

## Health of the street child: the relation between life-style, immunity and HIV/AIDS — a synergy of research

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A scrutiny and synergy of the research that was done on the health of street children revealed the relation between their poor living conditions and unhealthy life style and their depleted immune systems which, even in the best situations, wins a victory at a cost. This article probes the relation between the harsh circumstances in which millions of street children in the developed and developing world live and the devastating consequences thereof on their state of health, quality of life and life expectancy.

### Introduction

Millions of street children in the developed and developing world are left to survive by their own wits. They are maltreated, malnourished, unscrupulously abused (Levenstein, 1996:45), exposed to the elements of nature, socially deprived and abandoned (Lugalla & Mbwambo, 1999:329) and denied affection (Foster, 2000:55), education and assistance (Boukhari, 1997:9).

Street children often arrive in this *cul de sac* with poor health generally. This backlog, in combination with the harsh circumstances of street life, soon contribute to the child's lowered immunity, morbidity, ill health and eventually, the child's heightened susceptibility to HIV/AIDS in particular (Richter & Swart-Kruger, 1995:31).

### Formulation of the problem

The work of Louis Pasteur in the nineteenth century was based on the notion that the strengthening of the body by building the immune system, is a more effective strategy in fighting infection, than conquering invading harmful micro-organisms responsible for the infection (Emery & Brewster, 1948:1257). Research has since repeatedly confirmed this idea and has sufficiently proven that it is the immune system's ability to produce the antibodies (collectively called white cells, of which the main types are B-cells, T-cells and macrophages) that are responsible for the maintenance of health, or the recovery and restoration of health (Holford, 1998:120; [http://www.aegis.com/topics/basics/what\\_aidsis.html](http://www.aegis.com/topics/basics/what_aidsis.html)).

The point of departure in this article is the fact that it is the strength of the immune system, particularly the T-cells, that determines, the street child's resistance or his or her heightened susceptibility to HIV-infection. Similarly it is the T-cell count that determines the difference between a "symptom-free HIV infection and full-blown AIDS" (Holford, 1998:120).

In the light of the above, question regarding the general state of the street child's health, comes to the fore. From a clinical perspective, the following question may be asked: What is the general state of health of the street child and what are the implications thereof, especially with regard to the child's resistance to infection and, once infected, to opportunistic diseases? (For definitions of concepts, refer to Explication of concepts.)

In an attempt to answer the above question, a preliminary study was undertaken which revealed that, although much research in this regard had been done, it was done on an *ad hoc* basis without being consolidated and without giving a holistic picture of the implications of the street child's state of health and his or her susceptibility of becoming infected with HIV (Foley & Dylan, 1996:16; Gebers, 1990:14; Geldenhuys, 1994:97; Kandela, 2000:1991; Kipke, Oconnor, Palmer & Mackenzie, 1995:514; Schurink, 1994:29; Seal, Bandyopadhyay & Karmakar, 1998:895; Richter & Swart-Kruger, 1993:275).

The investigation further revealed that most of the research done in this regard focused on the influence of drug or sexual abuse on the physiological and psychological health of the child (Agrawal, 1998:

1255; Ball, Howard, Riley, Donoghoe, Rana, Widdus & Weider, 1998:505; Boukhari, 1997:7; Foley & Dylan, 1996:16; Govindaraj & Dhananjay, 1998:555; Kandela, 2000:1991; Pande, Jutkowitz, Spielmann, Koehler & Lohani, 1997:88). The research that was done by Seal, Bandyopadhyay & Karmakar (1998:595), referred to above, was an assessment of only the sexual health of the street children of Calcutta. The studies done by Agrawal (1998:1255) and Kipke, Oconnor, Palmer & Mackenzie (1995:514), focused on the abuse, and consequent sexual vulnerability and risk of the street child to become infected with HIV.

### Aim of research

To be able to get a holistic view on the general health of the street child, the aim was to construct a clinical picture from the different research studies that were done on the topic (refer to Figure 1). Such a clinical picture could assist the researchers in the identification of the possible implications with regards to the street child's resistance to infection and when infected, his or her vulnerability to opportunistic diseases.

### Method of investigation

The nature of the research problem demanded that a thorough literature study be conducted. A literature study consists of two basic aspects, namely the scrutiny and selection of relevant available literature and the determination of the reliability of the literature selected (Kruger, 1992:10). The study was, therefore, carded out in two phases: the preliminary phase and the in-depth phase.

