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HEALTH OF STREET CHILDREN IN CAPE TOWN

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DECLARATION

I, PAUL ERIC GEBERS HEREBY DECLARE THAT THE WORK ON WHICH THIS THESIS IS BASED IS ORIGINAL (EXCEPT WHERE ACKNOWLEDGEMENTS INDICATE OTHERWISE) AND THAT NEITHER THE WHOLE WORK NOR ANY PART OF IT HAS BEEN, IS BEEN, OR IS TO BE SUBMITTED FOR ANOTHER DEGREE IN THIS OR ANY OTHER UNIVERSITY.

I EMPOWER THE UNIVERSITY TO REPRODUCE FOR THE PURPOSE OF RESEARCH EITHER THE WHOLE OR ANY PORTION OF THE CONTENTS IN ANY MANNER WHATSOEVER.

Signed by candidate

Signature removed

9/8/10

(DATE)

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SUMMARY

This cross sectional study looks at the health profiles of street children both in institutions and on the street between May and November 1989. The former group had a clinical examination, with blood and urine investigations done where possible; the latter group were only interviewed.

159 street children were interviewed of whom 47 were interviewed on the street. 73 children had clinical examinations; 64 of these had blood and urine investigations.

The age range was 8 years to 19.8 years. 18.2% were females and 28.3% were black.

59,6% of those interviewed on the street had not been in an institution or shelter for street children. 27,2% of the total group had been on the street for more 3 years.

37,1% perceived colds and chest complaints as their main physical health problem. This was confirmed by the fact that 69,2% had a history of respiratory problems. 44,7% said that they would go to a hospital if they injured themselves or were ill; however 36,5% said they would not use or get any medication for problems such as a headache or a bad

cold. 37,7% of children used a hospital while they were on street but 59,7% had not used any facility while on the street.

Most street children (72,8%) washed themselves at least occasionally and 61% washed their clothes.

47,2% had suffered trauma significant enough to seek hospital attention.

56% had skin problems (including lice and scabies) while on the street.

15,7% complained of visual problems and 10,7% complained of reduced hearing. Dental problems appeared to be of major concern with 37,7% complaining of either toothache or dental caries (23,3% had obvious caries on examination).

73,4% admitted to solvent abuse, 49,9% had never taken alcohol and 12,7% had never smoked. 43% had tried dagga, 10,8% white pipe (mixture of dagga and "Mandrax" which is smoked) and only 7,6% "Mandrax" alone.

10,9% of boys and 10,0% of girls indicated that they had been sexually exploited.

Of the 67 examined 32,8% were below 90% of expected height for age, 44,8% were below 80% of expected weight for age and 8,6% had a circumference of head below 95% of standard.

There is a 9,4% Hepatitis Bs ag carrier rate. No HIV (human immunodefiency virus) antibodies were detected in 64 sera tested.

On the basis of these results, the following are recommended:

1) Improving accessability of health care resources.
2) Improving the availability of health care resources.
3) Initiating contact with street children by employing field health workers.
4) Drawing up a health care policy for street children institutions and field care workers.
5) Limit venereal disease management to single dose treatment where possible.
6) Further studies need to be undertaken in the following areas:-
   - solvent abuse
   - utilisation of health care resources
   - utilisation of street children shelters and institutions

Further breakdown of habits, physical problems and results of examinations are presented.

CHAPTER 1 - INTRODUCTION

Throughout the world the care of children in especially difficult circumstances has emerged as a problem in the 1980s. Many children in underdeveloped countries as well as developed countries are neglected, abused or exploited - these include street children, refugees and victims of war and natural disasters.

The phenomenon of Street children is world wide. This is also an old problem, perhaps seen in a new light. We read of street children in novels such as "Oliver Twist" of Dickensian times, and "Huckleberry Finn". However these novels have romanticised the situation of vagrant children. Morris West wrote a book called "Children of the Sun" to start a fund for street victims of Naples in the early 1950s.

In South Africa the concerned public, as well as people involved in the care of children, are taking an increasing interest in the plight of street children. In the Weekend Argus of 25 March and 1 April 1989 extensive coverage is given to the extent and implications of the problem. Further articles have continued to appear in the lay press throughout the year.

In the Cape, street children were first mentioned as early as 1917 in the Annual Report of The Society for the Protection of Child Life. But it was only in 1978, when the Vagrant Shelter opened in Green Point, that people involved noted that there were an extraordinary number of children among the vagrants seeking food and shelter. Recognising the need, the Child Welfare Society opened the first shelter for street children in Cape Town in 1982.

DEFINITION OF STREET CHILDREN

In the widest sense "a street child is one who has made the street his real home" (UNICEF[1]). Richter[2] quotes Cockburn's definition of street children as "those who have abandoned (or have been abandoned by) their families, schools and immediate communities before they are sixteen years of age and drifted into a nomadic 'street life'".

Ennew[3] further distinguishes between "children on the street" and "children of the street". The former are those children who are on the street to contribute to the family's income by begging or working and then returning home at night; the latter group are those who have made the street their home.

In South Africa Street children are known by various names. In Cape Town they are known as "Strollers". In Johannesburg

they are referred to as "Amalalapayipe" (those who sleep in pipes) or "Amalunde" (those of the streets). Other names are "Twilight Children" and "Skadukinders".

DEMOGRAPHY

The demography of street children has been widely studied. Shane[4] reviewed numerous articles in which a recurring thread is the abuse, neglect and rejection of the young person by one or both of the parents. Newsweek[5] noted that street children are a symptom of larger problems - "Fever blisters that signal economic and social ailments" - in the countries that they occur.

When seeking figures and statistics concerning street children it is not surprising to note the discrepancy between figures quoted by child care organisations and governmental agencies. The world total is estimated to be between 8 million and 80 million. This figure is a "guess-timate" as one can understand that it is difficult at times to distinguish between children on the street and those of the street. The greatest number of street children occur in South America. In Southern Africa the estimated number of strollers is 9000 with approximately 800 in the Western Cape. The estimates for Cape Town are between 300 and 600.

Most of the daily activities of street children, be it for survival or for leisure, put their health at risk. Survival activities include begging for money or food at traffic intersections, "flagging" or parking cars for money and selling sexual favours, while leisure activities include such activities as solvent abuse, smoking cigarettes and dagga and mandrax tablets as well as alcohol abuse. Other daily activities which can put their health at risk are the children's ignorance about the elements, particularly in relation to their sleeping arrangements, which range from sleeping under the bushes to proper shelter. A large number of street children appear to be knocked down by cars and are subject to assault by older street children, gangs and members of the public, including the police. Personal hygiene of these children would be compromised by the inadequacy of washing facilities and by atitudes of other street children. Although medical and dental services (preventative and curative) may be available, the lifestyle of street children suggests that any authority situation would be avoided as far as possible.

