# ECOSYSTEMIC MANAGEMENT STRATEGIES FOR DEALING WITH THE IMPACT OF THE HIV/AIDS PANDEMIC AT SCHOOL SETTING

MOTSEPUOA MAGDELINE MODISENYANE

PTC (WILBERFORCE COLLEGE); SPTD (SEBOKENG COLLEGE); EDUCATIONAL MANAGEMENT (R.A.U); BA (NWU); B Ed (NWU)

A dissertation submitted in fulfilment of the requirements for the degree

MAGISTER EDUCATIONIS

in

Educational Management

NORTH-WEST UNIVERSITY

(VAAL TRIANGLE FACULTY)

SUPERVISOR: Dr Nzuzo Joseph Lloyd Mazibuko

Vanderbijlpark

2008

## DECLARATION

I declare that this research study:

**ECOSYSTEMIC MANAGEMENT STRATEGIES FOR DEALING WITH THE IMPACT OF THE HIV/AIDS PANDEMIC AT SCHOOL SETTINGS.**

Is my own independent work, and that all of the sources used or quoted have been indicated and acknowledged by means of complete references.

---

**M.M. MODISENYANE**

**DATE: MARCH 2008**

# DEDICATION

This dissertation is a dedication to my brothers, Rapulane, Kholane, Nyedimane and twin sisters Motselisi, Matseliso Mahasela. My only daughter Matebello Millicent Jacob and son Mpho. My three grand children, Neo, Paballo and Rorisang, my husband Mohatelle Stephen and my in-laws.

## ACKNOWLEDGEMENTS

The author wishes to thank the following people whose interest and supervision have made the presentation of this dissertation possible:

- My supervisor Dr N.J.L Mazibuko for his expert advice, patience and constant encouragement throughout the duration of this study.
- Dr J. Heupsh for patience and professional editing.
- The Vaal Triangle Campus (North West University) library staff for their friendly and excellent service.
- Dr Siphokazi Kwatubana, for the support, guidance and encouragement and her family.
- My dearest daughter Matebello Millicent Jacob for being there all the time for my needs, son Mpho and grand children (Neo, Paballo and Rorisang) for their encouragement and moral support.
- My brother and his wife Rapulane Phillip and Winnie Mahasela for their encouragement and moral support.
- My friend Refiloe Canicia Masilo, Mesie Mokhema and late sister - in-l aw Sarah Magopane Motsepe for their moral support.
- My colleagues at work: A.M. Lembede staff for their moral support.
- My husband Mohatelle Stephen for the love, support and encouragement and always at my side during this study
- My Heavenly Father who gave me the strength, trust and love and sustenance to complete this study through His Grace.

# ABSTRACT

The objectives of this research were investigate the lived experiences of school-going learners who are HIV-positive; and develop ecosystemic management strategies to help learners who are HIV-positive.

The literature research investigation revealed that HIV/AIDS is not just a health problem but also attacks the education system itself. Demand for education is dropping and changing, many educators are ill and dying, and the traurna of loss associated with HIV/AIDS is entrenched in South African classrooms. The HIV/AIDS pandemic has a traumatic impact on all educators and learners. The work of educators both those who are HIV positive and those who have developed full-blown AIDS will be compromised by periods of illness. The pandemic thrives on sexual violence, male domination and child abuse in South Africa. It is the ecosystemic paradigm that helps in seeing the connecting link between family-school-community-society-world or school and peers and this helps in providing a more useful synergistic focus than trying to work in isolation with discrete segments of a microsystem for example, with an individual in isolation. Management strategies for dealing with HIV/AIDS include the notion that achieving sustainability requires bringing together a variety of legitimate stakeholders, drawing on a variety of accepted bodies of knowledge, to negotiate a learning path based on a series of conflict resolutions within ecological constraints. Continual learning based on free flow of information and mutual respect, and investment in effective management of HIV/AIDS are keys to success.

The empirical research investigation revealed that psychologically disturbed, emotional well-being, spiritual well-being, physical well-being, social life, their scholastic performance, daily routine, there is a change in their behaviour or health after the HIV- positive status has been revealed, they fear of death, their academic performance at school is affected by absenteeism and lack of concentration, there is absence of strategies to assist learners who are absent frequently because of illness, they loose valued level of functioning, lack assistance at school, fear being discriminated or ridiculed, there is absence

of measures to deal with discrimination at school, there is a lack of information on HIV/AIDS, learners fear disclosing to friends and teachers, there is a lack of communication between parents and infected learners about issues regarding HIV/AIDS. Educators are also affected emotionally, spiritually and physically. They become affected socially and they do not cope with the impact of HIV. The level of communicating the HIV/AIDS pandemic within the schools is low, the principals are not doing much as leaders to supplement this low level of communicating about HIV/AIDS, school policies on HIV/AIDS in these schools do not address issues of support for learners and educators who are incapacitated because of HIV/AIDS, there is no monitoring tool used in these schools to ensure HIV-policy adherence, principals in these schools do not ensure that educators teach learners about matters pertaining to HIV/AIDS, health programmes in these schools do not assist learners living with HIV/AIDS within the school and the level of accepting and accommodating infected learners and the personnel in these schools is low. The level of involvement of community members in matters pertaining to HIV/AIDS in these schools is low.

An ecosystemic management system is proposed in this research

# ABSTRAK

Die doelstelling van hierdie navorsing was om die 'geleefde' ervarings van skoolgaande leerders wat MIV positief is, te ondersoek, sowel as om ekosistemiese bestuurs-strategieë te ontsluit waarby leerders wat MIV positief is, behoort te baat.

Die literatuurnavorsing het aangedui dat MIV/VIGS nie slegs 'n gesondheidsprobleem is nie, maar dat dit die opvoedkundige stelsel ook in 'n mate anntas. Die aanvraag na opvoeding besig on te daal en te verander. 'n Groot aantal opvoeders is medies ongeskik en ander is sterwend, en die trauma rondom MIV/VIGS is onderliggend aan die klaskameratmosfeer. Die MIV/VIGS pandemie het 'n truamatiese invloed op alle leerkragte, sowel as op die leerders. Beide opvoeders wat MIV positief is, sowel as die wat volskaalse VIGS ontwikkel het, se werk word geaffekteer deur periodes van mediese ongeskiktheid. In Suid-Afrika floreer die pandemie op seksuele geweld, dominansie deur die manlike geslag, sowel as kindermishandeling. Dit is die ekosistemiese paradigm wat bydra om die skakel tussen gesin-skool samelewig-wèreld of tussen skool en medeleerder raak te sien en om 'n meer bruikbare sinergistiese fokus te voorsien met diskrete segmente van 'n mikrosisteem byvoorbeeld eerder as om met 'n individu in isolasie te werk. Bestuursstrategiee om met MIV/VIGS te handel, met die doel om volhoubaarheid te bereik, omhels om 'n aantal deelnemende partye byeen te bring wie 'n verskeidenheid aanvaarbare leerareas verteenwoordig, gebaseer op konflik-bereddering binne ekologiese beperkinge. Volhoubare leer gebaseer op 'n vrye vloei van inligting en wedersydse respek en belegging in effektiewe bestuur van MIV/VIGS is sleutels tot sukses.

Die empiriese navorsingsondersoek het blootgelê dat leerlinge sielkundige versteurings ervaar, hul emosionele welsyn, geestelike welsyn, fisiese welsyn, sosiale lewe, skolasitiese prestasie en daaglikse roetine, 'n verandering in gedrag of gesondheid toon nadat hul MIV-pisitiewe status aan die lig kom. Dan vrees hullle om te sterf, hul akademise prestasie word aangetas deur afwesigheid as gevolg van 'n tekort aan aandag. Daar is ook 'n gebrek aan

stategieë om leerders by te staan wat afwesig is as gevolg van mediese ongeskiktheid. Hulle verloor 'n waardevolle peil van funksionering, ondervind 'n tekort aan bystand in die skool, vrees diskriminasie of bespotting omdat daar 'n algehele afwesigheid van maatreëls is om met diskriminasie op skool te handel. Ook is daar 'n gebrek aan kommunikasie tussen ouers en besmette leerders aangaande sake wat MIV/VISGS aanbetref en leerders vrees om teenoor maats en opvoeders hul status te openbaar. Opvoeders word ook emosioneel aangetas, sowel as geestelik en fisies. Hull work op sosiale vlak geaffekteer en hulle kan nie met die impak van MIV saamleef nie. Kommunikasie rondom die MIV pandemie binne skole is minimal en die skoolhoofde as leiers doen nie genoeg om hierdie lae stand van kommunikasi aan te vul nie. Skoolbeleid in verband met MIV/VIGS spreek nie bystand van leerders en opvoeders aan nie omdat hierdie persone onbevoeg is as gevolg van MIV/VIGS, daar is ook geen monitoring in skole om seker te maak van MIV-beleids-verbondenheid. Skoolhoofde van hierdie skole maak ook nie seker dat opvoeders leerders inlig insake MIV/VIGS nie. Gesondheidsprogramme in hierdie skole bied geen hulp aan leerders wat met MIV/VIGS binne die skool moet saamleef nie en die vlak van aanname en akkomodasie van besmette leerders sowel as die personeel in sulke skole is minimaal. Die vlak van betrokkenheid van lede van die gemeenskap wat betref MIV/VIGS in hierdie skole is minimal.

'n Ekosisteмiese bestuursstelsel word in hierdie navorsing voorgestel.

# TABLE OF CONTENTS

DECLARATION ..... ii

DEDICATION ..... iii

ACKNOWLEDGEMENTS ..... iv

ABSTRACT ..... v

ABSTRAK ..... vii

TABLE OF CONTENTS ..... ix

LIST OF FIGURES ..... xix

CHAPTER ONE ..... 1

ORIENTATION ..... 1

1.1 INTRODUCTION ..... 1

1.2 BACKGROUND TO THE STUDY ..... 2

1.3 SIGNIFICANCE OF STUDY ..... 3

1.4 STATEMENT OF THE PROBLEM ..... 5

1.5 OBJECTIVES OF THE RESEARCH ..... 5

1.6 RESEARCH METHODS EMPLOYED IN CONDUCTING THIS RESEARCH ..... 6

1.6.1 Literature review method ..... 6

1.6.2 Qualitative empirical research method and design ..... 6

1.6.3 Population sample of this research ..... 8

1.6.4 Research measuring instrument ..... 9

1.7 ETHICAL CONSIDERATIONS ..... 10

1.8 OVERVIEW OF RESEARCH CHAPTERS ..... 11

1.9 CONTRIBUTION OF THE STUDY ..... 11

1.10 CONCLUSION ..... 12

CHAPTER TWO ..... 13

LITERATURE REVIEW ON THE ECOSYSTEMIC THEORETICAL FRAMEWORK ..... 13

2.1 INTRODUCTION ..... 13

2.2 CONCEPTUALISATION ..... 13

2.3 ORIGINS OF ECOLOGY ..... 14

2.4 THE ECOLOGICAL FRAMEWORK ..... 15

2.4.1 Central issues and concepts ..... 16

2.4.1.1 Assumptions ..... 16

2.4.1.2 Concepts ..... 17

2.4.1.3 The influence of the environment on human behaviour ..... 20

2.4.2 Deacon and Firebaugh's model ..... 25

2.5 AN ECOSYSTEM APPROACH TO HEALTH AND ITS APPLICATIONS ..... 26

2.5.1 Human diseases, health and their ecological and social contexts ..... 26

2.5.2 Definition of health ..... 27

2.5.3 An ecosystem approach to health ..... 28

**2.5.4 Application to information systems ..... 33**

**2.6 ECOLOGICAL FRAMEWORK AND ADOLESCENTS' SEXUAL BEHAVIOUR ..... 34**

**2.6.1 Individual Factors ..... 35**

**2.6.2 Familial Factors ..... 38**

**2.6.3 Extra-familial factor ..... 39**

**2.6.4 Feedback processes ..... 39**

2.6.4.1 First-order processes ..... 40

2.6.4.2 Second-order processes ..... 40

2.6.4.3 Third-order processes ..... 41

2.6.4.4 Fourth-order processes ..... 41

**2.7 UNDERSTANDING THE FAMILY AS A SYSTEM ..... 42**

**2.8 COLLABORATIVE COMMUNITY EMPOWERMENT ..... 44**

**2.8.1 Community Participation ..... 46**

**2.9 INTERVENTION IN SCHOOLS ..... 47**

**2.9.1 Goal of the intervention ..... 47**

**2.9.2 Content of the intervention ..... 47**

**2.9.3 Training of teachers as presenters ..... 48**

**2.10 CONCLUSION ..... 49**

**CHAPTER THREE** ..... **50**

**MANAGEMENT STRATEGIES FOR DEALING WITH THE IMPACT OF HIV/AIDS** ..... **50**

**3.1 INTRODUCTION** ..... **50**

**3.2 THE HIV/AIDS ENDEMIC AS A SYSTEMS CHALLENGE** ..... **52**

**3.2.1 The ecology of HIV/ populations** ..... **53**

**3.2.2 HIV/AIDS, life expectancy and social functioning** ..... **56**

**3.2.3 HIV/AIDS and the societal energy balance** ..... **57**

**3.3 THE IMPACT OF HIV/AIDS ON THE EDUCATION SYSTEM** ..... **58**

**3.3.1 Impact on Learners** ..... **58**

**3.3.2 Impact of orphanhood on schooling** ..... **59**

**3.3.3 Impact on educators** ..... **62**

**3.4 MITIGATING THE IMPACT OF HIV/AIDS ON EDUCATION** ..... **64**

**3.4.1 The impact of HIV/AIDS on education** ..... **64**

3.4.1.1 Socioeconomic conditions ..... 64

3.4.1.2 Stigma and Isolation ..... 65

3.4.1.3 Psychosocial stress ..... 65

**3.4.2 Demand for education services** ..... **66**

3.4.2.1 Size of learner populations ..... 66

**3.4.3 The quality of education provision** ..... **67**

3.4.3.1 Challenges to Education Quality ..... 67

3.5 SOUTH AFRICA'S STRATEGY TOWARDS COMABATING HIV/AIDS ..... 69

3.6 EDUCATIONAL MANAGEMENT OF HIV/AIDS ..... 72

3.6.1 Education sector action ..... 72

3.6.2 Confronting HIV/AIDS in education ..... 74

3.6.3 Working on health concerns - learning and preventing ..... 75

3.6.4 Working on education sector impact concerns - understanding and responding ..... 76

3.6.5 Social support as a management strategy for educators and learners affected and infected with HIV/AIDS ..... 80

3.6.6 Cover for absent educators and relief educator systems ..... 86

3.6.7 Provisional HIV/AIDS programme structures and functions ..... 88

3.7 MITIGATING THE CONSEQUENCES OF HIV/AIDS FOR EDUCATION ..... 88

3.8 CONCLUSION ..... 92

CHAPTER FOUR ..... 93

RESEARCH DESIGN ..... 93

4.1 INTRODUCTION ..... 93

4.2 THE PURPOSE OF THIS STUDY ..... 93

4.3 QUALITATIVE RESEARCH APPROACH ..... 93

4.3.1 Research design ..... 95

**4.4 POPULATION AND SAMPLING ..... 96**

**4.5 RESEARCH INSTRUMENT ..... 96**

**4.5.1 Individual interviews ..... 97**

**4.5.2 Focus Group Interviews (FGI) ..... 97**

**4.5.3 Interview setting ..... 98**

**4.5.4 Transcriptions and analysis ..... 98**

**4.6 ETHICAL CONSIDERATIONS ..... 99**

**4.7 CONCLUSION ..... 100**

**CHAPTER FIVE ..... 101**

**ANALYSES AND INTERPRETATION ..... 101**

**5.1 INTRODUCTION ..... 101**

**5.2 CASE STUDY ..... 101**

**5.2.1 Background information ..... 101**

**5.2.2 Interview proceedings ..... 102**

5.2.2.1 Interview with Sihle ..... 102

5.2.2.2 Interview with Sihle's grandmother ..... 107

5.2.2.3 Interview with Sihle's educator ..... 110

**5.2.3 Analysis and interpretation ..... 112**

5.2.3.1 Theme 1: Respondents are psychologically disturbed ..... 112

5.2.3.2 Theme 2: There is a change of behaviour or health after the HIV- positive status has been revealed ..... 113

5.2.3.3 Theme 3: Fear of death ..... 113

5.2.3.4 Theme 4: Learners' academic performance at school is affected by absenteeism and lack of concentration ..... 114

5.2.3.5 Theme 5: Absence of strategy to assist learners who are absent frequently because of illness ..... 115

5.2.3.6 Theme 6: Loss of valued level of functioning ..... 115

5.2.3.7 Theme 7: Lack of assistance at school ..... 116

5.2.3.8 Theme 8: Fear of being discriminated or ridiculed ..... 117

5.2.3.9 Discrimination at school and absence of measures to deal with it ..... 117

5.2.3.10 Theme 10: Support from school ..... 118

5.2.3.11 Theme 11: Lack of information on HIV/AIDS ..... 118

5.2.3.12 Theme 12: Fear of disclosing to friends and teachers ..... 119

5.2.3.13 Theme 13: Lack of communication between parents and infected learners about issues regarding HIV/AIDS ..... 119

**5.3 FOCUS GROUP INTERVIEWS ..... 120**

**5.3.1 Introduction ..... 120**

**5.3.2 Interview proceedings ..... 120**

**5.3.3 Analyses and interpretation ..... 128**

5.3.3.1 THEME 1: Effect of HIV/AIDS on the emotional well-being of infected learners ..... 128

5.3.3.2 THEME 2: Effect of HIV/AIDS on infected learners' spiritual well-being ..... 128

5.3.3.3 THEME 3: Effect of HIV/AIDS on learners' physical well-being ..... 129

5.3.3.4 THEME 4: Effect of HIV/AIDS on infected learners' social life ..... 130

5.3.3.5 THEME 5: Effect of HIV/AIDS on learners' scholastic performance ..... 131

5.3.3.6 THEME 6: Effect of HIV/AIDS on learners' daily routine ..... 131

5.3.3.7 THEME 7: Coping with being HIV positive ..... 132

5.3.3.8 THEME 8: Support from school, other learners, and the community to cope with being HIV-positive ..... 132

**5.4 INDIVIDUAL INTERVIEW WITH EDUCATOR ..... 133**

**5.4.1 Background information ..... 133**

**5.4.2 Interview proceedings ..... 134**

**5.4.3 Analyses and interpretation ..... 136**

5.4.3.1 Theme 1: HIV affects emotional well-being of educators ..... 136

5.4.3.2 Theme 2: HIV affects the spiritual well-being of educators ..... 136

5.4.3.3 Theme 3: HIV affects the physical well-being of educators ..... 137

5.4.3.4 Theme 4: Educators become affected socially ..... 137

5.4.3.5 Theme 5: The professional work of educators become affected ..... 137

5.4.3.6 Theme 6: The educator's daily routine becomes affected ..... 137

5.4.3.7 Theme 6: Educators do not cope with the impact of HIV ..... 137

**5.5 INDIVIDUAL INTERVIEW WITH THE SCHOOL PRINCIPALS ..... 138**

**5.5.1 Introduction ..... 138**

**5.5.2 Interview proceedings ..... 138**

**5.5.3 Analyses and interpretation ..... 142**

5.5.3.1 Theme 1: The level of communicating the HIV/AIDS pandemic within the schools is low ..... 142

5.5.3.2 Theme 2: The principals are not doing much as leaders to supplement this low level of communicating about HIV/AIDS ..... 142

5.5.3.3 Theme 3: School policies on HIV/AIDS in these schools do not address issues of support for learners and educators who are incapacitated because of HIV/AIDS ..... 143

5.5.3.4 Theme 4: There is no monitoring tool used in these schools to ensure HIV-policy adherence ..... 143

5.5.3.5 Theme 5: Principals in these schools do not ensure that educators teach learners about matters pertaining to HIV/AIDS ..... 144

5.5.3.6 Theme 6: Health programmes in these schools do not assist learners living with HIV/AIDS within the school ..... 144

5.5.3.7 Theme 7: The level of accepting and accommodating infected learners and the personnel in these schools is low ..... 144

5.5.3.8 Theme 8: The level of involvement of community members in matters pertaining to HIV/AIDS in these schools is low ..... 145

**5.6 CONCLUSION ..... 145**

CHAPTER SIX ..... 146

SUMMARIES AND RECOMMENDATIONS ..... 146

6.1 INTRODUCTION ..... 146

6.2 SUMMARIES OF THE FINDINGS FROM BOTH THE LITERATURE REVIEW AND EMPIRICAL RESEARCH PROCEEDINGS ..... 146

6.2.1 A summary of the literature review proceeding ..... 146

6.2.2 A summary of the empirical research proceedings ..... 147

6.3 RECOMMENDATIONS ..... 148

REFERENCES ..... 149

ADDENDUM A ..... 178

INTERVIEW QUESTIONS: CASE STUDY ..... 178

ADDENDUM B ..... 181

ADDENDUM B ..... 181

FOCUS GROUP INTERVIEWS QUESTIONS ..... 181

# LIST OF FIGURES

Figure 2.1: A diagrammatic representation of the model as it applies to a school learner..... 22

Figure3.1: Structure of causal links in HIV/AIDS system..... 55

Figure 3.2: Proportion of children who have no food..... 62

# CHAPTER ONE

# ORIENTATION

## 1.1 INTRODUCTION

HIV/AIDS is destroying the lives and livelihoods of millions of people around the world. Efforts to combat the disease have been oriented above all toward finding bio-medical and behavioural solutions, which are no doubt of vital importance if the world is to succeed in combating the effects of HIV/AIDS on the psychological, physical and social well being of human beings (Van Dyk, 2005:10). Nevertheless, concern with deeper socio-economic and political roots of the pandemic is growing. Clearly the disease strikes hardest where poverty is extensive, gender inequality is pervasive and public services are weak. In fact, the spread of HIV/AIDS at the turn of the twenty-first century is a sign of mal-development, an indicator of the failure at both national and international levels to create more equitable and prosperous societies for all people (Badcock-Walters, 2001:19).

The HIV/AIDS epidemic does not only attack individuals, but also social systems in communities and their institutions such as schools. Until recently, HIV/AIDS has been perceived primarily as a health problem, which can be contained by effective health education programmes (Kelly, 2000b:44), but this deadly virus has not been containable and continues to spread so widely that it is now having a profound adverse impact on social systems in communities and their institutions such as schools. Government's health-focused HIV/AIDS plans have also failed to consider what must be done when the disease is out of control and even state social development systems such as schools are themselves threatened (Department of Health, 2000:21).

From the foregoing paragraphs it is clear that the HIV/AIDS epidemic remains undoubtedly one of the greatest challenges of the world today, as there is no part of the world that has not felt the devastating impact of the epidemic.

## 1.2 BACKGROUND TO THE STUDY

In South Africa, the HIV/AIDS epidemic is the most critical factor that undermines social development and exacerbates social problems such as poverty, under-development, unemployment and socio-political instability. According to the UNAIDS Epidemic Update (UNAIDS, 2005:12), Sub-Saharan Africa has just over ten per cent of the world's population, but is home to more than sixty per cent of all people living with HIV-25.8. In 2005, an estimated three-point-two million people in the region became newly infected, while two-point-four million adults and children died of AIDS related diseases. In South Africa, the epidemic has evolved at an astonishing pace and taking a devastating toll on human lives. A report of the study conducted by Statistics South Africa (Stats SA, 2005:12) on death registration data has shown that deaths among people fifteen years of age and older has increased by sixty-two per cent from 1997-2003 with AIDS related conditions. In South Africa alone, it is estimated that five-point-three million people are living with HIV and the majority is women (Shisana, Rehle, Simbayi, Parker, Zuma, Bhana, Connolly, Jooste & Pillay, 2005:8). Tragically than elsewhere, the epidemic has caused untold miseries in Sub-Saharan Africa region as it has left millions of children with no parents or primary caregivers to care and support them (Asamoah-Odei & Calleja, 2004:54). The high prevalence rate of HIV and the increasing infection rates among the adult population in the region underscores the severity and magnitude of the impending crisis. The devastating impact of the epidemic has undermined and continue to undermine the social developmental gains of the past and initiatives of bodies such as Southern African Development Community (SADC), New Partnership for Africa's Development (NEPAD) and African Unity (AU) (Hien, 2004:14).

South Africa has the fastest-growing HIV/AIDS epidemic in the world, with more people infected than in any other country (UNAIDS/WHO, 2004:28). About half of South Africa's population of forty-point-six million is children. Over four million people are HIV positive. In 2005, six million South Africans were HIV positive and two-point-five million of these people have since died of AIDS or a related illness. It is predicted that these mortality rates will double

by 2010, and life expectancy will drop from sixty-eight to forty years. Changes in behaviour will not alter these projections, and according to El-Rahman (2004:5), as people who are now HIV positive will die. It is probable that fifty to sixty-five per cent of South African fifteen-year-olds will die of HIV/AIDS related illnesses within the next thirty years (Kelly, 2002:36). By 2005, nearly one million children will have lost one or both parents (WHO, 2002:12).

By 2015, when the epidemic peaks, ten per cent of South Africa's population-about three point-six to four-point-eight million children will be orphans (Nemoto, 2004:27). Traditional patterns of child-care will be under pressure to accommodate large numbers of children infected and affected by HIV/AIDS. HIV/AIDS will cause productivity to decline in all sectors because of illness on the job, absenteeism due to personal or family illness, and funeral attendance (Zhang, 2004:39). Public sector services will cost more, and economic growth will slow as the number of skilled workers declines and cannot be replaced. Child mortality will increase as poverty deepens. Survivors who are orphaned, unsupervised and inadequately parented are more likely to engage in criminal activities. Ultimately, South Africa is likely to experience a real reversal of social development gains. Further social development will be more difficult and development goals, including those set by South Africa Government for the education sector, will be unattainable for the foreseeable future (Corbett, 2002:78).

## 1.3 SIGNIFICANCE OF STUDY

To deal with the above mentioned impact of the HIV/AIDS epidemic on the functioning of families and social development of communities, South Africa needs to make use of an ecosystemic approach. The ecosystemic theory formulated by Bronfenbrenner (1979) and applied by Epstein's (1995) framework of six types of involvement to partnership in the overlapping spheres of influence identifies the following four systems of interrelationships that influence, human development, namely:

- the microsystem;
- the mesosystem;

- the exosystem; and
- the macrosystem.

Bronfenbrenner's (1979) ecosystemic model focuses on the child and the influences these systems have on his/her human development. The ecosystemic model is effective in highlighting how human beings co-exist within particular social contexts of their environments that influence both their identities and ways in which they respond to life is social situations (Gurney & Nisnet, 1998:46). This is in contrast with viewpoints where people often try to understand others in isolation from the factors that create both reinforcement for behaviour and patterns of interaction. This makes their judgment about what is happening for the other person quite limited and often inaccurate (Bogenschneider, Small & Riley, 2000:27).

When people can begin to think more ecosysternically, they are able see all manner of relationships and dynamics which have been relatively invisible. The ecosystemic paradigm helps in seeing the connecting link between family-school-community-society-world or school and peers and this helps in providing a more useful synergistic focus than trying to work in isolation with discrete segments of a microsystem for example, with an individual in isolation (De Plaen & Kilelu, 2004:10).

Using of an ecosystemic way of thinking helps one think about the wisdom of trying to influence the relationship or interaction between people rather than trying to change the fundamental beliefs or ingrained behaviours of an individual. An ecosysternic intervention therefore can be a useful approach to allowing the school management team to be a coach and a facilitator for an infected and or affected learner, rather than trying to control and influence beliefs about themselves and the world (Spencer, Dupree & Hartmann, 1997:817). However, school management teams' helping efforts can involve a new constructing, artificial ecosystem around these learners, where there is a belief that such a learner can function more effectively. This effort to create a safer, more predictable environment, allows the learners to slow down and

achieve relief from the chaos around them, and they perform more capably (Carlson & Kjos, 2002:19).

If school management teams allow themselves to view management of HIV/AIDS in a systemic way, they can suddenly become aware of the paradox of trying to help someone live better, but not allowing them to live where they exist. Their strategy should not be to remove learners from their environments, but to join them in negotiating new relationships and perspectives about themselves and ways in which their world functions (Epstein, Coates, Salinas, Sanders & Simon, 1997:46). In this way school management teams who are more ecosystemic in approach often can stop themselves from becoming a part of the microsystem when it is more useful to be an outside voice prompting the learner or family to expand their awareness (Lopez, Kreider & Caspe, 2004:18).

## 1.4 STATEMENT OF THE PROBLEM

In the light of the above findings from the literature review proceedings, the main questions which this research should answer are:

- What are the lived experiences of school-going learners who are HIV-positive?
- Can ecosystemic management strategies to help learners who are HIV-positive be developed?

Having posed the above questions, the following section states the objectives forming the basis of this research.

## 1.5 OBJECTIVES OF THE RESEARCH

The objectives of this research are:

- investigate the lived experiences of school-going learners who are HIV-positive; and
- develop ecosystemic management strategies to help learners who are HIV-positive.

## 1.6 RESEARCH METHODS EMPLOYED IN CONDUCTING THIS RESEARCH

This section provides the research methods, namely literature review and the qualitative empirical research methods, which this researcher employed in conducting this research in order to answer the questions highlighted in section 1.3 of this research and in this way achieve the objectives mentioned in 1.4.

### 1.6.1 Literature review method

International and national educational journal articles, books, papers presented at professional conferences, dissertations and theses written by graduate scholars and reports compiled by school researchers, university researchers and social agencies providing information on HIV/AIDS, learners infected with HIV/AIDS and the theory of ecosystems as postulated by Bronfenbrenner (1979) served as both primary and secondary sources of information for the literature review proceedings. Journal articles, papers presented at professional conferences, dissertations and theses formed primary sources of information while books formed secondary sources of information.

### 1.6.2 Qualitative empirical research method and design

Qualitative empirical research methods focus on phenomena that occur in natural settings – that is, in the 'real world', and involve studying those phenomena in all their complexity (Leedy & Ormrod, 2005:133). In this way, qualitative research methods deal with empirical data that are principally verbal (White, 2005:80). According White (2005:81), qualitative research is more concerned with understanding social phenomena from the perspectives of the participants. This happens through the researcher's participation in the daily life activities of those forming the population sample of his/her research, hence the researcher becomes a research instrument. According to Cresswell (2003:15), qualitative research is an inquiry process of understanding, based on distinct methodological traditions of inquiry that explore a social or human problem. In the process of a study, the researcher builds a complex and

holistic picture of the problem under investigation, analyzes words, reports detailed views of informants, and conducts the study in a natural setting.

De Vos (2001:240) states that qualitative empirical research is defined as a multi-perspective approach to social interaction, aimed at describing, making sense of, interpreting or reconstructing this interaction in terms of the meanings that the subjects attach to it. Denzin and Lincoln (2005:143) present a comprehensive definition of qualitative research which is that qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspectives, life stories, interviews, observations, historical, interactional, and visual texts – that describe routine and problematic moments and meaning in individuals' lives.

The justification for the use of the qualitative research approach is that:

- it uses an inductive form of reasoning and develops concepts, insights and understanding from patterns in the data;
- it derives meaning from the subject perspective;
- is ideographic and aims to understand the meaning that people attach to everyday life;
- captures and discovers meaning once the researcher becomes immersed in data;
- observations are determined by information richness of settings, and types of observations used are modified to enrich understanding;
- concepts are in the form of themes, motives and categories; and
- data are analysed by extracting themes.

The aim of qualitative empirical research is in this regard, that of understanding human experience as unified.

The above characteristics of qualitative empirical research were consistent with the values of qualitative empirical research described by Patton (2001:56). They listed the following values, which are:

- phenomenology, where the researcher develops an "insider's" viewpoint from
- multiple perspectives;
- holism where the researcher perceives the 'big' picture or the total situation rather than a few elements in a complex situation, as in quantitative research;
- non-judgemental orientation where the researcher records a situation in qualitative terms without superimposing his or her value system, judgments, hypotheses, or preconceptions that may distort what the researcher sees;
- contextualization where all information is considered only in the context of the environment in which it was gathered.

It seems obvious that these characteristics of qualitative empirical research are appropriate for studying lived experiences of learners infected with HIV/AIDS and to develop an ecosystemic management strategy to help them cope with the psychosocial demands of their environments.

### 1.6.3 Population sample of this research

The population sample of this research is composed of the learners infected by HIV/AIDS (n=7), educators (n=2), the grandmother one of the participants (n=1) and principals (n=3) in schools in the Fezile Dabi district in the Free State province.

Two types of sampling were used in this study, purposeful and convenience. Purposeful sampling is composed of elements that contains the most

characteristic, representative or typical attributes of the population (White, 2005:120). On the basis of the researcher's knowledge of the population, a judgement was made about which participants should be selected to provide the best information to address the purpose of this research. Patton, as quoted by McMillan and Schumacher (1997:397) and Leedy and Ormrod (2005:145) describe it as 'selecting-rich cases for study in-depth', or selection of those individuals or objects that will yield the most information about the topic under investigation.

White (2005:120) indicates that in a convenience or availability sampling, respondents are usually those who are the nearest and most easily available to the researcher. In this study the researcher worked with a social worker who happens to know the learner participants.

### 1.6.4 Research measuring instrument

A self-developed interview schedule was used to elicit empirical data from the participants who formed the population sample of this research during both the individual and focus group interviews. Powell and Single (1996:499) describe a focus group as a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the focus of the research, which in this study is the lived experiences of school-going learners infected with HIV/AIDS. White (2005:146) states that focus group interviews involve organised discussions with a selected group of individuals to gain information about their views and experiences of the topic. This type of interviewing is particularly suitable for obtaining several perspectives about the same topic. Focus group interviews were considered to be an appropriate data collection method in this research for the following reasons, which are:

- time-wise it was more economical than conducting numerous individual interviews;
- the group dynamics is a synergistic factor in bringing out information; and

- participants expressed their honest feelings more confidently within a support group of peers.

Learners were interviewed as a group, the educators the grandmother and the principals were interviewed individually.

All interviews were open-ended and semi-structured. In semi-structured interviews the content and procedure are organised in advance, but probing questions are posed (see Addendum B). Schulze (2005:60) indicates that pre-formulated questions should be carefully arranged and put to all interviewees in a fairly similar sequence.

Transcriptions were made of all the audio-taped interviews. The researcher compared audiotapes to transcripts and reviewed each transcript to ensure that it contained the *verbatim* recorded interview. These steps were important for the accuracy of the design and for the identification of emergent issues, which were to form themes.

## 1.7 ETHICAL CONSIDERATIONS

Due to the charged and emotive nature of the HIV/AIDS phenomenon, certain ethical considerations assumed particular importance. De Marrais (1998:230) notes that the very nature of the aim of a phenomenological study, namely to access the individual's life world, is obtrusive. In this study, this obtrusiveness will further be exacerbated by the sensitivity of the topic under investigation. First and foremost, the researcher has the responsibility to respect the rights, needs, values and wishes of the participants (Berg, 2003:112). In order to protect the participants' rights, the following safeguards in an interview as listed by Cresswell (2003:123), are employed, which are:

- the research topic and objectives will be expressed clearly before interview in order to be well understood by the participants;
- each participant's consent will be requested to participate in the study;
- transcriptions, interpretations and reports will be made available to the participants, if they wish to see them;

- in any decision-making process in the study, the researcher will consider the rights and protection of the participants; and

- the researcher will honour confidentiality. The participants will choose their pseudonym to be used in the texts to protect their anonymity. It is anticipated that the discussion of the experience of meaning in individuals with HIV may prove to be emotionally distressing for some participants. Participants, therefore, will be monitored and debriefed. If necessary the researcher will make recommendations for therapeutic interventions (Merriam, 1998:67).

## 1.8 OVERVIEW OF RESEARCH CHAPTERS

Chapter one is primarily an orientation chapter preparing the reader for the subsequent chapters.

Chapter two presents the literature review on ecosystems as the theoretical framework of this research.

Chapter three presents the literature review on the impact of HIV/AIDS on human health, especially that of the learner.

Chapter four presents the empirical research design.

Chapter five presents the analyses and interpretations of the empirical research results.

Chapter six presents the summary of research findings, conclusions and recommendations of the study.

## 1.9 CONTRIBUTION OF THE STUDY

This research suggested ecosystemic management strategies for assisting schools to help learners infected with HIV/AIDS. Such a programme is needed in South Africa in order to highlight the value of a synergistic approach among the different social systems such as families, schools, non-governmental and governmental agencies with HIV/AIDS orientation in combating the scourge of HIV/AIDS.

## 1.10 CONCLUSION

This chapter presented an orientation chapter with the aim of preparing the reader for the subsequent chapters.

The next chapter presents the literature review on ecosystems as the theoretical framework of this research.