### The preliminary phase

#### Goal with the preliminary phase

The preliminary phase was conducted with the following fourfold goal in mind:

- to enable the researchers to determine the scope and magnitude of the problem and the relevant research that was done;
- to familiarize the researchers with the existing knowledge available in the primary sources and, should it be necessary, to supplement the research with more background information and to become conversant with the available secondary sources;
- to enable the researchers to become acquainted with concepts currently used in this field of study;
- to enable the researchers to properly interpret and evaluate the data which will be yielded in the research.

During the preliminary phase electronic and printed sources were utilized to identify the relevant available material on the topic. A variety of relevant key words were used.

### Explication of concepts

For the purposes of this study

- the concept "clinical picture" (in Afrikaans "kliniese beeld" of "siektebeeld" [Bosman, Van der Merwe & Hiemstra, 1984:758])

will describe the general state of health of street children from a nursing perspective;

- the concept "street child" will refer to children who live and sleep alone on the street and have almost no family contact. According to the distinction made in literature between "children of the street" and "children on the street", the concept "street child" for the purpose of this study, will refer to "children of the street";
- the concept "health" will, in a positive sense, refer to the soundness of body and mind, and not just an absence of disease. "Positive health", also referred to as "functional health" (Holford, 1998:1), refers to the general state of health of a person, in this context, the street child. "Health" thus refers to the total health of a person, i.e. his or her physical, mental and/or psychological health;
- the concept "biological uniqueness" will refer to the complex interaction of a person's genetics with his or her environment that ensures that he or she is born biochemically unique (Williams, 1977:15). (All human beings inherit their evolutionary dynamics from their parents. These dynamics, together with their genetically inherited strengths and weaknesses, and the interaction of their genetics with their environment, determine their health. Refer to Figure 1.

When, in this research, reference is made to the health of the street child, it is made in the full acceptance and acknowledgement of his or her biochemical uniqueness. All research results are interpreted with this fact in mind.

**In-depth study**

Although a "good" sample of research has to be adequate in size in order to be reliable, the number of the different pieces of literature selected and included in the study was not necessarily a guarantee of its representativeness. Obviously the most important consideration in determining a sample was to ensure that it was as closely representative of the universe as possible (Young, 1966:211).

Complementary to the above criterion and in the context of this study, it was equally important to identify material that was directly relevant to the research problem. The focus in this study then was firstly to identify and select material on the health of the street child that was representative of the universe. Secondly, it was necessary to focus

on material that was directly related to the constituents of "good health" as described above, and the implications of the lack of good health on the street child's immunity and resistance to HIV infection, opportunistic diseases and AIDS.

The data which the researchers had identified and gleaned (the "raw material") were carefully studied and subjected to two critical processes: firstly, the process of elimination, and secondly, the process of internal and external criticism.

During the process of elimination the focus was on retaining material which was directly relevant to the theme of the study and which could be of authentic value in answering the research question. The material that was considered was continuously measured and evaluated against the criteria which constitute and describe the main concept, namely the health of the street child.

The scientific act of external criticism was applied when the authenticity and applicability of a research report was to be established, i.e. to determine the why, where, how and by whom the research was done, thus to establish if the source was what it claimed to be. During the process of external criticism it was also necessary to differentiate between an original text, later printings and revised editions (Kruger, 1992:12).

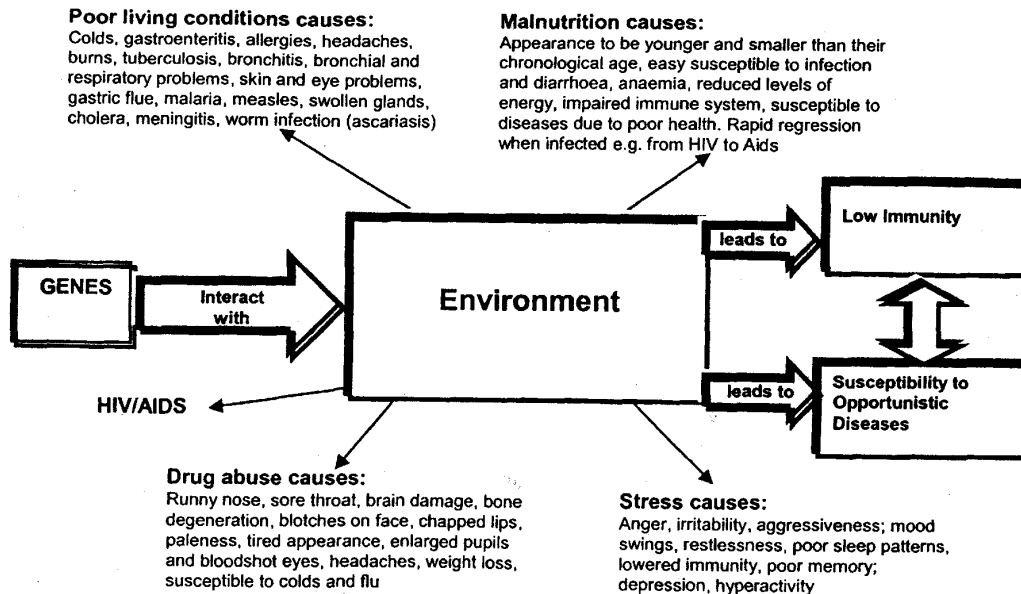
The process of internal criticism refers to the analysis and interpretation of the propositions made in the selected documents in an attempt to minimize illogical and biased assumptions and deductions.