For all these reasons, street children appear to be at a greater risk for ill health.

MOTIVATION FOR STUDY

Literature review

Literature reviews have shown that most research has focussed on the psychosocial aspects of the problems of street children[6, 7]. Some have researched solvent abuse and others have merely mentioned solvent abuse[9, 10] or the diet of street children[12, 13]. Moreover, although there is documentation of their sexual practices[10, 12, 14] the prevalence or degree of sexually transmitted diseases has not been assessed.

There is a paucity of research on the physical health of street children, especially in South Africa. In 1987 Shelton And Geard[11] undertook a limited descriptive study of the physical status and social profile of boys in Khayamnandi Home for Boys (Langa Cape Town). In their discussion they also refer to Henneberg and Warton's study[34] on these boys which noted anaemia, reduced height and weight for age as well as increased neuromuscular reaction time.

In Richter's study[7] of street children in Johannesburg, she looked at both anthropometric data and psychometric data. In so doing she was able to indicate the extent of acute and chronic malnutrition.

In the international literature there is some research into the health aspect of street children. However street children are often only mentioned as part of the larger problem of vagrants, homeless people and homeless families[1, 15, 16, 17, 18, 19, 20, 21, 22].

Aspects of physical health that are discussed in the literature include facets of daily life; their diet[23, 24], accommodation or sleeping arrangements[23, 25, 26], personal habits including solvent abuse[1, 27, 28], alcohol abuse[26, 29], and drug abuse[20, 22, 29] including dagga and mandrax[29] as well as cocaine and heroin abuse[20].

Some studies have researched the physical abuse[30, 31] and sexual exploitation of street children[1, 26, 32].

Goldman[30] investigated the health and health related behaviour of Toronto's street children noting the extent of sexually transmitted diseases, knowledge of family planning and practice of safe sex in relation to AIDS. He also commented on the presence of malnutrition. There are other studies that have noted malnutrition[16, 30, 31, 33, 35], tuberculosis, ear and auditory problems[21, 36] asthma[21], visual problems[16, 21, 37], iron deficiency or anaemia[19, 33, 38], dental caries[39] and discussed AIDS[22], hepatitis[22 40 41], and sexually transmitted diseases[1, 22, 26, 30, 38].

There are some valuable studies looking into the problem of children born to street children/youth and homeless mothers[22, 23, 26, 42, 43, 44].

Health care resources are reported with some notable programmes for intervention[15, 22, 39]. UNICEF[1] proposes that a major step in improving health care is to improve access to basic services.

This extensive international literature review has shown that there is little documentation of physical health of street children. This study therefore plans to assess the health status of street children and to draw on the findings to make suggestions for improvement of their existing health care.

THE PROBLEM

1. There are increasing numbers of children who live in/on the streets. This has become a problem of national interest as evidenced by numerous institutions and organisations throughout South Africa dealing with street children. A recent National Workshop on Street Children held in July 1988 in Cape Town indicates the extent and severity of the problem as well as the degree of organisation.

2. Numerous surveys and case studies have been conducted on street children[6, 8, 12, 13]. However these have only focused on the psychosocial problems.

3. There is limited knowledge of health problems.

4. It is therefore necessary to establish the extent and nature of the health problems to plan appropriate intervention.

AIM

The aim of the study was to document the health status of street children in Cape Town with a view to establishing a health care policy for those who care for street children in institutions and elsewhere.

OBJECTIVES

The objectives of the study were:

1. To list all the institutions caring for street children in Cape Town.

2. To define the admission criteria and health care practices within these institutions.

3. To develop a health profile of street children in institutions.

4. To document existing health care resources used by:

   i. children of the street
   ii. institutions for street children.

5. To make recommendations on the basis of the findings.

STUDY DESIGN

The study was a cross-sectional descriptive study.

STUDY POPULATION

The study population was the street children in the "institutions" for street children at the time of the study. For the purpose of the study street children were those in institutions who had lived on the street for more than two weeks. (This therefore excluded recent runaways and children who were lost.) There are approximately 120 children in these institutions.

In addition a random sample of those on the street were interviewed.

CHAPTER 2 - METHODOLOGY

1. To meet Objective 1

All the institutions caring for street children in metropolitan Cape Town were listed. This list was derived from interviews with social workers and child care workers as follows:

1.1 The following organisations/people were contacted:

the Child Care Information Centre, Child Health Unit, Department of Paediatrics and Child Health, University of Cape Town who provided the necessary data base of existing social welfare institutions for children;

the co-ordinator of work with street children, Jane Keen, of the Child Welfare Society of Cape Town;

the social workers or directors of the various child and family welfare departments;

1.2 The organisations were contacted through telephone interviews and the following information was documented:

- Name of organisation
- Type of organisation (private or state funded)
- List of institutions under the organisation's jurisdiction

1.3 For organisations which had institutions for street children under their jurisdiction, personal interviews were arranged as further information was required to meet objectives 2, 3 and 4.

2. Objective 2

Admission criteria and health care practices for all these institutions were defined by the following means:

2.1 The following people were contacted in addition to those contacted in 1.1:

The house parents of the residences
Other people identified by questions put forward in 1.2.

2.2 A questionnaire (APPENDIX 1) was drawn up detailing:

Referral agencies or people

Admission restrictions (age, race and sex)

Prerequisite medical examination on or prior to admission

If so, by whom

Limitations on solvent, alcohol or other drug abuse

Limitations on admission for other reasons.

Limitations on duration of stay

Discharge criteria

Rehabilitation programmes, if any

3. Objective 3

A health profile of street children in institutions and elsewhere was developed.

3.1 Initial discussions were held with child care personnel involved with street children concerning their perceived health problems to assess major areas of concern for children of the street and in institutions.

3.2 Existing information on the health profile of street children was gleaned by:

A Medical Research Council "Medlars Search" of computer based medical references

Personal contact with the following people:

- Professor Linda Richter, Associate Professor in the Institute of Behavioural Sciences, UNISA
- Mrs Annette Cockburn, Principal of The Homestead and Patrick's House, Cape Town
- Jane Keen of the Child Welfare Society, Cape Town
- Dr Chris Warton of the Department of Anatomy and Cell Biology, University of Cape Town.