# CHAPTER TWO

# LITERATURE REVIEW ON THE ECOSYSTEMIC THEORETICAL FRAMEWORK

## 2.1 INTRODUCTION

Disturbances experienced by the child and family members are likely to subsequently impact on the whole society that in turn generally and collectively contribute towards the development of the child. In this regard Bronfenbrenner (1989:132) indicates, that interdependent systems such as these can be reflected in an ecological theory based upon relationships between organisms and their physical environments. According to Fiscus (2002: 57), the changes within the society may tend to affect many other subsystems within ecosystemic framework.

The ecosystemic perspective has evolved from a blend of ecological and systems theories. This perspective shows how individuals and groups at different levels of the social context are linked in dynamic, interdependent and interacting relationships. In this chapter the research discusses:

- central concepts in ecological theory relevant to this research;
- the systems theory, particularly as it applies to understanding families, schools and relationships between them and within their social contexts; and
- important dimensions of Bronfenbrenner's ecological model.

This research argues that the learner does not grow up in a vacuum but in a particular environment that comprises people and many other things.

## 2.2 CONCEPTUALISATION

According to Bronfenbrenner (1979:21), the definition of human ecology is, that the ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being

and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded.

In accordance with this definition, the basic assumption of Bronfenbrenner's ecological model is that an individual's behaviour is influenced by a host of factors, both internal and external. Such factors include family, friends, school, work, neighbourhoods, community, and culture, all acting as interconnected systems with the capability to influence one another (Bronfenbrenner, 1979:22). According to Bronfenbrenner's theory, the whole person is made up of a set of components, each building off one another.

## 2.3 ORIGINS OF ECOLOGY

The term "ecology" has its origins in several disciplines, particularly the biological research of Charles Darwin and his principle of natural selection (Kay, 2000:135). A key to this survival process is the concept of the adaptation of the organism to the environmental inputs. This concept was borrowed by Human Ecology theoreticians and remains a central concept in the theory today. Dyer (2002:67), a zoologist, was one of the first to conceptualize an ecological theory as it related to and was interested in an organism's relationship to its organic and inorganic environments. He articulated the concept, that the organism was more than just a sum of its parts (Kay, Regier, Boyle & Francis, 1999:721).

The concept of human beings and their well-being as a function of their relationship with their environment, achieved a heightened interest during the later part of the 19th Century during the Industrial Revolution when families and individuals moved from farming communities to urban areas and were sometimes caught in a web of poverty, isolation, disease, and difficult working environments (Waltner-Toews, Kay, Neudoerffer & Gittau, 2003:23). At that time, Ellen Swallow Richards, a chemist and a Massachusetts Institute of Technology (MIT) graduate, utilized what she then termed as "oekology" as a means for applying the principles, methods and results of science to the improvement of people's lives and their environment (Small & Supple,

2001:161). During the early years of the field of "home economics" as it was later termed, emphasis was placed on the effects of various impacts on the family such as air and water pollution; sanitation and waste disposal; preservation storage and cooking of food; and clothing and furnishings for the family's safety, health and aesthetics (Forget & Lebel, 2001:15).

During the 1960s, the environmental movement renewed attention to the theory and the impact of humans on their environment and the environment on humans, as an international audience focused on the issues of worldwide population growth, and the depletion of fossil fuels and other resources. Later pioneers of the theory, who focused attention on issues and individuals in the family, were Bronfenbrenner (1979:174) who studied children and their environments, and Walter, Kay & Neudoerffer (12003: 110) who applied Human Ecology Theory to a Human Resource Management framework (Grove & Burch, 1997:259).

## 2.4 THE ECOLOGICAL FRAMEWORK

According to Bazzani and Feola (2001:35), the central concept of the ecological framework is adaptation. The family adapts to changing social and economic conditions. Adaptation is a broad concept that ranges down to our biological roots and up to large-scale interactive processes at the level of populations of organisms. This concept can be applied to an individual organism's successful adaptation to a specific environmental niche or to global changes (Dalby, 2002:95). The section then gives us a brief overview of the framework history, including early studies by sociologists such as Malthus, Darwin, Mendel and Weinberg, as well as several focus assumptions and definitions of six concepts. Finally, the section ends with a plethora of propositions by family ecologists (Carpenter, Brock & Hanson, 1999:50; Waller, 2001:44; Alcamo & Elena, 2003:56) because the human ecological theory has not yet produced one concrete set of theoretical propositions. The basic principles of the ecological approach are the connectedness and embeddedness of various ecological levels and the continual need for adaptation to the constant currents of change (Gargarino & Ganzel, 2000:34).

### 2.4.1 Central issues and concepts

In this subsection assumptions and concepts integral to ecological issues are discussed.

#### 2.4.1.1 Assumptions

There are five main central issues and concepts concerning ecological adaptation. Central issues are discussed first, then concepts follow.

- **Individuals and groups are both biological and social in nature -** this assumption leads ecological theory to a more biological and geographic orientation and a less mechanistic perspective on human groups. Basically it means linking the dual nature of humans as constructions of both biology and culture (Szapocznik, Kurtines, Santisteban, Pantin, Scopetta, Mancilla, Aisenberg, Mcintosh, Perez-Vidal & Coatsworth, 1997:137).

- **Humans are dependent on their environment for sustenance (air, water, food, and others) -** humans can survive only in environments in which their biological needs can be met (Auvert, Buvé, Ferry, Caraël, Morison, Lagarde, Robinson, Kahindo, Chege, Rutenberg, Musonda, Laourou & Akam, 2001:16).

- **Human beings are social and thus are dependent on other human beings -** what this implies, is that what people think, is truly "human", is social in nature an example would be language (Unger & Sussman, 2002:65).

- **Humans are finite and their life cycle coupled with their biological needs for sustenance, imposes time as both a constraint and resource -** this means that in the space of any individual's life, there is a species-common change and development. Time becomes a crucial resource and allows us to understand social organization and human behaviour (Bazzani, Norohna & Sánchez, 2004:56).

- **Human behaviour can be understood on several levels: Two of these levels are population and individual -** population shows spatial

organization and represent particular frequency distributions of genes. Individual organisms may adapt or fail to adapt to their environment. What may be a negative outcome for the individual may result in a positive outcome for the population. For example, if an individual cannot adapt and ends up dying, although this is bad for the individual - if one looks at the whole population, it may be good in that it might represent the evolution of a healthier gene pool or survival of the group faced with food scarcity (Costanza, 1998:63).

#### 2.4.1.2 Concepts

In the following section concepts concerning ecological adaptation are discussed.

- **Ecosystem -** a subset of a larger environment. The notion of an ecosystem contains the elements of wholeness and the interdependency of parts. Examples are desert or polar ecosystems. Each ecosystem, though it may be attached to others, have its own distinct characteristics. Gurney and Nisnet (1998:27) suggest, that "...a family ecosystem consists of a given family system in interaction with its environment."

- **Ecological Levels -** There are many ways to view the different levels of an ecosystem, but the most popular formulations were offered by Bronfenbrenner (1979:85). He contends, that the family is one among many "nested" ecosystems in which the individual develops and interacts. He studies these "nested" systems on four levels of analysis: the microsystem, the mesosystem, the exosystem, and the macrosystem which are discussed in detail in paragraphs below that follow.

- **Niche -** Every ecosystem contains niches. Associated with each niche is a patterned and relatively stable set of activities, which provides "functions". For example, in a human family, the function of the father is often tied to the role of the provider (Sterelny, 2001:437).

- **Ontogenetic Development:** this term is defined as change that brings development. For humans, this change is experience or maturation caused

by ageng. According to Taylor (1999:201), ontogenetic development and social development are linked. Development is always a relationship between the individual and its immediate environment.

- **Natural Selection and Adaptation:** These are both sources of evolutionary change. Natural selection is a concept about the outcome of adaptation. If an organism or population successfully adapts to its environment then it has not been "selected". If the organism does not adapt successfully, then it has been "selected". Whether a particular organism or individual can adapt to environmental changes, depends on the adaptive range provided by the genetic endowment (Goetz & Darryl, 2005:71).

In Bronfenbrenner's view (1979:23) of the ecological system's model, human development can only be seen as a dynamic two-directional process. People develop multiple settings or environments in which they live, while at the same time being influenced by these environments, the interrelationships among them and external influences from the larger environments. Szapocznik and Coatsworth (1999:334) illustrate the interdependence of sub-systems as a web. Anything that happens within a web, is felt in all other parts.

In the context of this study, a system starts with an individual, and then comes the family, school, community and lastly the broad society. Bronfenbrenner emphasises a contextual study of children and their relationship to their environments. He conceptualized the Human Ecology Model as being "...like a set of nested structures, each inside the other like a set of Russian dolls." Each of these nested systems comprises four levels of analysis: the microsystem, the mesosystem, the exosystem and the macrosystem (Klein & White, 2002:38). Therefore, in view of this theory there are four systems related to each other within such a web, namely the microsystem, mesosystem, exosystem, and the macrosystem (Bronfenbrenner, 1979:27). In the Ecology of Human Development, Bronfenbrenner (1979:22) presents a model of the ecological environment by using interconnecting systems: microsystem, mesosystem, exosystem, and macrosystem. They are defined as follows.

- A **microsystem** is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics, for example. In the case of a child, the parents, the immediate family, the child's interaction with the parents and the parents' interactions with each other. It can also be defined as direct interactions of the developing person with significant others (Garbarino & Ganzel, 2000:51).

- A **mesosystem** is the institutional environment that is larger than the microsystem, but is still close to the individual. It comprises the interrelations among two or more settings in which the developing person actively participates (such as, for a child, the relations among home, school, and neighbourhood peer group; for an adult, among family, work, and social life). It is interrelations of two or more microsystems, such as work and family. The *mesosystem* points out how the interrelationships among microsystems can impact an individual's perception within a setting. Such interrelationships include interactions between parents and schools, communities and families, and churches and communities (Small & Supple, 2001:172).

- An **exosystem** refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by what happens in the setting containing the person. The exosystem are systems that are not in direct interaction with the developing person, but have indirect effects on the person's micro- or mesosystem. These include institutions where the developing individuals themselves are not participating, even though they are affected by what is happening in these settings. The rules and values derived from the constitution and other laws of the particular country, establish the exosystem (Alcamo & Elena, 2003:33).

- The **macrosystem** is the public policy for an example, the state laws or the customs, values and laws of the culture in which the individual is raised as a child and lives (Forget & Lebel, 2001:21). It refers to consistencies, in the form and context of lower-order systems (micro-, meson and exo-) that

exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies. A macrosystem provides the general cultural context in which lower-order systems is environed. It refers to the culture that affects all the other components, as well as the individual. This level is the most remote from individuals' experiences, although it plays an important role in the development of the individual (Bronfenbrenner, 1979:36). For the child, his parents' labour situation entails the macrosystem. This is a layer of chronosystem, an outer circle which consists of the life transitions or changes that are visited upon the child or family. Herrin and Wright expanded the concept further in terms of another environmental layer that would consist of different world views or cultural systems (Waltner-Toews *et al.*, 2003:27).

Thus, Bronfenbrenner (1979:41) proposes that all levels of an individuals' environment are influential in their own way. The microsystem settings are the major focus of this study.

#### 2.4.1.3 The influence of the environment on human behaviour

This model de-emphasises the importance of the individual in behaviour change that is emphasized in the other models of behaviour change such as the health belief model and the transtheoretical model. The model recognizes the importance of all parts of the environment and all the relationships within the environment, in the behaviour of the individual, for example, human behaviour is a function not only of the individual or his or her immediate social relationships, but as depending on the community, organization and the political and economic environment as well (Costanza, 1998:11).

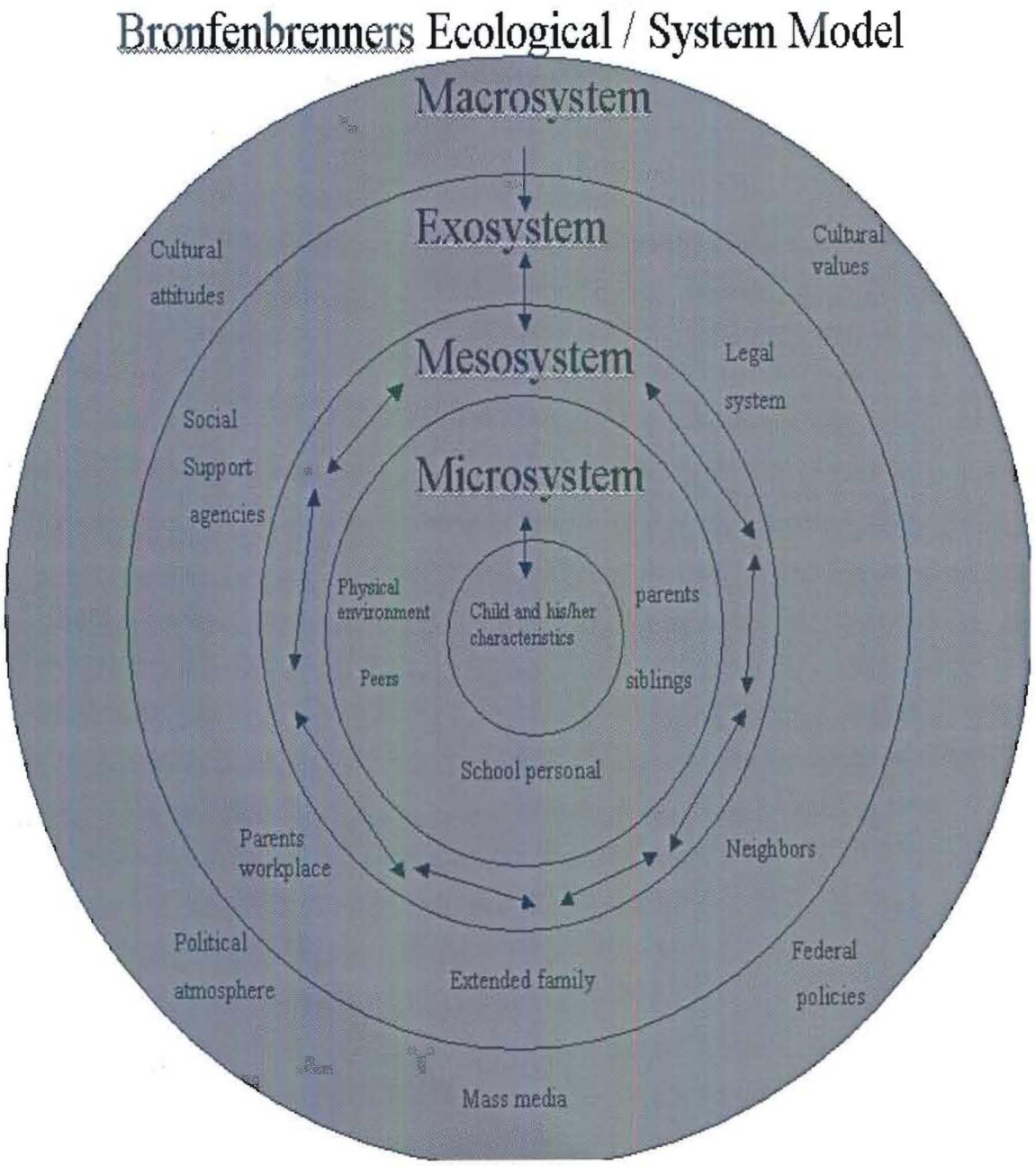
According to George and Moskov (2001:237) death of parents because of HIV/AIDS where these children are displaced, can only be viewed as a change that causes some imbalance within the web of the ecosystem. Human ecology, which this study forms part of, refers to the study of man in his environment: the processes that occur between man and the environment (Bazzani & Feola, 2001: 88). This environment influences and is influenced by

the specific extent to which people use available space and natural resources. People and environment, which together make up the ecosystem, continually influence one another. Kay *et al.,* (1999: 36) state, that although the individual is the nucleus of the human ecosystem, human beings cannot be seen in isolation from the system as a whole. Therefore, the behaviour and the actions of the parent, sick or dead individual, influence the family, the group and the community, while the actions of the family, extended family, the group and the value system of the community in turn influence one another. In any community, there is a distinct relationship in respect of the individual's economic, physical and social development. None of these areas should be over emphasised at the expense of another. Social development can never be properly realised if development in health matters does not take place (Sterelny, 2001:438; Bazzani *et al.,* 2004:72). To a great extent the dynamic interdependence and interaction between the economic, political and social aspects, determine the process of balanced development that takes place in any community. Parents are unable to fulfil their parenting roles due to deteriorating health caused by HIV/AIDS that make them to concentrate on fighting the battle of their own survival. However, within the home, parents are of utmost importance as primary educators in the development and life of the child (Costanza, 1998:63).

Bronfenbrenner's theory offers the most complete account of the influence of context on the development of the behaviour of an individual. His ecological systems theory views the individual as having a biological disposition and intrapersonal factors that develop within a complex system of relationships affected by multiple levels in the surrounding environment (Bronfenbrenner, 1989:190). He portrays the levels of the environment as a series of concentric layers around the individual. Bronfenbrenner also emphasizes that, as in an ecosystem, the relationships are bidirectional, for example, the person is affected by each of the elements in the environment, but in turn, the elements of the environment are affected by the person, and the elements are affected by each other. The child invariably influences those who influence him. The environment is also not static and thus the environmental forces that affect the individual are ever-changing (Szapocznik & Coatsworth, 1999:47).

Bronfenbrenner (1989:199) also points out that the other participants in the situation in which the child lives and develops are not strangers but persons who have enduring roles and relationships *vis-à-vis* the child.

**Figure 2.1: A diagrammatic representation of the model as it applies to a school learner**




**Source:** Carpenter *et al.* (1999:20)

According to Carpenter *et al.,* (1999:20), the Human Ecology Theory conceptualizes the family or individual and their relationships and interrelationships with their near and far environments.

Stemming from its biological beginnings, one of the core concepts underlying Human Ecology Theory is that of survival (Perrino, Coatsworth, Briones, Pantin & Szapocznik, 2001:25). Other core values have been proposed that should drive the theory such as "human betterment" or an increase in what Cuddington (2001:463) calls "the ultimate good". Four virtues, contribute to the ultimate good, and they are as follows:

- something more than economic adequacy - riches in contrast to poverty, nourishment in contrast to starvation, adequate versus inadequate housing, and clothing, healthcare and other essentials for life;
- justice and equality in access to work, education and health;
- freedom in contrast to coercion and confinement; and
- peacefulness in contrast to war and strife (Small & Supple, 2001:170).

Other virtues are included such as education, health, loving and nurturing relationships, productive and healthy work and work environments, a sense of meaning and community, and the ability to develop into human beings that are generous, courageous and tolerant (Gopalan, 2004:18). These virtues are congruent with the goal of "development" in general, which is to foster human development, learning and empowerment for the betterment of the general good (Dalby, 2002:97). In applying the Human Ecology Theory to any study, it can be challenging to identify which environments are the most important to the individual or group in question. For every person, certainly for every culture, there could be a different set of variables that fit into different environmental constructs, which could then be measured in relationship to the actors and their well being (Cuddington, 2001:474). Without another or additional theory operating in concert with the Human Ecology Theory, it can be very difficult to determine which variables of interest one might choose to measure or analyze (Grove & Burch, 1997:260).

An examination of the reciprocal interactions between learners and their environments provides a lens for understanding individuals in multiple, layered and interacting environments, only some of which they encounter directly. An ecology model allows for analysis of individual experience as well as the creation of peer groups and processes of peer cultures (Kay, Reiger, Boyle & Francis, 1999: 423).

Although Bronfenbrenner is able to distinguish four distinct systems, the importance of interconnectedness is essential to his model. He maintains that the ecological environment is conceived topologically as a nested arrangement of concentric structures, each contained within the next (Bronfenbrenner, 1997:50). For the most positive development of the individual to occur, the various systems must interconnect; blockage between the various systems is detrimental to individual development (Waller, 2001:46; Unger & Sussman, 2002:17; Gopalan, 2004:20).

In addition to the influences of the material environment, Bronfenbrenner also acknowledges the influences of cultural and ideological factors. This is succinctly stated in a hypothesis, that the developmental potential of a setting is enhanced to the extent that there exist direct and indirect links to power settings through which participants in the original setting can influence allocations of resources and the making of decisions that are responsive to the needs of the developing person and efforts of those who act in his behalf (Fiscus, 2002:36).

Combining insights from the ecosystem ecology, complex systems theory, catastrophe theory, and hierarchy theory, ecosystem researchers and managers developed a process that anticipates change (without predicting its exact timing

and nature) and creates adaptive solutions in a participatory manner. The process itself grew largely out of the work of Peter Checkland, a systems scientist and specialist in business management (Carpenter, Brock & Hanson, 1999: 89).

Arguing that human activity systems could not be understood or managed like machines, he developed a seven-step "Soft Systems Methodology" which focused on how to understand the goals, perceptions, and transformative actions of people in organizations. This methodology is best worked out for organizations which have definable goals (Szapocznik *et al.,* 1997:144).

Generalizing this understanding to recognize that there are many human actors, with many legitimate perspectives, Kay, Reiger, Boyle and Francis (1999: 724) and Schneider (1994:38) argue that using an ecosystem approach means "...changing in a fundamental way how we govern ourselves, how we design and operate our decision-making processes and institutions, and how we approach the business of environmental science and management."

Central to an ecosystem approach rooted in complex systems theories, then, is the notion that achieving sustainability requires bringing together a variety of legitimate stakeholders, drawing on a variety of accepted bodies of knowledge, to negotiate a learning path based on a series of conflict resolutions within ecological constraints. Continual learning based on free flow of information and mutual respect, and investment in effective management of HIV/AIDS are keys to success (Kay, 2000: 149).

This means that, in the ecosystem approach, the practical, social, and institutional dimensions are of as much concern to researchers as the scientific and scholarly concerns. Thus, even if the people in one region can agree on a common plan of action, they will need to pay attention to the larger system of which they are a part. Within the ecosystem approach, policies, programs, and actions serve the same function as hypotheses and experiments in laboratory science (Bazzani *et al.,* 2004:21).

### 2.4.2 Deacon and Firebaugh's model

Forget and Lebel (2001: 24) have a similar but slightly different model from Bronfenbrenner's which involves the family and the environments that touch the family, which radiate outward from the center. First, at the center is the built environment, then outside of that is the socio-cultural environment, and

then, finally, the outermost circle encompasses the natural/physical environment. They applied this basic Human Ecology model or framework to a model of Family Resource Management, which is basically a Systems Feedback Model (Forget & Lebel, 2001:30). First, as an input, they place the family and its varying characteristics (race, composition, socio-economic status, age, and place in the life course) and the family's mental frameworks (coping, decision-making, and personality) and that family's relationship with the external environment or inputs. Then they conceptualize the throughput as being the decisions that the family makes with regard to the Input or energy introduced into the System. Then the Outputs are the actions that occur from the decisions that have been generated. Essentially there is a feedback loop from the Output back into the Input and into the Throughput portions of the model (Forget & Lebel, 2001: 29).

This model, although traditionally applied to family decision-making processes is useful as a conceptual model for other purposes because it conceptualizes the unit of analysis and environments as having an interactive or two-way relationship with each other rather than a static one-way impact of environments on individuals. In portraying the family or unit of analysis as an adaptive system, the model takes the focus off of determinism and places the emphasis on the varying degrees of control that the individual or unit has relative to the environment (Fiscus, 2002: 263).

The ecological approach to the understanding of health and illhealth is discussed below.

## 2.5 AN ECOSYSTEM APPROACH TO HEALTH AND ITS APPLICATIONS

In this section an ecosystemic approach to health and its implications will be discussed.

### 2.5.1 Human diseases, health and their ecological and social contexts

For several decades after World War II, many parts of the world undertook committed efforts to eradicate diseases through applied biomedical sciences and promote health through public programs fostering social and economic

equity. Both efforts seemed to be successful. Then, in the closing years of the twentieth century, the efforts to promote health were largely abandoned in favour of increasing economic activity *per se*, at the cost of rapidly rising income disparities within and between countries (Duraiappah, 2004:19). At the same time, infectious diseases once thought to be all but eradicated have begun to re-emerge as serious problems throughout the world (Waltner-Toews *et al.,* 2003:18). All of this is occurring in a context of global environmental change occurring at speeds and a scale unprecedented in recent human history. This would appear to be a good time to reconsider how people think about human diseases, health, and their ecological and social contexts (Auvert *et al.,* 2001:27).

### 2.5.2 Definition of health

Good health, according to the preamble of the World Health Organization, is *"...* a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." This is clearly a utopian definition, a heaven-on-earth which humanity may well strive for, but never – except in rare moments perhaps when good wine and good friends conspire together.

Microbiologist Rene Dubos, as an antidote to this utopianism, suggested that good health was simply a "*modus vivendi* enabling imperfect [people] to achieve a rewarding and not too painful existence while they cope with an imperfect world" (Goetz & Darryl, 2005: 59).

A Dictionary of Epidemiology (Goetz & Darryl, 2005: 60) also proposes a more pedestrian, but perhaps more workable, definition of health as: "...a state characterized by anatomical, physiological, and psychological integrity, ability to perform personally valued family, work, and community roles; ability to deal with physical, biological, psychological, and social stress; a feeling of well-being; and freedom from the risk of disease and untimely death."

In general, definitions of the health of plants, animals, people, communities, and ecosystems include some notion of current balance and harmony and some notion of reserve (Goetz & Darryl, 2005:56) or capacity to respond and adapt to a changing environment (Constanza, 1998:34).

Furthermore, health is directly related to the achievement of desirable and feasible goals, and disease is but one constraint on achieving those goals. Thus the achievement of health is a social activity within biophysical constraints, rather than a biomedical activity within social constraints (Rossman & Morley, 1997:78). Furthermore, those who possess the skills required to prevent and treat disease that is analysis, diagnosis, treatment, professional authority are ill-equipped to promote health. Disease prevention and control programs, in fact, may actually create ill health. If nothing else, an ecosystem approach to health makes this transparent (Coatsworth, Santisteban, Mcbride & Szapocznik, 2001:313).

### 2.5.3 An ecosystem approach to health

Despite the disclaimer of health being "not merely the absence of disease" in the WHO definition, nearly all efforts to improve human health in the past century have been aimed at ridding the world of various diseases (Ntuli & Barron, 2002:161). Indeed, those accomplishments are so remarkable that one might ask, given the obvious benefits of freedom from smallpox, measles, and polio, why one would even bother to discuss alternatives to disease control (Bogardi, 2004:46). According to Helman (2000:56), based on the concept of health as the capacity to achieve culturally defined goals, and on the failures of the biomedical model, it can be suggested, that there are sound practical and theoretical reasons for not doing this. First, many disease-control programs are no longer effective. The rising tide, globally, of multi-resistant organisms and pesticide-resistant insect vectors is the direct, unintended result of therapies we use to control or eliminate them (Spencer *et al.,* 1997:818). One short-term response to these "counter-attacks" is simply more of the same – more vaccines, more drugs, more pesticides as has been proposed by the Institute of Medicine in the United States.

Croker, Dupraw, Kunde and Potapchuk (1996:37) maintain that in some ways, this is like responding to successful guerrilla warfare by proposing bigger conventional armies and weapons. It is time to ponder the wisdom of bio-military metaphors and linear causal thinking, to address the flaws in

reasoning and tactics people have employed to date, and to use their much vaunted intelligence as a species to find more creative solutions.

Based on the problems identified above, any new approach to studying and promoting health, must at least encompass multiple ecological, social, and health outcomes, and "not just the absence of disease".

- These multiple outcomes need to be expressed in a context of a set of interactions, with people inside them, rather than looking at the environment as an external "support" or "threat" to health (Cooper, 2004:39).

- Secondly, to be adequate to the new tasks facing people, any new theory and plan of action must account for problems of scale and inter-scalar connections (Kay, 2000:138).

Systems theory explicitly addresses the connections between various elements, and thus provides a useful starting point. A system is simply a set of elements which interact with each other within a certain boundary (Coatsworth, Maldonado-Molina, Pantin & Szapocznik, 2005:160). Many attempts have been made to reduce people, farms, households, or ecosystems to well-defined, machine-like systems which can be simulated mathematically. While such models provide some useful information, those which are the least realistic tend to provide the strongest implications for action, while those that are the most realistic provide understanding but suggest no obvious solution to the problems being studied (Sterelny, 2001:440). Bogenschneider *et al.* (2000:27) suggest that there are unavoidable trade-offs in systems modeling between generality, realism, and precision. "No model", they state, "can be general, precise, and realistic".

In the face of this intransigence of the mess people are in, some scholars retreat to the details of reductionism, with the assurance that if they are not helping the situation, they may at least be supplying data which might be useful. However, the systems literature itself seems to present kind of post-modern smorgasbord of systems ideas, ranging from chaos and catastrophe to soft, dynamic, complex, and ecosystems (De Plaen & Kilelu, 2004:10).

Cooper (2004:18) argues, that the interactions between people and ecosystems reflect an "emergent complexity", which cannot be captured by even most sophisticated complex systems models. Although this may be true, and should engender humility into all people's actions, it does not provide a very useful guide for action itself.

Health is related to the ability to achieve desirable and feasible goals. Therefore, working with people to identify goals, to understand the socioeconomic and ecological constraints and opportunities facing them, and to negotiate resolutions rather than "find" solutions, helps those people to become healthy by definition (Fiscus, 2002:56). There is no biomedical solution which can be imposed from the outside to promote health. Thus, an ecosystem approach to health promotes health in the very means it uses to understand and promote health. Secondly, since the ecosystem approach embeds the social goals of health within people's best understanding of the ecological context, it is more likely to be sustainable than an approach to health issues which is based on the fantasy of a social reality disconnected from the biosphere (Goetz & Darryl, 2005:60).

Emerging, re-emerging, and newly recognized diseases in both the tropics and in temperate zones represent failures – failures to understand the socio-ecological systems people live in, and failures to respond to new understandings as they are uncovered. What can be learned from these failures will largely determine how successful people are in creating sustainable and healthy human communities on this planet (Coatsworth, Pantin & Szapocznik, 2002:114).

The ecological approach to understanding disease dynamics in populations at least as old as Hippocrates. From Hippocrates until the dawn of the bacteriological era, disease theory was mostly ecological in nature (Epstein, 1987:121). In fact, it was not truly ecological according to the current scientific definition, but ecological in nature. According to the Hippocratic definition, an endemic was a disease determined by the nature of a certain place (Oliver-Smith, 2004:11). Demos had a broad meaning, and could be understood as people or population, but also as place, home. Under this definition, climatic,

hydrological, and behavioural determinants were seen as the main forces. This view of disease occurrence and distribution persisted for centuries (Spencer *et al.,* 1997:819). Hippocrates' writings were recycled by Galen in the early Christian era and resisted even the Galilean modernization of science during the Renaissance, surviving as the mainstay of medical and public health science until the late 18th century (Alcamo & Elena, 2003:37). Hippocrates and Galen are not the main subject of discussion in this research, but it must be noted that their concept of disease was ecological. Disease was a consequence of local condition, which had to be favourable for a particular disease to occur (Dyer, 2002:71). Diseases were named after the respective scenarios in which they occurred, such that different scenarios gave rise to different diseases. Pavlovsky, a little-known parasitologist from what was then the Soviet Union can be considered one of the first to propose a reasonably well-structured theory of infectious disease ecology (Szapocznik & Coatsworth, 1999:360). Unfortunately, in the late 1930s Soviet epidemiology (and indeed Soviet science as a whole) was not very well known in the West, and Pavlovsky's theory of the natural nidality of transmissible diseases had a very restricted circulation. Nonetheless, Pavlovsky succeeded in furthering the understanding of disease occurrence and the consequences of ecosystem modification (Waller, 2001:63).

It can, with reasonable confidence, be accepted that the ecosystem approach to infectious diseases began with Pavlovsky. A large number of researchers have employed one or another method of ecosystem analysis for understanding and controlling infectious diseases (Gopalan, 2004: 231). Globalization has erased boundaries between endemic and disease-free areas; these diseases are not a prerogative of tropical ecosystems, albeit the latter are doubtless extremely favourable to their occurrence. What distinguishes contemporary ecosystem analysis of diseases is the ecological paradigm adopted (Waltner-Toews *et al.*, 2003:35). Appalling living conditions in mid-19th century Silesia made the association obvious; it was not the result of scientific reasoning, but only of sound common sense. Waltner-Toews (2003:35) discusses an issue of fundamental importance, the role of environmental change and how it relates to human health, for example how to

combine the socioeconomic and biophysical dimensions of human health. It is a complex challenge to grasp how relations between ecosystems are connected and influence the everyday life, health, and welfare of human beings. He mentions the World Health Organization's definition "...as a state of complete physical, mental, and social well-being, and not merely the absence of disease". What he suggests is a redefinition of health as "absence from disease and pathology" (Waltner-Toews, 2003:36). The above statement is a perception of health as a static and biomedical condition.

In a world of limited resources, mass unemployment, and health standards that are socially and economically far removed from such aims for the majority of the world population, neither the idealistic WHO definition provides a realistic starting point (Coatsworth *et al.,* 2005:160). Such ideal statements sound strange and dangerous in relation to other people's ways of dealing with today's reality. They have the potential of creating new problems in establishing for whom and on what level in society the absence of disease or pathology can be defined. The WHO definition of health is part of the Western tradition and implies the notion of perfectibility (Goetz & Darryl, 2005:57).

According to Borgadi (2004:36), people are born, live, and die, and during this process they must deal with physical, emotional, and psychological strain. This is part of life, and only on an individual level can one decide whether to define one's situation as illness. This is valid for people with disabilities, those defined by society as mentally ill or abnormal, and persons with stress-related disease. Helman (2000:56) defines a system as a set of elements which interact with each other within certain boundaries. He elaborates on the concepts of holarchy, attractor, and complex feedback loops, all central to understanding an ecosystem approach. Systems that are hierarchically nested within each other are called holarchical (Small & Supple, 2001:165). As the ecosystem approach is understood, the point with concepts such as holarchies is to show that there is always interdependence between subsystems and supersystems. Central to this approach is that there is a systematic function; the supersystem is dependent on continuous cooperation with the subsystem (Costanza, 1998:43). This is translated into another

terminology by which everything is related to everything else. Dalby (2002:100) makes these relations more transparent by giving examples of the importance of local activities and how they interfere with and influence global activities. That is to say, there is interconnectedness between the holarchy of the ecosphere, ecosystems, and human systems, hence the connections between human health and ecosystem health.

The ecosystem approach is by definition holistic, because it takes abiotic, biotic, and cultural factors into account, along with a flow of matter and energy across space and time (Garbarino & Ganzel, 2000:33). Accordingly, the concept of holistic health (or, for that matter, ecosystem health) involves all the person's mental and family circumstances (social, economic, and others) rather than just the physical and biological aspects of disease (Helman, 2000:57).

### 2.5.4 Application to information systems

As the above passage suggests, the ecological environment can be viewed as a system of interconnected systems through which information in various forms (written, spoken, visual) pass. Some systems are privileged to let or allow information that is visual pass. Some systems are privileged to information that is blocked from other systems. The flow of signs throughout the macrosystem defines the nature of the dominant culture and subcultures (Unger & Sussman, 2002:46).

Using this concept, people can begin to conceptualize an environmental model that takes into account the flow (and blockage) of signs, symbols, and information. By combining this model with areas in linguistics which concern themselves with the structure of sign systems, such as semiotics and structural linguistics (Carpenter *et al.,* 1999:25), people can begin to formulate an ecosystem of the sign and understand how the flow of signs is fostered or hindered on an individual campus. Given the nature of contemporary, post-industrial society where knowledge is a commodity, and especially in the knowledge industry that education has become, the management and

understanding of the ecology of the sign is essential for many educational professionals (Oliver-Smith, 2004:30).

## 2.6 ECOLOGICAL FRAMEWORK AND ADOLESCENTS' SEXUAL BEHAVIOUR

According to the ecological model, any given behaviour, such as adolescent sexual activity, is influenced by multiple variables from multiple levels of influence such as individual, familial, and extra-familial levels (Cooper, 2004:18).

The ecological theory emphasizes the reciprocal relationships among multiple systems of influence on one's behaviour. For example, a familial factor such as income can affect an individual level factor such as self-esteem or an individual level factor such as a child's self-esteem, could affect a familial factor such as parenting style (Lopez *et al.,* 2004:35). Moreover, an extra-familial factor such as the sexual activity of one's friends can affect individual level factors such as attitudes about sexual activity. In return, all of these factors can affect an adolescent's decision to engage in sexual activity. In this way, factors at all levels or ecologies are interrelated and likely affect one another (Bazzani & Feola, 2001:58).

According to this perspective, an accurate and complete understanding of adolescent sexual behaviour must include information of individual, familial and extra-familial factors, which may contribute to a youth's decision to become sexually active (Cropp, Kristensen, Gabric & Braddock, 2003:63). Based on the ecological framework, there are numerous factors at multiple levels that are likely to affect youth sexual behaviours resulting in them being at risk of HIV/AIDS infection. For this study, gender, age, race, self-esteem, attitudes about sex, and college aspirations represent individual level variables. At the familial level, this study includes parent education and family structure, and at the extra-familial level, peer sexual activity will be examined (Garis, 1998:107; Renzulli, Aldrich & Moody, 2000:524).

