils had either no or only partial understanding of these concepts. The formative research using detailed, qualitative interviews revealed that the initial objectives of this project were slightly misguided. Subsequently, we drafted a new set of objectives. The focus of the intervention shifted from complex issues such as sexual abuse, to basic information pertaining to the 'good touch, bad touch' concept, privacy of one's body, pregnancy and the prevention of HIV/AIDS.

PHASE 2a: PUPPET SHOW

We devised a puppet show to impart information on pregnancy, its cause and prevention; HIV transmission and prevention, and the differentiation between good touches and bad touches.

The characters for the puppets were an inquisitive, naive young girl, an older brotherly-type figure with a large repository of knowledge, and a thug. Humour was used to sugarcoat the serious messages, and to initiate a rapport with the children. This medium was not, however, particularly interactive, but we improved on this in the subsequent activities.

A brief oral assessment was done directly after the show, through a question and answer segment. In general, a negligible improvement in understanding was noted.

PHASE 2b. COMEDY/CLOWN SHOW

We used performance art to our advantage by entertaining the pupils with a comedy act, dressed as clowns. This was an extremely interactive event, where we encouraged the children to be pro-active. This was achieved through directing the conversation towards them, as in face-to-face interaction, where questions were aimed at them, and they were asked to react to statements on cue, for example booing an incorrect statement made by one of the clowns, and clapping for the legitimate statements. One clown had the task of delivering the accurate information with a slight didactic tone, while the other clown's responsibility was that of comic relief, posing silly notions to the audience. The task of the 'more serious' clown was to teach the other clown important information. This tactic was implemented to ensure that the audience would identify with the ignorant clown, as they were all learners in this activity. In this scenario, the ignorant clown learnt information together with the children, thus breaking down the barrier of a source-centred approach.

Topics featured included HIV/AIDS transmission, consequences and prevention, pregnancy and contraception, and differentiating between good and bad touches.

We incorporated a show-and-tell approach by using visual aids, including a demonstration on how to put on a condom, drawing diagrams on the chalkboard, handling male and female condoms, and enacting scenarios.

Although a script was drawn up, we performed the act in a flexible manner according to our rapport with the audience and with each other, using the script as a guideline for ideas.

An oral assessment followed directly after the show. In general, pupils were more responsive than previously, due to the fact that the entire show was more interactive, and the children were beginning to lose their inhibitions. Also, an improvement was shown in the amount of information that was retained from the clown show. The children were able to competently answer questions pertaining to HIV, pregnancy and contraception as a group effort. Unfortunately, this was a short-term achievement.

PHASE 3: MUSIC/SONG

The music/song component of the intervention was motivated by the pupils' idolisation of the *Coca Cola PopStars* group '101' resulting in their eager selection of the song 'Who's it gonna be.' These cerebral palsied children were able to identify with '101' in the sense of them being ordinary people who had realised their aspirations. Participation and eagerness grew as the target group practised the song over two days, culminating in the performance and recording of the song onto compact disk (CD), in a studio at Highway Radio. This was undoubtedly the climax of the intervention, as no other activity was received by students with such enthusiasm.

This activity set out to reinforce the HIV concepts taught in the previous activities. The lyrics of the song 'Who's it gonna be next in line,' were changed to suit the intervention message of advocating responsible sexual intercourse. Both condom use and abstinence were promoted because the audience comprised of both sexually active and non- active pupils.

PHASE 4: SOUL BUDDYZ SCREENING

We screened episode 20 from series 1 of the children's television drama *Soul Buddyz*, which dealt with issues pertaining to sexuality. The content included the following:

- graphic illustrations of the male and female reproductive systems
- causes of and prevention of pregnancy, including how a baby is formed, how to put on a condom and how to enable a pregnancy test at a clinic
- responsible and irresponsible relationships including provided positive and negative role models on how males react upon the discovery of a girlfriend's pregnancy
- peer pressure, where friends encourage each other to be sexually active, to later discover that this is inappropriate
- how HIV can be contracted, avoided and tested for.