- Dr John Kulig of the Department of Paediatrics (Adolescent Medicine), New England Medical Center Hospitals, Boston, United States of America

3.3 Consultations concerning the appropriateness of information sought by questionnaires and practical methodological problems were held with:

Social workers

Personnel directly involved in the care of street children

Laboratory personnel

Health professionals

Medical Research Council personnel

3.4 A proforma on the health of the children was drawn up which consisted of three sub-sections:

i. APPENDIX 2A History

Direct health information on the children was obtained by a questionnaire directed at children in the institutions and of the street. This included:

Personal data of the street child
History related to circumstances of admission
Medical history
Goal directed systematic interrogation
Behavioural pattern including
- drug abuse
- sexual practices
Dietary history
Family and social background
Education

Questionnaires were administered by:

Medical officers
Paediatric registrar

Interviewing techniques were be standardised by:

Role play
Defining prompts, and
By eliminating ambiguity in questions

Questionnaires were translated into Afrikaans and then translated back into English to ensure standardisation

ii. Physical examination

The physical examination was conducted according to criteria in APPENDIX 2B and was be done by:

Medical officers
Paediatric registrar
Final Year Medical Students

and included:

Anthropometric measurements
General examination
Systemic examination

iii. Special investigations

Special investigations were performed as listed in APPENDIX 2C. These were performed by:

Medical officers
Paediatric registrar
Final Year Medical Students

3.5 Pilot study

For a two week period prior to the commencement of the study questionnaires (APPENDIX 2A) were administered and children were examined. The questionnaire and examination were directed at the street children in Patrick's House. This provided the following information:

i. Feasibility of data collection
ii. Problem with data collection
iii. Logistical information.

3.6 In addition any information on each street child such as the Social Worker's Report and hospital or clinic folder was reviewed.

3.8 The residences were visited in the afternoon as most children attended school.

3.9 Coding of data

i. The data recorded was computer compatible.

ii. The data was coded by the researcher.

4. Objective 4

4.1 To document existing health care resources used by:

4.1 Children of the street

Questions in APPENDIX 2A were directed at the children (see page 17).

4.2 To document health care resources used by institution a questionnaire was directed at (see APPENDIX 3).

House parents and people involved in direct care of street children. This covered:

Existence of any medical facilities at the institution

Current use of medication, responsibility for dispensing

Existence of health care information or talks/instruction

Any health training of the above care givers

Health facilities utilized by the institutions.

PROCESSING OF DATA

The Institute of Biostatistics, Medical Research Council, processed the computer coded sheets on an IBM Mainframe Computer.

ANALYSIS OF DATA

1. Statistical analysis was be done by the Medical Research Council.

2. The researcher interpreted the analysis.

3. The analysis was designed to assist in drawing conclusions and making recommendations.

ETHICS

The protocol for the study was submitted to the Ethics and Research Committee, University of Cape Town, and approved.

CHAPTER 3 - RESULTS

1. Institutions caring for street children

The following institutions have been opened as a result of a need for accommodation/shelter for street children.

i. The Homestead

31a New Church Street
Cape Town

ii. Patrick's House

101 Hope Street
Cape Town

iii. Highway Home

37a Chiappini Street
Cape Town

iv. Ons Plek

4 Albertus Street
Cape Town

v. Khayamnandi Home for Boys

143 Bennie Street
Langa

vi. Margaret's House

Southern Suburbs. It was originally opened as a tertiary level for street children but now caters mainly for runaways.

vii. James House

Hughendon Road
Hout Bay

There are other institutions that accommodate street children in Cape Town but they are not primarily street children shelters. Some of these are:

Beth Uriel, Salt River
Bruce Duncan Home, Athlone
Leliebloom House, Athlone
Ottery School of Industry
Bonnytown
Atlantis School of Industry

The seven listed institutions all originally opened as a result of the concerned public, mainly church groups, who raised money and formed committees to get the projects going. Generally they have fallen under the guidance of the Child Welfare Society with Ms Jane Keen as the Co-ordinator. However most are managed independently with no overall management policy. This does not automatically lead to free exchange of ideas.

There are no State run institutions for street children although various people in political office, including the Minister of Health in the House of Representatives and a Cape Town City Councillor,have expressed personal interest in their problems.

2. Admission criteria and health care practices

Name	Capacity	Occupancy (as at 01.10.89)
Homestead	16	25
Patrick's House	30	28
Highway Home	12	7
Ons Plek	20	18
Khayamnandi	35	28
James House	20	7

Limitations to admission

i. Age

Generally children aged ≥ 6 years and ≤ 16 years were excluded. However one home was registered for babies as well. One had a lower age limit of 9 years and another an upper age limit of 18 years.

ii. Population group

Only one home was registered for one population group. All the other homes could cater for all population groups.

iii. Sex

One home admitted both males and females; otherwise most homes were registered for males. There is only one girls' home.

Other limitations

There were no limitations on criteria for admission in terms of solvent abuse, drug abuse, alcohol abuse, sexual activity, aggressive or anti-social behaviour. However all

institutions indicated that ongoing problem behaviour involving the above would imply referral for psychiatric management. In the ongoing situation the person may be warned or refused entry to the shelter until sober or a change in behaviour manifested.

Further qualification of this question was that if a court asked an institution to admit a child with any of the above to a "marked degree", the institution would refuse admission.

Five out of six institutions indicated that children arriving at the institution were self-referred. One institution, being a second stage institution, had street children referred from other institutions.

All six indicated that some street children admitted were referred from non-street children institutions such as Child Welfare, the Police and social welfare.

Only one indicated that it did not accept referrals from the public.

Five out of six institutions required a Detention Order or a Court Order once admitted. One institution was not yet registered and therefore did not benefit from such legal procedures.

All institutions were willing to accept other categories of street children in difficult circumstances such as abused children, victims of urban unrest. However one institution has extended its care beyond street children.

Limitations on stay

One home had a two year limitation of stay. However each person's situation was reviewed from time to time, otherwise the limitation was at the upper age limit for admission criteria. Generally however this was open-ended.

However any behaviour as listed for other limitations for admission could also be seen as a limitation for stay. One institution took note of whether the situation would result in a significant negative influence on other inhabitants, whether it was a security risk or posed a physical danger to small boys.

The Principals of the institutions concerned however all indicated a fair degree of tolerance and would go out of their way to assist with rehabilitation.

Rehabilitation programme

All institutions indicated that the institution itself was a rehabilitation programme. Each insitution has its own social worker who is involved on a regular basis with the children, reviewing their backgrounds, families and social circumstances. From this information each child's rehabilitation programme is individualised. One institution specifically mentioned that the aim of the rehabilitation programme was to build up the child's self-image and another to improve life skills.