Following is a review of extent literature, starting with the individual-level factors.

### 2.6.1 Individual Factors

Factors such as gender, age, race, self-esteem, attitude about sex and university aspirations are discussed.

- **Gender -** An examination of the extant literature on adolescent sexual behaviour revealed that there are several individual level factors relevant to a youth's decision to become sexually active. Numerous researchers have examined the influence of gender on sexual behaviour and it appears that gender does play a part. It appears that at older ages, 16 to 17 years, boys and girls are equally likely to engage in sex (Grove & Burch, 1997:264). However, boys are more likely than girls to have sex at an early age (Costanza, 1998:74). A recent study that reviewed information on the sexual behaviour of adolescents 14 years and younger also found that boys were more likely than girls to have sex at an early age (Costanza 1998: 79). According to Albert and colleagues, at age 12, 4% of girls and 6, 8% of boys were sexually experienced and at age 14, 14-20% of girls and 20-22% of boys were sexually active. It also appears that different factors affect the likelihood for activity in boys and girls (Garbarino & Ganzel 2000: 42), and that boys have significantly more partners than girls, raising their risk for sexually transmitted diseases (Gopalan, 2004: 56). Boys are also more likely to intend to have sex before marriage, or in high school, than females (Coffey 2004: 169). In a risk-factor analysis, (Garbarino & Ganzel 2000: 45) looked at 14 possible predictors of sexual experience. The researchers found that sexually experienced and sexually inexperienced males differed on 8 of the 14 predictors while 12 of 14 variables were found to discriminate the sexual experience of females, indicating that boys and girls are affected by different factors.

- **Age -** Researchers agree that age plays a role in adolescent sexual activity. Rates of sexual activity increase with age (Walter-Toews, Kay, Neudoerffer & Gittau, 2003: 99). Estimates of sexually active youth at age 18 or 19 currently approach 85% in the United States (Waller, 2001: 78). That estimate decreases as age decreases. Taylor (1999: 214) reviewed information from three national and three local data sets looking for

information regarding the sexual activity of adolescents 14 and younger. This study found that 18-19% of adolescents are sexually active by age 14 and that this percentage decreased among younger adolescents. At the age of 13, 10% of adolescents are sexually active, and at 12, 4-5% of youth reported being sexually active. Mean or median age at first intercourse is most often reported in studies conducted with college students. Age at first intercourse varies widely among studies and ranges from 13.9 to 17.2. A 1995 study (Goetz & Darryl, 2005: 59) that examined high-risk sexual behaviour at a Midwestern university reported a mean age at first vaginal intercourse of 17.2 for participants. A more recent study examining sexual activity among college women reported a mean age at first intercourse of 16.7. Gurney and Eccles (1999:1451) examined gender and ethnic differences in the age at first sex among 877 Los Angeles County youths. The total sample reported a median age of 16.9 years at first intercourse. The lowest median age at first intercourse observed by Upchurch and colleges was among Black males at 15.0 years. Groove and Burch (1997: 267) explored sexual coercion first sexual intercourse and reported a mean age of 13.9 years among youth who reported a consensual first intercourse experience.

- **Race -** Race is another individual factor found to be associated with patterns of teen sexual activity (Kay, Reiger & Francis, 1999:736). Minority youth tend to report higher rates of sexual involvement at younger ages than Caucasian peers (Duraiappah, 2004: 27), and more teen fathers are African American and Hispanic than Caucasian (Thornberry, Smith & Howard, 1997). Rates of teen pregnancy are also higher among Native Americans than Caucasians (Fiscus, 2002: 365). In 2002, the birth rate for Native American 15 to 19-year olds was 53.8 per 1,000, higher than the national rate of 43.0 per 1,000 (Forget & Lebel, 2001: 32). It may be difficult, however, to disentangle cultural effects and poverty as race is confounded with poverty. In other words, racial and ethnic minority groups are disproportionately likely to be poor (De Plaen & Kilelu, 2004: 12).

- **Self-esteem** - Researchers have found mixed results of the effects of self-esteem, or an individual's attitude towards him or her self, on sexual behaviour. Some studies have found that self-esteem does not play a significant role in sexual behaviour (Coffey, 2004: 164), but the general consensus on self-esteem is that boys with higher self-esteem are more likely to initiate intercourse while girls with higher self-esteem were more likely to remain sexually inactive (Kay, Reiger & Francis, 1999: 736) examined the role of self-esteem in predicting onset of intercourse in a longitudinal study. Results indicated that differences in self-esteem among virgins and non-virgins precede the initiation of intercourse in early adolescence. Girls in this study who scored low on the self-esteem measure was three times more likely to initiate intercourse. On the other hand, boys who scored high on the self-esteem measure were 2.4 times more likely to initiate sexual activity (Coatsworth, Maldonado-Molina, Pantini & Szapocznik, 2002: 167).

- **Attitude About Sex** - In a review article of sexual antecedents, (Kay, Reiger & Francis 1999: 736) states that more permissive attitudes toward premarital sex is a risk factor for initiation of sex. The theory of reasoned action states that attitude influences an individual's intention to perform a behaviour and behaviour is a function of intention (Taylor 1999: 200). According to this theory, one's attitudes about sex will affect their intention to initiate sexual activity and give a fuller understanding of adolescent sexual activity. In a study that examined the utility of the theory of reasoned action for predicting sexual intercourse, (Kay, Reiger & Francis, 1999: 729) found that sexual intercourse was associated with intentions to have sex. Intentions, in turn, were associated with a more positive attitude toward having sex.

- **University Aspirations** - Less has been published specifically on the influence of university aspirations on sexual behaviour. In a review of sexual antecedents, De Plaen and Kilelu (2004: 13) did find that in general, youth at the greatest risk of initiation of sex have low expectations for their futures. Similarly, Duraiappah (2004: 9) found that concern about

future vocational opportunities was related to sexual experience, as was grade point average, suggesting that teens who are not succeeding at school and who perceive a dim future for themselves are less likely to postpone intercourse. In addition, in a study conducted with minority females younger than 19 years of age, Kay (2000: 149) found that teenagers in segregated, poor communities with declining employment opportunities maintain low expectations of future school and work and this belief that life options were limited was connected to youth being more likely to engage in risky sexual behaviour.

### 2.6.2 Familial Factors

Familial factors such as parental education and family structure are discussed in the next sections.

- **Parental Education -** Familial level factors are likewise important to a full understanding of teen sexual behaviour. Research on the affect of parent education on sexual behaviour has produced mixed results. Some studies have shown no significant effect (Kay, Reiger & Francis, 1999: 736), while others have shown differing effects for boys and girls. Grove and Burch (1997: 265) found that sexually experienced females, but not males, were more likely to come from families with lower levels of education. In a review of sexual antecedents, Gopalan (2004: 42) found that lower levels of parental education were a risk factor for initiation of sex in both males and females. In a study of teen fathers, Gurney and Nisnet (1998: 67) found parent education to be a significant predictor for teen fathers. In fact, each additional year of parental education decreased the chance of teen fatherhood by 0.03 per cent (Kay, Reiger & Francis, 1999: 736).

- **Family Structure -** Family structure, that is, with whom the adolescent lives, appears to have an impact on adolescent sexual behaviour as well. (Forget & Lebel, 2001: 21) found that living in a "nontraditional" family structure was a risk factor for initiation of sex. Nontraditional structures include families with parents who are divorced, separated, or were never married. Kirby also found a change in marital status to be a risk as well. In

another study of the timing of first sexual intercourse, Taylor (1999: 214) found that adolescents living with both of their biological parents reported later median age of first intercourse than youth living in any other family situation, including stepfamilies with two parents in the home.

### 2.6.3 Extra-familial factor

Peer sexual behaviour as extra-familial behaviour will be discussed below.

- **Peer Sexual Behaviour -** While multiple familial factors appear related to early sexual activity, certain extra-familial factors also seem salient. For this study the researcher chose to examine peer sexual behaviour. As teens struggle with their identity formation and as their peers become increasingly important, it makes sense that youth may perceive their peers to be increasingly like themselves or may try to act in ways similar to their peers. Therefore, it comes as no surprise that a risk factor for sexual activity is to have friends or peers who are sexually active (Kay, Reiger & Francis, 1999: 736). In addition to actual behaviour, sexually experienced teens also perceived significantly more of their friends to have engaged in sexual intercourse than did their non-experienced counterparts (Fiscus, 2002: 152).

### 2.6.4 Feedback processes

A model of higher-order feedback processes was conceptualized in terms of dialectic interplay between the social processes and the rules and meanings underlying those processes (Taylor, 1999:198). Processes on each level of the model are determined or maintained by rules and meanings underlying these processes. The rules and meanings on each level are again determined or maintained by higher-order processes (Auvert *et al.,* 2001:26). The interaction of various levels of feedback and control can be conceptualized in such a way.

#### 2.6.4.1 First-order processes

In this model first-order processes can be defined as the interaction between learners, resulting in 'safe' sexual behaviour (positive first-order processes) or high-risk sexual behaviour (negative first-order processes). For each process there are underlying rules or meanings maintaining the processes in context, for example, knowledge about HIV/AIDS and high self-esteem may be related to 'safe' sexual behaviour, while peer-group norms and peer pressure can impact on high-risk sexual behaviour. When the rules underlying behaviour patterns change, change in the behaviour patterns is also possible (Bogenschneider *et al.,* 2000:44).

#### 2.6.4.2 Second-order processes

Second-order processes can be defined as processes maintaining rules and meanings underlying first-order processes. Positive second-order processes can thus be defined as those processes maintaining the rules and meanings underlying positive first-order processes or changing rules for negative first-order processes. For example, among various different processes that can impact on rules and meanings attached to behaviour, AIDS education can impact on behaviour by increasing learners' knowledge of HIV/AIDS, self-esteem and life skills that can enhance 'safe' sexual behaviour (De Plaen & Kilelu, 2004:11).

Negative second-order processes can be defined as processes maintaining rules for negative first-order processes or change the rules for positive first-order processes. For example, lack of AIDS education and guidance from, skills and behaviour (Holland & Mimnaugh, 1996:63). The rules and meanings underlying second order processes, provide the reasons why the process unfolds as it does. Rules and meanings underlying positive second-order processes indicate why some learners are exposed to positive second-order processes such as AIDS education (for example, their educators were trained to present a program), while the rules underlying negative second-order processes involve the reasons why no AIDS education takes place in schools (Ainsworth & Teokul, 2000:57).

### 2.6.4.3 Third-order processes

Third-order processes impacting on rules and meanings for second-order processes, can involve, among various other processes, processes that affect the organization in the school, allowing some educators to implement the program and others not to do so. Positive third-order processes can involve the school principal who creates time for AIDS education on the timetable and supports the educator to implement the program. Negative third-order processes can be that there is neither time nor resources available for the implementation of the program (MacIntyre, 2000:19).

### 2.6.4.4 Fourth-order processes

These are processes that maintain rules for positive third-order processes or remove rules for negative third-order processes. For example, the Education Department develops policy and training to promote HIV/AIDS education and at the same time it provides limited resources (De La Rey, 2002:18).

Among many other processes, the interaction between the school and the educational authorities and educational policy can impact on the organization of the school and the attitude of the school principal. Positive fourth-order processes can involve the development of policies and training to promote HIV/AIDS education, while the provision of limited resources for program implementation can be considered as negative fourth-order processes (Johnson, 2000:39). Rules and meanings attached to HIV/AIDS underlie the development of policies. For example, where the community is concerned about the spread of HIV/AIDS they may support the implementation of the intervention (rules for positive fourth-order processes). When there are other more important issues in

the community, these issues may be of more importance to policy makers (rules for negative fourth-order processes) (Badcock-Walters, 2001:64).

This conceptualization of higher-order processes in the community was used as a framework to understand the interactions of complex processes while evaluating the school intervention.

In the following a family as a system will be discussed.

## 2.7 UNDERSTANDING THE FAMILY AS A SYSTEM

In recent years, the view of the family as a "system" has become an increasingly popular and important theoretical framework for counselors and family therapy professionals. By definition, a family system functions because it is a unit, and every family member plays a critical, if not unique, role in the system. As such, it is not possible that one member of the system can change without causing a ripple effect of change throughout the family system (Carlson & Kjos, 2002:38).

In stark contrast to the systems view, families have been traditionally seen as a group of more or less independent agents linked by their membership in the family, and any given member's behaviour was not necessarily related to the behaviour of any other member (Whitaker & Bumberry, 1988:17). With such a restricted view of the family, it is entirely likely that a parent might state, "...I have two children; my daughter is terrific, but my son is always in trouble. Since I raised them both the same way, there must be something dreadfully wrong with my son" (Bitter, 1993:330).

A family is one of the examples of a system. Although composed of individual members, a family will tend to function in ways that preserve its own characteristic patterns. Individual members within the family shape and are shaped by these patterns in a continuous process of dynamic tension and adjustment. If a tension arises in one part of the family, it affects the whole family (Goldenberg & Goldenberg, 2002:18). The whole family system will tend to respond to this tension in terms of its characteristic patterns and ways of functioning. In addition, family systems characteristically have subsystems within them which interact with the entire system.

A fundamental principle of thinking in terms of systems is that cause and effect relationships are not seen as occurring in circles, or more accurately cycles. Because of the interrelationships between the parts, an action in one part of a system cannot be seen as the cause of an action in another part in a

simple, one-directional way. An example of this is the way family members blame each other (Schwartz, 1995:39).

Within the systems view, the above statement would be interpreted quite differently. Each member of the family plays a specific role; the son is literally assigned his negative role, and the daughter assumes her role with equal determination. Upon closer examination of this family, several factors could be operating that have created and sustain the system (Nichols & Schwartz, 2001:24).

Within the systems view, however, the family will be the identified patient, and changing the son's behaviour will require a change in the family system. If his parents understand the goal of his behaviour and re-evaluate their use of praise, it will surely help. In this manner, the boy can receive the attention he needs without having to resort to acting-out or delinquent behaviour (Bitter, 1993:332).

As previously stated, any change in the system will result in reverberations throughout the system. If the parents change and thus stimulate change in the boy, the girl may also be affected. She may feel the stress of having to share positive attention with her brother, something which she has never experienced before. This will result in new and additional stresses within the system, and all family members must anticipate and address these stresses when they appear (Bitter, 1993:332).

A key feature of the systems view of families, is the concept of "homeostasis," which is defined as a kind of inertia which actually works against change in the system (Horne, 2000:33). In the scenario above, it was mentioned that the girl might feel new and unfamiliar stress if her parents and her brother were to alter their relationship. In this case, she might unknowingly sabotage change in order to keep her coveted role in the family system.

Therapy from the systems view requires a broader perspective of the family than merely identifying the troublemaker(s) and persuading them to change (Becvar & Becvar, 2003:27). According to Hanna and Brown (2004:58), the family must be ready and willing to look at what members of the system must

do together to improve relations in the household rather than what any individual must do. Families seeking to alter their dysfunctional system must be aware that change is often difficult, and that subtle forces will be afoot to counter their best efforts.

This hypothetical look at this family underscores the unique contributions of the systems view of families. This approach provides a solid framework for understanding how families function and how to support their change. Most important, the systems view de-emphasizes blaming the family's problems on a given family member, particularly a child whose "acting-out" behaviour may be a natural reaction to an unnatural set of circumstances. With accurate identification of the process that sustains painful or stressful conditions in the family, change for the better can be both profound and permanent (Bitter, Roberts & Sonstegard, 2002:51).

## 2.8 COLLABORATIVE COMMUNITY EMPOWERMENT

Since 1979, social ecological models have been prevalent in guiding community health promotion in the United States of America (Gopalan, 2004: 245). Social ecological models encourage health promotion planners and evaluators to consider how the different dimensions of an issue influence the community on a number of social levels and choosing intervention strategies for the conditions at each of the levels (Walter-Toews, Kay, Neudoeffer & Gittau, 2003: 98). As a result, community members may gain a fuller appreciation for the causes of community concerns and strategies that may be empowering in addressing the concerns (Kay, Reiger & Francis, 1999: 536) illustrated an ecological assessment of a community coalition against substance abuse in South Carolina, which involved coalition members in the evaluation. By involving them in the process, the coalition members were empowered with increased understanding of and confidence in their program and its evaluation.

The models are built around the interactions between people and their environments, the interactions between people and groups within their environment, and interactions between causes and effects within a

community. Szapocznik, Kurtines, Santisteban, Pantini, Scopetta, Mancilla, Aisenberg, Mcintosh, Perez-Vidal and Coatsworth (1997: 142) noted that the growing emphasis on community-based health approaches has led to increased use of social ecological approaches. In addition to the increased application of the social ecological model, there has also been a strong drive to increase the amount of community involvement in the development of health programs.

Community-level approaches to health promotion have become a common strategy for addressing social and economic factors known to have significant influence on the health of individuals (Kay, Reiger & Francis, 1999: 736). A community-based approach to health education and disease prevention can have profound implications for the practice of public health, as practitioners move away from focusing solely on individual health behaviours and emphasize the role that the social structure and the environment play in determining health status (Fiscus, 2002: 271). The benefits of focusing on the community as the unit of change include focusing on the assets and resources of a community (Forget & Lebel 2001: 280), empowering the community and avoiding a victim-blaming orientation (Kay, Reiger & Francis, 1999: 736).

A community-level approach becoming more widely used is community empowerment that seeks to enhance a community's ability to identify, mobilize, and address the issues that it faces to improve the overall health of the community (Waller, 2001: 78). Central to the concept of community empowerment is community capacity - defined as the cultivation and use of transferable knowledge, skills, systems, and resources that affect community and individual-level changes consistent with public health-related goals and objectives (Gopalan, 2004: 46). Increased community capacity, in turn, is expected to enhance the health of the individuals within the community and the community as a whole. The process of increasing a community's capacity logically affects the individuals who participate in the process by honing their abilities to network with others, identify resources that will be of benefit, and identify strategies that can be employed by the community. Communities that

have a high level of capacity have been characterized by high levels of civic involvement, safe environments, effective educational systems, stable economies, and accountable and competent governmental representation (Gopalan, 2004: 46). Although most communities strive to be strong and vibrant, poor or marginalized communities often face many challenges to improving social and health conditions. The significance of increased community capacity is that it empowers a community in affecting its destiny. Improved capacity can further enable communities to develop sustainable programs that enhance the overall health of the community. Schulz and colleagues (Kay, Reiger, Boyle & Francis, 1999: 731) provided an example of strengthened social networks, such as collaboration with local police to address safety in a Detroit community as a result of a community-based participatory research. Schulz and colleagues also sought to illustrate social determinants of health, which include community capacity.

### 2.8.1 Community Participation

Undertaking a community health approach creates a complicated set of challenges for schools that try to deal HIV/AIDS. These challenges include determining the nature of the work a community requires, how to identify issues that are salient to the community that are relevant to school situation, how to assist a community group in developing strategies to overcome identified concerns, and how to improve the relationship between the community and the school (Bazzani & Feola, 2001:46).

There is a need for reliable methods that can be employed by School Management Teams and coordinators of HIV/AIDS programmes to assist communities in effectively identifying issues, and selecting feasible and appropriate strategies to dealing with HIV/AIDS (Clark, 2000:123). In addition, such methods can be helpful in improving relationships between the facilitators and the community by engaging in a mutual learning process that creates trust. Approaches informed by social ecological principles, enable a community to identify mutually reinforcing strategies at different social levels (Gopalan, 2004: 46).

## 2.9 INTERVENTION IN SCHOOLS

In this section interventions that are initiated at schools include having a goal and content of the intervention and training educators as presenters.

### 2.9.1 Goal of the intervention

The National Departments of Education, Health and Welfare in South Africa and various helping organizations, initiated the intervention to address some of the serious psychosocial problems that young people in schools are confronted with, like HIV/AIDS, substance and child abuse. This was done by introducing them to skills that can contribute to the development of a healthy lifestyle (Sanders, 2001: 58). The rationale of the life-skills approach was to embed HIV/AIDS education within a broad series of skills relating to self-esteem, interpersonal relationships, citizenship and health. In this research the focus is on *one* of the aims of the program, which is to impact on interpersonal meanings and social norms attached to relationships, sexuality and HIV/AIDS that could result in the change of behaviour patterns of individuals. The intervention was implemented by facilitating change in the school as a social system. Through involvement of the young people in schools it was hoped that the intervention would also impact on the parents and the wider community (Gopalan, 2004: 46).

### 2.9.2 Content of the intervention

A national committee developed guidelines for the intervention recommended that the following aspects include the following, which are:

- information about sexuality and HIV/AIDS, especially on the transmission of and protection against HIV/AIDS, to facilitate critical assessment of personal risk for acquiring the HIV infection;
- the development of life skills that would enable the learners to take up health-protective behaviour such as self-awareness, decision-making, assertiveness, communication and negotiation skills; and

- the enhancement of a positive attitude among the young people toward people with HIV/AIDS as preparation for interaction with and caring for infected people (Sanders, 2001: 54).

The aim is to implement the programme in an interactive and empowering way by empowering the teachers to implement HIV/AIDS education as part of the general curriculum in schools. Programme material was provided that could be used in the development of interventions that addressed the needs of the learners within their own cultural context. The reason for this was that a single programme would not be able to address the diverse needs of diverse cultural groups (Kay, Reiger, Boyle & Francis, 1999: 734).

### 2.9.3 Training of teachers as presenters

Through the cascade-training model, 840 master trainers on the provincial and district levels were trained in South Africa during a series of 10-day training sessions. The master trainers had to train and empower two teachers in every secondary school in the country to present life skills and HIV/AIDS education in their schools. Nationally there were 13,609 teachers trained in HIV/AIDS matters, life skills and presentation skills for presenting HIV/AIDS education programmes in schools. The trained teachers were expected to:

- develop a context-specific programme for their schools according to the needs of the learners and the values of the community;
- present the programme to the learners in the school; and
- act as change agents in the school by involving the other teachers, parents and the principal in a change process to integrate life-skills training and HIV/AIDS education as part of the school curriculum.

The training attempted to provide teachers with knowledge and skills to implement HIV/AIDS education and life-skills training in schools. The aim of the intervention in schools was to empower learners to reduce high-risk behavioural patterns and to prevent the spread of HIV/AIDS (Gopalan, 2004: 46). The intervention was aimed at change on an individual level, but social

processes and the school as a system (higher-order processes) were involved to reach this goal.

## 2.10 CONCLUSION

In this chapter the ecological framework and the justification of its use were discussed. It was necessary to analyse an ecosystem approach to health ecological framework and adolescents' sexual behaviour and interventions in schools as this study is mainly about the management of HIV/AIDS at schools.

The next chapter focuses on the literature review of HIV/AIDS.

# CHAPTER THREE

# MANAGEMENT STRATEGIES FOR DEALING WITH THE IMPACT OF HIV/AIDS

## 3.1 INTRODUCTION

Many governments and international organizations speak of 'fighting' AIDS. However, the metaphor and model of a 'war on AIDS' is rather more challenging than simply the task of mobilizing human and financial resources (Haacker, 2001:46). Successfully fighting a war is an intellectual activity as well as a material one, beginning with defining the enemy and the nature of the conflict. If schools are to take the metaphor and indeed the task with the seriousness it deserves, they need to ask themselves what it means to 'fight a war against AIDS' (World Bank, 2000:17). Schools can take as a guide the thinking of the army officers, former guerrilla fighters, who began the Ethiopian Defense Force's AIDS program in 1996. Confronted with the threat of an AIDS endemic in the ranks, the army command asked themselves, what sort of an enemy is HIV? What sort of war are they going to fight? What is the enemy likely to do to frustrate their activities? In short, without theorizing it, they analyzed the HIV/AIDS endemic in the same way that they analyzed their challenges and eventually came up with a strategy (De La Rey, 2002:4).

Considering the above discussions the first insight is that AIDS can be conceived as a guerrilla war. According to Benatar (2002:167), HIV is not an external enemy across the border, but rather an invader that has already overrun the national territory, which requires a 'people's war' to resist and ultimately expel it. A second insight is that war is the continuation of politics by other means, which means as in a liberation war concerned parties need to design a strategy for political mobilization first, and make military organization and operations (which in this research is the school management and coordinators of HIV programmes, families and community organizations dealing with HIV/AIDS) ancillary to that. Hence, 'waging war on AIDS' is not just a matter of deploying human and material resources and making

speeches calling for effort and sacrifice, but is a systems change (Kelly, 2000a:68).

A plethora of researchers (Butler, 2005:14; Dixon, McDonald & Roberts, 2002:232) indicate that HIV/AIDS is not just a health problem. For twenty years the disease has spread inexorably through Southern Africa. All efforts to contain it have failed, and South Africa now has the largest HIV-positive population in the world. The pandemic affects not only the health of individuals, but is attacking the education system itself (Vandemoortele, 2001:35). Demand for education is dropping and changing, many educators are ill and dying, and the trauma of loss associated with HIV/AIDS is entrenched in South African classrooms. In South Africa, as in Africa as a whole, one can no longer assume that it is 'business as usual' in schools (Benatar, 2002:164).

Despite the collaboration between government and non-government agencies, the work to inform, educate and support young people must become more focused and systematic (Battles & Weiner, 2002:165). In addition to the efforts to institute strategies, there is a need for extensive support for those who are infected, or affected through the loss of a family member/s, or those who live with persons with HIV/AIDS (Coombe, 2001b:36). The social concerns for children with HIV/AIDS require timely and focused responses from educational institutions. Appropriate responses, including prevention and intervention strategies might necessitate policies to guide the management of the incidence of HIV/AIDS among learners and others in the education sector (Hargrove, 2005:10).

According to Kelly (2002:7), the following important factors must guide the development of educational policies at schools on HIV/AIDS, which are:

- there being no cure for AIDS, the focus must be on prevention, via information, education and efforts at behaviour change;
- children infected with HIV may lead long and healthy lives. Like all children, they have a right to education;

- children living with HIV/AIDS do not pose a health risk to others; and

- HIV/AIDS is transmitted sexually and this is how most persons living with HIV/AIDS in Jamaica became HIV infected. Children may also become HIV infected through vertical transmission – from an HIV infected mother during pregnancy, childbirth or breast feeding. HIV/AIDS is not transmitted by casual contact such as touching or hugging.

## 3.2 THE HIV/AIDS ENDEMIC AS A SYSTEMS CHALLENGE

Internationally, the first case of AIDS was diagnosed more than 20 years ago. In spite of extensive research, the origin of HIV has not been discovered (WHO, 2000:18). The spread of HIV in South Africa is mainly through sexual contact between men and women. Additionally, about one-third of all babies born to HIV-infected women are infected during pregnancy, at birth or through breast feeding unless anti-retroviral medication is given to prevent HIV transmission from mother to child (Ayieko, 1998:28).

Persons infected with HIV do not immediately develop AIDS or AIDS symptoms. Most persons will remain apparently well and continue to function productively as family and community members and at the workplace for several years. However, the virus gradually weakens the immune system of the affected person, leaving him or her susceptible to other infections (Gwyther & Marston, 2003:30). Conditions such as skin rashes, chronic diarrhoea, weight loss, fevers, swollen glands and certain types of cancers may occur. Whereas these conditions may be treated, the underlying HIV infection cannot be cured (Schiff & McKay, 2003:102). Treatment with anti-retroviral drugs combined with living positively significantly improves the well-being and quality of life of persons living with HIV/AIDS (PLWHA), prolongs their life and allows them to work and lead a productive life (Walker, 2004:14).

There are several ways of analyzing the HIV/AIDS endemic as a systems challenge. This research will discuss the following three:

- the advent of HIV/AIDS can be analyzed in an ecological framework. This draws attention to the scale of the shift in the human-viral ecology, and the

co-evolution of HIV and certain social forms and processes (Duraiappah, 2004:26);

- the social systems implications of the endemic can be analyzed using the lens of its impact on human life expectancy, and through that on the pillars of social and economic functioning that are based upon the expectation of a 'normal' lifespan (Mahomva, 2004:28); and

- the advent of HIV/AIDS in a poor society can be seen as an increase in the cost of sustaining life, and thus as a change in the energy balance of AIDS and human societies that are already energy-constrained (Binagwaho, 2005:14).

### 3.2.1 The ecology of HIV/ populations

The Human Immuno-deficiency Virus has found and exploited a particular niche in the ecology of *Homo sapiens*, such that it is able to co-evolve with human populations in a manner that allows for the indefinite reproduction of both virus and human host, at a high prevalence while retaining its 100% lethality (Duraiappah, 2004:27).

According to Hunter (2002:99), certain features of HIV, including its mode of transmission, indicate that it cannot be expected to follow the 'normal' pattern for endemics of infectious diseases, which decline over time, due to the adaptation of the host, the evolution of the pathogen towards lower virulence, or both. Unusually for a pathogen, HIV can theoretically attain and sustain 'saturation' level in a population over an indefinite period even while retaining 100% lethality. It can do this, because:

- the period of infective latency provides sufficient opportunity for onward transmission before the host becomes incapacitated; and

- this same period allows humans to reproduce, and thus sustain the human population and avoid a population collapse. A long-term saturation of a human population (the optimal evolutionary outcome for the virus) is consistent with that human population (Sullivan, 2004:15).

Saturation refers to the high probability (for example, 90%) that any particular individual will contract HIV during her or his lifetime. This is roughly equivalent to 35-40% adult prevalence. This scenario is disastrous in terms of human development and quality of life (Camara, 2003:38).

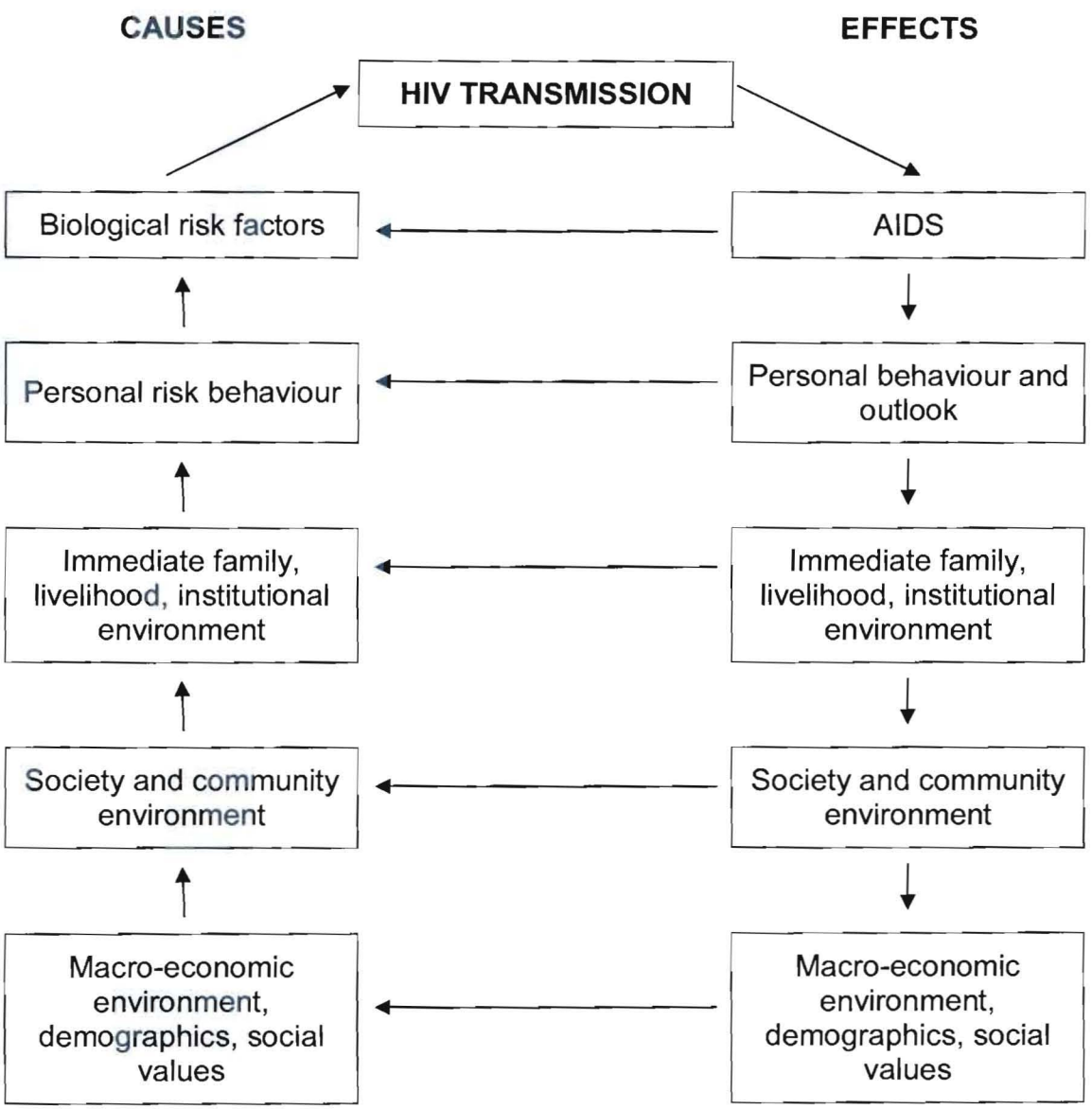
Thus far, medical and behavioural interventions have had disappointingly modest impacts on the course of the endemic. Small-scale projects often appear to demonstrate encouraging results for HIV control. However, national HIV prevalence rates have rarely fallen (Mbulaiteye, 2002:20). One reason for this discrepancy may be that a generalized HIV/AIDS endemic unleashes its own secondary, structural impacts. It exacerbates poverty, inequality (including most importantly gender inequality), poor educational achievement, and social distress (Solomon, 2004:155). These have all been identified as structural factors that contribute to a high risk of HIV in a society. The virus is therefore creating feedback loops at a population level, that in turn create the very conditions for the virus to reproduce. The clearest example is children orphaned by AIDS - we can expect them to have lower literacy, higher poverty and less socialization than their peers, and thus be at increased risk of contracting HIV (Booysen, 2003:26). Micro-projects often succeed in creating bubbles of relative structural beneficence within which individuals can escape these feedback loops. But elsewhere in wider society, immiseration and the creation of HIV-favourable environments continues (Kayirangwa & Hanson, 2004:14).

Rather than detailing each of the feedback mechanisms, for this research it is sufficient to note that these act at all levels of social functioning. They range from the adverse effects of orphaning on educational achievement to the increase in crime and disorder to be expected from a demographically unbalanced population that includes a proportionate excess of learners and educators (Mendel, 2002:15). A growing literature documents these impacts, and although there is good evidence for short-term 'coping' by affected households, this rarely provides more than a reprieve (Chakraborti, 2006:89). Although the statistics for plunging life expectancy, children orphaned by AIDS, and increasing poverty are shocking, there is no quantitative

enumeration of the impacts of the HIV/AIDS pandemic that does justice to the way in which it serves as a systemic insult to severely affected societies. These societies may function in a systematically different manner, and will follow different trajectories to those that have escaped high prevalence HIV/AIDS endemics (Mwaluko, 2003:45).

The relationship between the different levels of cause and effect of HIV transmission are represented in figure 1. This figure distinguishes the different structural levels of causation.

**Figure 3.1: Structure of causal links in HIV/AIDS system**




**Source:**

### 3.2.2 HIV/AIDS, life expectancy and social functioning

The generalized HIV/AIDS endemics that are striking much of Southern Africa have already caused something unprecedented in modern history, namely a drastic and hard-to-reverse drop in adult life expectancy (Bautista, 2004:98). Whereas a generation ago, young adults in sub-Saharan Africa could expect to live into their sixties and beyond, today's teenagers in the worst-hit countries can expect to die in their thirties or forties. This truncation of adult longevity is not only an immense tragedy, but also a threat to social, economic and political functioning (Parker & Mundawarara, 2002:34). It is not merely setting back socio-economic development by many decades, but also setting those processes of change along fundamentally different trajectories.

Low adult life expectancy means a crisis of social reproduction, reflected in the failure of parents to live to see their children into adulthood. The crisis of orphanhood in sub-Saharan Africa can be seen as a symptom of this long-term structural crisis (Rhodes & Simic, 2005:220).

Dickinson (2003:50) states, that it also indicates structural economic dysfunction, as lower expectations of future life feed through into lower savings and investment rates, and higher consumption. Clearly, these basic economic indicators will be affected by a host of other factors, but the influence of reduced adult longevity points consistently in one direction. The sum total of economic changes implied by the HIV/AIDS endemic has been described as 'running Adam Smith in reverse' (Lamptey, Wigley & Carr, 2002:53).

The functioning of social, administrative and political institutions is based upon individuals establishing careers that span several decades, during which they build up experience, judgement and networks, as well as accruing formal qualifications. With shorter careers, it would become more difficult to sustain complex institutions, implying the progressive degradation of institutional capacity - akin to 'running Max Weber in reverse' (Oliver-Smith, 2004:10).