**The street child — a clinical picture**

The street child's psychological well-being

During puberty and adolescence, often referred to as "a negative phase" (Van Rooyen & Louw, 1994:48), vast and important changes take place in the life, body, psyche and behavioural patterns of the child. Sensitive guidance of the child (Van Rooyen & Louw, 1994:51) and "someone" to offset 'psychological trauma' (Hurlock, 1968:232) are extremely important.

The measure in which children are affected by the changes of puberty, their ability to cope, as well as their affective reaction to the changes, are largely determined by whether children must cope on their own or whether they have someone with whom they can discuss their anxiety and concern (Geene & Ringwalt, 1999:9; Lugalla & Mbwambo, 1999:329; Levenstein, 1996:46). The lonely and forgotten



**Figure 1** The relation between the street child's inherited genes, the environment, immunity and susceptibility to opportunistic diseases

street child (whose mean age is reported to be 13 years [Richter & Swart-Kruger, 1995:31]), therefore, will experience much more in silence and suffer more because of what is experienced, than the child who has "someone" who cares.

#### The street child's low self-esteem and the influence thereof on his or her risk behaviour

The street child's low self-esteem can contribute to his or her vulnerability (Richter & Swart-Kruger, 1995:31). Being dependent on others for acceptance, approval and care decreases the street child's boldness to disapprove, reject or condemn or to act in either an assertive or self-protective manner (Shanler, 1998:1) which further promotes sexual exploitation, the chances of an unintended pregnancy, as well as the child's risk of becoming infected with HIV or other serious diseases. Society's negative views of the street child as being a "nuisance" or "criminal" and the indifference or hostility with which society treats these youths contribute to further traumatize and damage the child's self-esteem and his or her ability to have healthy relationships with others (Centre for Development and Population Activities, 1997:144).

#### The street as a way of life and a place to sleep

In his or her nomadic existence, the street child is lonely, and the street impersonal and unfamiliar (even far more so than what the child expected [Richter & Swart-Kruger, 1995:32]). The child has to depend on his or her own survival strategies. Poverty often forces the child to work under hazardous conditions and in situations in which he or she is exploited.

Due to the fact that larger groups of children attract the attention of the community and the police, street children sleep in groups of four to seven for protection and warmth. Street children go to sleep in the early hours of the morning when cities are quiet. They use cardboard and newspapers to make their sleeping quarters as warm as possible and sleep in 'safe' places like under bridges, in crevices, dustbins, parks, cemeteries, old cars, junk yards, drainpipes, sports grounds, parking areas, public toilets, door openings, building sites, old store-rooms, dumping sites, churches, corridors, pavements and bushes or any other place that offers protection from the wind, cold and rain (Gebers, 1990:14; Swart, 1990b:69, 74; Connolly, 1990:129; Schurink, 1993:113; South African National Council for Child and Family Welfare, 1993:36; Geldenhuys, 1994:80). These places are unsafe, unhealthy and unprotected (Lugalla & Mbwambo, 1999:335). Girls often get raped and boys sodomized which increase the risk of HIV/AIDS or other infection (Richter & Swart-Kruger, 1993:336; Haque, Sharma, Chowdbury & Majumdar, 1998:777).

The street child uses public amenities to retain a little of the self-respect and dignity that a clean body offers. These facilities often are dirty and unhygienic. A study on street children in Cape Town (Gebers, 1990:14) indicates that 41.4% of street children never bath. When street children wash clothes they hang them on fences or lay them flat on the grass or ground to dry (Schurink, 1993:113) which can lead to ascariasis (worm infection).