Nutrition

Five out of six institutions indicated that the House Parents were responsible for the diet and menu of the institution; only in one out of the six institutions was it the responsibility of the Principal in conjunction with the services of a dietician.

Health care practices of institutions

Only one of the six institutions provided a full medical check up on admission. Five of the institutions ensured regular dental clinic referrals and only one required venereal disease clinic referral on admission. One institution also required all new admissions to have a

Heaf test and chest X-ray. Day hospitals, hospitals, medical personnel and other institutions such as the Drug Counselling Centre and Lentegeur Psychiatric Hospital were only used for specific indications.

As the youngest age of admission is six years of age no immunisation records were available nor is any routine immunisation done by the institutions.

All institutions had first aid boxes and the following medications were available:

- antiseptics
- analgesics
- antipyretics
- anti scabies medication
- anti lice preparations
- various coryza and cough medications

Only one institution had vitamin syrup available and one gave each child on admission a vitamin Bco injection.

Five out of six institutions indicated that medications as prescribed by a medical doctor were dispensed on an ad hoc basis by members of staff. In one institution this was done by the Principal personally, in one institution one member of staff is a registered nursing

assistant. Potentially harmful medicines, such as anti-convulsants, were locked in a medicine cabinet or cupboard in three of the six institutions.

Two out of six institutions used day hospitals as a first line of referral for any emergencies; the rest used general hospitals. For after hours emergencies 5 out of 6 used general hospitals and 1 a general practitioner. In 2 out of 6 institutions the patients were transported by private means, the rest by Metro ambulances.

All institutions made use of district surgeons in cases of rape, assault and indecent assault.

All institutions provided tooth brushes and toothpaste and ensured regular washing of clothes and bedding changes.

There was an extremely varied response to the question regarding health education. General hygiene, smoking and drug/solvent and alcohol abuse were usually discussed. There was no uniform programme on nutrition, sex education or dental care, although in some it was discussed more formally.

No education about AIDS existed at all. It was interesting to note however that in two institutions some knowledge concerning AIDS was volunteered when discussing the value and reasons for my working with street children.

3. General data

159 street children were interviewed between May and November 1989, of these 47 (29,6%) were children still on the street (Table 01)

TABLE 01 GENERAL DATA

INTERVIEW	EXAMINED	INVESTIGATE
INSTIT 112	73 (65.2%)	64 (57.1%)
STREET 47	0	0
TOTAL 159	73	64

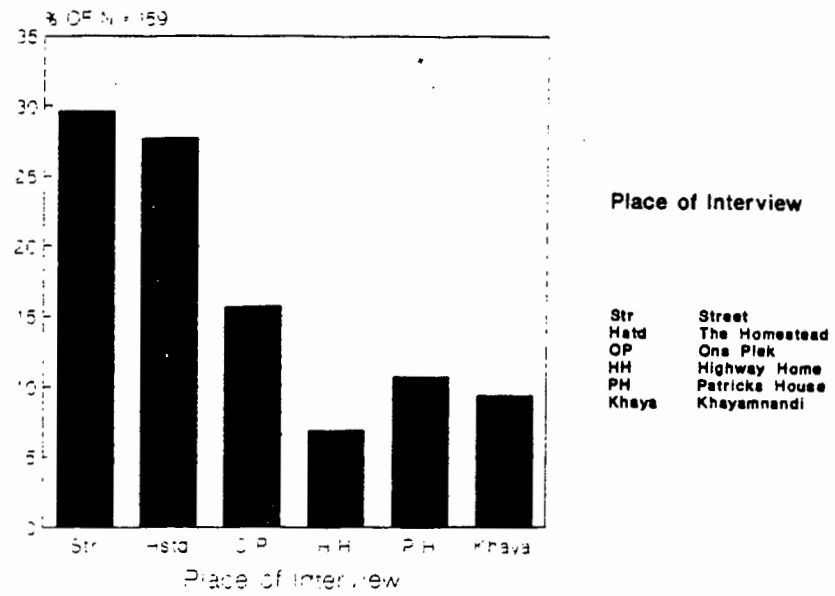
Only those in institutions, for logistical reasons, were examined and had investigations. Of the 112 in institutions, 73 (65,2%) were interviewed and 64 (57,1 %) had investigations. Some were not examined because they either refused to be examined or were not available on the days set aside for examination (e.g. they had gone back onto the street from the shelter, were on a technical training course, had gone home, were at school or were visiting friends in jail). The main reason for this fall off at The Homestead was because the children had gone back to strolling.

Examinations and investigations usually occurred a day or two after interviews for that particular institution had

been completed. Similar reasons existed for the difference between the number of examinations and number of investigations (64). However the tendency for refusal was even greater for blood investigations. One individual on the street was not able to complete the questionnaire beyond the questions regarding diet, hence N = 158 from this point any data requiring correlation with facts such as time on street and solvent abuse can only be interpreted for N = 158.

Figure 1 shows the breakdown of the interviews according to the place of interview. 27% were interviewed at The Homestead (which is a shelter), 15,7% at Ons Plek, the shelter for girls, and 6,9% at Highway Home, which opened in January 1989.

FIG 01 INTERVIEWS



Age, Sex and Population Group

The ages ranged from 8 years to 19,8 years (Table 2) with a median age of 14,2 years for those in institutions and 15,4 years for those on the street. Figure 2 shows the breakdown of the sample according to race and sex. 57,2% were coloured males, 23,9% black males, 14,5% coloured females and 4,4% black females.

TABLE 02 MEDIAN AGE BY INSTITUTION & STREET

	INSTITUTION	STREET
MEDIAN AGE	14.2	15.4
AGE RANGE	8 - 19.5	8.7 - 19.8

FIG 02 RACE & SEX DISTRIBUTION

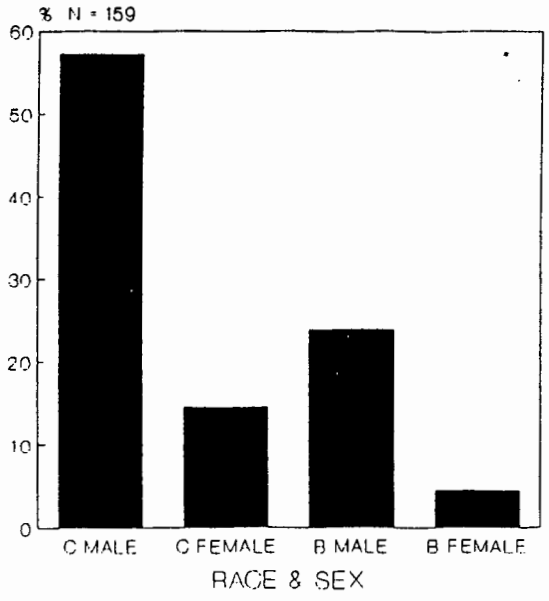


TABLE 03 AGE GROUPINGS BY RACE & SEX

AGE	<12	12 - <14	>14 - <16	+ 16	
RACE/SEX					
C MALE	17.6	21.9	31.9	28.6	
C FEMALE	4.4	21.7	21.7	52.2	
B MALE	7.9	34.2	36.8	21.1	
B FEMALE	0	57.1	42.9	0	
TOTALS	20	42	51	46	159
TOTAL %	12.6	26.4	32.1	28.9	100