In this analytical frame, the fact that HIV is causing the truncation of adult longevity is entirely incidental. The same effects could be brought about by

any other cause of death. This points to the way in which HIV/AIDS interacts with other diseases (especially TB and malaria) and may also interact with malnutrition to cause lower life expectancy (Caiaffa, 2003:76).

### 3.2.3 HIV/AIDS and the societal energy balance

A third analytical model is drawn from the observation that HIV infection in the individual, and the HIV/AIDS endemic in society, makes increased demands of physical energy and economic effort, simply in order to sustain life (Duraiappah, 2004:18). The individual living with HIV requires more and better nutrition, in addition to medicine and health care. Society needs to expend resources on caring for the sick and bringing up orphans. This is reflected in the increased consumption levels (and lower savings/investment) in badly-stricken societies (Meyer, 2003:44).

The increased cost of sustaining life becomes particularly critical when there are other concurrent threats to lives and livelihoods, such as drought or economic downturns. The interaction between HIV/AIDS and these other shocks and stresses has been shown to create destitution and hunger (Van Aaard, 2002:28).

This framework of analysis cries out for complex systems analysis. The study of livelihoods and coping strategies of poor and vulnerable households, especially during times of stress, shows that entire livelihood systems need to be analyzed as holistic frameworks, in which the disruption of one element has consequences throughout (Duraiappah, 2004:17). For example, one of the characteristic patterns during severe food crises is, that affected households resort to coping strategies including migration to preserve the basis of their livelihoods, but the social and ecological disruption that follows from these strategies creates conditions in which infectious diseases spread more rapidly (Keeton, 2002:25). Unlike the ecology of 'traditional' disasters, which are marked by a disruption and then a return to equilibrium similar to that which existed beforehand, the stress caused by HIV/AIDS is long-term and structural. There is a need to examine whether it implies a new and

different equilibrium, or a fluctuation between different steady states, or ongoing turbulence (Mugurungi, 2005:12).

## 3.3 THE IMPACT OF HIV/AIDS ON THE EDUCATION SYSTEM

Thwe (2004:171) argues that it is within this context of catastrophe, challenge and loss that South Africa's education departments struggle to maintain their balance. The Government's impact assessment was completed late in 2000, and information from other sectors, demographic analysis, and anecdotal information provided clues about how HIV/AIDS is likely to compromise education quality in South Africa (Meyer, 2003:24).

In this section impact on learners, educators, learning and teaching is discussed.

### 3.3.1 Impact on Learners

There are currently just over 12 million learners at school (50.5% female) in South Africa, in about 30,000 primary and secondary schools (Department of Education, 2003:15). As HIV/AIDS reduces the number of parents who are 20 to 40 years old, numbers of orphaned children increase, and poverty deepens, school enrolment rates are expected to decline (Coombe, 2000:46). Dropouts due to poverty, illness, lack of motivation and trauma are set to increase, along with absenteeism among children who are heads of households, those who help to supplement family income, and those who are ill (Lamptey, Wigley, Carr & Collymore, 2002:13). Coombe (2001a:103) maintains that there may be greater demand for second-chance, flexible out-of-school education by learners returning to education after absence as caregivers or wage-earners. On the other hand, these demands may be offset by fewer births and more deaths of under-fives, and the fact that family units will have less disposable income for fees, voluntary funds, transport, books and uniforms. Unless state provisioning changes to meet more complex learning demands, more young people will be functionally illiterate and unqualified.

HIV/AIDS will have a traumatic impact on learners. Children are being abused and young women are subject to violence. Many live in families that are

overextended and are under pressure to contribute to family incomes as poverty deepens. They are losing parents, siblings, friends and educators to the disease. Many will have to move long distances to find new homes. For others, there are no homes at all. As a result, learners are increasingly absent from school and distracted (Mateo, 2003:43).

### 3.3.2 Impact of orphanhood on schooling

Orphans' schooling can be affected through economic stresses on their households, psychological impacts that are a result of changes in family structure and functions that involve new responsibilities to care for the sick, the elderly or siblings, as well as loss of parental guidance and interest in children's education (Booysen, 2003:38). Dropout or failure to enroll is the gross manifestation of impacts of orphanhood on education. Evidence suggests that orphans tend to have lower enrollment rates than children with both parents alive and their disadvantage can be substantial (Case, Paxson & Ableibdinger, 2004:483). A number of studies suggest that enrollment rates of orphans can be around 30% lower than among non-orphans (UNAIDS, 2000:16). Uganda studies have indicated that orphaned children had around a 50% lower enrollment rate than non-orphans, and that enrolled orphans had more erratic attendance (UNAIDS, 2000:23; Chimwaza & Watkins, 2004:795). In Kagera, Tanzania the average number of hours of school attendance was lower among children in households affected by an adult death (Mbulaiteye, 2002:23). However, other studies suggest that orphans do not always have substantially lower enrollment rates (Mwaluko, 2003:46).

In South Africa the impact seems to vary widely, depending on social, economic and cultural circumstances. There are strong indications that household income may be a stronger predictor of non-enrollment than orphan status *per se,* other biases in the school survey, inappropriate time lags or underestimations in projections or children orphaned during the liberation war (Pick, 2003:25; Giese, 2003:46). However, researchers suggest that orphanhood is already a significant issue in schools that warrants a response, particularly in view of the expected large increase in orphan numbers

(Birdthistle, 2004:20). Other findings on how HIV/AIDS affect needs of learners and their education outcomes include the following:

- □lack of material resources to meet basic needs is a common reason that children drop out of school, or perform poorly. In Kagera, rural Tanzania, households affected by adult deaths took certain children out of school as they could not afford to send them and because they were needed for household chores (Boyden, 2003: 152). In a Zimbabwean study, 13% of children in households after an adult female death were unable to attend school and absence lasted for more than six months in 75 percent of these children due to financial constraints (Tropman, Erlich & Rothman, 2001: 37);

- □effects on schooling may differ with age and level of schooling. On Zimbabwean commercial farms, 48 per cent of primary school orphans dropped out of school due to parents' illness or after their death, and 100 per cent of secondary school orphans had dropped out. (UNAIDS 2004:14). Delayed primary school enrolment of Kagera maternal orphans (but not paternal orphans) was found in 80 per cent of cases but enrolment was maintained for children aged 11-14 (Mohlala, 2002:33);

- □gender dynamics influence the way in which the endemic impacts on children's education. Studies have shown that girls tend to be at higher risk of dropping out than boys, girls are normally charged with the responsibility of taking care of sick parents or relatives, and girl orphans have different needs from those of boy orphans. There is evidence, that household food distribution usually disadvantages girl children and women especially in heavily patriarchal societies where there is boy child preference (Epstein, 2001: 5). In Uganda, in various studies, a gender differential was also evident for school attendance whereby school attendance dropped for 47 per cent of male and 67 per cent of female orphans (UNAIDS, 2000:31). Recent analyses of data from other countries suggest that impacts of orphanhood on enrolment of girls does not appear proportionately greater than among boy orphans in many countries, and tends to mirror general gender inequities in enrolment (Voydanoff, 2001: 143);

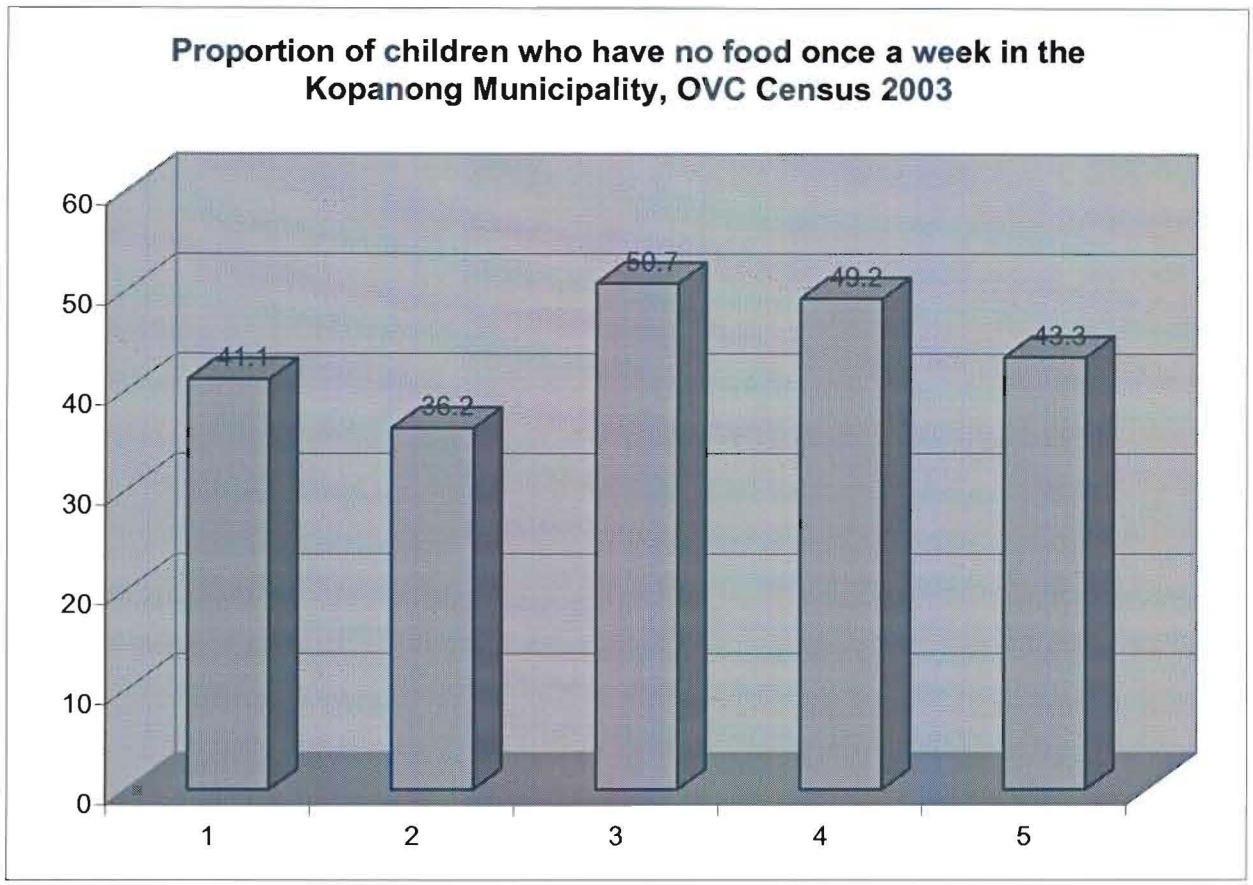
- □impacts often occur before children are orphaned, due to effects of illness on their households; and

- □the period surrounding parental death seems likely to indicate a critical point of heightened vulnerability. A Kenyan study found that 52% of AIDS-orphans were not in school compared to 2 per cent of non-orphans. Among the orphans, 56 per cent of girls and 47 per cent of boys dropped out of school within twelve months after death of a parent (McCallin, 2001: 82).

Other impacts of orphanhood on education outcomes, have frequently been noted, but understanding of them is still at an early stage. Many reports indicate that orphanhood, particularly due to a stigmatized disease such as AIDS, can substantially affect performance, completion rates and general development of learners. Commentators have noted that effects of orphanhood on children may only manifest after many years, with important social consequences because of the scale of orphanhood in many communities (Oliver-Smith, 2004: 19).

Figure 3.2 illustrates some of the mechanisms by which the education and well-being of Orphans and Vulnerable Children may be faced with before and after illness and death of a parent or care-giver.

**Figure 3.2: Proportion of children who have no food**




The above graph indicates the percentage of children who have no food once a week. This study was conducted over five weeks. The figure indicates that 41.1% of the children in Kopanong Municipality had no food at least once in the first week of the census. On the second week 36.2% of the children in this municipality did not have food at least once. On the third week 50.7% of the children did not have food at least once. On the fourth week 49.2% of the children did not have food at least once. On the fifth week 43.3% of the children did not have food at least once.

### 3.3.3 Impact on educators

The education service, the largest occupational group in the country, includes 375,000 educators, 5,000 subject advisors and advisers, and 68,000 managers and support personnel (Department of Education, 2003a:157). At

least 12 per cent of all educators are reported to be HIV positive (Kelly, 2000c:23). In Southern Africa an HIV positive person without access to preventative drugs dies within seven years of infection. That means that over 53,000 educators will die by 2010, or between 88,000 and 133,000 educators if prevalence reaches 20 or 30 per cent. Many others will be ill, absent and dying, or preoccupied with family crises, and school effectiveness is bound to decline (Department of Education, 2003:19; Pretorius, 2002:46).

Job mobility of educators is likely to increase, and as educators die or leave the service for better jobs elsewhere, learner/educator ratios will decline. Chisholm (2004:201) warns that educator recruitment targets may be lower than at present if enrolments decline or do not grow as expected. Given uncertainty about likely levels of chronic morbidity, mortality and other types of 'wastage,' it is difficult to make educator requirement projections with any degree of confidence. In any case, new recruits cannot make up for the loss of the education service's most experienced senior educators, managers, educator educators, professors, and science and mathematics specialists (Devanney, 2001:36).

The HIV/AIDS pandemic has a traumatic impact on all educators and learners. The work of educators, both those who are HIV positive and those who have developed full-blown AIDS, will be compromised by periods of illness (Kelly, 2000b:24). Once they know that they are HIV positive, many are likely to lose interest in continuing professional development. Even among educators who believe they are not infected or do not want to be tested, morale is likely to fall significantly as they cope emotionally and financially with sickness and death among relatives, friends and colleagues, and wrestle with the uncertainty about their own future and that of their dependents (Brown, 2003:49). Most educators will have to take on additional teaching and other work-related duties in order to cover for sick colleagues. Although discrimination is illegal, stigmatization of infected learners and educators is a deeply rooted response (Hargreves & Glynn, 2002:489).

## 3.4 MITIGATING THE IMPACT OF HIV/AIDS ON EDUCATION

General agreement has emerged over the past three years (USAID, 2002:14; Coombe & Kelly, 2001:47) that there are three principal areas of concern for managing HIV/AIDS in schools, which are:

- prevention - helping prevent the spread of AIDS;
- social support - working with others to provide a modicum of care and support for learners and educators affected by HIV/AIDS; and
- protection - protecting the school's capacity to provide adequate levels of quality education – by stabilising the school, and responding to new learning needs (Coombe & Kelly, 2001:480).

In addition, an effective response will require capacity in the school to manage this crisis (Coombe & Kelly, 2001:48).

### 3.4.1 The impact of HIV/AIDS on education

In highest prevalence countries HIV/AIDS is affecting the supply of education, the demand for education, the quality of education, the way education is managed, and its capacity to respond to new and complex demands (Badcock-Walter, 2001:89). The relationship between the HIV/AIDS pandemic and education provision can only properly be understood within the context of the lives of people – children and adolescents and their families, educators and principals, education officials and college lecturers who are coping in the first instance with the impossible demands the pandemic makes on them as individuals. The pandemic's impact on households directly influences the choices that learners and educators make (Ntuli, 2004: 201).

#### 3.4.1.1 Socioeconomic conditions

In Southern Africa, the financial burden of HIV/AIDS-related illness or death on households is at least 30 per cent greater than for deaths from other causes. Many of those who are ill or caring for those who are, are poor and live in cramped housing with limited access to water or sanitation (Department

of Health, 2001:18). Costs for treatment place a strain on savings, but most affected families cannot opt for drug therapy or even the most basic panaceas. By striking more than one family member, HIV imposes major stress on the household, forcing single parents, older children or the elderly to take over responsibility (UNAIDS, UNFPA & WHO, 2004:24). Affected households suffer from loss of medical and insurance benefits, treatment costs including transport, and reduced capacity for income-generating work. Such households may depend solely on old-age income or sale of assets. Resources for education, food, housing, basic utilities and home maintenance decline substantially. Burial costs consume remaining resources, and children may be forced into low paid work, crime or sex work, thus increasing their own risk of infection (Bell, Shantayanan & Hans, 2003:31).

Many at-risk learners come from the context of socioeconomic deprivation complicated by and further complicating HIV infection whether they live in North America, Europe, Africa, Latin America, the Caribbean or Asia-Pacific. HIV/AIDS is not a disease of the poor, but the poor are at higher risk of HIV infection, the poor are more vulnerable to HIV infection, and the disease makes the poor poorer (Kelly, 2001a:35).

#### 3.4.1.2 Stigma and Isolation

Affected people are stigmatised and may be prevented from gaining access to social support mechanisms. HIV/AIDS-related stigmatisation is responsible for social rejection, alienation, and can compromise employment, housing, schooling and child-care (Human Rights Watch, 2005:12). It means that HIV/AIDS-related loss of family and friends is not likely to be acknowledged. Fear of isolation is particularly strong among educators who live and work in small communities, where confidentiality is problematic (Kidane, Banteyena & Nyblade, 2003:39).

#### 3.4.1.3 Psychosocial stress

The disease brings with it psychosocial stresses. Illness and the prospect of death in the family, often not discussed with children, are as traumatic for the child as for the adult. When illness becomes evident, family members are

likely to experience rejection, 'fear of contagion', and anticipatory grief (Ross & Deverell, 2004:293). When death occurs, high levels of grief enter households and communities, with implications for mental and physical health, as well as social and work relationships. Loss of a child particularly causes acute grief (Bogardi, 2004:45). Children are highly traumatised by watching parents die and not being able to talk about it. Stress and depression can compromise function and well-being in all areas of family life including school and work performance, family relationships, and capacity for child care. Responses to stress may include alcohol and drug abuse, and unsafe sexual behaviour. The difficulty here is that little is known yet about how children and young people process the stresses that engulf them (Solomon, 2001:18; Ebersohn & Eloff, 2001:27).

### 3.4.2 Demand for education services

There is a great demand for education services which is affected by the size of learner populations.

#### 3.4.2.1 Size of learner populations

HIV/AIDS will affect the size of learner populations. Where prevalence is high, rising deaths among adults of reproductive age and declining fertility rates result in fewer children being born (Duncan & Arntson, 2003:45). Combined with increased mortality among children infected around the time of birth, most of whom die before they are five years old, means that there are fewer potential learners than there would have been without AIDS. It is anticipated that Zimbabwe will experience a 24.1 per cent reduction in primary school age population by 2010; in Zambia it will be 20.4 per cent, Kenya 13.8 per cent, and in Uganda 12.2 per cent (Abt Associates Inc, 2001:4; World Bank, 2003:3).

In Botswana, there are likely to be 860,000 young people under 25 by 2015, rather than 1,200,000 if HIV/AIDS had not intervened. There is already evidence that the 0-4 year age group is declining in absolute numbers while the 5-9 year age group showed signs of starting to decline in 2001. Grade 1 intake, which appears to have been slowing down for some time, declined by

3 per cent in 1998. Declines in numbers of children in older age groups are likely to become apparent by the end of the decade (Abt Associates Inc, 2001:4).

In South Africa, the number of potential learners is expected to decline if orphans and other vulnerable children do not enroll, delay enrolling, or leave school in large numbers. In general, orphans, at-risk children, and those in HIV/AIDS-affected homes are likely to be withdrawn from schooling and higher education. Introducing drugs to reduce MTCT, assuming governments are able and willing to provide this option, will ultimately make a difference, but only over a long period of time (Abt Associates, 2001:38; LoveLife, 2001:27; UNICEF, 2001b:13).

### 3.4.3 The quality of education provision

#### 3.4.3.1 Challenges to Education Quality

The HIV/AIDS pandemic will affect the quality of education services. Educators are being lost through illness and mortality (Kwa-Zulu Natal Province and Botswana), and transfers to other sectors (Swaziland) (Coombe, 2003:28). AIDS-related illness means educators become increasingly unproductive. Death or absence of even a single educator is particularly serious because this affects the education of fifty or more children (Hargreves & Glynn, 2002:489).

Because teaching service management has made no provision for medically boarding educators who are ill (and may refuse to be tested), educators continue to teach even during terminal illness (Botswana and South Africa). With high educator and learner absenteeism, instructional time is disrupted. Textbooks and educators' manuals are designed for a full school year of full-class instruction (Johnson, 2000:33). There is no evidence that provision is being made for individual learning or for adjusting lessons to learner needs. Repetition is not the answer, for this merely increases class size, reduces efficiency, and puts girls at risk when older boys join the class (LoveLife, 2001:28).

Current shortages of educators in critical fields such as science, mathematics and technical skills will become more acute. Loss of key individuals in management or senior leadership – planners, principals, inspectors, educators may compromise quality and efficiency (Rugamela & Akoulouze, 2003:36). Concentration of deaths among staff in the 30-39 year age group, just when they have accumulated important experience, means not only loss of their skills but may jeopardise less formal processes of mentoring and skills transfer within the sector (Thwe, 2004:171). As the average age and experience of educators fall, systems will rely increasingly on less qualified educators, young educators with less experience and poorly qualified new recruits whose secondary and educator education may have been disrupted by the loss of qualified educators and lecturers. These effects are likely to be compounded by the reduction of numbers of qualified entrants to educator education from secondary schools (LoveLife, 2001:43).

HIV/AIDS is impacting on the emotional status of educators and young people (Kelly, 2000a:25). Educator morale is low where impact is high, combined with considerable student and educator trauma. Educators who, at least in Africa, have generally resisted voluntary testing and counseling, may be uncertain about their own HIV/AIDS status (Abt Associates Inc, 2001:38). Both educators and learners have difficulty concentrating in the face of illness, death, mourning, and dislocation (Kelly, 2000a:26). Many learners affected by the presence of HIV/AIDS have a widespread sense of anxiety, confusion and insecurity (Ebersohn & Eloff, 2001:24). The psychosocial needs of affected children are not as well understood as their material needs (UNICEF, 2001b:20; Coombe, 2001b:24). Adult caregivers may fail to identify psychological difficulties as the cause of more visible problems like truancy or anti-social behaviour. Where emotional problems do manifest themselves, few people responsible for children are equipped to handle them. Further, where abuse and violence along with educator misconduct, characterise the learners' community, young girls and boys fear they will be sexually abused or maltreated (Van Dyk, 2005:11).

There may be uncertainty and distrust between learners and educators if the latter are seen to be those responsible for introducing or spreading HIV/AIDS (Leach, 2002:83; Kelly, 2000a:24). All this adds up to a school environment characterised by constant change and distress. Even children from intact, healthy families are surrounded by death and loss. Stress is unrelenting, and contributes to what one educator described as the 'inchoate unease' which textures the learning environment in heavily infected countries (Worthington & Myers, 2003: 654). Not all schools will suffer to the same extent. But there is enough personal and systemic traumas to undermine education quality generally.

Finally, and ironically, policies intended to support children affected by HIV/AIDS such as Malawi and Uganda's introduction of free primary education for all children, have dramatically overstretched the education system and reduced quality of provision (Ekra, 2004:16).

## 3.5 SOUTH AFRICA'S STRATEGY TOWARDS COMABATING HIV/AIDS

Government and its partners have demonstrated their commitment to combat the pandemic. Health information on HIV/AIDS is systematically collected and reported in South Africa. The Metropolitan Life-Doyle model has been used throughout the 1990s to predict the pandemic's course. The first South African HIV/AIDS strategy and implementation plan (Department of Health, 2000a:26) has been succeeded by a new national plan for combating HIV/AIDS launched mid-2000 by the Department of Health. The implementation of the HIV/AIDS/STD strategic plan for South Africa 2000-2005 (Department of Health, 2000b:14) is monitored by the HIV/AIDS and STD Directorate of the National Department of Health and executed by provincial health departments in cooperation with other sectoral departments. Government's HIV/AIDS budgets doubled during the 1990s but were substantially under-spent (Human Rights Watch, 2005:26).

The response of South Africa's education departments has so far been practical and multi-faceted. There is both political and official commitment to address operational as well as health difficulties created by the pandemic

(Ntuli, 2004:191). An HIV/AIDS-in-education policy and regulatory framework is in place, along with adequate budgetary provision, and practical implementation structures, at least at national level. But management structures now in place are clearly not adequate to handle this crisis, and there are no full-time managers with sufficient skill and executive power to take decisive action to counteract the pandemic's threat (Parker & Mundawarara, 2002:64).

As the pandemic begins to escalate, greater resources and creative energies will be needed to protect the quality of education provision. Education officials and their partners inside and outside government now need to learn how to stabilize the system, devise innovative ways to reduce the impact of HIV/AIDS on the sector, and respond creatively to new management and learning requirements (Department of Education, 2001:44). In an education environment radically altered by HIV/AIDS this will require a foundation for action featuring collective dedication among all stakeholders in education, systematic information collection and analysis, dedicated structures and full-time staff responsible for strategic planning, effective partnerships of all stakeholders, professional crisis management capacity, and streamlined funding (Department of Health, 2001:24).

The South African Government's new strategy is strictly focused on the predisposing factors of HIV/AIDS, preventing or finding a cure, and monitoring health interventions. It does not address the social, development, human rights, economic and infrastructural consequences of HIV/AIDS for vital sectors like labour, education, agriculture, the public service, or the public sector (Giese, 2003:29). Government is now under pressure to consider how HIV/AIDS will influence the country's future. The Department of Public Service Administration has commissioned an impact survey. The South African National Defense Force has publicly recognized that the pandemic threatens to reduce or even destroy the capacity of the defense force (Gwyther & Marston, 2003:9). Parliamentarians asking questions about HIV/AIDS and economic policy were recently told that Government had no data on which to plan for the impact of the pandemic. Parliamentary committees are now

expected to scrutinize Government's response to HIV/AIDS in the context of development (Reproductive Health Research Unit, 2004:16).

Despite the strategic planning of the Department of Health, and increased resources for fighting the pandemic, South Africa is losing the battle against HIV/AIDS. Prevalence rose from 0.7 per cent in 1990 to over 22 per cent in 2000 (Gopalan, 2004: 46). South Africa now has more HIV-positive people than any other country in the world. On one hand, Government's strategic plans have been impeded by a lack of informed political leadership, vision and commitment; concentration of resources on essential post-apartheid transformation during the 1990s; mistrust and lack of cooperation among potential partners; program management inadequacy at all levels; and a lack of focus and concentration (Helman, 2000: 76; Coombe, 2000:28). At the same time, Government is fighting this battle on difficult ground. In taking on HIV/AIDS, it is also taking on the complex legacy of apartheid, the region's migrant labour system which has for decades disrupted family and community life, high levels of poverty, and profound gender and income inequality. South Africa's excellent transport infrastructure and traditionally high levels of mobility permit the rapid spread of HIV into new communities. Very high levels of other Sexually Transmitted Diseases (STDs), the low status of women, social norms which accept or encourage high numbers of sexual partners, and resistance to the use of condoms also challenge Government's battle plans (Helman 2000: 76).

The pandemic thrives on sexual violence, male domination and child abuse in South Africa. HIV/AIDS prevalence rates are highest among young people, especially teenage girls. Many adolescents are sexually active at 12 years old, but few practise safe sex because of pressure to engage in unprotected intercourse, to have a child, or because they lack access to user-friendly health services and are uninformed about condoms and risk (Lamptey, Wigley, Carr & Collymore, 2002: 89). Over one-quarter of women 16 to 20 years report they have been forced to have sex (Lyon & Woodward, 2003: 199). In the face of violent and coercive male behaviour, combined with their own limited understanding of their bodies and the mechanics of sexual

intercourse, young women have little chance to negotiate safe sex, including contraception or condom use (Lamptey, Wigley, Carr & Collymore, 2002: 90).

Abuse of young girls and children within families are on the rise (Smart, 2000:30) highlighting three myths or theories apparently linking child sexual abuse and HIV/AIDS. The prevention theory is based on the assumption that all sexually active people are likely to be HIV infected and, in order to be 'safe', one must choose a partner who is not yet sexually active. The cleansing theory suggests that having sex with a child will cleanse the infected individual of the virus. Finally, the retribution theory is linked to the deliberate spreading of infection to all sectors of society (Lamptey, Wigley, Carr & Collymore, 2002: 84).

## 3.6 EDUCATIONAL MANAGEMENT OF HIV/AIDS

Educational management capacity in the management of HIV/AIDS is fragile at national, provincial, district and school levels. The system is finding it difficult to attract skilled managers. Many principals have not yet received sufficient support or training to enable them to be creative about local management of education (Chisholm, 2004:205). The situation will become worse as the pandemic takes hold. In the private sector, some companies are already training replacements for skilled technical and managerial personnel they expect to lose to HIV/AIDS (Hepburn, 2002:16). Similar strategies are not yet in place in education. In addition to the loss of managers, the system will lose experienced senior educator-mentors and educator educators in universities and colleges whose career experience cannot be replaced. Institutions will depend on younger, less experienced educators and the quality of educator education will decline (Coombe, 2003:46).

### 3.6.1 Education sector action

Until late in 1999, the Department of Education had no policy on HIV/AIDS. In August 1999, the Department's Corporate Plan, 2000-2004 identified action on HIV/AIDS as one of its five priorities. The Department of Education (2000:7) has highlighted three objectives related to HIV/AIDS, which are:

- raising awareness about HIV/AIDS among educators and learners;
- integrating HIV/AIDS into the curriculum; and
- developing models for analyzing the impact of HIV/AIDS on the system.

The Department of Education's National Policy on HIV/AIDS for Learners and Educators (1999a:9) takes account of Government's responsibilities for children's rights specified by international agreement (Nineteenth Session of the UN Committee on the Rights of the Child cited in Smart, 1999:58), the Constitution of South Africa (1996). Education's HIV/AIDS policy is entirely consistent with the priorities of the Department of Health's strategic plan but goes further to provide guidance on discrimination in schools and institutions, workplace advocacy and sensitization, and sports safety. It specifies that:

- the constitutional rights of all learners and educators must be protected equally;
- there should be no compulsory disclosure of HIV/AIDS status;
- the testing of learners as a prerequisite for attendance at an institution, or of an educator as a prerequisite of service, is prohibited;
- no HIV-positive learner or educator may be discriminated against; they must be treated in a just, humane and life-affirming way;
- no learner may be denied admission to or continued attendance at an institution because of his or her actual or perceived HIV status;
- no educator may be denied appointment to a post because of his or her actual or perceived HIV status;
- learners and educators who are HIV-positive should lead as full a life as possible.
- infection control measures must be universally applied to ensure safe institutional environments;

- learners must receive education about HIV/AIDS and abstinence in the context of life-skills education as part of the integrated curriculum;

- educational institutions will ensure that learners acquire age- and context appropriate knowledge and skills to enable them to behave in ways that will protect them from infection; and

- educators need more knowledge of, and skills to deal with, HIV/AIDS and should be trained to give guidance on HIV/AIDS (27/1996).

The Director-General of Education and Heads of provincial departments of education are responsible for implementing national policy on HIV/AIDS and education. Schools are encouraged to develop their own policies on HIV/AIDS (27/1996). Principals of schools are responsible for implementing policy in their institutions, and governing bodies are expected to supplement budgetary allocations for health, safety and other equipment (27/1996).

### 3.6.2 Confronting HIV/AIDS in education

Education's HIV/AIDS operations must be assessed in terms of both health and operational concerns. Health concerns are those, which focus on learning about the pathology of the disease, and preventing its spread by better education, advocacy and sensitization (Department of Health, 2005:21). This has been the conventional bureaucratic approach to HIV/AIDS. There are, however, other, equally significant operational concerns which focus on understanding the nature of the pandemic and its influence on the education community as HIV/AIDS continues its inexorable spread, and responding creatively to a much more complex teaching and learning environment in order to maintain education quality (Dickinson, 2003:50).

Understanding means accepting that the pandemic has not been halted or even slowed, that it is not 'business as usual' in education, and that as HIV/AIDS affects the supply, demand and quality of education it must be factored into planning for the future (Hepburn, 2002:18).

Responding means seeking ways to protect the education system before it is further compromised by the pandemic, so as to sustain an adequate and acceptable quality and level of education provision. It means stabilizing the system (system self-preservation) to ensure that even under attack by the pandemic, the system works so that educators are teaching, children are enroling and staying in school, managers are managing, and personnel, financial and professional development systems are performing adequately (Kelly, 2002:10). It includes mitigating the pandemic's potential and actual impact (counteracting the pandemic) to ensure that learners affected and infected by the pandemic are receiving counseling and care; that there is a culture of care in schools and institutions; and that human rights compromised by HIV/AIDS are protected in learning institutions and education workplaces (Department of Education, 2001:18). And it requires creatively and flexibly responding to it (outwitting the disease) to ensure that the system continues to provide meaningful, relevant educational services to communities of learners in complex and demanding circumstances by finding new times, places and techniques for learning and teaching, and is far more demand- than supply-driven (Thwe, 2004:175).

### 3.6.3 Working on health concerns - learning and preventing

The Department's principal focus thus far has been on teaching safe sex and creating an HIV/AIDS-aware environment in schools. The National Coordinating Committee for Life Skills and HIV/AIDS began to design curricula in 1995 (Departments of Health & Education, 2000). Each provincial education department is required to apply the curriculum and train educators in its use. All South African educational institutions have also received copies of the Department's HIV/AIDS Emergency: Guidelines for Educators (Department of Education, 2000:15) which require that educators exemplify responsible sexual behaviour and create a supportive environment for those infected or affected by HIV/AIDS, thereby 'making the school a center of hope and care in the community'. The booklet stresses, that male educators have a particular duty of care, and that having sex with learners, betrays the trust of

the community, is against the law, and is a disciplinary offence (Department of Education, 2000:2).

Some headway is being made in teaching safe sex, and creating a culture of care in schools. But progress is slow. There is evidence that only 15% of schools have a policy on HIV/AIDS. Male educators still represent one of the greatest dangers to children and to female educators. The Medical Research Council recently reported (Human Rights Watch, 2005:22) that many young women are forced to have sex by employers and school educators. One-third of all reported rapes of girls younger than fifteen were perpetrated by school educators. Implementation of life skills curricula varies from province to province, but has generally been inefficient. There are about 21,300 primary schools (8.4 million learners), and 5,000 secondary schools, and another 2,500 combined schools (with over four million learners). Introducing life skills curricula at primary level alone means re-training 64,000 school educators and 21,000 lay counselors. Apart from the huge numbers to be reached, teaching materials require adjustment, additional master educators/counselors need regular upgrading training and replacement, and models of peer-group support must be elaborated (Department of Health, 2000a:26).

Life skills content is also suspect. More robust evidence about sexual behaviours, including violence against women and children and male bisexuality, is needed to improve HIV/AIDS teaching, learning and counseling. Not enough is understood yet about how custom and tradition, poverty, family disorientation during the apartheid years, persistent gender inequality, and HIV/AIDS-related myths are linked to each other and to the spread of the disease (USAID, 2002:118).

### 3.6.4 Working on education sector impact concerns - understanding and responding

In its Corporate Plan, 2000-2004, the Department of Education (2000b) has tried to come to grips with the knowledge that HIV/AIDS is threatening to undo South Africa's considerable post-apartheid educational achievements. The Department of Education recognizes that 'the demand, supply and quality of

learning and teaching will be affected by the HIV/AIDS endemic' and that this in turn will 'affect the pattern of human development and economic growth in South Africa' (Department of Education, 2000b).

An analysis of the impact of HIV/AIDS on the education and training system has been commissioned by Government and will be presented to the Department of Education late in 2000. The analysis is taking account of:

- the impact of HIV/AIDS on society and human resource development: changes in skills requirements, the vulnerability of educators to the pandemic, staff attrition and mobility patterns, and changes in household expenditure patterns (Chisholm, 2004:216);

- how HIV/AIDS affects the supply of education: how many educators by category will be infected, develop AIDS, and die; shifts in rates of educator absenteeism, attrition, recruitment and ill-health retirement, benefit costs, contact time in classes, other aspects of departmental functioning; the extent to which Government policies and practices assist in management of HIV/AIDS-related difficulties (Mateo, 2003:46); and

- how HIV/AIDS influences the demand for education: projected future numbers of learners, of learners infected and affected by HIV/AIDS, of orphans, of households and schools at risk; effects of the disease on enrolments, wastage and completion rates; the extent to which sector policies and practices help prevent the spread of HIV/AIDS, and meet the needs of learners so they can contribute to society and the economy (Pick, 2003:18).

However, the question is whether, with better information on the pandemic's likely impact on the education, schools will in practice be able to respond. There are a number of school management hurdles to be cleared. First, despite a sense of urgency in the institutions of education, there is evidence that as yet schools do not understand that HIV/AIDS is inimical to education quality. This makes it difficult to anticipate whether and how these schools will use the impact assessment findings, and identify people within these institutions who can start being more creative about 'providing an increasing

range of learning possibilities, and offering learners greater flexibility in choosing what, where, when, how and at what pace they learn' (Department of Education, 1996).

Secondly, innovation in education is difficult under any circumstances because of administrative and procedural constraints, the complexity of the education bureaucracy, and the high cost of personnel (Department of Education, 2003:15). The third problem is how to devise management structures suitable to addressing an issue like HIV/AIDS which cuts across the whole sector in much the same way that 'gender' does (Duncan & Arntson, 2003:26). Finally, these difficulties are compounded in South Africa by persistent managerial shortcomings, and the lack of creative management capacity within the sector the full-time staff capable of fighting this war.