Soul Buddyz, aimed at children between the ages of eight and twelve years old, was chosen over the adult version of *Soul City*, due to the fact that *Soul City* would have been too complex and complicated for the children to understand. Juvenile protagonists enabled easier interpellation of the target audience.

Due to the fact that *Soul Buddyz* is a bilingual programme in English and Zulu (with English subtitles), we assisted the pupils in interpreting the messages that were put forward. Bearing in mind that all the children in the audience were not competently literate, we periodically paused the video in order to read out the English subtitles, whilst reaffirming the narrative plot. By supplementing their interpretations of the progression of the narrative, through dialogic updates, we reiterated what they understood, whilst assisting in their conceptualisation of the various messages. This process was interactive.

A friendly, competitive quiz was used to test the children's interpretation of the *Soul Buddyz* screening. Prizes were given to the pupils that answered the most number of questions correctly, and had the most stickers on their cards. At this point in the programme, it appeared that the majority of the pupils had gained some knowledge, even though we had to constantly prompt or para-phrase questions to elicit correct answers.

PHASE 5: POST EVALUATION

Summative research was conducted two weeks after the implementation of the project, to evaluate the impact of the intervention. Qualitative, individual interviews, in the same format as the preliminary interviews, were conducted. The same questions were asked in order to ascertain whether new information had been assimilated and retained, and to discover whether previous knowledge had been reaffirmed.

The summarised results are as follows:

- Differences between good touch/bad touch: All the students displayed a good grounding in discerning the good from the bad touches. Initially, only 77% had understood the concepts.
- Rape: Every pupil was able to explain the concept of rape, which was an improvement from the initial 54% of the sample.
- Causes of HIV: 40% maintained a partial or slightly confused understanding of HIV transmission, however 33% showed evidence of having acquired new and accurate information, while 27% remained oblivious to the causes. There was an increase in numbers of both knowledgeable pupils and those who did not understand. This was probably due to the higher number of pupils interviewed in the post evaluation.
- HIV prevention: This data correlated proportionately to the data from the previous question (causes of HIV).
- Cause of pregnancy: 53% of the group understood that unprotected sex could lead to pregnancy. 40% of the pupils still maintained some confusion, while 7% were still unable to comprehend how a woman could get pregnant. Knowledge was gained in this area. Pre-evaluation revealed that only 17% understood this component prior to the programme.
- Prevention of pregnancy/contraception: 60% were knowledgeable on the contraceptive methods used in preventing unwanted pregnancies, and 40% has some grasp of the issue, but still displayed some confusion. This revealed a drastic improvement in their knowledge.

It is evident that post-evaluation is a crucial aspect in determining the effectiveness of an intervention. The post-evaluation proved that improvements in knowledge acquisition occurred in practically every concept taught to the children.

Certain indicators were also used to ascertain the impact of our project. One of these was the sticker cards. This was a method employed to determine the progress of the project. The pupils were given stickers to stick onto their individual cards whenever they answered questions correctly. This was used as a continuous evaluation throughout the programme. One way of measuring the success of the intervention was through the comparison of the initial knowledge identified in the pupil's preliminary interview, and the continuous evaluation of acquired knowledge, through the number of stickers on their cards. The results on the cards proved that the majority of the pupils did have an increased knowledge and overall perception in comparison to their initial understanding, even though it may have been a temporary retention of knowledge. However, some pupils consistently misunderstood certain concepts.

Another success indicator that was identified during the post evaluation interviews, was the fact that pupils still sang the song that they had been taught, even after the completion of the activity. It became a socialising strategy whereby pupils taught their friends the song. Furthermore, when questioned in the post-evaluation interviews, some pupils reflected back to the song in order to provide answers.

A further success indicator was the fact that parasocial interaction was achieved. Respondents stated that they conversed with their peers about issues that they learnt about during the programme.