FIG 03 AGE DISTRIBUTION BY RACE & SEX

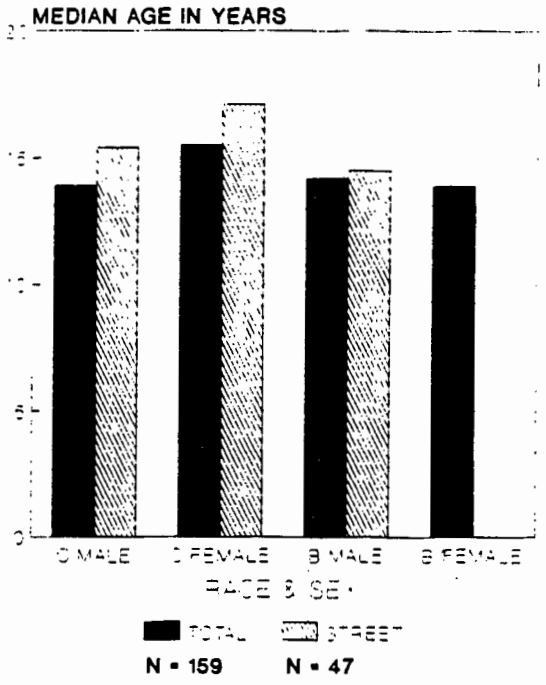


Table 3 and Figure 3 provides age grouping by sex and race. 81,1% were males and 18,9% were females.

Figure 4 compares the total group with those interviewed on the street. Note that there was a greater percentage of males interviewed on the street, 76,6% as opposed to 57,2% in the institutions.

FIG 04 RACE & SEX DISTRIBUTION

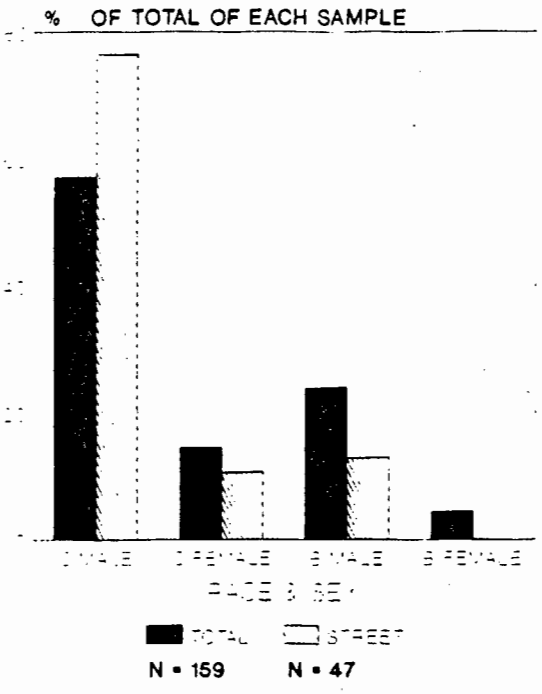
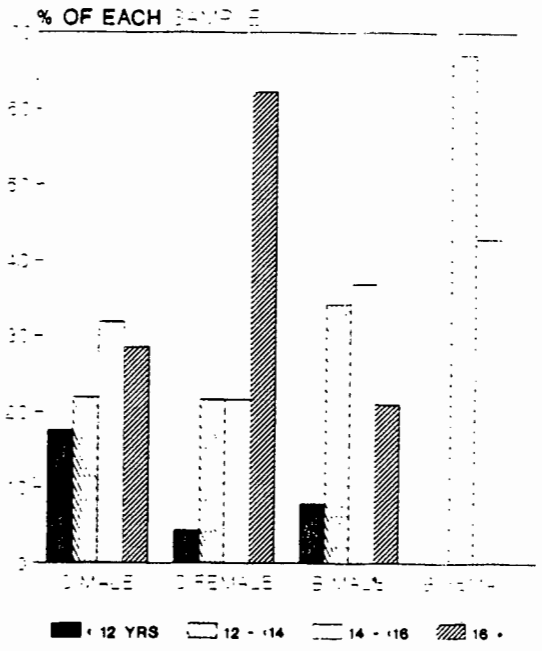


FIG 05 AGE BY RACE & SEX



No black females were under 12 years of age or over 16 years of age (Figure 5). Coloured females were mainly over 16 years of age (52,2%) and coloured males were mostly in the 14 - < 16 year age group (31,9%). Black males tended to fall in the same age groupings as coloured males, although there were fewer under 12 years (7,9%) and more in the 12 - < 14 year age group (34,9%).

Educational level

Table 4 and Figure 6 provide a breakdown of the highest education level achieved. This does not take into account 4 children who were undergoing technical training. Only 3 children had not had any education at all and 6 had achieved a Standard 7 level of education or more. One interviewee who was in an institution was in Standard 10.

TABLE 04 EDUCATIONAL LEVEL

EDUCATIONAL LEVEL	NUMBER	%
NO SCHOOLING	3	1.9
SUB A	5	3.1
SUB B	15	9.4
STD 1	24	15.1
STD 2	25	15.7
STD 3	35	22
STD 4	20	12.6
STD 5	19	11.9
STD 6	7	4.4
STD 7 or >	6	3.8
TOTAL	159	100

FIG 06 EDUCATIONAL LEVEL

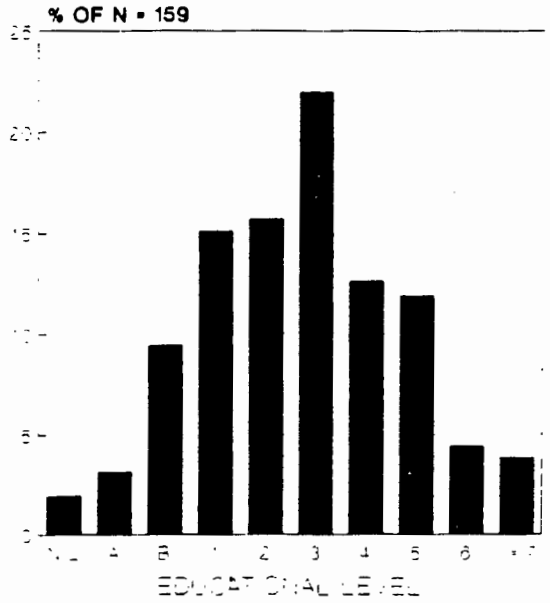


Table 5 and Figure 7 compares education levels according to sex and further comparisons in education according to race, sex and total sample versus street are shown in Figure 8, Table 6 and Figure 9. Females have achieved a better education than males, although findings have indicated an older female sample. No comparisons were done looking at age and educational level. Black males only achieved a Standard 5 educational level.