#### Street life as a subculture of malnutrition and poor health

Street children in South Africa lack a regular and healthy diet (Swart, 1990a:7). Concerns with health and buying food are not one of the highest priorities of street children. Some street children eat leftovers and food that they find from bakeries, restaurants and dustbins or they beg for food.

A study on the nutritional status of 97 street children showed that 74% were malnourished while 53% were seriously underfed (Richter, 1988:13-14). Malnutrition causes slower growth in children and heightens their susceptibility to infection, diarrhoea (Cockburn, 1991: 13, Geldenhuys, 1994:61, 197) as well as anemia which can be worsened when the child is plagued by parasites and consequent blood loss (Kurz & Johnson-Welch, 1994:14). In children, anaemia affects physical growth and mental development. Other consequences are reduced levels of energy and impaired immune systems (Brabin &

Brabin, 1992:956). When infected, street children are more susceptible to opportunistic diseases and may show a more rapid regression from HIV infection to AIDS, because of their state of poor health caused by malnutrition and an unhealthy life-style (World Health Organization, 1991:299).

#### Street children and their preoccupation with fulfilment of needs

Regarding the physical needs of street children, the research of Schurink (1994:29) and Richter & Swart-Kruger (1997:957) identified food, drugs (to diminish hunger pains) and shelter as the most important physical needs of street children. To fulfil these needs street children desperately need money. Studies reveal that some street children have informal work during the day such as car-parking boys, vehicle security guards or car washers (Lugalla & Mbwambo, 1999: 335). Research done by Richter & Swart-Kruger (1997:957) disclosed that half of the boys included in their study, conceded that they engage in transactional sex for goods or protection. Girls generally also indulge in prostitution — a habit which can be very hard to break (Shanler, 1998:24). These activities could put them at risk for HIV infection. Studies further revealed that fear of HIV infection did not appear in a list constructed by the children of day-to-day priorities. The list of priorities was dominated by survival concerns such as food, money and clothes (Richter & Swart-Kruger, 1997:957). Avoiding HIV infection is not a priority in their lives.

In a study Kelly (2001:19) mentions that young street boys, aged 8–10 have "sugar mummies" with whom they exchange sex for food and shelter. In the process many contract HIV and spread the infection to other street children both girls and boys. Once infected, the street child is more susceptible to opportunistic diseases and may show a more rapid regression from HIV infection to AIDS mainly because of his or her poor health and lowered immunity.

Research has confirmed that many street girls engage in survival sex for the purposes of enlisting or mollifying powerful others in exchange for protection, accommodation or other goods and services (Richter & Swart-Kruger, 1993:35). Roy (1998:424) found that street girls have three kinds of sexual relationships, namely: for protection, for love, and for commercial reasons. Health care is not a priority among them and perceptions of risk are almost nil.

#### General health of the street child

Gebers (1990:14) indicates that street children admitted to hospitals are mostly treated for wounds. Most of the children are assaulted on purpose while they roam the streets. In the survey it was found that 34% of the respondents had suffered head injuries of which 52% was as a result of assault and 48% as a result of accidents. Some of these accidents were the result of substance abuse while others were car accidents.

Swart (1988:35), Gebers (1990:14), Swart (1990a:7) and Schurink (1993:204) point out that children are physically maltreated by the police, security guards and the public in general. Peacock (1994:140) mentions in a survey that 85% of the respondents were victimised by members of the police force and the general public.

According to the South African National Council for Child and Family Care (1993:39) prostitution and sexual abuse are in general serious health risks for street children. Street children are in particular vulnerable as far as AIDS is concerned. However, not all street children engage in prostitution (Swart, 1990a:9).

#### Drug and substance abuse

Sniffing glue is popular among street children. About 95% of street children are addicted to glue inhalation (Geldenhuys, 1994:97). The toluene in glue initially damages the respiratory system. Regular glue sniffers usually have runny noses and are hoarse. They are also susceptible to colds and flu. In the long run, physical and psychological effects like tiredness, weight loss, distorted vision, problems with concentration, brain damage and complete bone degeneration are reported. The SSD syndrome (sudden sniff death) which causes critical

heart seizure, is another result of sniffing glue (Swart, 1990b:89-93, Jansen, Richter & Griesel, 1991:13-15, Taljaard, 1993:30).

Besides sniffing glue, alcohol or dagga abuse is also popular among street children. About 95% of street children are addicted to substance abuse (Geldenhuys, 1994:97, Richter & Swart-Kruger, 1993:275). Street children maintain that it is a way of escaping from the cold, loneliness and hunger that they experience (Swart, 1990b:84; George, 1998:694).