These hurdles are clearly evident in current arrangements in the education sector for combating HIV/AIDS. South Africa's Director-General of Education, and heads of provincial education departments are responsible for implementing HIV/AIDS programs. At national level the Minister's Advisor on HIV/AIDS and the Chief Director (HIV/AIDS Coordination) are full-time HIV/AIDS-dedicated officials, but have no executive authority (Groenewald, 2005:14). HIV/AIDS-related functions have been parceled out to various departments and directorates. Every provincial education department is required to appoint two HIV/AIDS program managers, as well as a working group to communicate policy, monitor implementation, and advise on progress. HIV/AIDS provincial business plans are designed to make best use of national and international resources, although officials and cooperating partners have all been frustrated by what they perceive to be complicated procedures for accessing funds (Department of Education, 2003:20).

It will take time before structures and personnel are working effectively. Directorates and individual personnel often lack clear mandates. Officials are under such pressure that there is little time for cooperation. Officials have only limited time to give to HIV/AIDS functions, as they are already overloaded with other competing commitments (Ministry of Health, 2005:25). Tensions inevitably arise between staff in different departments, different directorates,

and at different levels. As a result, structures may get out of phase, and disjunctures and overlaps arise. Overworked officials consequently tend to focus narrowly on a single task or set of tasks which can be 'carved out of the whole', and for which tangible outcomes can be identified. This results in lack of coherence among initiatives. It also means that as staff comes and go, priorities change (Walker, 2004:11).

Line management problems are compounded by the shortage of skilled and experienced managers capable of maintaining system performance, and mandated to do so. There is no doubt about the personal commitment of responsible officials, but individually and collectively public officials may not perceive the complex nature of the pandemic, or may lack strategic techniques to counteract it (WHO, 2004:18). They are in some cases overcome by inertia because the challenge is too big, resources too dispersed, and their units are understaffed and under pressure. Perhaps they do not understand messages coming from principals, educators, and district officials. Certainly they do not have support from planners, demographers, economists, sociologists and anthropologists, care workers and others whose advice is now required. If this is a war, it needs generals to fight it (Coombe, 2001a:109).

Some of these problems could be overcome by cultivating stronger links with partners in and out of government. Cooperation problems persist everywhere. The contribution of NGOs, faith-based organizations, unions, international organizations, and communities to the battle against HIV/AIDS in the past has been not just considerable, but fundamental. Protecting the compromised health of the education service will depend in future on how well Government learns to work with other Departments, and with local organizations, and the extent to which it is able to fund and support their contributions to the battle against HIV/AIDS (Department of Health, Welfare and Education, 2000:38).

### 3.6.5 Social support as a management strategy for educators and learners affected and infected with HIV/AIDS

UNICEF's strategic paper, Principles to Guide Programming for Orphans and Other Children Affected by HIV/AIDS (2001) stresses that although they are 'less tangible than the violations of other rights that children suffer, (HIV/AIDS-related) psychosocial problems are rarely addressed in HIV/AIDS programmes, and yet can have long term impact on development. A child's progression through basic developmental stages is jeopardized if HIV-related illness reduces and then ends a parent's capacity to provide consistent love and care' (UNICEF, 2001:8).

While there have been regional conferences and much informal discussion on issues relating to HIV, gender and sexuality for example, and there is significant literature on orphan care, little is known in practice about how children and their families are coping with HIV/AIDS-related trauma, and the impact it has in the classroom (Ebersohn & Eloff, 2001:38). The South African Department of Health, HIV/AIDS, (2001) has produced a guidebook, HIV and AIDS: Care and Support of Affected and Infected Learners: A Guide for Educators to supplement the 'emergency guidelines for educators' (Department of Education, 2001b:21). There is talk about lay counselling INSET and PRESET courses for educators, and Botswana has provided counselor training for a few educators through its Institute of Development Management. Most countries are at an early stage in their orphan endemics, and it appears difficult for them to anticipate or plan how educators will cope with very large numbers of distressed children (Birkmann, 2005:54). Re-orphaning of children is expected to be common, and the group psychological effects of the endemic may change current norms around schooling in unpredictable ways. Many non-orphans will be affected indirectly by AIDS impacts on friends, educators and families especially in households that assume extra orphan-care burdens (Abt Associates Inc, 2001:42).

The SADC review graphically demonstrated the failure of countries to provide even a modicum of social support in schools or to engage with the likely consequences of having increasing numbers of intellectually, socially and

psychologically dysfunctional learners (Case, Paxson & Ableindinger, 2004:485).

Many educators perceive that the system does not care about them. Their morale is low, not only because they are poorly paid, but because too often the system is unresponsive to their needs and concerns (Johnson, 2000:47). They work in dire conditions, with little or no professional or administrative support at school, district or higher levels. If no one cares for educators, why should they care about each other or about the children and their parents? (Kelly, 2001a:38).

Educators in high prevalence settings are caught between 'a rock and a hard place'. They may be HIV positive themselves, and they may be relatively or completely ignorant about HIV/AIDS. Yet they are required to reach out to children and adolescents and provide them with advice and counseling. For most of this decade educators throughout the SADC region have been mandated to teach life skills without the necessary tools, workplace policy, information programmes aimed at them as adults, or access to lay and professional counseling (Life skills Development Foundation, 2001:22; MacIntyre, 2000:18; USAID, 2004:109). There are fundamentals of support to which every educator is entitled, which are as follows:

- every educator must have access to adequate knowledge of the aetiology of HIV/AIDS, starting with a book in accessible language, which is graphically illustrated (Vandemoortele, 2001:14);

- every educator must have adequate training and guidance in life skills curricula, and have syllabi and manuals, as well as enough suitable learning materials (Webb, 2001:10);

- selected educators must be trained additionally in care and counseling techniques, and should perhaps be chosen on the basis of trust by children in consultation with the school head and governing body or parent-educator association for special upgrading. All preservice educator education programmes must make provision for basic tutoring in HIV/AIDS issues and lay counseling techniques (Coombe, 2003:34);

- every educator must have access to counseling if they are worried about their own health, and to help them cope with the trauma of working with learners and families in difficulty. Access to confidential VTC is essential for educators (Meyer, 2003:19);

- heads of schools and teaching service managers must have adequate preparation appropriate to managing HIV/AIDS-related crisis, especially in high prevalence areas (Riono & Jazant, 2004:79); and

- wherever possible, educators in high prevalence countries should have access to antiretroviral therapy. This is already being considered in at least one Sub-Saharan country, as a cost-effective and humane response, and is perhaps the only way to sustain the teaching service (USAID, 2002:17).

Community participation must be central to the response to HIV/AIDS. For education to combat HIV/AIDS and manage its impacts, it must also be pro-active in establishing linkages with the communities being served. Education authorities and institutions must constantly explore with communities how best they can be of service to one another. In Zambia, one objective of the education sector HIV strategic plan is for all schools and colleges to participate in home based care and other responses to AIDS-related community needs (Coombe & Kelly, 2001:46). Likewise in Botswana close links are emerging between learning institutions, local NGOs and faith-based organizations, and social and health workers (Abt Associates Inc, 2001:39). In Thailand, the Sanga Metta project, with support from local and international agencies, supports a shift in the focus of work of some Buddhist monks and temples in the direction of social responsibility for those suffering from HIV and AIDS, including orphans who become novices, or are given education support. The programme is being extended in the region through Unicef's Buddhist Leadership Initiative.

The 2001-2002 plan of action of the South African Department of Education (Department of Education, 2001b:12) includes provision for the establishment of 27 multi-purpose education and training centres linked to community development. They are particularly designed to assist with victim

empowerment, cooperate with local programmes supporting victims of sexual violence and rehabilitation of school offenders, and 'make schools centres of community life through innovations in infrastructure provisioning' (Department of Education, 2001b:12).

Possibilities for harnessing the energy of women in school, around the school, and on behalf of the school need to be elaborated, preferably within the context of existing government and agency gender programmes (Walker, 2004:16). Mothers in Uganda are known to have mobilised in informal ways to save their daughters from death by AIDS, and there is evidence that this is happening in South Africa. Mothers in Bangladesh teach their children in community schools; mothers in Ghana make sure their children have access to water and food at school; mothers in Dominica become community educators for five years before they undertake 'initial' educator training; mothers in the United Kingdom assist classroom educators with special subjects or children with special learning needs (WHO, 2005:22; Gaillard, 2004:36; Brown, 2003:49). Mothers everywhere are the principal and most reliable guardians of their daughters' well-being. Anecdotal evidence suggests that female educators and principals are already carrying much of the burden of AIDS care and counseling in learning institutions (Heyzer, 2003:44). They are the ones who commonly deal with learners traumatised by conflict, poverty, loss and insecurity, for helping children who have complex emotional and learning needs. More needs to be done to identify ways of mobilising mothers on behalf of their community schools, getting them into classrooms and around the school, getting them involved in decision making about their schools, and setting targets for their schools (International HIV alliance, 2003:12). There need to be more female educators trained (using the initial educator training route for example) and more female officials in positions of authority at school, district, and higher levels. The idea of greater numbers of female principals, district officials, inspectors and senior executives is not new. Like much else about HIV and AIDS, what must be done is known. It is now a question of putting it into effect (Murphy, 2004:66).

Strong leadership is indispensable (UNICEF, 2003:27). There is general consensus, based on evidence from Uganda, Thailand, Botswana and elsewhere (UNICEF, 2003:27), that effective action takes place when politicians, senior education department officials, and senior international agency staff are 'committed', are convinced that disaster is around the corner, and that their very systems are being steadily undermined. Politicians and officials need to be not just dedicated, but knowledgeable (World Health Organisation, 2003).

According to Parker and Mundawarara (2002:18), the establishment of a Wellness or Employee Assistance Programme (EAP) in schools is an urgent matter. This should assist infected and affected staff to deal with stresses created by HIV/AIDS by providing access to counseling, advice and services around issues such as life planning, accessing benefits, disease management, nutrition and positive living, coping with stigma, testing and counseling. Thwe (2004:172) maintains that Wellness and EAPs can also provide a mechanism to inform managers and planners about the scale and types of HIV/AIDS-related problems without compromising confidentiality of individual employees. Coordination with other Ministries, unions and private sector providers should be considered to ensure development of an efficient, feasible and accessible system in all regions.

Management of absenteeism and ill health in schools need to be strengthened. In many instances, absenteeism and ill health are simply not managed. Absenteeism is a major problem independent of HIV/AIDS (Coombe, 2003:45). School managers have difficulty enforcing controls. The current situation has negative implications for infected staff that faces great uncertainty and work well beyond the time when they are severely ill. There are also negative impacts on education delivery and on their colleagues (Lamptey *et al.*, 2002:33). Monze (2004:16) maintains that several issues need strong consideration as part of a coordinated approach to the problem. These issues include.

- **Review sick leave entitlements.** Strongly consider reducing the routine amount of sick leave entitlements to ensure that an employee's health

status is confronted and active management of ill health absenteeism begins before negative impacts result for learning and affected individuals. Granting of further special sick or disability leave should be possible after assessment, with further structured review. It is important to ensure that ill employees can continue to teach if they recover and are not permanently incapacitated (Heyzer, 2003:7).

To a large extent, the education system currently provides for personnel administration rather than human resource management. Training to build confidence and competence of line and human resource managers in basic human resource management and development, will help them to deal with many of the impacts of HIV/AIDS, in addition to improving general system performance (Mateo, 2003:45). Specific systems that need to be strengthened, include the following:

- **the cluster system -** This can be expected to reinforce schools' ability to manage various impacts of HIV/AIDS on staff through sharing and building capacity and expertise (Meyer, 2003:10);

- **succession planning -** This is a key approach to facilitate skills transfer and avoid unnecessary delays in appointments to reduce service disruption due to absence or death of staff (Nemoto, 2004:30);

- **efficient recruitment, appointment, redeployment and transfer systems and practice -** These become increasingly important. Incentives and other systems need to be considered to fill key managerial and technical posts as well as vacancies in remote or "unattractive" schools (Phimphachanh & Sayabounthavong, 2004:91);

- **other innovative means of skills sharing and transfer -** These include teamwork approaches and improving routine and other communication (Tembon, Drake, Shirlaw, Connolly, Lee, Patrikios, Kaleeba, Mannathoko, Gillespie & Bundy, 2003:56); and

- **performance appraisal systems -** Consider possibilities for targeted or general performance appraisal systems. These can help to ensure

fair assessment and management of incapacity among infected staff and reward exceptional effort by colleagues who cover for them (Chisholm, 2004:201).

Systems need to deal with potential for fairly rapid decline or fluctuations in performance.

According to Hagreves and Glynn (2002:495), sport and culture can play several important roles in the HIV/AIDS response. These include promoting prevention by providing alternative entertainment in order to reduce HIV risk, active promotion of HIV/AIDS prevention and impact mitigation messages through sports events and role models. Sport and cultural activities can also facilitate stress management, socialisation and positive peer interaction for orphans and vulnerable children. Heritage and culture programmes can also play a key role in mobilizing communities around HIV/AIDS issues, reinforcing cultural and other norms that enhance prevention and support, and engaging with those norms that may increase HIV/AIDS risk and vulnerability of women and orphans. Within schools sports and culture can play key roles in creating nurturing environments for children who are at risk of HIV or made vulnerable through HIV/AIDS impacts (Giese, 2003:38).

### 3.6.6 Cover for absent educators and relief educator systems

Informal cover by colleagues for staff who are sick is seen as having major limitations in protecting learning processes and avoiding undue stress for colleagues when educators are absent temporarily permanently due to illness and death (Heyzer, 2003:65). Lack of an effective relief educator system is widely seen as a major impediment to quality education provision. For some positions, regulations for acting appointments and acting allowances (of up to 6 months) are available to facilitate efficiency of cover for deceased colleagues but these mechanisms were not seen as providing an adequate solution in practice (Kelly, 2002:11). Several limitations of the current relief educator situation were noted, which are the following:

- **lack of budgets** - Currently government does not pay for relief educators except in the case of educators taking maternity leave. In other

cases, payment for relief educators comes from School Boards but most Boards cannot afford to pay for them (Meyer, 2003:24); and

- **limited quality of potential relief staff -** in many areas, particularly but not only for specialist subjects and management positions. Current sick leave entitlements and practice are far in excess of the Labour Act (1992) minima of 30 working days in a three year cycle, and 24 consecutive days of normal vacation leave. Recent reforms to public service sick leave entitlements in South Africa restrict sick leave to 30 days in a three-year cycle but make provision for special disability sick leave which involves active assessment, planning and management. In several countries with more advanced HIV/AIDS endemics traditional norms around funeral attendance policies have had to be altered to preserve functions of government departments (Pick, 2003:14).

HIV/AIDS can have several important implications in relation to appointment, transfer and deployment systems. HIV/AIDS could substantially increase turnover and attrition rates and associated administrative burdens, delays and inefficiencies. Rates of staff losses from all causes in surveyed schools were 7.5 per cent per annum, with higher rates of 8.5 per cent in northern regions and a total 3 per cent overall attrition rate. It was noted that many learners already use Namibian College of Open Learning (NAMCOL) materials in addition to what they receive at school (Dickinson, 2003:50).

These materials are often well suited to situations where there is limited formal teaching capacity, and significant numbers of educators are familiar with the materials through teaching for NAMCOL. Part of the solution is seen as developing competency based, rather than qualifications based, job descriptions

to assist in screening and planning training. Ministry managers are also being encouraged to write better job descriptions to facilitate selection (Hepburn, 2002:43).

### 3.6.7 Provisional HIV/AIDS programme structures and functions

Mallmann (2003:23) suggests that at school level, the principal should specifically be held accountable for implementation of HIV/AIDS responses by the school, its staff and any available local partners. As soon as possible, dedicated posts should be created for a Guidance and Counseling/ Life skills Co-coordinator, responsible coordination, referral activities and aspects of service delivery and technical support within the school.

According to Riono and Jazant (2004:80), the principal should have discretion in the allocation of HIV/AIDS responsibilities (to several educators rather than an individual provided that outcomes are achieved. School managers should ensure that all functions are not only left to the Guidance educator. In smaller schools, or to relieve resource constraints, consideration should be given to part time posts and sharing of guidance and counseling post between schools in a cluster (Badcock-Walters, 2001:105).

Improved monitoring and evaluation at all levels is likely to be critical to enhance programme effectiveness. Requirements for effective monitoring and evaluation are likely to include:

- guidelines and support on programme monitoring and evaluation for various levels of programmes. Specific guidelines to inspectors and other senior managers on monitoring prevention and impact mitigation issues will be centrally important to more effective mainstreaming of HIV/AIDS (Coombe & Kelly, 2001:48); and

- particular emphasis on participatory and qualitative approaches to enhance buy-in and reliability of information (Farmer, Léandre & Mukherjee, 2001:49).

## 3.7 MITIGATING THE CONSEQUENCES OF HIV/AIDS FOR EDUCATION

The situation seems to be desperate and getting worse, without a contingency plan to protect the system against HIV/AIDS. Fortunately there are things that

can be done, however challenged the present and future may look, these include:

- **a foundation for action -** The first step is to recognize that the HIV/AIDS pandemic is not just a health problem, but that it brings psychosocial, economic and other consequences which threaten the efficient operation of the system itself. Making this conceptual break-through makes it possible to redefine the education sector's response to the pandemic, and then to act systematically in fighting it. Taking these practical steps is possible if there is a foundation from which to launch education's counter-offensive. South Africa's past experience suggests some elements of such a foundation for action on HIV/AIDS (Johnson, 2000:33). More needs to be known quantitatively about how HIV/AIDS influences educator and educator attrition (especially in key areas like supervision, management, and science/maths teaching), education costs, education requirements, the complexity of grade cohorts, and wastage and completion rates. How can adequate information be collected and analyzed systematically? Who is responsible for reporting, collecting and collating? Who will analyze it and feed it into the decision-making process? Much information is already available from demographers and sentinel sites at antenatal clinics (Kelly, 2000a:46).

  According to Life Skills Development Foundation (2001:23), further data can be extracted regularly from school reporting forms and personnel systems without adding to institutional reporting burdens. It should be possible to deduce a set of 'alarm bells,' or indicators which warn managers when a situation reaches crisis levels in schools, districts and provinces. Concerns about sustaining the quality of education require more detailed research and analysis. How do existing knowledge and value systems complicate life skills teaching? What should the education system look like in future when a high proportion of learners will be unparented orphans, or part of a child-headed household? What needs to be done to ensure the system meets the needs of children in distress and those who look after them, monitors HIV-affected children's rights, promotes a culture of care in schools, and operates in more flexible, non-

formal ways to meet very complex educational needs. What will happen to South Africa's four million AIDS orphans? Who will care for them and how will they be educated? What do we know about 'orphanhood'? What more do we need to know? The education sector urgently requires a research agenda on HIV/AIDS and its impact on the education system, with priorities agreed, academic and other research partners mandated, resources allocated, and research outcomes linked to change (Vandemoortele, 2001:27);

- **collective dedication -** The impact assessment commissioned by Government on behalf of the Department of Education will provide a focal point for reaching agreement within education departments, in consultation with partners, about how to stabilize the system and protect education quality. Politicians, planners and practitioners, and development agency partners must now together assert their collective will to understand and deal with the effect of HIV/AIDS on the education system (Webb, 2001:110);
- **adequate planning and strategic principles -** Innovative structures and systems are needed to plan education's response to HIV/AIDS. Some strategic principles have emerged from South Africa's experience during the '90s. First, interventions must be manageable, within the capacity of the system to implement. Secondly, the 'grassroots' is at work and Government needs to shift from a top-down 'delivery' structure to cooperatively devised support frameworks for local initiatives. Thirdly, a peer group support is essential for all learners, students, educators, lecturers and other educators (World Bank, 2000:19). Collectivity, cooperation, collaboration, coordination and consultation, based on trust, are needed to sustain a culture of care in schools. Finally, full-time officials with clear job descriptions need to be mandated to work on HIV/AIDS impact matters. These principles and others need to be fully elaborated as a basis for planning and management (De La Rey, 2002:38);
- **streamlined funding -** It is essential now to make funding arrangements more efficient, and to make adequate provision for local non-government partners. It is up to the finance and education departments, as well as local

and international funding partners, to sort this out as a matter of urgent priority (Haacker, 2001:17);

- **effective partnerships -** Cooperation and trust must characterize South Africa's response to HIV/AIDS. That means:
    - breaking the current impasse between politicians, government officials, NGO and institutional activists, academics and the media about what to do, and who is responsible (Walker, 2004:16);
    - involving communities, parents and local leaders in any campaign through the school governing body, and using the school as the ultimate community based organization and the nerve-center for local response (Epstein, 2001:5);
    - listening to what educators and district officials say about what needs to be done, how it can be done, and what they need to do it;
    - pushing unions to get the message out to their members (Johnson, 2000:42); and
    - making better arrangements with international development cooperation agencies in support of both Government and local initiatives. Three strong networks exist which can carry messages throughout South Africa: schools, unions, and faith-based organizations. Their potential for leadership at local level as AIDS-focused community-based organizations requires further exploration, along with the role of traditional leaders and South Africa's mothers (Ebersohn & Eloff, 2001:26);
- **crisis management capacity -** The Department of Education has an obligation to deploy the best managers and leaders it can find to counteract the pandemic. Because so much is at stake, it is essential to recruit dedicated teams of proven, mature senior managers on contract if necessary. This is not a part-time assignment for individuals dotted around the bureaucracy. Fighting HIV/AIDS, protecting children, educators and other educators, and shielding the system itself is a full-time professional

assignment, at least in the short- to medium term until the situation stabilizes (Van Dyk, 2005:30); and

- **responsive decision-making. -.** Having a foundation for action in place should make it possible to act creatively to deflect the worst ravages of HIV/AIDS. Difficult decisions will need to be taken about targeting resources where they are most needed (by making provision to replace educators lost to HIV/AIDS, for example, and meet the needs of the growing orphan population), and avoiding wastage (by building fewer schools where populations are decimated, by creating new learning opportunities for children forced out of school) (Hargreves & Glynn, 2002:491). Educators should be able to identify at-risk schools and learners (female learners, children who walk a long way to school, those in boarding hostels). With stronger AIDS dedicated planning and management, education departments and their partners should be able to provide a wide selection of materials to support peer group work among children, educators, and other care-givers, promote a 'culture of care' in schools and institutions, and start planning for 'randomized' education and training for learners affected by AIDS (Kelly, 2002:31).

## 3.8 CONCLUSION

This chapter discussed how the HIV/AIDS endemic impact on systems by exploring the ecology of HIV/AIDS, HIV/AIDS, life expectancy and societal functioning and HIV and the energy balance. The Department of education strategy for the management of HIV/AIDS is also discussed.

# CHAPTER FOUR

# RESEARCH DESIGN

## 4.1 INTRODUCTION

This chapter presents the research methods employed in this study. It includes an overview of the qualitative research approach as well as research design and sampling. The use of interviews is considered as the most appropriate and practical technique in reaching the objectives of this study.

## 4.2 THE PURPOSE OF THIS STUDY

The purpose of this study is to investigate the lived experiences of school going learners who are HIV-positive and develop ecosystemic management strategies to help learners who are HIV-positive.

## 4.3 QUALITATIVE RESEARCH APPROACH

Qualitative research encompasses several approaches to research that have two things in common. First, they focus on phenomena that occur in natural settings – that is, in the 'real world'. And second they involve studying those phenomena in all their complexity (Leedy & Ormrod, 2005:133). Qualitative research methodologies are methodologies dealing with data that are principally verbal (White, 2005:80). According to White (2005:81), qualitative research is more concerned with understanding social phenomena from the perspectives of the participants. This happens through researcher's participation in the daily life activities of those involved in the research; hence the researcher becomes a research instrument. According to Cresswell (2003:15) "...qualitative research is an inquiry process of understanding, based on distinct methodological traditions of inquiry that explore a social or human problem. In the process of a study, the researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting."

De Vos (2001:240) states that qualitative research is defined as a multi-perspective approach to social interaction, aimed at describing, making sense of, interpreting or reconstructing this interaction in terms of the meanings that the subjects attach to it. Denzin and Lincoln (2005:143) presented a comprehensive definition of qualitative research which is that qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspectives, life stories, interviews, observations, historical, interactional, and visual texts – that describe routine and problematic moments and meaning in individuals' lives.

The justification for the use of qualitative research approach is that:

- it uses an inductive form of reasoning: develops concepts insights and understanding from patterns in the data;
- it derives meaning from the subject perspective;
- is ideographic: aims to understand the meaning that people attach to everyday life;
- captures and discovers meaning once the researcher becomes immersed in data;
- observations are determined by information richness of settings, and types of observations used are modified to enrich understanding;
- concepts are in the form of themes motives and categories; and
- data are analysed by extracting themes.

The aim of qualitative research is, therefore, to understand experience as being unified.

The above characteristics of qualitative research were consistent with the values of qualitative research described by Patton (2001:56). Patton (2001:56) listed the following values:

- phenomenology where the researcher develops an "insider's" viewpoint from
- multiple perspectives;
- holism where the researcher perceives the big picture or the total situation rather than a few elements in a complex situation, as in quantitative research;
- non-judgemental orientation where the researcher records a situation in qualitative terms without superimposing his or her value system, judgments, hypotheses, or preconceptions may distort what the researcher sees; and
- contextualization where all information is considered only in the context of the environment in which it was gathered.

It seems obvious that these characteristics of qualitative research are appropriate for studying the ecosystemic management of HIV/AIDS in a school setting.

### 4.3.1 Research design

The following designs were used in this study, which were:

- **case study design -** The term case study has to do with the fact that a limited number of units, such as an individual, a group or an institution, are studied intensively (Welman & Kruger, 2000:190). The researcher explores a single entity or phenomenon (the case) bound by time and activity (programme, event, process, institution, social group) and collects detailed information by using a variety of data collection procedures during a sustained period of time (Stockdale, 2003:21). An individual case study

where an HIV/AIDS infected learner, his grand mother and an educator were interviewed is presented in this study; and

- **phenomenological design** - The term phenomenology refers to a person's perceptions of the meaning of an event, as opposed to the event as it exist external to a person (Leedy & Ormrod, 2005:139). This study attempted to understand the impact of HIV on educators and learners so.

## 4.4 POPULATION AND SAMPLING

The population of this research is composed of all HIV-positive learners and educators in Fezile Dabi district in the Free State province. The sample was limited to learners infected by HIV/AIDS (n=7), educators (n=2), the grandmother of one of the participants (n=1) and principals (n=3) in schools in Fezile Dabi district in the Free State province.

Two types of sampling were used in this study, purposeful and convenience. Purposeful sampling is composed of elements that contains the most characteristic, representative or typical attributes of the population (White, 2005:120). On the basis of the researcher's knowledge of the population a judgernent was made about which subjects should be selected to provide the best information to address the purpose of this research. Patton, as quoted by McMillan and Schumacher (1997:397) and Leedy and Ormrod (2005:145) describe it as 'selecting-rich cases for study in-depth', or selection of those individuals or objects that will yield the most information about the topic under investigation.

White (2005:120) indicates that in a convenience or availability sampling, respondents are usually those who are the nearest and most easily available to the researcher.

## 4.5 RESEARCH INSTRUMENT

This section discusses the instruments which were used to elicit data from the participants who formed the sample of this research.

### 4.5.1 Individual interviews

Individual interviews were conducted with the three principals and one educator of Fezile Dabi district schools. The participants who formed part of the case study who were also interviewed individually were Sihle the HIV-positive leaner, his grandmother and his educator.

### 4.5.2 Focus Group Interviews (FGI)

Powell and Single (1996:499) describe a focus group as a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research which in this study is ecosystemic management of HIV/AIDS in schools. In this research six HIV-positive learners from three schools in Fezile Dabi district formed part of the FGI. White (2005:146) states, that FGI involved organised discussions with a selected group of individuals to gain information about their views and experiences of the topic. This type of interviewing is particularly suitable for obtaining several perspectives about the same topic. FGI interviews were considered to be an appropriate data collection method in this research for the following reasons:

- time-wise it was more economical than conducting numerous individual interviews;
- the group dynamics is a synergistic factor in bringing out information; and
- participants expressed their honest feeling more confidently within a support group of peers.

Each FGI lasted for about an hour and thirty minutes.

All interviews were open-ended and semi-structured. In semi-structured interviews the content and procedure are organised in advance but probing questions are posed (see Addendum B). Schulze (2005:60) indicates that preformulated questions are carefully arranged and put to all interviewees in a fairly similar sequence. The interviewer posed a question to the group and the participants would respond by trying to give their views and experiences. The

interviewer was assisted by an audio-tape to capture the data as sometimes learners would all talk at the same time.

### 4.5.3 Interview setting

Participants were encouraged to select an interview setting that would be private, convenient and comfortable. Principals and the educator agreed to be interviewed at their homes where they would not have disturbance from learners. Learners were interviewed at school after teaching time. The choice of homes and the school as setting was convenient for all the interviewees as it provided them with privacy and comfort. Participants were asked to allow two hours for the complete interview. Participants were told that the interview would be transcribed and audio-taped and asked if they had any objections to this process. All respondents agreed to be audio-taped.

According to Patton (2001:75), open-ended interviewing is considered to be an effective way to obtain individual perspectives. Opening and non-threatening questions, such as the first question, "Would you tell me about yourself?" were included to help establish rapport and allow the interviewee to respond freely. In addition to developing rapport, the open-ended interview dialogue was selected because it assisted with enhancing the communication level between the interviewees and the interviewer.

### 4.5.4 Transcriptions and analysis

Transcriptions were made of all the audio-taped interviews. The researcher compared audiotapes to transcripts and reviewed each transcript to ensure that it contained the *verbatim* recorded interview. These steps were important for the accuracy of the design and for the identification of emergent issues, which were to form themes.

Data collection and analysis are not independent processes in qualitative research design. While data collection actually entailed the process of interviewing, informal analysis of the respondents was also conducted during the interview. Handwritten assessment notes taken during and after the interview constituted part of the initial research design. Immediate review of

audiotapes, *verbatim* review of the interview transcript and notes to the methodological log were additional analysis steps that intertwined with data collection. Thus, analysis was ongoing and occurred during the process of data collection.

Details of the interview setting and procedure, field notes/methodological log, transcriptions, case study development, case analysis follow.

## 4.6 ETHICAL CONSIDERATIONS

Due to the charged and emotive nature of the HIV/AIDS phenomenon, certain ethical considerations assumed particular importance. De Marrais (1998:230) notes, that the very nature of the aim of a phenomenological study, namely to access the individual's life world, is obtrusive. In this study, this obtrusiveness will further be exacerbated by the sensitivity of the topic under investigation. First and foremost, the researcher will have a responsibility to respect the rights, needs, values and wishes of the participants (Berg, 2003:112). In order to protect the participants' rights, the following safeguards, as listed by Cresswell (2003:123), are employed:

- the research topic and objectives will be expressed clearly in order to be well understood by the participants;
- each participant's consent will be requested to participate in the study;
- transcriptions, interpretations and reports will be made available to the participants, if they wish to see them;
- in any decision-making process in the study, the researcher will consider the rights and protection of the participants; and
- the researcher will honour confidentiality. The participants will choose their pseudonym to be used in the texts to protect their anonymity. It is anticipated that the discussion of the experience of meaning in individuals with HIV may prove to be emotionally distressing for some participants. Participants, therefore, will be monitored and debriefed. If necessary the

researcher will make recommendations for therapeutic interventions (Merriam, 1998:67).

## 4.7 CONCLUSION

This chapter presented the research design employed in this study. The qualitative research, population and sampling, research instruments and the ethical considerations were analysed and explored.

The next chapter deals with analysis and interpretation of data collected by means of interviews.

# CHAPTER FIVE

# ANALYSES AND INTERPRETATION

## 5.1 INTRODUCTION

In this chapter the researcher presents:

- a case study of a learner (Sihle not his real name) who is HIV-positive, his grandmother and his class educator;
- Focus Group Interviews (FGI) with five learners who are all HIV-positive; and
- individual interviews with three principals of schools where learner participants who were interviewed attend school.

The interview transcriptions are presented first followed by analyses by means of themes.

## 5.2 CASE STUDY

In this section the case study of a learner, is presented. The family background will be placed first, followed by a *verbatim* transcription of the interview, analysis and interpretation.

### 5.2.1 Background information

Sihle is an eight year-old boy who is in grade 2. He stays with his grandmother and his brother Jabulani who is 11 years old. Both their parents passed away. Their mother became terminally ill and passed away in December 2002. Immediately after her death, their father also became ill and he was in and out of hospital until he passed away in September 2005. Their grandmother is not working and she is not receiving an old-age grant yet, because of her age. This family depends on the boys' grant which they receive every month.

Sihle and Jabulani stay with their grandmother, their aunt and uncle and their three children (the other family members were not interviewed as they were never at home when the interviewer visited) in a four roomed shelter. Both boys are HIV positive their HIV positive status has not been revealed to them by their grandmother, but they know that they are HIV-positive as they overheard when the nurse was revealing their status to their grandmother. They are aware that they are very sick and have to take their medication every morning. Their grandmother told them that because they are sick, they have to take good care of themselves, even when playing with other children. The boys' HIV positive status has been revealed to the educators at school. Only Sihle was interviewed as Jabulani did not want to be interviewed.

### 5.2.2 Interview proceedings

The following is an interview with Sihle, a grade 2 learner who happens to be HIV-positive through mother-to-child- transmission (MTCT).

#### 5.2.2.1 Interview with Sihle

**Interviewer: I have heard that you are sick. What is the problem?**

**Sihle:** 'I am sick; sometimes I cough a lot and I also have constant headaches, my granny takes me to the clinic. Last month the nurse said that I have pneumonia and I must wear warm clothes when it is cold. I was given instructions not to play in the sun and stay in-doors when it is too cold. I am taking medication that I got from the clinic'.

**Interviewer: When did you become aware of your HIV-positive status?**

**Sihle:** 'My grandmother took us to the clinic for an HIV test. She told us that both our parents died of HIV/AIDS. We were counselled by a nurse who was very friendly; she treated us well, we were even given coffee and bread. After we were tested went back home; after a week we had to go back to the clinic to check for results. The nurse told Granny that we were both HIV-positive'.

**Interviewer: How did you feel when your positive-HIV status was revealed to you?**

**Sihle:** 'I was worried because I thought we were going to die but the nurse told us that we can live longer and that we need not worry as Granny and she were going to take care of us'.

**Interviewer: Are you able to go to school when you are sick?**

**Sihle:** 'No, my granny tells me to sleep until I have recovered. I usually stay at home for about a week or two. This is when I cannot even move out of bed because of pains. When I am sick, I cannot concentrate in class, I become weak and cannot even write or participate in the activities'.

**Interviewer: Have you ever been admitted in a hospital?**

**Sihle:** 'Yes, when I was in grade one, I was admitted for a month. I could not go to school but I managed to progress to the next grade at the end of the year. I was fortunate. All the time I was in hospital I was thinking about school and longing to see my friends, just to play and chat with them. I had pneumonia and sores in my mouth, I couldn't eat'.

**Interviewer: How does Granny treat you?**

**Sihle:** 'My granny loves me very much, she is like a mother to me, but there are days I miss my mother. She spoils me a lot. She never shouts at me, even when a person wants to send me to the shops, she refuses. She would like me to stay at home where she can see me; this does not always happen as I want to be with my friends most of the time. When I am away for a long time playing, she becomes furious'.

**Interviewer: How does Jabulani treat you?**

**Sihle:** 'He is my brother he loves me very much. When my friends are fighting me he helps me. When I am sick, he takes care of me. He plays with me; he is a good brother and I love him so much'.

**Interviewer: How are other learners towards you?**

**Sihle:** 'The educator told them that I am sick so they must not play rough with me. They all treat me well; I play with them during break and after school. But my friends always complain that I am playing rough. I like kicking them and starting a fight; they sometimes do not kick back but when they do, they would kick harder and I would cry and report this to the class educators. I know she will take my side and reprimand them'.

**Interviewer: Do you have friends?**

**Sihle:** 'Yes, I have two friends: Mpho and Sithembiso. We are in the same class and in the same group; we always play together. They also help me with school- work. When I am not attending school and sick at home, they visit me and tell me what they have been doing in class. Mpho likes reading. I can read because he encourages me to read. He would bring me a reading book at home and we would read the lesson they were reading in class in my absence. We would read and do Maths together. I hate it when I cannot go to school; I usually miss my friends a lot'.

**Interviewer: How do they help you with school work?**

**Sihle:** 'I can't read fluently. Mpho helps me when I am stuck, even when we are reading in class, they make sure that they are next to me to help. The teacher also encourages the other friends to help me as well; we also do homework together. There is a floating trophy in our class; the best group has it for two weeks; after two weeks we are assessed again and the best group will receive the trophy. The competition is tough: all the members of the group have to participate fully and all get outstanding achievement requests in all the learning areas. That is one of the reasons why my friends help me a lot because if I do not achieve the group will not get the trophy'.