TABLE 05 EDUCATIONAL LEVEL BY SEX

EDUCAT LEVEL	MALE %*	FEMALE %*
NIL	1.9	0
A	3.1	0
B	7.5	1.9
1	14.5	0.6
2	13.8	1.9
3	18.9	3.1
4	10.1	2.5
5	7.5	4.5
6	1.9	2.5
7 +	1.9	1.9
TOTAL N = 159	81.1	18.9

* = % of Total sample

FIG 07 EDUCATIONAL LEVEL BY SEX

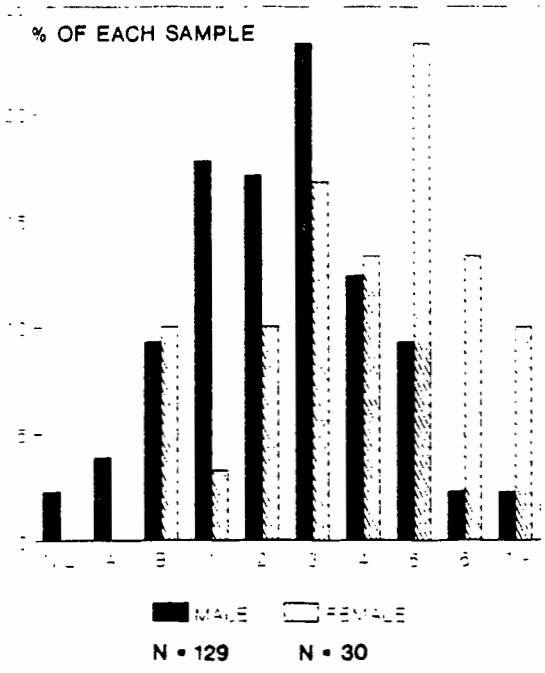


FIG 08 EDUCATIONAL LEVEL BY RACE & SEX

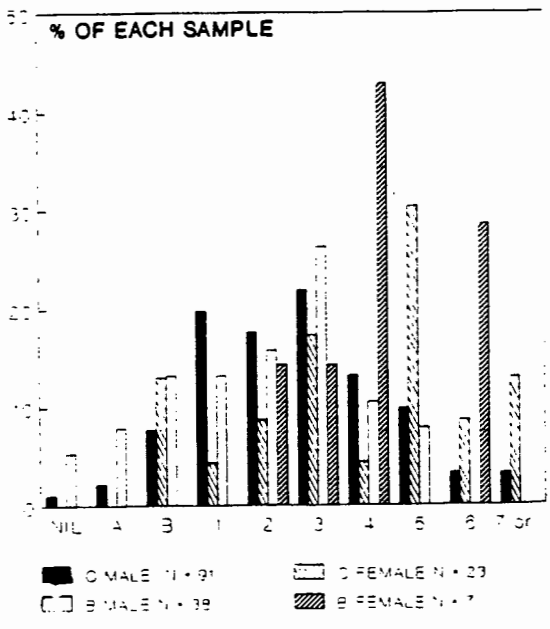
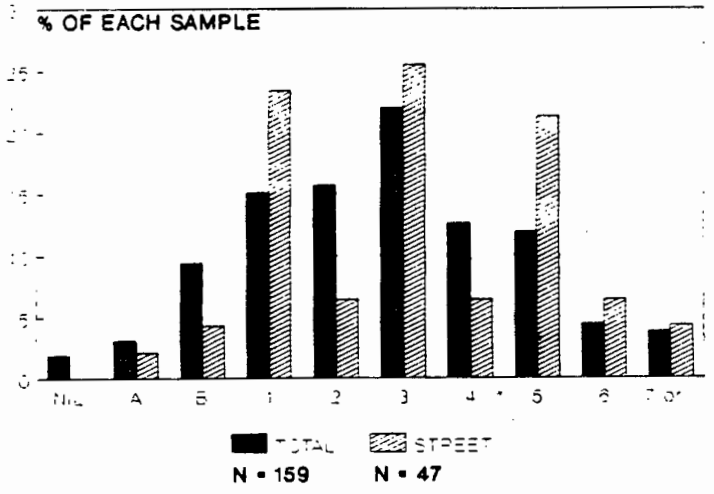


TABLE 06 COMPARISON OF TOTAL SAMPLE & STREET SAMPLE ACCORDING TO RACE & SEX

RACE/SEX	TOTAL/STREET N		T/S %	
C MALE	91	36	57.2	76.6
C FEMALE	23	5	14.5	10.6
B MALE	38	6	23.9	12.8
B FEMALE	7	0	4.4	0
TOTAL	159	47	100	100

FIG 09 EDUCATIONAL LEVEL TOTAL VS STREET SAMPLE



Origin

Table 7 provides information on the areas of origin of the strollers. 87,5% came from Cape Town. (Cape Town includes the greater metropolitan Cape Town and Khayelitsha and Phillipi) However 52,5% of the Cape Town sample came from the following "suburbs": Bonteheuwel, Elsies River, Mitchells Plain, Guguletu and Khayelitsha. One street child was from Pinetown, Natal, and one was from Upington. 23,9% of the total sample indicated that they were living with relatives, foster parents and friends prior to strolling.

TABLE 07 TABLE INDICATING ORIGIN OF STROLLER

ORIGIN	NUMBER	%
CAPE TOWN	139	87.5
WESTERN CAPE	15	9.4
CAPE	4	2.5
OTHER	1	0.6
TOTAL	159	100

Institution prior to interview

Table 8 compares the total sample versus the street sample in terms of institutions prior to the interview. 53,5% of the total indicated no previous institutionalisation whereas 66% of the street sample indicated previous institutionalisation. The majority of the street sample (48,9%) had been either in a prison or a reformatory and only 4,3% had previously been in an institution for street children. Note that in terms of the total group, the previous shelter is indicated as 15,1% but these were interviewed in Patricks House, the majority in fact had been transferred from The Homestead.