PROBLEMS ENCOUNTERED DURING THE IMPLEMENTATION OF THE PROGRAMME

Due to the low cognitive capabilities of the majority of the pupils, many were only able to gain partial understanding of the messages we were communicating to them. Most pupils had an extremely short memory span and an Attention Deficit Disorder (ADD). They were able to answer questions shortly after each activity; however, they were unable to recall information days or weeks later. Due to the short time span of the project, we were unable to adequately reinforce the concepts through sufficient repetition.

At the start of the project, we initially moved at a pace that was too rapid for the children to effectively assimilate information, for example, we spoke too quickly in the puppet show. However, we were quick to slow down the pace in the subsequent activities.

All of the pupils were not always present for each component of the programme. Some parents did not permit their children's participation in the project due to the fear of unintended effects.

At times it was difficult to understand the children and accurately ascertain what each pupil was verbalising, due to poor speech articulation. We had to be attentive to non-verbal cues, such as gestures and body language, as well as avoid open-ended questions that would encourage full sentences. We opted for closed questions in this situation. The pupils' answers were ambiguous at times, where they affirmed and negated the same closed question.

The credibility of some pupils' statements were also questionable, due to the fact that they did not always understand concepts posed to them in our questions. Confusion, on their part, would have resulted in misinterpretations, and hence the incorrect use of terminology or 'false facts'.

Shyness both on our part and that of the children's led to a slight inhibition of the free exchange of information. However, we attempted to counteract this through the use of humour.

SUSTAINABILITY

There were three elements of sustainability in this project, the 'ongoing vehicles' of the CD, *Soul Buddyz* video, and a video of the project itself.

The HIV song was recorded on CD, and a copy of the CD was presented to the school. Subsequently, the song was played at the schools morning assembly on numerous occasions. Pupils who were not involved in our programme were taught the lyrics by their peers and class teachers, who also assisted them in assigning meaning to the song.

The second 'ongoing vehicle', was the *Soul Buddyz* video. Teachers screened this video weekly after the completion of the programme, to reaffirm information through repetition. This episode of *Soul Buddyz* contained all the essential concepts covered throughout the programme.

The third indicator was the video recording of the entire programme, containing footage of the puppet and clown shows, as well as the excursion to the radio station. This video will be screened in conjunction with *Soul Buddyz*.

Community efficacy is exemplified by the staff being actively involved in ascertaining the goals and in using these materials to ensure the continued effect and sustainability of the project.

CONCLUSION

According to Paisley (2001), there is an assumption that attitude change is greatest immediately after a message is received. Attitudinal change and memory retention do, however, decay progressively as time elapses. This concept was exemplified in our project, where the children were able to answer questions correctly directly after each activity, however, the summative interviews proved that only a slight increase in knowledge had occurred when compared to the preliminary interviews.

This project reinforced the fact that cerebral palsied children were in dire need of sex education, as many pupils had been exposed to some form of sexual encounter, either with their peers, or with opportunistic adults.

The daunting task, however, is to discover a means of communicating the message effectively, by capturing and maintaining the pupils' interest and enthusiasm. This is evidently achieved through music. It is evident that the top-down and didactic approaches lead to minimal improvements. Mobilising the cerebral palsied children into a pro-active, participatory approach using action media can counteract this. Central to this approach is the idea of empowering the target group. Cerebral palsied children should not be treated as being incompetent or disadvantaged. They should not be made to feel stupid. Avoiding top-down approaches, where concepts are bombarded at the audience at a rapid pace, or where the communicator has a different background to the audience, resulting in shortsighted methodologies, may solve this problem. These children require a boost to their self-esteem, which will improve their self-efficacy. This can only be achieved through validating their input and increasing their control in the construction of the product, so that they can be knowing subjects, and not just recipients. Furthermore, their participation is vital to the product's success. Incorporating the pupils into the song allowed them to become part of the communication product. This manifested in the pupils themselves becoming agents of potential behavioural change in their school environment and within their communities.

In this project, music was shown to be an entertaining and effective way to communicate HIV/AIDS and sexuality messages. This project exemplified the fact that music, with its emotive capacity, in combination with action media, is a useful avenue, which needs to be explored further.

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