**Interviewer: Do you experience any discrimination at school?**

**Sihle:** 'Yes, although I have friends, there are other children at our school who do not know that I am HIV/AIDS-positive, but they always tease me about

being thin. They call me "broomstick", because sometimes I feel very weak and I cannot play for a long time, they do not choose me as their partner. There are times when my friends do not want to eat my food as they say I am going to infect them with what I am suffering from'.

**Interviewer: Whom did you tell about your positive HIV status?**

**Sihle:** 'No one. I do not want to tell my teacher about my status; in fact, I do not want her to know but, I know that Granny told her. I feel if she knows, she will treat me differently, or she will always see a person who is HIV-positive and not just one of the learners. I also do not want to tell my friends. I do not want to lose them. No one in our school has ever come up and said he or she is HIV-positive. I wish it was easy to do so without fear of what people would say'.

**Interviewer: How does your grandmother help you with schoolwork?**

**Sihle: '**My grandmother cannot read or write, but she would encourage me to read for her. In the evening she would tell me to do my homework and if I do not have work, I must read my books. She makes it a point that I do something in the evening'.

**Interviewer: What are your fears Sihle?**

**Sihle:** 'I know that I am going to die. Whenever I see a person with AIDS at the clinic, I think of death and I think of how my mother was before she died (very thin, frail and very sick). I do not always think of death or of my status for that matter, but I wish I could get more information on how to keep healthy so as to live longer. I know that exercise helps. I heard that from my teacher at school, but I have never exercised. I want to exercise; when I am not sick I play a lot; in my mind I am trying to exercise. I wish I could get more information about the disease and how it affects people. I want to know about the stages of HIV/AIDS. I am dying to hear from other children of my age how it affects their lives. When they talk about it on TV, I try to listen but it is always about medical stuff I do not understand'.

**Interviewer: Do you eat healthy or exercise regularly?**

**Sihle:** 'I do exercise, although I cannot say, regularly, I play a lot with my friends and most of the time we use a skipping rope, but when I am ill, it becomes impossible to do so until I have recovered. I do not think I eat healthy though, as most of the time I do not have an appetite'.

**Interviewer: Have you ever been counselled at school?**

**Sihle:** 'There are no qualified counsellors at school; we only have teachers and clerks. I was once very emotional in class; I think I was frustrated because I did not know how the sums we were given were done and other learners were quickly doing them and showing their work to the teacher, it was the work they were doing two days before I came to school after being sick. I cried because I did not know what to do. The teacher saw this; she called me and asked what the problem was, I told her the truth. She told me that it was not my fault that I did not know the work. She was going to help me with it and she was going to make sure that I am helped by one of my friends whenever I need help. We talked about this for about fifteen minutes; she was also trying to comfort me. I felt relieved after that and continued with my work'.

**Interviewer: Did it help you to talk about your problem to your teacher?**

**Sihle:** 'Yes, it helped a lot; I was very frustrated and I felt relieved after I spoke to the teacher about my problem. She even offered to help me; if I did not tell her what my problem was, she would not have been able to help me'.

**Interviewer: Do you think you will be able to talk to her if you feel frustrated about your HIV/AIDS status?**

**Sihle:** 'No, I cannot talk to her about that. I do not want my teacher to know about my status.

#### 5.2.2.2 Interview with Sihle's grandmother

**Interviewer: How did you feel when you heard about your grandchildren's HIV positive status?**

**Granny:** 'Although I was expecting them to be, I really felt bad. I thought of their mother before she died. I was the one who was taking care of her. She was very ill and looked frail and very thin. I felt very sorry for these children who at their ages are facing such hardships. I wished that the nurse would have made a mistake. I also felt as if the nurse would have revealed their positive HIV status in their absence so that when I have dealt with this myself, I would find a way of breaking the news gently to them'.

**Interviewer: Did you notice any change in your grandchildren's behaviour or health after their status was revealed to them?**

**Granny**: 'There was change in Jabulani's behaviour; he is the eldest and he can now think about how their future will be. Sihle was quiet the whole of that week. We were also very worried as he would refuse to go out and play with his friends. He ate very little, sometimes he could not even touch his food, and he had lost appetite. Jabulani's health deteriorated to the extent that he could not go to school for the whole of that week. He was very sick. I had to take him to hospital. By the end of the second week, one could see that he had lost weight'.

**Interviewer: What did you do about this as their guardian?**

**Granny:** 'There was nothing I could do. I just waited for Jabulani to recover. In the second week Sihle was back to his old self, but Jabulani was still not well. When I asked him about what he was thinking about the positive HIV/AIDS results, he said that he was not okay. He missed his parents a lot. I think he was still grieving about their death'.

**Interviewer: Why did you decide to disclose Sihle and Jabulani's HIV-positive status to the educators?**

**Granny:** 'At first I had a problem because their mother did not want me to disclose their status to educators at school. She said she did not want everybody to know that her children are HIV-positive. Immediately after her death, I decided to disclose their status. This was because I was afraid that they would be sick at school and if you are not aware of their status, you would take it light, thinking that it was just an illness. One other reason was, that as Sihle is on ARVs, he needs a meal during the day. I cannot afford to give him money to buy food during break. I had to make sure that he is part of the nutrition programme at school. Sihle is most of the time absent from school; because of illness, if the educator knows his status, she would know how to assist him when he recovers'.

**Interviewer: Were you not afraid of what they were going to say?**

**Granny:** 'No, the nurse at the clinic advised me to tell the class teacher so that she could assist me with Sihle. It was also difficult not to disclose, as Sihle is often sick and had to stay at home'.

**Interviewer: How did Sihle's educator react to the news?**

**Granny:** 'She understood; she even counselled me: she promised to take care of Sihle and help him however, she could and she thanked me for trusting her with something so delicate. She was worried about Sihle's high rate of absenteeism'.

**Interviewer: How do you support Sihle and Jabulani?**

**Granny:** 'I am always there for them they are my grandchildren. I become worried sometimes of what would happen to them if I die. Their aunt has children of her own; it would be too much for her to raise her sister's. I wish I can live longer for their sake. I am not able to help them with their schoolwork, but I make sure that their uniforms are clean and they have everything they need for school. I make sure that Sihle takes his ARVs every morning, so I

wake up with them at six to supervise them. Most of the money I receive for their grant, I spend on them. It is difficult though, to buy a uniform; it is not much; it is enough for them to have at least one meal per day. They are provided with food at school during break'.

**Interviewer: Does the boys' condition affect you?**

**Granny:** 'Yes, as I said, I am worried of what will happen to them. I am taking care of them now, although we do not have much; but they have a roof over their heads, they come back home to me every day. Life is not that difficult for them, but what will happen in future. I am always worried of what would happen to them should I die. No one would take care of them; their aunt has children of her own; she will never manage to take care of her children, as well as of Sihle and Jabulani. That keeps me awake the whole night sometimes, why do things have to happen like this? I cannot imagine my grandchildren staying in a shack, but under the circumstance, that is inevitable'.

**Interviewer: Have you spoken to anyone about this?**

**Granny:** 'Yes, I have spoken to the social worker about it, but there is nothing that she can do now that I am still alive. She suggested that I should speak to one of my relatives to see if they cannot foster care the children after my death. To tell you the truth, there is no one in my family who can do that. I come from a poor family; we are all not learned; we were raised on farms as our parents were farmworkers. Each one of us is struggling to make ends meet. I think it would be a burden to them to take care of my grandchildren when they cannot afford to raise their own children well. I would like my grandchildren to get the education I never had. With them, this would be difficult, their own children are not at school, they dropped out in lower primary; they do not encourage them to be educated: how are they going to do that with my grandchildren?'.

**Interviewer: How are the boys performing at school?**

**Granny**: 'Jabulani's class teacher is complaining. He is not doing well at all at school. Sihle's books are very neat, he takes pride in his work. However, his performance is affected by his high rate of absenteeism; like now, he has been absent for two weeks and it is the time when other learners are writing tests for the end of the term. Jabulani is stronger than Sihle, but his performance is poor. When I asked him about this, he said he lacks concentration in class, as he is always thinking about his positive status'.

**Interviewer: Do you ever talk about HIV/AIDS with Sihle and Jabulani at home when you are relaxing?**

**Granny: '**No, no one ever talks about HIV/AIDS. I think we are afraid of how the boys would react'.

#### 5.2.2.3 Interview with Sihle's educator

**Interviewer: How is Sihle in class?**

**Educator:** 'I think he would do well if his performance was not affected by his high rate of absenteeism. He also gets tired very easily; as a result it is difficult for him to complete tasks. I can say his performance is a little below average, but he was the best student in Grades one and two. His performance started dropping last year when he started becoming frequently ill'.

**Interviewer: What do you do at school to help Sihle catch up with his work after absence?**

**Educator:** 'We really do not have a strategy at school to help learners who have been absent from school. I personally try to explain what I am teaching that day thoroughly so that they at least get something, but to teach what one has taught two weeks ago in her absence, is very difficult. I am thinking of what other learners are going to do when I am busy teaching Sihle only'.

**Interviewer: Is there a way that learners that are frequently absent because of illness, can be given extra classes to help them catch up?**

**Educator:** 'I think they may be given extra classes, but we have done that at our school. We rely on them to take the initiative to ask others what has been done in their absence. The problem is when they do not understand what others are telling them or when those that were attending, cannot explain thoroughly for them to understand'.

**Interviewer: What are you supposed to teach learners about HIV/AIDS?**

**Educator:** 'I teach them life orientation. In this learning area I do not only concentrate on HIV/AIDS. It is just a small part of other aspects that have to be dealt with in this learning area. It depends. In other years you had time to cover all the themes including HIV/AIDS, in some years you do not. Basically, I teach them what it means and how it is transmitted. That usually takes about two to three periods per year'.

**Interviewer: Are they allowed to ask questions on the subject?**

**Educator:** 'Yes, they are, but mainly questions should be based on what I have told them. We do not have time to discuss the topic generally and I feel some of the learners would not be comfortable with this, as some of their relatives are HIV/AIDS positive'.

**Interviewer: Is there a way that you can let these learners choose what they want to talk about concerning HIV/AIDS, that is accommodating their interests?**

**Educator:** 'I cannot just allow them to choose their own topic. You see, I plan for each day. In my planning I have to say what I am going to teach learners that day. Now saying that, I am going to depend on what they are interested in, is not acceptable. Also, I feel they are still too young to be told in detail how HIV/AIDS is contracted and all the other sensitive information around the subject. I think they will get some of the information from the nurses and the media'.

**Interviewer: How often do you organise health-workers, non-governmental organisations to address learners on matters pertaining to HIV/AIDS?**

**Educator:** 'Yes, we can manage to do that once a year when we are celebrating the World AIDS Day. We do not have time to organise these occasions; we are aware that they are very important for learners, but at the same time we have to concentrate on teaching'.

### 5.2.3 Analysis and interpretation

This section provides analysis of the responses of the participants. The analyses are supported by quotes from their responses.

#### 5.2.3.1 Theme 1: Respondents are psychologically disturbed

Responding to the question about how Sihle felt when his HIV-positive status was revealed to him, he indicated the following:

> 'I could not believe what the doctor had just said'
>
> 'I was very sad and frustrated'

Having parents that died because of HIV/AIDS, seem not to have prepared Sihle and Jabulani for the positive HIV results. This is what was said:

> "I suspected that I could be HIV-positive, but I did not want that confirmed'

Caretakers are also affected when children they are taking care of are diagnosed HIV-positive; this is what the boys' grandmother said:

> "Although I was expecting them to be, I really felt bad. I thought of their mother before she died. I was the one who was taking care of her. She was very ill and looked frail and very thin. I felt very sorry for these children who at their ages were facing such hardship. I wished that the nurse would have made a mistake"

The boys' grandmother felt that it would be better if they were not there when the nurse revealed their positive HIV status, this is what she said:

> "I felt as if the nurse would have revealed their status in their absence so that when I have dealt with this myself, I would find a way of breaking the news gently to them"

The respondent indicated being frustrated, sad and not believing what the doctor revealed. The respondent indicated, that the death of both parents due to HIV/AIDS did not prepare her for a positive HIV status. It seems that infected learners whose parents died of HIV/AIDS, experience more fears as they normally have a picture of their parents before they died. The boys' grandmother seems to have suffered psychological distress because of their positive HIV/AIDS status. It seems that caretakers and guardians of these learners are also not spared of the pain they undergo.

#### 5.2.3.2 Theme 2: There is a change of behaviour or health after the HIV-positive status has been revealed

A change in the boys' behaviour and health after the disclosure of their positive HIV/AIDS was noticed. This is what was said:

> "Yes there was change in their behaviour; he was reserved for the whole of that week. He ate very little; sometimes he could not even touch food, and he had lost appetite. Jabulani's health deteriorated to an extent that he could not go to school for the whole of that week. By the end of the second week one could see that he lost weight"

The change in the boys' behaviour could be attributed to the emotional disturbances they experienced when their positive HIV-status was revealed to them.

#### 5.2.3.3 Theme 3: Fear of death

The respondents indicated having a fear of death. They said among others:

'I know that I am going to die. Whenever I see a person with AIDS at the clinic, I think of death and I think of how my mother was before she died (very thin, frail and very sick)'

The respondent indicated fears of death - this could be attributed to the fact that he has experienced both parents getting ill everyday and eventually died. This could also be an indication of the fact that when he thinks about HIV/AIDS, what comes to his mind, is death.

#### 5.2.3.4 Theme 4: Learners' academic performance at school is affected by absenteeism and lack of concentration

Responding to the questions about Sihle and Jabulani's general performance in class, Sihle and his educator said.

'His books are very neat; he takes pride in his work; however, his performance is affected his high rate of absenteeism, like now he has been absent for two weeks and it is the time when other learners are writing tests for the end of the term'

'Jabulani has a problem; he says he lacks concentration in class as he is always thinking about his positive status'

'The class teacher says Sihle gets tired very easily, as a result it is difficult for him to complete tasks'

'I think he would do well if performance was not affected by his high rate of absenteeism, he also gets tired very easily; as a result, it is difficult for him to complete tasks. I can say his performance is a little below average, but he was the best student in Grade one. His performance started dropping last year when started becoming ill'

From these responses it can be deduced that the boys' performance is affected by the high rate of absenteeism, lack of concentration in class and getting tired easily. All these factors are negatively affecting their academic performance in class.

#### 5.2.3.5 Theme 5: Absence of strategy to assist learners who are absent frequently because of illness

The educator indicated not having a strategy at her school for assisting learners who are frequently absent because of illness. This is what she said:

> 'We really do not have a strategy at school to help learners who have been absent from school. I personally try to explain what I am teaching that day thoroughly so that they at least get something, but to teach what one has taught two weeks ago in her absence is very difficult. I am thinking of what other learners are going to do when I am busy teaching Sihle only'

> 'I think they may be given extra classes but we have not done that at our school. We rely on them to take the initiative to ask others what has been done in their absence. The problem is when they do not understand what others are telling them or when those that were attending cannot explain thoroughly for them to understand'

The educator indicated, that they do not have extra classes for learners who are frequently absent because of illness, they also do not have a strategy to assist these learners to catch up. This could indicate, that if these learners are not assisted at school to catch up, they could fail and end up dropping out of school.

#### 5.2.3.6 Theme 6: Loss of valued level of functioning

The loss of a valued level of functioning appeared to be a problem for Sihle. This is what he said.

> 'I am afraid to ask for assistance from other learners, I think maybe they will laugh at me'

> 'I am not stupid I know myself but if you were not at school for a long time, you lose out on important lessons and it is very difficult to catch up'

'I think other learners would say I am stupid if I ask them for help'

Sihle indicated loss of valued level of functioning regarding schoolwork as he used to be intelligent. He also indicated being scared of what other learners would say if he asks for assistance from them. The loss of functioning could be very frustrating for the respondent, as he would struggle to do things he used to do with ease.

#### 5.2.3.7 Theme 7: Lack of assistance at school

The respondent indicated not being helped to catch up with the work is a problem. This is what he said:

> 'She does not help me with catching up; she just tries to explain what she is teaching that day thoroughly.
>
> 'I do not think she would have time to start all over again and teach me everything she taught others in my absence'.

The teacher mentioned not having enough time for discussion of the topic of HIV/AIDS. He said the following:

> 'Yes, they are, but mainly questions should be based on what I have told them.' 'We do not have time to discuss the topic generally and I feel some of the learners would not be comfortable with this as some of their relatives are HIV/AIDS-positive.'
>
> 'Also I feel they are still too young to be told in detail how HIV/AIDS is contracted and all the other sensitive information around the subject.' 'I think they will get some of the information from the nurses and the media.'

Sihle indicated not being helped by the teacher to catch up with the schoolwork as it being a problem he feels that teachers might not have time to teach her again the work they have already done with the other learners. This will have a negative effect on this learner's performance.

The teacher mentioned not having enough time for discussion of the topic of HIV/AIDS in general in class she also indicated fears that some of the learners would not be comfortable with the topic of HIV/AIDS as some of their relatives are HIV-positive. This could deprive other learners of valuable information they need on HIV/AIDS.

#### 5.2.3.8 Theme 8: Fear of being discriminated or ridiculed

Sihle indicated fear of being discriminated against, or ridiculed if he asks for assistance from other learners. This is what he said:

> 'I am afraid to ask for assistance from other learners, I think maybe they will laugh at me. I am not stupid: I know myself, but if you were not at school for a long time you lose out on important lessons and it is very difficult to catch up. I think other learners would say I am stupid if I ask them for help'

Sihle is also worried that other learners would say he is stupid. These fears will prohibit the learner from asking for help and deprive him of the assistance he could have got.

#### 5.2.3.9 Discrimination at school and absence of measures to deal with it

Sihle indicated being discriminated against by other learners at school. The teacher indicated, that cases of discrimination are not reported to them. This is what the educator and Sihle said about discrimination:

> 'Children at our school do not know that I am HIV/AIDS positive, but they always tease me about being thin. They call me "broom stick", because sometimes I feel very weak and I cannot play for a long time they do not choose me as their partner. My friends sometimes do not want to eat my food as they say I am going to infect them with what I am suffering from'

> 'We have not had any cases of discrimination at our school - if they are there they have not been reported'

The respondent indicated being discriminated against by other learners at school. The teacher indicated, that cases of discrimination are not reported to the school and thus they do not have a record of those cases. It is worrisome that these cases are not reported by learners as that would create a platform for educators not to deal with discrimination and prejudice in the school.

#### 5.2.3.10 Theme 10: Support from school

Sihle indicated being assisted to understand schoolwork by the teacher and other learners in class. This is what he said:

> 'My school teacher assists me with school work; she makes sure that I am helped by one of my friends whenever I need help'.

It is impressive that the teacher helps Sihle to understand the schoolwork when he is at school. Understanding the work would help to boost the learner's self esteem.

#### 5.2.3.11 Theme 11: Lack of information on HIV/AIDS

The respondent indicated lack of information regarding HIV/AIDS and the fact that he would like to know how other learners are affected by HIV/AIDS.

> 'I wish I could get more information on how to keep healthy so as to live longer. I know that exercise helps, I heard that from my teacher at school, but I have never exercised'

> 'I am dying to hear from other children of my age how it affects their lives. When they talk about it on TV I try to listen but it is always about medical stuff I do not understand'

The respondent indicated lack of information regarding HIV/AIDS and lack of support groups for infected learners where he would understand how they are affected by HIV/AIDS. This lack of knowledge regarding HIV/AIDS can be attributed to the fact that talking about HIV/AIDS, is a taboo in these communities.

#### 5.2.3.12 Theme 12: Fear of disclosing to friends and teachers

Sihle indicated that he fears disclosing to teachers and friend. This is what he said:

> 'I do not want to tell my teacher about my status, in fact I do not want her to know. I feel if she knows she will treat me differently, or she will always see a person who is HIV-positive and not just one of the learners'

> 'I also do not want to tell my friends, I do not want to lose them. No one in our school has ever come up and said he or she is HIV-positive. I wish it were easy to do so without fear of what people would say'

The respondent indicated fears disclosing to teachers and friends as he does not know what they are going to say. Fear of what people say and of what they think seems to be the major barrier to non-disclosure of positive HIV/AIDS status.

#### 5.2.3.13 Theme 13: Lack of communication between parents and infected learners about issues regarding HIV/AIDS

Sihle's grandmother indicated that they do not talk about HIV/AIDS at home. She said the following:

> "No, no one ever talk about HIV/AIDS; I think we are afraid of how Bulelani would react"

The respondent indicated lack of communication regarding issues related to HIV/AIDS as one of the sources of stress. It seems difficult for the respondent to carry on with life, there are important things that he would like to communicate to his family. This lack of communication may have negative effects on the relationship.

## 5.3 FOCUS GROUP INTERVIEWS

### 5.3.1 Introduction

In this section data collected by means of focus group interviews with six learners from three schools at Fezile Dabi district, will be analysed and interpreted. The interviews are written first, then the analysis and interpretation of data follow. Data are analysed and interpreted by means of themes.

### 5.3.2 Interview proceedings

**Interviewer: How is being HIV-positive affect you emotionally?**

**Zonke:** 'I feel like crying all the time; I cannot concentrate on my schoolwork. I am afraid to sit next to a person who is HIV-positive, not that he or she is going to re-infect me, but I just do not feel comfortable'.

**Tefo:** 'When I look at people who are HIV-positive, I feel sorry for myself. I think of what is going to happen to me in future and how is being HIV-positive going to affect my life. It is when I see other people with AIDS that I think of my own status'.

**Sifiso:** 'I feel sad and sorry for myself; sometimes I think I even feel pain in my heart. I always think of death as I know that people with HIV/AIDS do not live long'.

**Mpho:** 'When my positive HIV status was revealed to me, I cried. I was very disturbed emotionally. I think I have accepted that I am sick. I love my parents (which are both deceased) very much although sometimes I blame them for infecting me with this dreadful disease'.

**Manete:** 'I feel very bad each time I look at my elder sister and brother I ask myself why me? Why is it not one of them who is infected? I was diagnosed HIV- positive three years ago. I was very sick at the clinic, they tested me and revealed my status to me and my mother. I think I am disturbed, because I

sometimes lose memory. My mother used to console me by saying that I am not the only one, since my parents are also HIV positive'.

**Interviewer: How is being HIV-positive affect you spiritually?**

**Zonke:** 'I am always praying it is as if God does not hear my prayers. I think this is a curse for me. I pray that God should heal me or just make this disease to go away'.

**Tefo:** 'I always plead with God to help doctors get a cure for HIV/AIDS before I become very sick like my father before he died. Sometimes I pray that God can take me so that I can find rest as I am sometimes suffering a lot'.

**Sifiso:** 'I always pray that God can intervene so that all people who are dying of HIV/AIDS can be healed by prayer. I do not pray only for myself I pray for others as well because if God does not heal all of us AIDS will still spread'.

**Mpho:** 'I pray to God and plead with Him to heal me. God is my only hope, I trust Him. The prayer helps me as I feel I cannot just sit, do nothing and just slowly die. I arrive last year at the shelter; there are three babies who are already dead. When they arrived the housemother informed us of their status, so that when we play with them, we must be careful. It is sad to watch other children dying, knowing that one day it is going to be your turn'.

**Manete:** 'Everyday I ask myself whether this is because of God's wrath because if it is that is why He does not help us get a cure for AIDS. I also ask for forgiveness for the sins I have done. I feel that I should have done something very bad to evoke God's anger on me'.

**Interviewer: How is being HIV-positive affect you physically?**

**Zonke:** 'Sometimes I do not even eat. We are aware of all the children who are positive in the shelter. When one of them is sick, I become very worried. I think of my own health. I also think and dream about how I would be in my last stages of HIV/AIDS. When I am day-dreaming I see myself as thin as a rake and very frail. I wish I would have someone to take care of me. I do not think that our house- mother would be able to take care of all of us'.

**Tefo:** 'There are times when I have sores all over my body, sometimes they take a long time to heal. Then there are times when I have shingles, I cannot even go to school during this time. Shingles are very painful'.

**Sifiso:** 'I do not sleep well at night. When this started, it was because I used to think a lot about my condition, that I am living at the shelter while other children are living at their homes with their parents. I used to think about my status and what is going to happen to me in future. Now I do not sleep because I am afraid that I would die in my sleep. When one of us coughs, or is in pain, I just toss and turn the whole night. I always think of what I would do if the other child could die while sleeping with me'.

**Mpho:** 'My weight is gradually dropping, I am now as thin as a rake. I do not eat well. It is difficult to sit and enjoy a meal; my appetite has also decreased. My friends at the shelter know this. They would sit next to me at lunch so that I can share my lunch with them. The housemother sometimes forces me to eat and make sure that I finish my meal. This does not help, as I would throw up'.

**Manete:** 'I do not sleep at night, I am afraid of dying in my sleep. Sometimes it is as if the bed is too soft; then I would sleep, seated on a chair. It is very difficult to do this as I can just fall. I also have nightmares because of my illness'.

**Interviewer: How has being HIV-positive affected your social life?**

**Zonke:** 'It has not affected my social life that much, I still enjoy hanging out with friends, but we cannot hang out until late; we are afraid of being raped by people who are HIV-positive and we cannot arrive after 20:00 at the shelter'.

**Tefo:** 'I do not think it has affected my social life. I do not take myself as having a social life or being part of society, for that matter. I take myself as an outcast. I do talk to other children at school and at the shelter, but most of the time I am just quiet. I do not think there is any point in chatting or playing with others. I am not like thy are!'

**Sifiso:** 'I used to like playing with my friends at school, but I do not do that anymore. I do not even enjoy my friends' company. I feel that they no longer love me. I think they know that I am HIV-positive. I also had friends at the shelter but when we fight, they threaten me that they are going to tell everybody at school that I am HIV-positive. They would them mock me and tell me not to play with them, as I am going to infect them'.

**Mpho:** 'I do not have time to play. After school I have to rush to the shelter to help the housemother with the house chores. I am the eldest and she relies on me for a lot of things. Even if there is nothing to be done at the shelter I do not think of going out to play with other children. I feel guilty'.

**Manete:** 'It is difficult to enjoy the company of other learners who are not HIV-positive, at school. I think it is a way of protecting myself from them. I just sit and play alone. Because I am used to this at school, I also do it at the shelter'.

**Interviewer: How is being HIV-positive affect your scholastic performance?**

**Zonke:** 'I think my performance has been affected. When I think about my positive HIV status, I see no point in pursuing my studies. I feel that we are all going to die of HIV/AIDS. It is only now that I still feel healthy; in years to come I will also be sick and die'.

**Tefo:** 'I cannot concentrate at school, I always think of my status. My performance is poor in all the learning areas. I sometimes want to perform better, but I just cannot. I think other learners are cleverer than I am. I am not always at school; my poor attendance also affects my performance'.

**Sifiso:** 'My mind is not at school, I am in class only physically. I always think of my status. There are times when I am very sick. I do not perform well, because of a lack of concentration in class'.

**Mpho:** 'I am always working at the shelter, we have so many chores and when others are sick, we have to do theirs as well, sometimes I do not have

time to do my homework. At school I am tired and cannot concentrate, especially when I am not feeling well'.

**Manete:** 'I cannot concentrate in class, my performance is becoming poor. I do not have time to think about my studies. When I am very sick, I have to absent myself. There are times when I do not attend school for a month. There is nothing I can do about this; in fact I have accepted that I am not like other learners whose only worry is to get good marks. I have my life to take care of'.

**Interviewer: How is being HIV-positive affect your daily routine as a learner?**

**Zonke:** 'My daily routine is affected. Sometimes when I wake up in the morning preparing for school, I realize that I have to go for a check-up at the clinic. That usually takes the whole day. Then there are days when I am sick and cannot attend'.

**Tefo:** 'I cannot even plan for one day. I think it is true what they say that people who are HIV-positive, must live one day at a time! I can tell myself that I am going to do my homework in the evening, only to find out that I am sick by then'.

**Sifiso:** 'There are days when I feel very tired so that I cannot even do my classwork. In these days I just sit and do nothing in class the whole day. My class educator understands, as she was informed of my HIV-positive status by the housemother. Even if I want to work like other learners, I cannot; it is really frustrating'.

**Mpho:** 'I am on ARV's, I have been told at the clinic that ARV's have side-effects. Sometimes I feel nauseous after I have taken my medication. I cannot stay at school when I am like this. It can take me days feeling this way'.

**Manete:** 'I cannot plan ahead; what I have to do depend on how is my health is that day. My health is unpredictable. I am well today, tomorrow I might be very sick to the extent of being hospitalized'.

**Interviewer: What has helped you to cope whilst living with HIV/AIDS?**

**Zonke:** 'To talk to other children about HIV/AIDS, helps me cope. We are friends here at the shelter. We help each other a lot, although there are times when we quarrel; this happens when we feel that the housemother does not care for us, she is concentrating on other children who have just arrived'.

**Tefo:** 'I do not think I am coping; nothing is helping me to cope. People like the housemother and my class educator try to comfort me sometimes when I am feeling down. This does not help, but I just tell them that I am better'.

**Sifiso:** 'Being with other learners at school, helps me to forget about my status. Just watching them play or chat, makes me feel better'.

**Mpho:** 'My aunt visits me every month at the shelter. I get a chance of telling someone how I feel. She brings us fruit and sweets. She is working as a domestic worker. I always look forward to her visit. She told me that she is be able to live with me, as she has four children of her own and two others who are her younger sister's. She does not earn much. She motivates me to be patient and work too hard at school; things will be better. Although I do not believe this, I feel lucky to have her'.

**Manete:** 'I do not think there is anything that makes me to cope. I live everyday as it comes. I think this is meant to be. I even feel that this is the burden I have to carry until I die'.

**Interviewer: What support do you need from your school to cope with being HIV-positive?**

**Zonke:** 'I think we need to have people who are doctors, nurses, and psychologists to come and educate us about this disease. I think I still need more information at the late stages of the HIV/AIDS disease. People talk about HIV; there are programmes on TV, but I still feel that we can talk about it in class more often'.

**Tefo:** 'At our school AIDS Day is celebrated once a year; this is when we get a chance of talking to people who have been invited by the school, especially

those who are HIV-positive. I hope we can get a chance like this more often. I think this can help me, in the sense that I will better understand HIV/AIDS and I will then be able to perform better in class'.

**Sifiso:** 'I wish I could get a chance to talk to other learners who are also HIV-positive. I think we can be able to share our problems'.

**Mpho:** 'I wish I could be able to tell my educator about my status. I am afraid to tell her, as I am not sure how she will react. She is a very knowledgeable person who could advise me on problems I encounter'.

**Manete:** 'I wish educators could be more understanding there are days when I cannot do schoolwork in class, I wish I could just be left alone. When I am absent, no one tells me what others have been doing, I wish the educators could re-teach the work done in my absence'.

**Interviewer: What support do you need from other learners to cope with how the HIV/AIDS pandemic has affected your performance as a learner?**

**Zonke:** 'I wish they could be able to assist me with my work and stop talking bad about people who are HIV-positive. I do not think I could be able to tell them that I am HIV-positive. I wish I could be able to tell them how I feel when they are talking bad about infected people'.

**Tefo:** 'I wish they could help me with the activities in class. There are learners who do not want to help me. Others do not want me to be in their group. They say I am a slow learner. I wish they could just accept me as I am'.

**Sifiso:** 'They do not help me when I am struggling to understand something, I wish they could. When other learners realise that you are struggling to understand something, they laugh or mock you. It becomes difficult to ask for their assistance'.

**Mpho:** 'I need to be helped with all the tasks we do in class. I love soccer but I cannot play it at school. I do not have soccer boots like other learners and other learners do not allow us to play barefoot'.

**Manete:** 'If other learners could pay me a visit at home when I am absent from school and keep me informed about the schoolwork, I would be glad'.

**Interviewer: What support do you need from the community to cope with being HIV/AIDS-positive?**

**Zonke:** 'People in the community should help out especially those who are working. There are times when we do not have school uniforms, there are those who come and donate school-uniforms to the centre. We normally do not get the right sizes of trousers and shirts. There is a system that is used by our Housemother, that if you got new trousers and shirts the previous year, you won't get them the following year. She is trying to be fair, but this does not work as we go to school wearing torn trousers and shirts. They should also not discriminate against people who are HIV-positive'.

**Tefo:** 'I think there should me more shelters for children like us who do not have parents or anyone to take care of us. Our shelter sometimes becomes overcrowded, until others decide to move to other shelters or back to the streets. Even if you feel you are not comfortable, there is nothing you can do. I hate living off the streets I am not used to that life. I would rather stay in this shelter until I am older, then I will decide what to do'.

**Sifiso:** 'I would love to stay in a normal home where there are few children: a mother and a father. I think it is the members of the community who can give us a chance of a better life by adopting us. There are people who come and take us out to their homes for weekends. This happens very rarely. I wish more people in the community would do this'.

**Mpho:** 'I wish community members would help us out. We are about twenty in our shelter including five babies who are always sick. They need special attention. The housemother and the other woman (we call her aunty) do not seem to cope. There are days when we do not eat after school, because they had a lot of work to do. This happens mostly when one of them has to take one or two of the sick babies to the clinic'.

**Manete:** 'I need the community to just accept me and just love me'.

**Interviewer: What else can be done to support learners who are infected with HIV/AIDS?**

**Zonke:** 'I think it would be good if we could have food at home and at school'.

**Tefo:** 'We need to be taken care of - the government should also give us grants so that we can be able to lead a normal life'.

**Sifiso:** 'We need money for food and get a grant. I also need people within the community to take care of me, even if they adopt me'.

**Mpho:** 'There are social workers and retired nurses, who can help us in the shelter; there are times when I feel that if we had a nurse, it would have been better. I cannot just go and approach them. I am afraid'.

### 5.3.3 Analyses and interpretation

Here follows analysis and interpretation of results. Themes will be written first, then analysis and interpretation of each theme will follow.

#### 5.3.3.1 THEME 1: Effect of HIV/AIDS on the emotional well-being of infected learners

The infected learners indicated, that they are affected emotionally. This is what they said:

> 'I feel like crying all the time', 'I feel sorry for myself', 'I feel sad, and sorry for myself', 'I always think of death', 'I cried, I was very disturbed emotionally', 'I feel very bad', 'I sometimes lose my memory.'

These learners feel helpless and hopeless; they seem not to be having any solution to the problem.

#### 5.3.3.2 THEME 2: Effect of HIV/AIDS on infected learners' spiritual well-being

The learner participants indicated being closer to God. They pray occasionally for their health. The learners pray for their own health mainly, and also for others'.

'I pray that God should heal me', I do not pray only for myself; I pray for others as well', 'I always pray that God can intervene', God is my only hope; I trust Him', 'I always plead with God to help doctors get a cure for HIV/AIDS'

For one of these learners, prayer makes her feel she has done something instead of doing nothing. This is what she said:

'Prayer helps me, I feel I cannot just sit and do nothing.'

For the other participants HIV/AIDS is a punishment from God. This is what they said:

'I ask myself whether this is because of God's wrath';

'I feel that I should have done something very bad to evoke God's anger on me'.

There are learners who pray, because they are depressed or need a miracle. This is what they said:

'Sometimes I pray that God can take me so that I can find rest', '....or just make this disease to go away.'

The implication is, that all respondents became closer to God. They also realise, that if they cannot find help on earth, they can negotiate and bargain for divine help.

#### 5.3.3.3 THEME 3: Effect of HIV/AIDS on learners' physical well-being

Most learner participants indicated having difficulty to sleep at night. They indicated various reasons for this. This is what they said:

'I do not sleep well at night', 'I do not sleep because I am afraid that I would die in my sleep', 'I also have nightmares because of my illness', 'I do not sleep because I am afraid that I would die in my sleep', 'I also think and dream about how I would be in my last stages of HIV/AIDS.'

The participants also have difficulty to eat. This is what they said:

'....my appetite has also decreased; Sometimes I do not even eat' and 'my weight is gradually dropping.'

These participants also show signs of being affected physically. They said the following.

'Then there are times when I have shingles', 'There are times when I have sores all over my body', 'I see myself as thin as a rake and very frail.'

This is an indication of how severely affected these learners are by HIV/AIDS; they also show signs of being traumatised, as one of them have nightmares.

#### 5.3.3.4 THEME 4: Effect of HIV/AIDS on infected learners' social life

The learner participants' social life is affected. They indicated being afraid of being raped or not enjoying other children's company as they are not like them and discrimination. This is what they said:

'...we cannot hang out until late we are afraid of being raped by people who are HIV-positive', 'I do not think there is any point in chatting or playing with others. I am not like they are', 'I do not even enjoy my friends company; I feel that they no longer love me', '...when we fight, they threaten me that they are going to tell everybody at school that I am HIV-positive', 'I do not take myself as having a social life or being part of society, for that matter', 'I take myself as an outcast', 'They would then mock me and tell me not to play with them, as I am going to infect them', 'I do not have time to play', 'I do not think of going out to play with other children, I feel guilty', 'I think it is a way of protecting myself from them.'