Further note that 10,1% of the total and 12,8% of the street samples indicated previous institutionalisation in places of safety or welfare.

TABLE 08 TABLE INDICATING INSTITUTION PRIOR TO THAT AT TIME OF INTERVIEW

INSTITUTION	TOTAL %	STREET %
NIL	53.5	34
PRISON/REFORM	20.8	48.9
STREET SHELTER	15.1	4.3
SAFETY/WELFARE	10.1	12.8
OTHER	0.6	0
TOTAL N	159	47
%	100	100

Previous admissions to street children institutions

Tables 9 and 10 compare the numbers of children indicating previous admissions to the various street children institutions. Many children have been admitted to more than one institution on more than one occasion. Those indicating no previous admission to institutions total 49,7% versus street (51,1%) are similar. Other institutions include James House (one child) and a street children shelter in Port Elizabeth.

TABLE 09 THOSE INDICATING NO PREVIOUS ADMISSIONS TO STREET CHILDREN INSTITUTIONS

PLACE	NUMBER	%
TOTAL N = 159	79	49.7
STREET N = 47	24	51.1

TABLE 10 THOSE INDICATING PREVIOUS ADMISSIONS TO STREET CHILDREN INSTITUTIONS

INSTITUTION	TOTAL %	STREET %
HOMESTD	37.1	38.3
ONS PLEK	5	4.3
HIGHWAY H	3.1	4.3
KHAYA	5	0
PATRICKS	10.7	14.9
BETH URIEL	5.7	2.1
OTHER	5	6.4
TOTAL %	100	100
TOTAL NUMBER	159	47

TABLE 11 TABLE INDICATING NUMBER OF TIMES PREVIOUSLY ADMITTED TO STREET CHILDREN INSTITUTION

FREQUENCY	TOTAL %	STREET %
0	17	53.2
1	40.9	21.3
2	18.9	4.3
3	8.2	6.4
4 +	15.1	14.9
TOTAL N	159	47
%	100	100

Table 11 compares the total sample and street sample with respect to the total number of previous admissions to institutions. 40,9% and 21,3% respectively had at least one previous admission and 15,1% and 14,9% had four or more previous admissions.

Time in an institution

Tables 12 and 13 look at the time spent in institutions for all males and for black males and Figure 10 compares the two groups. Girls were not compared as the institution for girls had been opened less than a year. The Homestead, Patrick House and Khayamnandi had been open for more than 18 months at the time of the interviews. Black males tended to have stayed in the street children institution for a longer time.

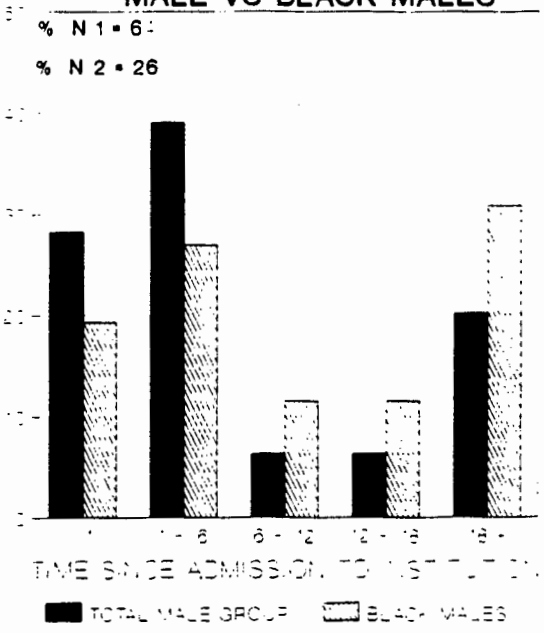
TABLE 12 TIME IN INSTITUTION OF BOYS INTERVIEWED

TIME (MONTHS)	NUMBER	%
< 1	18	28.2
1 - <6	25	39.0
6 - <12	4	6.3
12 - <18	4	6.3
18 +	13	20.2
TOTAL	64	100

TABLE 13 TIME IN INSTITUTION OF BLACK BOYS

TIME (MONTHS)	NUMBER	%
< 1	5	19.3
1 - <6	7	26.9
6 - <12	3	11.5
12 - <18	3	11.5
18 +	8	30.8
TOTAL	26	100

FIG 10 COMPARISON OF TIME IN INSTITUTION, TOTAL MALE VS BLACK MALES

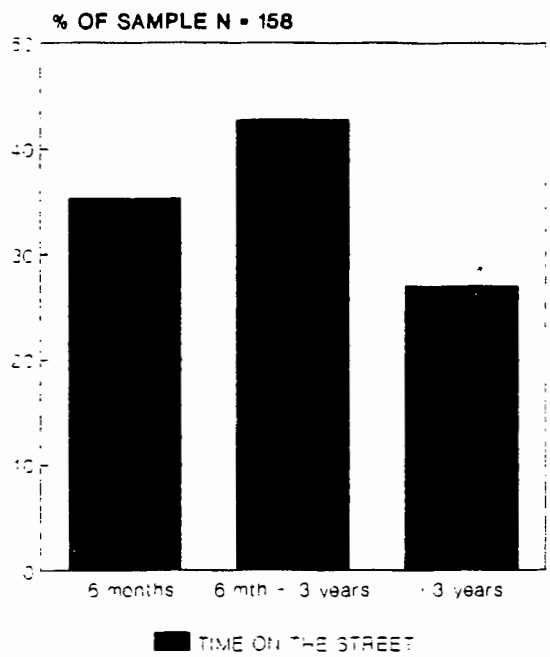


Time on the street (Table 14, Figure 11)

TABLE 14 TIME ON STREET

TIME	NUMBER	%
< 1 MONTH	13	8.2
> 1 MONTH < 3 MONTHS	23	14.6
> 3 MONTHS < 6 MONTHS	12	7.6
> 6 MONTHS < 1 YEAR	20	12.7
> 1 YEAR < 3 YEARS	47	29.7
> 3 YEARS	43	27.2
TOTAL	158	100

FIG 11 TIME ON STREET



Reasons for leaving home

The results of this question were very varied and the answers as listed were inadequate to give a true result. Other studies have dealt with this question in far greater detail (Jayes[6], Ennew[3], Scharf[4, 9, 54, 59, 65, 86, 90]).

Children : resources

4. Data relating to the interview in terms of physical problems

Children were asked about their perceived physical problems while strolling. Table 15 shows that 37,1% indicated respiratory tract problems were their main problem. However a significant sample, 18,9%, had "other" as their response. 21 out of 30 complained of skin problems, including impetigo, skin rashes and scabies. Other problems indicated headache, toothache, being cold, being dirty, painful feet and venereal diseases.