Drug and alcohol abuse lower the street child's level of responsibility. Being intoxicated may interact with high risk sexual behaviour by, on the one hand, making street youth more vulnerable to rape when "high" and, on the other hand, by rendering their sexual behaviour less discriminating. Richter & Swart-Kruger (1993:275) revealed in their study that 60% of the children admitted to having sex while under the influence of glue, dagga or alcohol.

### Sexual risk behaviour

Together with the physical and sexual maturation and psychological and inner awareness, sexuality becomes a major issue for adolescents (Steuer, 1994:522) and even more so for adolescents who are living on the street and have to use their bodies to provide and fulfil their most primary needs.

Due to weakened or severed family and social ties and the fact that street children are without any social support (except for peers living in similar circumstances), they, in their desperation of forlornness, tend to confide in anyone who enters their world and can fulfil their most basic needs such as food, shelter, love and acceptance. This causes them to fall prey to so-called "caring" adults who use them, not only as thieves or purse-snatchers, but also as sex objects and prostitutes. "Commercial sexual exploitation of youth is a multi-billion dollar industry" (UNICEF, 1997:24). Druglords, gangs and "powerful others" offer practical support, protection, and a sense of belonging (Levenstein, 1996:46) often in exchange for "survival" sex (Richter & Swart-Kruger, 1995:34).

Caught in this negative pattern of behaviour (which soon becomes a fixed life-style) street children wrongly come to view their maturing sexuality as a means to an end and their changing bodies as a matter of priority in their fight for survival (Geene & Ringwalt, 1999:6) — a part of their being that lies beyond their personal control (Richter & Swart-Kruger, 1995:34). They believe they have lost their responsibility towards, and their right of ownership of their bodies. This attitude, together with the street child's negative circumstances, lack of knowledge about HIV/AIDS in general and the transmission of the virus in particular, greatly contribute to their susceptibility to HIV infection and other diseases.

Studies have proved that the majority of street children have been engaged in sexual activities that could put them at risk for HIV infection (Richter & Swart-Kruger, 1993:34, Richter & Swart-Kruger, 1997:957, Banerjee, Sengupata, Bhattacharya & Verma, 1998:222; Palibas, 1998:909). Street children engage in sex for money, goods and protection. Most boys are sexually active with "girlfriends", who themselves frequently engage in transactional sex. These children have little or no control over their sexual partners or the nature of their sexual experiences. For these children sexual encounters are embedded in emotional, social and economic dependence on powerful and potentially coercive partners (Richter & Swart-Kruger, 1997:957; George, 1998:694).

Younger street boys are at risk of HIV infection when elder boys forcibly indulge in anal sex with them. Richter & Swart-Kruger (1997:957) report that several boys indicated that they are being raped. The risk of HIV infection is further increased by the methods of induction into the "gang". Street boys have violent initiation ceremonies for gaining entry into the street "gangs". In these ceremonies they are raped by 4–5 older boys (Roy, 1998:424, Banerjee, Sengupata, Bhattacharya & Verma, 1998:222).

Selling sex to both men and women is regarded as the best way to get money and unprotected penetrative oral, anal or vaginal sex is

usually required by customers (Richter & Swart-Kruger, 1993:34). This research confirmed that many street girls seem to engage in prostitution to earn money. They are engaged in survival sex for purposes of enlisting or mollifying powerful others in exchange for protection, accommodation or other goods and services (Richter & Swart-Kruger, 1993:35). Roy (1998:424) mentions that street girls have three kinds of sexual relationships, namely: for protection, for love, and for commercial reasons. Health care is not a priority among them and perceptions of risk are almost nil.

### Stress

Although street children appear to be relaxed, they experience tremendously high levels of stress due to the complexity of their daily life and their struggle to survive. Holford (1998:155) emphasizes that tension and stress eventually result in an adrenal imbalance which causes symptoms such as the following: anger, irritability, aggressiveness, mood swings, restlessness, poor sleep patterns, lowered immunity, poor memory, depression and hyperactivity.

### Conclusion

This research on the health of street children revealed the significant relation between their poor living conditions, unhealthy life-style, lowered immunity and heightened HIV/AIDS risk (refer to Figure 1). The intolerance and harshness of street life and the deprivation the street child suffers are the fate of millions of street children in the developed and developing world.

The devastating consequences of their deprived street life on their state of health, immunity and life expectancy, provide a key explanation for the street child's heightened susceptibility to opportunistic diseases and their rapid regression from HIV infection to AIDS.

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