These learners seem not to enjoy life like other children who are not HIV/AIDS positive. They seem not to be able to make lasting friends, as they have to protect themselves from others. They are living in fear of being attacked for their being HIV-positive.

#### 5.3.3.5 THEME 5: Effect of HIV/AIDS on learners' scholastic performance

All respondents indicated, that their scholastic performance has been affected. They indicated lack of concentration, lack of interest, being tired and not having time to think about studies as reasons for their poor performnance.

> 'When I think about my positive HIV status, I see no point in pursuing my studies', 'I cannot concentrate at school, I always think of my status', 'I am not always at school; my poor attendance also affect my performance', 'My mind is not at school, I am in class only physically', 'I do not have time to do my homework.'

These learners show signs of being demotivated. This is a situation which can lead to their failing their grades and eventually dropping out of school.

#### 5.3.3.6 THEME 6: Effect of HIV/AIDS on learners' daily routine

All respondents indicated that their daily routine is affected by mainly their health that is unpredictable. These learners indicated that they cannot plan ahead as they are sick, and go for check-ups usually disturbs their routine. This is what these learners said:

> 'Sometimes when I wake up in the morning preparing for school I realize that I have to go for a check-up at the clinic', 'I can tell myself that I am going to do my homework in the evening, only to find out that I am sick by then', 'There are days when I feel very tired so that I cannot even do my class work', 'Sometimes I feel nauseous after I have taken my medication', 'I have to do depend on how my health is that day', 'My health is unpredictable. I am well today; tomorrow I might be very sick to the extent of my being hospitalized.'

The learner participants are unable to enjoy life, play like all other children their age, because they have to perform adult roles at a tender age.

#### 5.3.3.7 THEME 7: Coping with being HIV positive

Some of the respondents have developed ways of coping with the pandemic, such as talking to other children about HIV/AIDS, being with other learners at school and relying on the support of relatives. There are however two respondents who seem not to be coping; they feel that there is nothing that can make them cope. This is what the respondents said:

> 'To talk to other children about HIV/AIDS, helps me cope', 'I do not think I am coping; nothing is helping me to cope', 'Being with other learners at school help me to forget about my status', 'My aunt visits me every month at the shelter. I get a chance of telling someone how I feel', 'I do not think there is anything that can make me to cope.'

In a search for balance and normality within the abnormality of life where HIV/AIDS rages, it is applauded that these learners are finding ways of coping. It is worrisome though that one of them has lost all hope and seems to succumb to the situation.

#### 5.3.3.8 THEME 8: Support from school, other learners, and the community to cope with being HIV-positive

The respondents gave different answers on the support they need from school, such as having people who are doctors, nurses, and psychologists to come and educate them about HIV/AIDS, getting a chance to talk to other learners who are HIV-positive, being able to talk to educators about problems and having educators who are willing to re-teach the work done in their absence. This is what the respondents said:

> 'I think we need to have people who are doctors, nurses, and psychologists to come and educate us about this disease', '....get a chance of talking to people who have been invited by the school especially those who are HIV- positive', 'I wish I could get a chance to talk to other learners who are also HIV-positive', 'I wish I could be able to tell my educator about my status', 'I wish educators could be more

understanding: there are days when I cannot do schoolwork in class, I wish I could just be left alone.'

All respondents indicated, that these learners need to be assisted by their peers with their tasks and being visited at home when they are absent from school to keep them informed about the schoolwork. This is what they said:

'I wish they could be able to assist me with my work and stop talking badly about people who are HIV-positive', 'I wish they could help me with the activities in class', 'I wish they could just accept me as I am', 'If other learners could pay me a visit at home when I am absent from school and keep me informed about the schoolwork.'

All learner participants indicated a need for help from their community with assisting in the shelter, with the adoption of children who are orphans, with donating necessities, including school uniforms and with visiting and loving them. The respondents indicated the following.

'People in the community should help out especially those who are working', 'They should also not discriminate against people who are HIV positive', ".....come and donate school uniform to the centre', 'I think there should me more shelters for children like us who do not have parents or anyone to take care of', 'I think it is the members of the community who can give us a chance of a better life by adopting us', 'I need the community to just accept me and just love me.'

The responses indicate that there is a lot that can be done by schools, other learners, and the community members to support these learners. These learners surely need the support of everyone within their communities to cope; without this support there is no hope for them.

## 5.4 INDIVIDUAL INTERVIEW WITH EDUCATOR

### 5.4.1 Background information

The interviewee is a 40 year old-female who is an in one of the three schools that participated in this research. She is the interviewer's neighbour who is

teaching in one of the schools in the informal settlements. The interviewer chose this educator, as the educator is under the impression that learners in these areas are affected mostly by HIV. Only the younger generation move to these areas and the interviewer thinks, that because of poverty and the high rate of unemployment, the residents are more likely to be infected.

The teacher is affected, as a substantial number of learners in her class are orphans; she believes that this is due to HIV/AIDS.

### 5.4.2 Interview proceedings

**Interviewer: How has the HIV/AIDS epidemic affected you emotionally?**

**Educator:** 'HIV has affected me emotionally, because I always feel pain when I see an infected person. In some instances I even cry; not in front of the person of course, but I am always touched'.

**Interviewer: How has the HIV/AIDS epidemic affected you spiritually?**

**Educator:** 'I think this is the way God punishes His people or tests their faith in Him'.

**Follow up – Does that mean that you have lost faith in God?**

**Educator:** 'My belief is, that God has to protect His people and with this pandemic, I have no doubt that He has turned His back on His people. How many people die of HIV/AIDS daily? Why is there no cure up to know; with other diseases after an outbreak, there is surely a cure, even if it takes a few years to be effective'.

**Interviewer: How has the HIV/AIDS epidemic affected you physically?**

**Educator:** 'I have developed a migraine I am sure it is caused by this HIV epidemic. One fears for one's own life. Sometimes you think about when it is going to be your turn! There is no solution to this, thinking of AIDS makes my whole body numb; it is if I am becoming aware of it for the first time. I am not sure if all humankind will ever recover from this!!'

**Interviewer: How has the HIV/AIDS epidemic affected you socially?**

**Educator:** 'I am not an outdoor person, so my social life has not been affected that much'.

**Interviewer: How has the HIV/AIDS epidemic affected you professionally?**

**Educator:** 'HIV has affected me professionally. My work that is daily planned, is not always done. I think I am demotivated. I do not have the drive to plan, mark learners' books or just read books on the learning areas I teach. I survive, because I have experience, so I teach learners what I was teaching the previous year'.

**Interviewer: How has HIV changed your daily routine as an educator?**

**Educator:** 'I cannot say I follow any routine or time-table. There is a teaching time-table, but it becomes difficult to follow it, as sometimes I do not feel like teaching may be up to before break; then thereafter I would do two learning areas, just for them to do something in their books'.

**Interviewer: What has helped you to cope with the impact of the pandemic so far?**

**Educator:** 'I have the support of other educators at school; this makes it easier for me to approach them whenever I have a problem'.

**Interviewer: What has helped you to cope with teaching whilst the HIV/AIDS pandemic rages on?**

**Educator:** 'To be honest with you, I am not coping with teaching, you cannot call teaching learners two to three learning areas per day, coping. You cope when you are effective in class. I cannot say I am effective!'

**Interviewer: Who has helped you to cope whilst HIV/AIDS pandemic rages on?**

**Educator:** 'I can share my problems only with my colleagues at work. At home my relatives do not understand why I should be bothered with children I am not related to. They just do not understand, I live with those learners every blessed day; how can I not care?'

**Interviewer: What do you think, educators generally need in order to cope with the pandemic and its impact?**

**Educator:** 'I think they need to work as a team, there are educators who seem to cope. Teachers of the same grade should plan lessons together, and help one another in teaching lessons'.

### 5.4.3 Analyses and interpretation

#### 5.4.3.1 Theme 1: HIV affects emotional well-being of educators

The educator is affected emotionally. She spoke as follows:

> 'I always feel pain when I see an infected person', '...even cry', 'I am always touched'.

#### 5.4.3.2 Theme 2: HIV affects the spiritual well-being of educators

The educator's spiritual well-being is affected. She regards HIV as a punishment from God. She responded thus.

> '...is the way God punishes His people or tests their faith in Him', 'He has turned His back on His people'.

According to her, if God cares, He would provide His people with a cure. This is what she said.

> 'Why is there no cure?'

#### 5.4.3.3 Theme 3: HIV affects the physical well-being of educators

The educator is affected physically; she seems to be in a state of shock. This is what she said.

> 'I have developed a migraine'. 'Thinking of AIDS makes my whole body numb; it is if as I am becoming aware of it for the first time'.

#### 5.4.3.4 Theme 4: Educators become affected socially

The social life of the interviewed educators is not affected. She said that her

> '... social life has not been affected'.

#### 5.4.3.5 Theme 5: The professional work of educators become affected

Concerning professional work and the execution of duties, the educator is affected. She is demotivated and demoralized. This is what she said:

> '...daily plan is always not done', 'I am demotivated', '...do not have the drives to plan, mark learner's books or just read books on the learning areas I teach'.

#### 5.4.3.6 Theme 6: The educator's daily routine becomes affected

The educator's daily routine is affected, she does not perform her teaching tasks well, she is also aware that she is not effective. She responded as follows.

> 'I cannot say I follow any routine or time-table', 'Sometimes I do not feel like teaching', 'I would do two learning areas just for them to do something in their books'.

#### 5.4.3.7 Theme 6: Educators do not cope with the impact of HIV

The educator does cope with the impact of the pandemic as there are educators who are willing to listen and support her. This is what she said:

'I have the support of other educators at school; this makes it easier for me to approach them whenever I have a problem.'

She is, however, not coping with teaching. She said that she was -

' also not coping with teaching'. 'one would cope when you are effective in class'.

Colleagues are the only ones helping this educator to cope. She responded by saying that she

'...can share my experiences only with my colleagues at work'

She has a problem sharing her problems with relatives, as she says that they '...do not understand why I should be bothered with children I am not related to'.

Concerning what the educator thinks would help affected educators to cope, she said that.

'...they need to work as a team', 'should plan lessons together and help each other in teaching lessons'.

## 5.5 INDIVIDUAL INTERVIEW WITH THE SCHOOL PRINCIPALS

### 5.5.1 Introduction

Individual interviews were conducted with school principals of learners who were interviewed in this research.

### 5.5.2 Interview proceedings

**What is the level of communicating this pandemic within your school?**

**School Principal 1:** Through functions especially the first December on the AIDS day through sports, assembly, and through drama. We also have T-shirts designating messages around the pandemic.

**School Principal 2:** I can say that it is low, we only talk about HIV/AIDS when we have to have AIDS day or when we elect an HIV/AIDS committee.

**School Principal 3:** The level of communication is low. We only talk about HIV when there is a learner we suspect is HIV positive. It is difficult to just talk about this disease as most of the educators and learners are sensitive. If you suggest that a nurse or an NGO must be invited to talk about HIV/AIDS, people become suspicious. It is as if you invite people because you want to expose those who are HIV positive. Both educators and learners are still ignorant about the disease and people who disclose their HIV positive status are still discriminated against.

**What are you doing as a leader to supplement this low level of communication?**

**School Principal 1:** I usually communicate through circulars and school journals I talk about HIV/AIDS frequently during contact time.

**School Principal 2:** I encourage educators to talk about HIV/AIDS in their lessons as they teach.

**School Principal 3:** There is not much one can do. I do not want to offend people. I just encourage educators to teach about HIV/AIDS during Life Orientation period. I tell them that learners deserve to be informed about matters pertaining to HIV/AIDS.

**Does the school policy on HIV/AIDS address issues of support for learners and educators who are incapacitated because of HIV/AIDS?**

**School Principal 1:** Not really. It is stated in the policy that in case where a learner can develop full blown AIDS and it becomes impossible for her/him to attend school the educator will send school work to his/her home. This never happens.

**School Principal 2:** We do support learners who are HIV positive by including them in the school nutrition programme, but we do not support them by means of a catch up programme. Sometimes learners who are HIV positive

are absent from school for up to a month. We do not have after classes for them, educators complain that this is too much work for them.

**School Principal 3:** We support learners but not for educators. For educators we just request an educator who teaches the same grade with the educator who is sick to take care of his/her class until s/he recovers. We do not have strategies to support the learners and educators.

**What monitoring tool do you use to ensure HIV-policy adherence, does the tool you use help learners living with HIV/AIDS?**

**School Principal 1:** I record noticeable defect or non-compliance and include that as an item of the agenda in our next staff meeting. There is no monitoring tool, I sometimes stress the fact that learners should not be discriminated against but most of the time that happens.

**School Principal 2:** We do not monitor the adherence to HIV-policy, we draft the policy and after it has been approved by the SGB educators are issued out copies.

**School Principal 3:** We do not have a monitoring tool, we leave the monitoring to the HIV/AIDS committee. They usually inform us on matters pertaining to HIV/AIDS.

**How do you ensure that educators teach learners about matters pertaining to HIV/AIDS?**

**School Principal 1:** I only see just when I check their books or during class visits. I am not always there when teachers teach I just take it that they are doing the right thing.

**School Principal 2:** I sometimes check the learners' books or talk to educators of that grade about the problems they experience when teaching about matters pertaining to HIV/AIDS. It is in these informal meetings that I can see that learners get the information or not.

**School Principal 3:** When learners are writing tests I usually ask educators to include questions about HIV/AIDS in their question papers. I know that they cannot only ask learners about matters pertaining to HIV/AIDS without having taught them.

**How does your health programme assist learners living with HIV/AIDS within the school?**

**School Principal 1:** The school supplies them with vegetables from the garden, they are also taught cleanliness and to be hygienic.

**School Principal 2:** We include them in our school nutrition programme, but we help only those whose HIV positive status has been revealed to us. It is however difficult to include all of them as we have a limited number of learners we have to feed each year.

**School Principal 3:** They are included in the school nutrition programme, that is all we can do.

**What is the level of accepting and accommodating infected learners and the personnel in your school?**

**School Principal 1:** The slogan "a friend with AIDS is still my friend" is emphasized and orchestrated by the school community.

**School Principal 2:** We try by all means to accommodate learners and educators affected by HIV/AIDS but it is difficult sometimes. Learners are discriminated by their peers and educators and educators by other educators. I can say that the level of acceptance is low.

**School Principal 3:** The level is low as a result both educators and learners are reluctant to disclose their HIV/AIDS status. We do encourage parents to come and disclose their learners' positive HIV status as this would help their children but very few have done so.

**What is the level of involvement of community members in matters pertaining to HIV/AIDS in your school?**

**School Principal 1:** We do involve the NGOs but once a year when we have AIDS days. We used to invite nurses to talk to learners about HIV/AIDS but in other years we do not have time to plan for that.

**School Principal 2:** We have NGOs that assist the community with support groups. We do not necessarily involve them. They have contact with our learners in the community.

**School Principal 3:** Our involvement with the community members is low, when we invite them for meetings they do not come.

### 5.5.3 Analyses and interpretation

#### 5.5.3.1 Theme 1: The level of communicating the HIV/AIDS pandemic within the schools is low

Principals indicated that they do not always communicate about HIV/AIDS, it seems that by not talking about HIV/AIDS principals do not want to offend the HIV-infected educators as one of the principals indicated, they said:

> '……it is low, we only talk about HIV/AIDS when we have to have AIDS day or when we elect an HIV/AIDS committee.' '….level of communication is low. We only talk about HIV when there is a learner we suspect is HIV positive.' 'It is difficult to just talk about this disease as most of the educators and learners are sensitive'.

#### 5.5.3.2 Theme 2: The principals are not doing much as leaders to supplement this low level of communicating about HIV/AIDS

Principals use few means of communication such as circulars, journals and lessons in class. This means that all other means of communication that would have helped the HIV-infected within the school are not considered. The principals indicated the following:

'……..communicate through circulars and school journals.' '…..encourage educators to talk about HIV/AIDS in their lessons as they teach.' 'I just encourage educators to teach about HIV/AIDS during Life Orientation period'.

#### 5.5.3.3 Theme 3: School policies on HIV/AIDS in these schools do not address issues of support for learners and educators who are incapacitated because of HIV/AIDS

The responses of the principals indicated that both educators and learners who are infected with HIV/AIDS are not supported at their schools. This is despite the fact that the policy indicates that these learners should be supported. They said:

'Not really. It is stated in the policy that in case where a learner can develop full blown AIDS and it becomes impossible for her/him to attend school the educator will send school work to his/her home. This never happens'. 'We do support learners who are HIV positive by including them in the school nutrition programme but we do not support them by means of a catch up programme'. 'For educators we just request an educator who teaches the same grade with the educator who is sick to take care of his/her class until s/he recovers. We do not have strategies to support the learners and educators'.

#### 5.5.3.4 Theme 4: There is no monitoring tool used in these schools to ensure HIV-policy adherence

All three principals indicated that they do not have a monitoring tool to ensure HIV-policy adherence. This indicates that even if the HIV/AIDS policy is implemented in these schools, the principals are part of neither its implementation nor monitoring. They said:

'There is no monitoring tool, I sometimes stress the fact that learners should not be discriminated against but most of the time that happens'. 'We do not monitor the adherence to HIV-policy, we draft the policy and after it has been approved by the SGB educators are

issued out copies'. 'We do not have a monitoring tool, we leave the monitoring to the HIV/AIDS committee. They usually inform us on matters pertaining to HIV/AIDS'.

#### 5.5.3.5 Theme 5: Principals in these schools do not ensure that educators teach learners about matters pertaining to HIV/AIDS

Principals indicated not having a plan to ensure that learners are taught about matters pertaining to HIV/AIDS. This is a matter that is left entirely in the hands of the educators, they mentioned the following:

'I check their books or during class visits'. '....or talk to educators of that grade about the problems they experience when teaching about matters pertaining to HIV/AIDS'. 'I usually ask educators to include questions about HIV/AIDS in their question papers'.

#### 5.5.3.6 Theme 6: Health programmes in these schools do not assist learners living with HIV/AIDS within the school

Principals indicated very few things that their health programmes are able to assist learners with school nutrition only, they said:

'The school supplies them with vegetables from the garden, they are also taught cleanliness and to be hygienic' '....include them in our school nutrition programme, but we help only those whose HIV positive status has been revealed to us'. 'They are included in the school nutrition programme'.

#### 5.5.3.7 Theme 7: The level of accepting and accommodating infected learners and the personnel in these schools is low

Principals indicated that they encounter problems concerning acceptance and accommodation of infected learners and the personnel in their schools, they said:

'Learners are discriminated against by their peers and educators and educators by other educators'. 'I can say that the level of acceptance

is low both educators and learners are reluctant to disclose their HIV/AIDS status'.

#### 5.5.3.8 Theme 8: The level of involvement of community members in matters pertaining to HIV/AIDS in these schools is low

Principals indicated not communicating with the community about HIV/AIDS. This Is what they said:

'We do involve the NGOs but once a year when we have AIDS days'. 'We used to invite nurses to talk to learners about HIV/AIDS but in other years we do not have time to plan for that'. 'We do not necessarily involve them. They have contact with our learners in the community'. 'Our involvement with the community members is low, when we invite them for meetings they do not come'.

## 5.6 CONCLUSION

This part of the research dealt with analysing and interpretation of the data collected from five learners affected by HIV/AIDS who participated in this research. Interview responses are written first, then they are analysed and interpreted. Recommendations based on the responses are also provided.

# CHAPTER SIX

# SUMMARIES AND RECOMMENDATIONS

## 6.1 INTRODUCTION

This research used both the literature review and qualitative empirical research proceedings with a view to achieving its objectives which were to:

- investigate the lived experiences of school-going learners who are HIV-positive; and
- develop a ecosystemic management strategies to help learners who are HIV-positive.

The findings from both the literature review and empirical research proceedings were used to develop an ecosystemic programme.

In the next section, the researcher presents summaries of both the literature review and empirical research proceedings.

## 6.2 SUMMARIES OF THE FINDINGS FROM BOTH THE LITERATURE REVIEW AND EMPIRICAL RESEARCH PROCEEDINGS

As a way of concluding this research, it is necessary to make summaries of the findings from both the literature review and empirical research proceedings.

### 6.2.1 A summary of the literature review proceeding

Literature revealed that:

- The ecosystemic paradigm helps in seeing the connecting link between family-school-community-society-world or school and peers and this helps in providing a more useful synergistic focus than trying to work in isolation with discrete segments of a microsystem for example, with an individual in isolation (see 1.1). According to ecological system's model, human development can only be seen as a dynamic two-directional process.

People develop multiple settings or environments in which they live, while at the same time being influenced by these environments, the interrelationships among them and external influences from the larger environments (see 2.4.1.2).

- Management strategies for dealing with HIV/AIDS include the notion that achieving sustainability requires bringing together a variety of legitimate stakeholders, drawing on a variety of accepted bodies of knowledge, to negotiate a learning path based on a series of conflict resolutions within ecological constraints. Continual learning based on free flow of information and mutual respect, and investment in effective management of HIV/AIDS are keys to success (see 2.4.1.2)

- HIV/AIDS is not just a health problem but also attacks the education system itself. Demand for education is dropping and changing, many educators are ill and dying, and the trauma of loss associated with HIV/AIDS is entrenched in South African classrooms (see 3.1). The HIV/AIDS pandemic has a traumatic impact on all educators and learners. The work of educators both those who are HIV positive and those who have developed full-blown AIDS will be compromised by periods of illness (see 3.4.2). The pandemic thrives on sexual violence, male domination and child abuse in South Africa (see 3.7).

### 6.2.2 A summary of the empirical research proceedings

The empirical research findings indicated that learners are:

- psychologically disturbed, emotional well-being, spiritual well-being, physical well-being, social life, their scholastic performance, daily routine (see 5.3.3), there is a change in their behaviour or health after the HIV-positive status has been revealed, they fear of death, their academic performance at school is affected by absenteeism and lack of concentration, there is absence of strategies to assist learners who are absent frequently because of illness, they loose valued level of functioning, lack assistance at school, fear being discriminated or ridiculed, there is absence of measures to deal with discrimination at school, there is a lack

of information on HIV/AIDS, learners fear disclosing to friends and teachers, there is a lack of communication between parents and infected learners about issues regarding HIV/AIDS (see 5.2.3).

Findings on educators indicated that their:

- emotional well-being, spiritual well-being and their physical well-being is affected. They become affected socially, their professional work and their daily routine become affected and they do not cope with the impact of HIV (see 5.4.3).

Findings on the ecosystemic management of HIV/AIDS in schools indicated that:

- the level of communicating the HIV/AIDS pandemic within the schools is low, the principals are not doing much as leaders to supplement this low level of communicating about HIV/AIDS, school policies on HIV/AIDS in these schools do not address issues of support for learners and educators who are incapacitated because of HIV/AIDS, there is no monitoring tool used in these schools to ensure HIV-policy adherence, principals in these schools do not ensure that educators teach learners about matters pertaining to HIV/AIDS, health programmes in these schools do not assist learners living with HIV/AIDS within the school and the level of accepting and accommodating infected learners and the personnel in these schools is low (see 5.5.3).

The level of involvement of community members in matters pertaining to HIV/AIDS in these schools is low

## 6.3 RECOMMENDATIONS

# REFERENCES


ABER, J., GEPHART, M., BROOKS-GUNN, J. & CONNELL, J. 1997. Development in context: implications for studying neighbourhood effects, (*In* Brooks-Gunn, J. Duncan, G. & Aber, J. eds. Neighbourhood policy. Vol1: Context and consequence for children, New York: Russel Sage Foundation).

ABT ASSOCIATES INC. 2001. Impending Catastrophe Revisited.LoveLife & Kaiser family Foundation.

AINSWORTH, M. & TEOKUL, W. 2000. Breaking the silence: setting realistic priorities for AIDS control in less-developed countries. *Lancet,* 356 (3): 55–60.

ALCAMO, J. & ELENA, M.B. 2003. Ecosystems and human well-being: a framework for assessment. The first product of the Millennium Ecosystem Assessment (MA), a four-year international work program designed to meet the needs of decision-makers for scientific information on the links between ecosystem change and human well-being. Washington, D.C. Island Press.

ANDERSON, A. 2000. The spirituality and experience of Pentecostal and Zionist/Apostolic Churches in South Africa. Pretoria: Macmillan.

ANGUIANO, R.P.V. 2003. Families and schools: the effect of parental involvement on high school completion. *Journal of Family Issues, 25*(1): 61–85.

ASKEW, I. & BERER, M. 2003. The contribution of sexual and reproductive health services to the fight against HIV/AIDS: A review. *Reproductive Health Matters*, 11(22): 51–73.

ASPINWALL, L.G. & STAUDINGER, U.M. 2003. A psychology of human strengths: fundamental questions and future directions for a positive psychology. Washington, D.C.: APA Books.

AUVERT, B.A., BUVÉ, B., FERRY, M., CARAËL, L., MORISON, E., LAGARDE, N.J., ROBINSON, M., KAHINDO, J., CHEGE, N., RUTENBERG, R., MUSONDA, M., LAOUROU. A. & AKAM, E. 2001. Ecological and individual level analysis of risk factors for HIV infection in four urban populations in Sub-Saharan Africa with different levels of HIV infection. *AIDS,* 28(4):15-30.

AYIEKO, A.K. 1998. From single parents to child-headed households: the case of children orphaned in Kisumu and Siaya District, HIV and Development Programme Study Paper No. 7.

BADCOCK-WALTERS, P. 2001. The impact of HIV/AIDS on education in long-term socio-economic impact of HIV/AIDS on children and the policy response: South African Case Study, HEARD, Durban: Maskew Miller Longman.

BANKS, A.M. 2003. Education department issues guidance on religion in schools. The pew forum on religion and public life. [Web:] http://pewforum.org/news/display.php?NewsID=2000 [Date of access: 16 October 2005].

BAZZANI, R. & FEOLA, G. 2001. Challenges and strategies for implementing the ecosystem approach to human health in developing countries. MN: UNEP.

BAZZANI, R., NORONHA, L. & SÁNCHEZ, A. 2004. An ecosystem approach to human health: building a trans-disciplinary and participatory research framework for the prevention of communicable diseases. MN: UNEP.

BECVAR, D. & BECVAR, J. 2003. Family therapy: a systemic integration (5th ed.). Needham Heights, MA: Allyn & Bacon.

BENATAR, S.R. 2002. The HIV/AIDS pandemic: a sign of instability in a complex global system. *Journal of Medicine and Philosophy,* 27(2): 163-77.

BERG, B. L. 2003. Qualitative research methods for the social sciences (5th ed.). Boston: Allyn & Bacon.

BEST, J. W. & KAHN, J. V. 2003. Research in education. New York: Congress Cataloging.

BIRDTHISTLE, I. 2004. Understanding the needs of orphans and other children affected by HIV and AIDS in Africa: the State of the Science. Paper prepared for the support for analysis and research in Africa (SARA) Project, April 2004. Washington, D.C.: Academy for Educational Development.

BIRKMANN, J. 2005. Measuring vulnerability and coping capacity. Setting the framework. Presentation at the UNU-EHS workshop in cooperation with the ADRC on measuring vulnerability and coping capacity at the World Conference on disaster reduction (WCDR). *(In* Kobe, 23-24 January 2005. Tokyo. UNU Press).

BITTER, J.R. 1993. Communication styles, personality priorities and social interest: strategies for helping couples build a life together. *Individual psychology*, 49(4): 330-350.

BITTER, J.R., ROBERTS, A. & SONSTEGARD, M. 2002. Adlerian family therapy [*In* J. Carlson & D. Kjos (Eds), Theories and strategies of family therapy (pp. 41-79). Boston: Allyn & Bacon.].

BLANK, M.J., MELAVILLE, A. & SHAH, B.P. 2003. Making the difference: research and practice in community schools. Washington, D.C.: Coalition for Community Schools, Institute for Educational Leadership.

BOGARDI, J. 2004. Hazards, risks and vulnerabilities in a changing environment. The unexpected onslaught on human security. (*In* Global Environmental Change. Chichester: John Wiley).

BOGARDI, J. & BIRKMANN, J. 2004. Vulnerability Assessment, the first step towards sustainable risk reduction. (*In* Malzahn, D. & Plapp, T., eds.

Disasters and Society – From Hazard Assessment to Risk Reduction. Tokyo: UNU Press).

BOGENSCHNEIDER, K., SMALL, S. & RILEY, D. 2000. An ecological, risk-focused approach for addressing youth at risk issues. Washington, D.C: National 4-H Center.

BOYDEN, J. & DE BERRY, J. 2004. Children and youth on the front line: ethnography, armed conflict and displacement. New York: Berghahn.

BOYDEN, J. & GILLIAN, M. 2000. Children's risk, resilience and coping in extreme situations: background paper to the consultation on children in adversity. Pretoria: Oxford.

BOYDEN, J.O. 2003. Children under fire: challenging assumptions about children's resilience. *Children, Youth and Environments,* 13(1): 1-259.

BRISSETTE, I., SCHEIER, M.F. & CARVER, C.S. 2002. The role of optimism in social network development, coping, and psychological adjustment during a life transition. *Journal of Personality and Social Psychology,* 82(1): 102–111.

BRONFENBRENNER, U. 1979. The ecology of human development: Experiments by nature and design. Cambridge: Harvard University Press.

BRONFENBRENNER, U. 1986. Ecology of the family as a context for human development: research perspectives. *Developmental Psychology*, 22(1): 723-742.

BRONFENBRENNER, U. 1989. Ecological systems theory. *Annals of Child Development,* 6(2): 187-249.

BRONFENBRENNER, U. 1997. Ecological models of human development. (*In* Gauvain, M. & Cole, M., eds. Readings on the development of children, New York: W H Freeman and Company, p.37-97).

BROOKS-GUNN, J. & MARKMAN, L.B. 2005. The contribution of parenting to ethnic and racial gaps in school readiness. *The Future of Children,* 15(1): 139–168.

BROUGH, J.A. & IRVIN, J.L. 2001. Parental involvement supports academic improvement among middle schoolers. *Middle School Journal,* 32(1): 56–61.

BUTLER, A.M. 2005. The negative and positive impacts of HIV/AIDS on democracy in South Africa. *Journal of Contemporary African Studies,* 1(1): 12-312.

CARDONA, O.D. 2004. The need for rethinking the concepts of vulnerability and risk from a holistic perspective: a necessary review and criticism for effective risk management. (*In* Bankoff, G., Ferks, G. & Hilhorst, D., eds. Mapping vulnerability. Disasters, development & people. London: Earthscan. p. 37-51).

CARLSON, J. & KJOS, D. (Eds). 2002. Theories and strategies of family therapy. Boston: Allyn & Bacon.

CARPENTER, S., BROCK, W. & HANSON, P. 1999. Ecological and social dynamics in simple models of ecosystem management, *Conservation Ecology,* 3(2): 4-150.

CARLSON, J. & KJOS, D. 2002. Theories and strategies of family therapy. Boston: Allyn & Bacon.

CASE, A., PAXSON, C. & ABLEINDINGER, J. 2004. Orphans in Africa: parental death, poverty, and school enrollment. *Demography,* 41 (3): 483-508.

CHAKRABORTI, C. 2006. Ethics of care and HIV: a case for rural women in India. (*In* Developing World Bioethics 6, no. 2. p. 89-94).

CHEN, L. & NARASIMHAN, V. 2003. A human security agenda for global health. (*In* Chen, L., Leaning, J. & Narasimhan, V., eds. Global Health

Challenges for Human Security. Cambridge: Harvard University Press. p.3-12).

CHIMWAZA, A.F. & WATKINS, S.C. 2004. Giving care to people with symptoms of AIDS in rural sub-Saharan Africa. *AIDS Care*, 16(7): 795-807.

CHISHOLM, L. 2004. The state of South Africa's schools. (*In* Daniel, J., Southall, R. & Lutchman, J., eds. *State of the nation: South Africa 2004-2005.* Cape Town: HSRC Press. 201-226).

COATSWORTH, J.D. & DUNCAN, L. 2003. Fostering resilience: a strengths-based approach to mental health. Publication Series. Harrisburg, PA: PA CASSP Training and Technical Assistance Institute.

COATSWORTH, J.D., MALDONADO-MOLINA, M., PANTIN, H. & SZAPOCZNIK, J. 2005. A person-centered and ecological investigation of acculturation strategies in Hispanic immigrants. *Journal of Community Psychology,* 33(1): 157-174.

COATSWORTH, J.D., PANTIN, H. & SZAPOCZNIK, J. 2002. Familias Unidas: a family-centered eco-developmental intervention to reduce risk for conduct problems and substance use among Hispanic adolescents. *Clinical Child and Family Psychology Review,* 5(1): 113-132.

COATSWORTH, J.D., SANTISTEBAN, D.A., McBRIDE, C.K. & SZAPOCZNIK, J. 2001. Brief strategic family therapy versus community control: engagement, retention and an exploration of the moderating role of adolescent symptom severity. *Family Process, 40*(1): 313-332.

COFFEY, E.P. 2004. The Heart of the Matter 2: integration of ecosystemic family therapy practices with systems of care mental health services for children and families. *Family Process,* 43(2): 161-173.

CONNORS, L.J. & EPSTEIN, J.L. 1995. Parent and school partnerships. (*In* Bornstein, M.H. ed. *Handbook of parenting*, 4(1): 437-458 Applied and practical parenting. Mahwah. Lawrence Erlbaum Associates).

CONSTANINO, S. 2003. Engaging all families: creating a positive school culture by putting research into practice. Maryland: Scarecrow Education.

COOMBE, C. 2000. Managing the impact of HIV/AIDS on the education sector in South Africa. Paper prepared for the United Nations Economic Commission for Africa/Africa Development Forum 2000, Addis Ababa: UNECA.

COOMBE, C. 2001a. Rethinking some of our perceptions about HIV/AIDS and education. Resource paper presented to the Southern African Development community human resource development sector coordinating unit meeting on HIV and education. Pretoria: Heinemann, February. 103-116.

COOMBE, C. 2001b. HIV/AIDS and trauma among learners: sexual violence and deprivation in South Africa. (*In* Maree, J.G. & Ebersohn, L., eds. Lifeskills within the caring professions: a career counselling perspective for the bioitechnical age. Cape Town: Heinemann. 36-39).

COOMBE, C. & KELLY, M. 2001. Education as a vehicle for combating HIV/AIDS. *Prospects,* 12(2): 45-57.

COOPER, J. 2004. The science of the struggle for existence: on the foundations of ecology. Cambridge: Cambridge University Press.

CORBETT, E. 2002. HIV/AIDS and the control of other infectious diseases in Africa. *Lancet,* 359(2): 177–187.

COSTANZA, R. 1998. The value of ecosystem services. *Ecological economics*, 25(1): 1-98.

COUTU, D. 2002. How resilience works. Havard Business Review, September 2002, 46-85.

CROKER, J.M., DUPRAW, J., KUNDE, W. & POTAPCHUK, S. 1996. Negotiated approaches to environmental decision making in

communities: an exploration of lessons learned. Washington, D.C.: Program for community problem solving, 1996. 36.

CROPP, R., KRISTENSEN, N.P., GABRIC, A. & BRADDOCK, R. 2003. Is maximizing resilience compatible with established ecological goal functions? *Ecological Modelling*, 169(1): 61-71.

CUDDINGTON, K. 2001. The "balance of nature" metaphor and equilibrium in population ecology. *Biology and Philosophy,* 16(4): 463-479.

DALBY, S. 2002. Security and Ecology in the Age of Globalization, (*In* Woodrow Wilson International Center for Scholars. ed. Environmental Change & Security Project Report, Issue No. 8 (Summer): 95-108).

DAWES, A. 2000. Cultural diversity and childhood adversity: implications for community level interventions with children in difficult circumstances. Address to the Consultation on Children in Adversity, Refugee Studies Centre, University of Oxford. 48.

DE LA REY, R.P. 2002. Spiralling HIV/AIDS but bewildering disease management. A South African perspective in an African context. Paper presented at the APA Symposium 'Psychology's response to global health problems'. Chicago: 22-25 August.

DeMARRAIS, K. 1998. Inside stories: qualitative research reflections. Mahwah, N.J.: Lawrence Erlbaum Associates.

DE PLAEN, R. & KILELU, C. 2004. From multiple voices to a common language: ecosystem approaches to human health as an emerging paradigm. Department of Biology & Society, Institute for Innovation and Transdisciplinary Research 2002. *EcoHealth*, 1(2): 8–15.

DELLA, P.D. & DIANI, M. 2004. Social movements: an introduction. Malden: Blackwell Publishing.

DENZIN, N. & LINCOLN, M.Y. 2005. The Sage book of qualitative research (3 rd ed). Thousand Oaks, CA: Sage

DEVANNEY, B. 2001. School-based peer health education: a regional approach to HIV/AIDS Prevention in West Africa. Paper presented to the ECOWAS meeting, Elmina, Ghana, March 2001, Department of State for Education and the Nova Scotia-Gambia Association.

DE VOS, A.S. 2000. Research at grass roots. Pretoria: Van Schaik Publishers.

DONALDSON, S.I., GRAHAM, J.W., PICCININ, A.M. & HANSEN, W.B. 1995. Resistance-skills training and onset of alcohol use: evidence for beneficial and potentially harmful effects in public schools and in private Catholic schools. *Health Psychology*, 14(4): 291-300.

DUNCAN, J. & ARNTSON, L. 2003. Children in crisis: good practices in evaluating psychosocial programming. Washington, D.C.: Save the Children Federation, Inc.

DUNST, C.J. 2002. Family-centered practices: birth through high school. *The Journal of Special Education,* 36(3): 139–147.

DURAIAPPAH, A. 2004. Exploring the links: human well-being, poverty, and eco-system services, *Online EcoHealth Network,* 27(1): 1-32.

DYER, H.C. 2002. Theoretical aspects of environmental security. (*In* Petzold-Bradley, E., Carius, A. & Vinvze, A., eds. Responding to environmental conflicts – implications for theory and practice. *NATO ASI Series*. Dordrecht: Kluwer Academic Publisher. 67-81.)

EBERSOHN, L. & ELOFF, I. 2001. The black white and grey of rainbow children's coping with HIV/AIDS. Pretoria: University of Pretoria Faculty of Education.

EPSTEIN, J.L. 1987. Towards a theory of family-school connections: educator practices and parent involvement. (*In* Hurrelmann, K., Kaufmann, F.X. & Lasel, F., eds. Social intervention: potential and constraints. New York: Walter de Gruyter. p.121-136).

EPSTEIN, J.L. & SANDERS, M.G. 2000. Connecting home, school, and community: new directions for social research. (*In* Hallinan M.T., ed. Handbook of the sociology of education. New York: Klower Academic/Plenum Publishers p.285-306).

EPSTEIN, J.L. 1993. A response. Educators college record, 94(4): 710-717.

EPSTEIN, J.L. 1995. School/family/community partnerships: caring for the children we share. *Phi Delta Kappan*, 76(9): 701-712.

EPSTEIN, J.L. 2001. New direction for school, family, and community partnerships in middle and high schools. *NASSP Bulletin,* 85(2): 3–7.

EPSTEIN, J.L., COATES, L., SALINAS, K.C., SANDERS, M.G. & SIMON, B.S. 1997. School, family, and community partnerships: your handbook for action. Thousand Oaks, CA: Corwin Press.

EVIAN, C. 2003. Primary HIV/Aids care, 4th ed. Houghton: Jacana.

FALBO, T., LEIN, L., & AMADOR, N.A. 2001. Parental involvement during the transition to high school. *Journal of Adolescent Research,* 16(1): 511–529.

FAN, X. & CHEN, M. 2001. Parental involvement and students' academic achievement: a meta-analysis. *Educational Psychology Review,* 13(1): 1–22.

FARMER, P., LÉANDRE, F. & MUKHERJEE, J.S. 2001. Community-based approaches to HIV treatment in resource-poor settings. *The Lancet,* 35(2): 40-409.

FELLIN, P. 2001. The community and the social worker. 3rd ed. (*In* Itsaca, IL; Peacock. F.E. Homan, M.S. Promoting community change: making it happen in the real world. Pacific Grove: Brooks-Cole).

FILMER, D., JEFFREY, S.H. & LANT, H.P. 2000. Weak Links in the Chain: a Diagnosis of Health Policy in Poor Countries. *World Bank Research Observer,* 15(2): 199-224.

FISCUS, D.A. 2002. The ecosystemic life hypothesis II: four connected concepts. *Bulletin of the Ecological Society of America*, 23(2): 1-456 January, 2002.

FORGET, G. & LEBEL, J. 2001. An ecosystem approach to human health, *International Journal of Occupational and Environmental Health*, 7(2): 3-37.

FOSTER, G. & WILLIAMSON, J. 2001. A review of current literature on the impact of HIV/AIDS on children in Sub-Saharan Africa. *AIDS,* 14(3): S275–S284.

FRIEDMAN, I. 2005. CHWs and community caregivers: towards a unified model of practice. (*In* Ijumba, P. & Barron P., eds. *South African health review* Durban: Health Systems Trust. p. 176-189).

FURSTENBERG, F.F., J.R., COOK T.D., ECCLES, J., ELDER, G.H. & SAMEROFF, A. 2000. Managing to make it: urban families and adolescent success. Chicago: Havard University Press.

GAMBONE, M.A., KLEM, A.M., & CONNELL, J.P. 2002. Finding out what matters for youth: testing key links in a community action framework for youth development. Philadelphia: Youth Developrnent Strategies and Institute for Research and Reform in Education.

GARBARINO, T. & GANZEL, B. 2000. The human ecology of early risk. (*In* Shonkoff, J. & Meisels, S. eds. Handbook of early childhood intervention 2nd ed, Cambridge: Cambridge University Press).

GARIS, D. 1998. Poverty, single-parent households, and youth at-risk behaviour: an empirical study. *Journal of Economic Issues,* 32(1): 106-179.

GEORGE, B. & MOSKOV, B. 2001. HIV prevention among street children: need for innovative programming. Paper presented to the 6th International Congress on AIDS in Asia and the Pacific. Melbourne, October 2001. 23.

GIESE, S. 2003. Health and social services to address the needs of orphans and other vulnerable children in the context of HIV/AIDS: research report and recommendations. Cape Town: Children's Institute of the University of Cape Town. 29.

GOETZ, C. & DARRYL, C.W. 2005. Systemic Healing: an ecosystemic biopsychosocial integration applied to clinical practice in the care of sick children. *Clinical Child Psychology and Psychiatry,* 10(1): 53-63.

GOLDENBERG, I. & GOLDENBERG, H. 2004. Family therapy: an overview (6th ed.). Pacific Grove, CA: Brooks/Cole.

GONZALEZ, A.R. 2002. Parental involvement: its contribution to high school students' motivation. *The Clearing House, 75*(3): 132–134.

GOODMAN, R.M. 2000. Bridging the gap in effective program implememtation: from concept to application. *Journal of Community Psychology*, 28 (3): 309-321.

GOOGINS, B.K. 1997. Shared responsibility for managing work and family relationships. (*In* S. Parasuraman & J. H. Greenhaus eds., Integrating work and family. Westport, CT: Quorum. p. 220-231).

GOPALAN, H.N.B. 2004. Ecohealth: the ecosystem approach to human well-being, our planet. Ecosystem sustainability and health: a practical approach. Cambridge: Waltner-Toews.

GRINER, S. 2002. Living in a world risk society: a reply to Mikkel, C. Rasmussen. Millenium. *Journal of International Studies*, 31(1): 159.

GROVE, J.M. & BURCH, W.R. 1997. Social ecology approach and application of urban ecosystem and landscape analyses: a case study of Baltimore. Maryland: *Urban Ecosystems* 1: 259-275.

GURNEY, W.S.C. & NISNET, R.M. 1998. Ecological dynamics. New York: Oxford University Press, 1998.

GUTMAN, L.M., & ECCLES, J.S. 1999. Financial strain, parenting behaviours, and adolescents' achievement. *Child Development*, 70: 1464-1476.

GUZZINI, S. 2000. A Reconstruction of constructivism in international relations. *European Journal of International Relations*, 6(2): 147-182.

GWYTHER, L. & MARSTON, J. 2003. Dealing with the symptoms of AIDS. Home-based HIV/AIDS care, eds. Uys, L. & Cameron, S. Cape Town: Oxford University Press.

HAACKER, M. 2001. Providing health care to HIV patients in Southern Africa. IMF Policy Discussion Paper. Washington, D.C.: International Monetary Fund.

HANNA, S. & BROWN, H. 2004. The practice of family therapy: key elements across models (3rd ed.). Belmont, CA: Brooks/Cole.

HARGRAVES, A. & FULLEN, M. 1998. What is worth fighting for out there. Toronto: Ontario Public School Educators Association.

HEKTNER, J.M. 2001. Family, school, and community predictors of adolescent growth-conducive experiences: Global and specific approaches. *Applied Developmental Science,* 5(1): 172–183.

HELMAN, C.G. 2000. Culture, health and illness, 4th ed. Oxford: Butterworth-Heinemann. 50-83.

HENDERSON, A.T. & MAPP, K.L. 2002. A new wave of evidence: the impact of school, family, and community connections on student achievement. Austin, TX: Southwest Educational Development Laboratory.

HENNING, E., VAN RENSDURG, W. & SMIT, B. 2004. Finding your way in qualitative research. Pretoria: Van Schaik.

HIDALSO, N.M., SIU, S., BRIGHT, J.A., SWAP, S.M. & EPSTEIN, J.L. 1995. Research on families, schools, and communities: a multicultural

perspective. (*In* Banks, J.A. ed., Handbook of research on multicultural education. New York: Macmillan).

HOLLAND, J. & MIMNAUGH, H. ed. 1996. Hidden order: how adaptation builds complexity. New York: Perseus Press. [Web:] http://www.cisnet.org/cissc/default.asp [Date of access: September 4 2005].

HOOVER-DEMPSEY, K.V. & SANDLER, H.M. 1997. Why do parents become involved in their children's education? *Review of Educational Research*, 67(1): 3-42.

HORNE, A. 2000. Family counselling and therapy (3rd ed.). Itasca, IL: F.E. Peacock.

JEYNES, W.H. 2005. A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education, 40*(3): 37–269.

JOHNSON, S. 2000. The impact of HIV/AIDS on the education sector in South Africa. Paper presented to workshop on the impact of HIV/AIDS on education. Paris: International Institute for Educational Planning.

JOHNSON, J.M. 2002. In-depth interviewing in handbook of interview research. London: Sage.

KAISER FAMILY FOUNDATION AND HEALTH SYSTEMS TRUST. 2002. 'Hitting Home: how households cope with the impact of the HIV/AIDS epidemic', October.

KAY, J. 2000. Ecosystems as self-organizing holarchic open systems: narratives and the second law of thermodynamics. (*In* Jasen, S.E. and M.F., eds. Handbook of ecosystems theories and managements. Boca Raton: CRC Press. Lewis Publishers. p.135-160).

KAY, J., REGIER, H., BOYLE, M. & FRANCIS, G. 1999. An ecosystem approach for sustainability: addressing the challenge of complexity. *Futures,* 31(7): 721-742.

KEBEDE, D., AKLILU, M. & SANDERS, E. 2000. The HIV epidemic and the state of the surveillance in Ethiopia (Review Article), *Ethiopia Medical Journal*, 38(1): 283-302.

KELLY, M. 2000a. Planning for education in the context of AIDS. Fundamentals of Educational Planning Series No 66. Paris: UNESCO IIEP.

KELLY, M. 2000b. The impact of HIV/AIDS on education. Paper presented to workshop on the impact of HIV/AIDS on education at the International Institute for Educational Planning. Paris: September 2001. IIEP.

KELLY, M. 2000c. HIV/AIDS and education in Eastern and Southern Africa: the leadership challenge and the way forward. report for the African development forum 2000, commissioned by the United Nations Economic Commission for Africa. Addis Ababa: UNECA.

KELLY, M. 2001a. Responding to the threat of HIV/AIDS to education for National and Regional Development. (Draft).

KELLY, M. 2001b. Why is there so much AIDS in Zambia? Lusaka: Jesuit Centre for Theological Reflection.

KIM, K. & ROHNER, R.P. 2002. Parental warmth, control, and involvement in schooling: predicting academic achievement among Korean American adolescents. *Journal of Cross-Cultural Psychology,* 33(1): 127–140.

KIRAGU, K. 2001. Youth and HIV/AIDS: can we avoid catastrophe? Population Reports, Series L, No. 12. Baltimore: Johns Hopkins

KNOWLTAN, A.R. 2002. Social network approaches to HIV prevention and care: theoretical and methodological considerations of intervention. (abstract no. ThOrE1501). Int Conf AIDS 14.

LAKE, R., WINGER, A. & PETTY, J. 2002. Strategic advice for successful school start-up in partnership with school district officials, staff and community members. 72-97.

LAMPTEY, P., WIGLEY, M., CARR, D. & COLLYMORE, Y. 2002. Facing the HIV/AIDS pandemic. *Population Bulletin*, 57(3): 1-134.

LEACH, F. 2002. School-based gender violence in Africa: A risk to adolescent sexual health. *Perspectives in Education*, 20(2): 99-112.

LEEDY, P.D. & ORMROD, J.E. 2001. Practical research. Planning and design. New Jersey: Prentice Hall.

LESHNER, A.I. 1999. Introduction. (*In* Glantz, M.P. & Johnson, J.L., eds. Resilience and development: positive life adaptations. New York: Kluwer Academic/Plenum Publishers).

LETTENEY, S. 2006. When it happens to your family. One social worker's response. *Journal of HIV/AIDS & Social Services.* 5(1): 67-84.

LIFE SKILLS DEVELOPMENT FOUNDATION. 2001. The UNAIDS/UNICEF chief-friendly community schools project for promoting health, psychosocial development, and resilience in children and youth affected by AIDS. Presentation to the 6th International Congress on AIDS in Asia and the Pacific, Melbourne, October 2001.

LIFE SKILLS DEVELOPMENT FOUNDATION. 2002. Promoting health, resilience and psychosocial development in children and youth affected by AIDS: a child-friendly community schools approach. Bangkok: UNICEF and the Life Skills Development Foundation.

LOPEZ, M.E., KREIDER, H. & CASPE, M. 2004. Co-constructing family involvement. The evaluation exchange, 10(4). Cambridge: Harvard Family Research Project. Uninsky, P. B. (n.d.).

LOVELIFE. 2001 .Impending catastrophe revisited. An update on the HIV/AIDS in South Africa. Henry J Kaiser Family Foundation. [Web:] [www.lovelife.org.za] [Date of access 17/03/2002].

LYON, M.E. & WOODWARD, K. 2003. Nonstigmatizing ways to engage HIV-positive African-American teens in mental health and support services: a commentary. *J Natl Med Assoc.*, 95(3): 196-200.

MacINTYRE, K. 2000. Assessment of life skills programmes: a study of secondary schools in Durban Metro and Mtunzini Magisterial Districts. Tulane University, Population Council (South Africa). Durban: University of Natal – HEARD.

MALEBRANCHE D.J., PETERSON J.L. 2004. Race and sexual identity: Perceptions about medical culture and healthcare among Black men who have sex with men. *J Natl Med Assoc,* 96(1): 97-107.

MALLMANN, S.R.S. 2003. Building resilience in children affected by HIV/AIDS, revised ed. Cape Town: Maskew Miller Longman.

MALONE, R.J. 2001. Principal mentoring. Eric Digest. [Web:] http://eric.uoregon.edu/publications/digests/digest149.html) [Date of access: May 29 2004].

MARCHANT, G.J., PAULSON, S.E., & ROTHLISBERG, B.A. 2001. Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools, 38* (1): 505–519.

McCALLIN, M. 2001. Discussion Guide 3: understanding the psychosocial needs of refugee children and adolescents. From the refugee experience-psychosocial training module. Oxford: Refugee Studies Centre (Rev. ed.) 79-87.

McLANAHAN, S.S. 1997. "Parent absence or poverty: which matters more?" (*In* Consequences of growing up poor, eds. Duncan, G. and Brooks-Gunn, J. New York: Russell Sage Foundation).

MCNICHOL, S.J., & DALTON, P. 2002. The best way is always through the children: the impact of family reading. *Journal of Adolescent & Adult Literacy, 46*(3): 246–253.

MEDEIROS, S. 2001. Mentoring aspiring principals to improve principal preparation. Unpublished doctoral dissertation. Johnson & Wales University.

MEISGEIER, C.H., DAHL, R. & MEISGEIER, C.S. 1998. A multiple intelligence/psychological type initiative to increase school performance and parent-student communication. Proceedings of the Third Biennial International Conference on Education of the Center for Applications of Psychological Type. Gainesville: Center for Applications of Psychological Type.

MERRIAM, S. 1998. Qualitative research and case study applications in education: a qualitative approach. San Francisco: Jossey-Bass.

MITRANI, V.B., PRADO, G., FEASTER, D.J., ROBINSON-BATISTA, C. & SZAPOCZNIK, J. 2003. Relational factors and family treatment engagement among low-income, HIV+ African American Mothers. *Family Process, 42*(4): 31-45.

MORRISON, E.F., RIMM-KAUFFMAN, S. & PIANTA, R.C. 2003. A longitudinal study of mother-child interactions at school entry and social and academic outcomes in middle school. *Journal of School Psychology, 41*(3): 185–200.

NAZMUL, C., HAMMER, J.S., KREMER, M., MURALIDHARAN, K. & ROGERS, F.H. 2005. Missing in action: educator and health worker absence in developing countries. *Journal of Economic Perspectives,* 75(2): 12-187.

NEUMAN, W. 1997. Social research methods. Qualitative and quantitative approaches. Tokyo: Allyn and Bacon.

NICHOLS, M. & SCHWARTZ, C. 2001. Family therapy: concepts and methods (5th ed.). Boston: Allyn & Bacon.

NICOLAI, S. & TRIPLEHORN, C. 2003. The role of education in protecting children in conflict. Humanitarian Practice Network Paper 42. London: Overseas Development Institute. 109-117.

NTULI, A. & BARRON, P., eds. *2002.* South African Health Review. Durban: Health Systems Trust. 161-180.

NTULI, A., ed. 2004. South African Health Review. Durban: Health Systems Trust. 191-211.

OLIVER-SMITH, A. 2004. Theorizing Vulnerability in a Globalized World: A Political Ecological Perspective. *(In* Bankoff, G., Ferks, G. & Hilhorst, D., eds. Mapping Vulnerability. Disasters, Development & People. London: Earthscan p.10-24).

PALUMBO, J. & LEIGHT, J. 1996. Putting common sense back into school reform. Education Week.

PARADIS, L. A. 1998. Parents: advocates for introverted children. *Bulletin of Psychological Type*, 21(7): 10-12.

PATTON, M.Q. 2001. Qualitative research and evaluation methods (3 rd ed). Thousand Oaks, CA: Sage.

PENLEY, J. 2004. How to parent with style. British association for psychological type, *TypeFace*, 15(3): 14-96.

PERRINO, T., COATSWORTH, J.D., BRIONES, E., PANTIN, H. & SZAPOCZNIK, J. 2001. Initial engagement to parent-centered prevention interventions: a family systems perspective. *Journal of Primary Prevention*, 22(2): 21-44.

PHILLIPS, M. & SETTERSTEN, R.A. 2002. Some ways in which neighbourhoods, nuclear families, friendship groups, and schools jointly

affect changes in early adolescent development. *Child Development, 73*(4): 283–309.

PHIRI, S.N., FOSTER, G. & NZIMA, M. 2001. Expanding and strengthening community action: a study of ways to scale up community mobilization interventions to mitigate the effect of HIV/AIDS on children and families. Displaced Children and Orphans Fund, March 2001.

PIANTA, R.C., KRAFT-SAYRE, M., RIMM-KAUFMAN, S., GERKE, N., & HIGGINS, T. 2001. Collaboration in building partnerships between families and schools: the national center for early development and learning's kindergarten transition intervention. *Early Childhood Research Quarterly, 16*(1): 117–132.

PITTMAN, L.D. & CHASE-LANSDALE, P.L. 2001. African American adolescent girls in impoverished communities: parenting style and adolescent outcomes. *Journal of Research on Adolescence*, 11(1):199–224.

POWELL, RA. & SINGLE, HM. 1996. Focus groups. *International Journal of quality in Health Care*, 8(5): 499-504.

RAK, C.K. 2002. Heroes in the nursery: three case studies in resilience. *Journal of Clinical Psychology*, 58(3): 247-260.

RAMIREZ, A.Y. 2001. Parental involvement is like apple pie: a look at parental involvement in two states. *High School Journal,* 85(1): 1–9.

RAMIREZ-VALLES, J. 2002. The protective effects of community involvement. *Social Science and Medicine*, 47(11): 1749-62.

RANKIN, B.H. & QUANE, J.M. 2002. Social contexts and urban adolescent outcomes: the interrelated effects of neighborhoods, families, and peers on African-American youth. *Social Problems,* 49(1): 79–100.

RENZULLI, L.A., ALDRICH, H., & MOODY, J. 2000. Family matters: gender, networks, and entrepreneurial outcomes. *Social Forces*, 79(1): 523-546.

ROSS, E. & DEVERELL, A. 2004. Psychosocial approaches to health illness and disability. Pretoria: Van Schaik.

ROSSMAN, S.B. & MORLEY, E. 1997. Helping at risk youth: lessons from community-based initiatives. Washington, D.C.: The Urban Institute.

ROTHMAN, J. 1999. Reflections on community organization: enduring themes & critical issues. Itasca, IL: Peacock.

SANDERS, M.G. 2001. Schools, families, and communities partnering for middle level students' success. *National Association of Secondary School Principals Bulletin,* 85(1): 53–61.

SCHIFF, M. & MCKAY, M. 2003. The role of personal contact with HIV-infected people in explaining urban, African American preadolescents' attitudes toward peers with HIV/AIDS. *Am J Orthopsychiatry* 73(1): 101-8.

SCHOLL, K. 1995. Psychological type and parenting. *Australian Journal of Psychological Type*, 4(2): 13-117.

SCHWARTZ, R. 1995. Internal family systems therapy. New York: Guilford Press.

SCHULZE, S. 2005. Research methodology. Pretoria: University of South Africa.

SELIGMAN, M. E. P., BERKOWITZ, M. W., CATALANO, R. F., DAMON, W., ECCLES, J.S., GILLHAM, J. E., MOORE, K. A., NICHOLSON, H. J., PARK, N., PENN, D. L., PETERSON, C., SHIH, M., STEEN, T. A., STERNBERG, R. J., TIERNEY, J. P., WEISSBERG, R. P. & ZAFF, J. F. 2005. The positive perspective on youth development. (*In* D. L. Evans, E. Foa, R. Gur, H. Hendrin, C. O'Brien, M. E. P. Seligman, & B. T. Walsh., eds. Treating and preventing 38).

SENGE, P.M. 1994. The Fifth Discipline. The Art & Practice of The Learning Organization. New York: Doubleday.

SHARTRAND, A.M., WEISS, H.B., KREIDER, H.M. & LOPEZ, M.E. 1997. New skills for new schools: preparing educators in family involvement. Harvard Family Research Project. Cambridge: Harvard Graduate School of Education.

SHUMOW, L. & MILLER, J.D. 2001. Parents' at-home and at-school academic involvement with young adolescents. *Journal of Early Adolescence*, 21(1): 68–91.

SIMON, B.S. 2001. Family involvement in high school: predictors and effects. *NASSP Bulletin,* 85(1): 8–19.

SMALL, S. & SUPPLE, A. 2001. Communities as systems: Is a community more than the sum of its parts? (*In* Booth, A. & Crouter, A.C., eds. Does it take a village? Mahwah, NJ: Erlbaum. p.161-173).

SMART, R. 2000. "AIDS Brief for sectoral planners and managers: Civil service HEARD, University of Natal.

SOLOMON, A 2001. The noonday demon. New York: Scribner.

SONN, C.C., BISHOP, B.J. & DREW, N.M. 1999. Sense of community: issues and considerations from a cross-cultural perspective. Community, Work & Family, 2, 205-218. *Organization Management Journal*, 1(1): 49-54.

SOUTH AFRICA. 1983. Child Care Act 74 of 1983. Pretoria: Government Printer.

SOUTH AFRICA. Department of Health. 1996. National Policy on Testing for HIV. Government Gazette No 20710. Pretoria: Government Printer.

SOUTH AFRICA. Department of Health. 2000a. National HIV and Syphilis sero-prevalence survey of women attending public antenatal clinics in South Africa. Pretoria: Government Printer.

SOUTH AFRICA. Department of Health. 2000b. Recommendations for the Prevention and Treatment of Opportunistic and HIV Related Diseases in

Adults. Pretoria: Department of Health. [Web:] http://www.doh.gov.za/aids/docs/adult.html [Date of access: August 20 2005].

SOUTH AFRICA. Department of Health. 2001a. An enhanced response to HIV/AIDS and tuberculosis in the Public Health Sector – Key Components and Funding Requirements, 2002/03-2004/05. Pretoria: Department of Health. [Web:] http://www.doh.gov.za/aids/docs/response.html [Date of access: August 20 2005].

SOUTH AFRICA. Department of Health. 2001b. HIV/AIDS and Sexually Transmitted Diseases' Directorate 2001. HIV and AIDS: care and support of affected and infected learners: *a guide for educators.* Pretoria: Government Printer.

SOUTH AFRICA. Department of Education. 2001. Implementation plan for *Tirisano*, 2001-2002. Pretoria: Government Printer.

SOUTH AFRICA. Department of Education. 2003. HIV/ AIDS in your school: what parents need to know. Pretoria: Department of Education.

SOUTH AFRICA. Department of Education. 1998. Further Education and Training Act 98 of 1998. Pretoria: Government Printer.

SOUTH AFRICA. Department of Education. 1999a. HIV/ AIDS. Government Gazette No 20372. Pretoria: Government Printer.

SOUTH AFRICA. Department of Education. 1999b. National Policy on HIV/AIDS for learners and educators in public schools, and students and educators in Further Education and Training Institutions. Pretoria: Government Printer.

SOUTH AFRICA. Department of Education. 2000. "The HIV/AIDS Emergency: Guidelines for Educators" Pretoria: Government Printer.

SOUTH AFRICA. Department of Health. 2000. HIV/AIDS and Sexually Transmitted Diseases. Strategic Plan for South Africa 2000–2005.

Pretoria: Department of Health. [Web:] http://www.doh.gov.za/aids/docs/aidsplan/. [Date of access: August 24 2005].

SOUTH AFRICA. Department of Health, Welfare and Education. 2000. National integrated plan for children infected and affected by HIV/AIDS. Pretoria. Department of Health.

SOUTH AFRICA. Department of Social Development. 2001. Status Report on HIV/AIDS in the Social Welfare Sector. Unpublished Memo.

SOUTH AFRICA. Department of Education. 1998. Employment of Educators Act 76 of 1998. Pretoria: Government Printer.

SOUTH AFRICA. 1996. National Policy on HIV/AIDS Act 27 of 1996. Pretoria: Government Printer.

SOUTH AFRICA. 1996. South African Schools Act 84 of 1996. Pretoria: Government Printer.

SOUTH AFRICA. 1996. The constitution of the Republic of South Africa Act 108 of 1996. Pretoria: Government Printer.

SPENCER, M.B., DUPREE, D. & HARTMANN, T. 1997. A phenomenological variant of ecological systems theory (PVEST): a self-organization perspective in context. *Development & Psychopathology, 9*(4): 817–833.

STERELNY, K. 2001. The Reality of Ecological Assemblages: a palaeo-ecological puzzle. *Biology & Philosophy*, 16(4): 437-461.

STEYN, L. 2005. Using internet resources and e-learning modalities for training learners in nutrition for people living with HIV and AIDS in South Africa. Pretoria: University of Pretoria (UP). (Thesis - DPhil.).

STOCKDALE, 2003. An approach to recording, transcribing and preparing audio data for qualitative data analysis. NY: Education Development Center, Inc.

SZAPOCZNIK, J. & COATSWORTH, J.D. 1999. An eco-developmental framework for organizing risk and protection for drug abuse: a developmental model of risk and protection. (*In* Glantz, M. & Hartel, C.R., eds. Drug Abuse: origins and Interventions Washington, D.C.: American Psychological Association. p. 331-366).

SZAPOCZNIK, J., KURTINES, W., SANTISTEBAN, D.A., PANTIN, H., SCOPETTA, M., MANCILLA, Y., AISENBERG, S., MCINTOSH, S., PEREZ-VIDAL, A. & COATSWORTH, J.D. 1997. The evolution structural ecosystemic theory for working with Latino families. (*In* Garcia, J. & Zea M.C., eds. Psychological interventions and research with Latino populations. Boston, Massachusetts: Allyn & Bacon, Publishers. 137-151).

TAYLOR, P. 1999. Form natural selection to natural construction to disciplining unruly complexity: the challenge of integrating ecological Taylor, Peter. 2000. Socio-Ecological Webs and Sites of Sociality: Levins' Strategy of Model Building Revisited. *Biology and Philosophy,* 15(2): 197-210.

TEMBON, A., DRAKE, L.J., SHIRLAW, L., CONNOLLY, M., LEE, S-H., PATRIKIOS, A.E., KALEEBA, N., MANNATHOKO, C., GILLESPIE, A. & BUNDY, D.A.P. 2003. HIV/AIDS and Education: Ensuring Education Access for AIDS Orphans and Vulnerable Children. Geneva: World Bank Publications.

THE NATIONAL EDUCATION GOALS PANEL. 1995. The national education goals report: building a nation of learners. Washington, D.C.: US Government Printing Office.

THOMAS, M. 1998. Conducting educational research, a comparative view. London: Bergin and Garvey.

THOMAS, N. 2006. Giving positive HIV test results to clients: a comparative analysis of six sites. *Journal of HIV/AIDS & Social Services* 5(1): 57-66.

TIERNEY, W.G. 2002. Parents and families in precollege preparation. The lack of connection between research and practice. *Educational Policy, 16*(4): 588–606.

TIEGER, P.D. & BARRON-TIEGER, B. 1997. Nurture by nature: understand your child's personality type and become a better parent. Boston: Little, Brown and Company.

TONEY, L.P., KELLEY, M.L., & LANCLOS, N.F. 2003. Self- and parental monitoring of homework in adolescents: comparative effects on parents' perceptions of homework behaviour problems. *Child & Family Behavior Therapy, 25*(1): 35–51.

TROPMAN, J.E., ERLICH, J.L. & ROTHMAN, J. eds. 2001. Tactics and techniques of community intervention, 4th ed. Itasca, IL: F.E. Peacock. 34-39.

UNGER, D, & SUSSMAN, M.B., eds. 2002. Families in community settings: inter-disciplinary perspectives. New York: Haworth Press.

UNICEF. 2001a. Discussion paper: principles to guide programming for orphans and other children affected by HIV/AIDS. New York: UNICEF.

UNICEF. 2001b.The State of the World's Children. 2000. New York. UNICEF.

USAID. 2004. Children on the Brink 2004: a joint report of new orphan estimates and a framework for action. The fourth edition of a report by The Joint United Nations Programme on HIV/AIDS (UNAIDS), the United Nations Children's Fund (UNICEF), and the United States Agency for International Development (USAID). Using C2V3 Region of the Env Gene. Abstracts of the 39th Annual Medical Conference 2003, Addis Ababa: Abstract AB55. 105-121.

VAN DYK, A. 2005. HIV/AIDS care and counselling. A multidisciplinary approach. Cape Town: Maskew Miller Longman.

VAN VOORHIS, F.L. 2003. Interactive homework in middle school: effects on family involvement and science achievement: Educators involve parents in schoolwork (TIPS). *Journal of Educational Research, 96*(6): 323–338.

VANDEMOORTELE, J. 2001. HIV/AIDS and education. New York: UNICEF.

VERMA, G.K. & MALLICK, K. 1999. Researchind education. London: The Falmer Press.

VOYDANOFF, P. 2001. Conceptualizing community in the context of work and family. *Community, Work and Family*, 4(1): 133-156.

VOYDANOFF, P. 2004. Work, community, and parenting resources and demands as predictors of adolescent problems and grades. *Journal of Adolescent Research*, 19(1): 155-173.

WACHSLER-FELDER, J.L. & GOLDEN, C.J. 2002. Neuropsychological consequences of HIV in children: a review of current literature. *Clinical Psychology Review,* 22(1): 441-462.

WALKER, J. 2004. Cost and cost-effectiveness of HIV-AIDS prevention strategies in developing countries: Is there an evidence base? Health Policy and Planning 18(1): 4-17.

WALLER, M.A. 2001. Resilience in ecosystemic Context: evolution of the concept. *American Journal of Orthopsychiatry*, 71(3): 1-98.

WALTNER-TOEWS, D.J., KAY, C., NEUDOERFFER, V. & GITTAU, T. 2003. Perspective changes everything: managing ecosystems from the inside out. *Frontiers in Ecology and the Environment*, 1(1): 23-130.

WEBB, D. 2001. Best practice in HIV/AIDS programme development, (*In SAfAIDS News*, 9 (2): 1-123 June 2001).

WELLMAN, B. 1999. The network community: an introduction. (*In* B. Wellman, ed., Networks in the global community. Boulder, CO: Westview. p.1-47.).

WHITAKER, C. & BUMBERRY, W. 1988. Dancing with the family: a symbolic experiential approach. New York: Brunner/Mazel.

WILLIAMSON, J. 2004. A family is for a lifetime. Washington, D.C.: Synergy Project.

WOOD E, HOGG, R.S., YIP, B., HARRIGAN, P.R., O'SHAUGHNESSY, M.V. & MONTANER, J.S. 2003. Is there a baseline CD4 cell count that precludes a survival response to modern antiretroviral therapy? *AIDS* 17(1):711-20.

WORLD BANK. 2000. Exploring the implications of the HIV/AIDS epidemic for educational planning in selected African Countries: the demographic question. Paper presented to workshop on the impact of HIV/AIDS on education, International Institute for Educational Planning. Paris: IIEP.

WORLD HEALTH ORGANISATION. 2001. HIV/AIDS in Asia and the Pacific Region. Lusaka: New Delhi Zambia Ministry of Education.

WORLD HEALTH ORGANIZATION. 2003. HIV-infected women and their families: psychosocial support and related issues. A literature review. Geneva: Department of Reproductive Health and Research, World Health Organization.

WORTHINGTON, C. & MYERS, T. 2003. Factors underlying anxiety in HIV testing: risk perceptions, stigma, and the patient-provider power dynamic. *Qual Health Res,* 13(5): 636-55.

XU, J. 2002. Do early adolescents want family involvement in their education? Hearing voices from those who matter most. *The School Community Journal,* 12(1): 53–72.

XU, J. & YUAN, R. 2003. Doing homework: Listening to students', parents' and educators' voices in one urban middle school community. *The School Community Journal, 13*(2): 25-44.

XU, J.Z. & CORNO, L. 2003. Family help and homework management reported by middle school students. *Elementary School Journal, 103*(5): 503-517.

YANG, P.Q. & KAYAARDI, N. 2004. Who chooses non-public schools for their children? *Educational Studies*, 30(3): 231-249.

## ADDENDUM A

## INTERVIEW QUESTIONS: CASE STUDY

I have heard that you are sick what is the problem?

When did you become aware of your HIV-positive status?

How did you feel when your positive-HIV status was revealed to you?

Are you able to go to school when you are sick?

Have you ever been admitted in a hospital?

How does Granny treat you?

How does Jabulani treat you?

How are other learners towards you?

Do you have friends?

How do they help you with school work?

Do you experience any discrimination at school?

Whom did you tell about your positive HIV status?

How does your grandmother help you with schoolwork?

What are your fears Sihle?

Do you eat healthy or exercise regularly?

Do you eat healthy or exercise regularly?

Have you ever been counselled at school

Did it help you to talk about your problem to your teacher?

Do you think you will be able to talk to her if you feel frustrated about your HIV/AIDS status?

How did you feel when you heard about your grandchildren's HIV positive status?

Did you notice any change in your grandchildren's behaviour or health after their status was revealed to them?

What did you do about this as their guardian?

Why did you decide to disclose Sihle and Jabulani's HIV- positive status to the educators?

Were you not afraid of what they were going to say?

How did Sihle's educator react to the news?

How do you support Sihle and Jabulani?

Does the boys' condition affect you?

Have you spoken to anyone about this?

How are the boys performing at school?

Do you ever talk about HIV/AIDS with Sihle and Jabulani at home when you are relaxing?

How is Jabulani in class?

What do you do at school to help Sihle catch up with her work after absence?

: Is there a way that learners that are frequently absent because of illness, can be given extra classes to help them catch up?

What are you supposed to teach learners about HIV/AIDS?

Are they allowed to ask questions on the subject?

## ADDENDUM B

## FOCUS GROUP INTERVIEWS QUESTIONS

How is being HIV-positive affect you emotionally?

How is being HIV-positive affect you spiritually?

How is being HIV-positive affect you physically?

How has being HIV-positive affected your social life?

How is being HIV-positive affect your scholastic performance?

How is being HIV-positive affect your daily routine as a learner?

What has helped you to cope whilst living with HIV/AIDS?

What support do you need from your school to cope with being HIV-positive?

What support do you need from other learners to cope with how the HIV/AIDS pandemic has affected your performance as a learner?

What support do you need from the community to cope with being HIV/AIDS-positive?

What else can be done to support learners who are infected with HIV/AIDS?

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAALDRIEHOEKKAMPUS

2008 -04- 23

Akademiese Administrasie
Posbus Box 1174
VANDERBIJLPARK
1900