TABLE 15 PERCEIVED PHYSICAL PROBLEMS

PROBLEMS	NUMBER	%
Don't know	17	10.7
M.V.A.	8	5.0
Assault/Burns	27	17.0
Colds/Chest Problems	59	37.1
Stomach Problems	5	3.1
No Problems	12	7.5
No answer	1	0.6
Other	30	18.9
TOTAL	159	100

Use of facilities

The street children were asked what facility they did or would use if they were injured or sick (Table 16). 44,7% indicated that they would use a hospital as opposed to 16,1% who would go to a day hospital. 20,8% would not use anything, whilst 5% would ask a friend or another stroller. Of the others (12), 6 indicated that they would go to The Homestead and 6 indicated that they would go home. The two who indicated that they would go to a general practitioner were both girls.

TABLE 16 RESOURCE USED IF INJURED OR ILL

RESOURCE	NUMBER	%
HOSPITAL	71	44.7
DAY HOSP	24	15.1
GENERAL PRACTITIONER	2	1.3
OTHER PEOPLE	9	5.7
FRIENDS	5	3.1
NOBODY	33	20.8
OTHER STROLLER	3	1.9
OTHER	12	7.5
TOTAL	159	100

Following the above questions they were then asked where they would get medication for a minor problem such as a headache or a cold (Table 17). 22% indicated that they got medications such as Panado or Grand-pa headache powder from the corner cafe or shop. 36,5% indicated that they would not bother. Those indicating the pharmacy (9,4%) noted that on some occasions medications were given to them for free.

TABLE 17 RESOURCE USED FOR MEDICATION FOR MINOR PROBLEMS

RESOURCE	NUMBER	%
PHARMACY	15	9.4
CORNER CAFE	35	22
CLINIC	3	1.9
DOCTOR	2	1.3
HOSPITAL	30	18.9
OTHER	16	10.1
NIL	58	36.5
TOTAL	159	100

The street children were then asked which of the listed medical facilities were in fact used whilst strolling (Table 18). Some children used more than one facility (hence the totals of % and numbers are greater than 100%

and 159 respectively). Of note is that some individuals indicated that they had received venereal disease treatment at the hospital rather than the STD (sexually transmitted diseases) clinic. 52,8% indicated that they had not used any medical facility whilst strolling.

TABLE 18 FACILITY USED WHILE ON THE STREET

FACILITY	NUMBER	%
DENTIST	26	16.4
TB CLINIC	6	3.8
STD CLINIC	3	1.9
OTHER CLINIC	6	3.8
HOSPITAL	60	37.7
NIL	84	52.8

N = 159

Bathing and Washing Facilities

As an introduction to the children's use of facilities for washing (Table 19) they were asked whether they washed/bathed or not (Table 20) and how frequently they bathed (Table 21). 27% did not wash at all and 26,2% washed on a daily basis. Thus the figures indicate that 48,5% bathed at least regularly (i.e. daily and more than three times a week). 49,1% indicated that they used a

shower. In Schotze Kloof, Cape Town, there are municipal baths and showers referred to by the strollers as "wasbad". These facilities were the most commonly used. Other facilities used for bathing included the showers at Sea Point beach and the sea itself.

TABLE 19 FACILITY USED FOR BATHING/WASHING

FACILITY	NUMBER	%
TAP	26	22.4
BATH	17	14.7
SHOWER	57	49.1
OTHER	16	13.8
TOTAL	116	100

TABLE 20 BATHING

BATHING	NUMBER	%
YES	116	73
NO	43	27
TOTAL	159	100

TABLE 21 FREQUENCY BATHED OR WASHED

FREQUENCY	NUMBER	%
DAILY	40	25.2
> 3X/WEEK	37	23.3
ONCE/WEEK	32	20.1
OCCASIONALLY	7	4.4
NEVER	43	27.0
TOTAL	159	100

The washing of clothes and by whom are represented in Tables 22 and 23. 61,6% washed their clothes (cf bathing 73%) and 75,6% washed their own clothes. In a number of situations the clothes are washed by a girl in the group of strollers or an older stroller (10,2%). Some strollers made use of a washing machine (9,2%) and these included washing machines in the street children institutions.

TABLE 22 WASHING OF CLOTHES

WASH CLOTHES	NUMBER	%
NO	61	38.4
YES	98	61.6
TOTAL	159	100

TABLE 23 PERSON RESPONSIBLE FOR WASHING CLOTHES

WHO WASH	NUMBER	%
SELF	77	78.6
ANOTHER	10	10.2
OTHER	9	9.2
TOTAL	98	100

Accommodation

Other facilities used by street children that were investigated were their sleeping habits and accommodation (Table 24). By far the majority (61%) slept against a building. Included in this group were 3,1% who used a place referred to as "Die Dungeon", a remnant of a building on Signal Hill, and 1,9% used a wall near "Jesus Is Lord" (poster on the Young Mens Christian Association hostel off Darling Street). Generally "against a building" implied either in the doorway or entrance of a building or in the alley way next to the building. A particular group of strollers tended to use "Die Jungle", a collection of Port Jackson acacias in the old District Six area.

TABLE 24 SLEEPING FACILITY

SLEEPING FACILITY	NUMBER	%
AGAINST A BUILDING	97	61.0
IN A BUILDING	18	11.3
UNDER A BRIDGE	19	11.9
IN A DRAIN PIPE	5	3.2
UNDER BUSHES	10	6.2
WITH OTHER PEOPLE	7	4.5
OTHER	3	1.9
TOTAL	159	100

Past Medical History

Certain important facts of their past medical history are in Tables 25 and 26. Particularly of note was that 37,3% of the sample were admitted while strolling for various problems. Of the 76 admitted for trauma (See Table 27), 50 whilst on the street, 27 were for motor vehicle related accidents (most pedestrian but not indicated), of which 18 occurred whilst strolling and 16 of them required admission for fractures. Of the 35 who indicated assault, 25 were whilst strolling and 17 required hospitalisation for serious injury including chest and abdominal stab wounds. Of those who indicated other types of trauma, these included dog bites and burn wounds.

TABLE 25 PAST MEDICAL HISTORY

PAST MEDICAL HISTORY		NUMBER	%
EVER TO HOSPITAL	YES	138	86.8
	NO	21	16.2
ADMITTED	YES	75	47.2
	NO	84	52.8
TRAUMA	YES	76	47.8
	NO	83	52.2
WHILE STROLLING	YES	60	37.7
	NO	99	62.3
TOTAL SAMPLE		159	100

TABLE 26 OTHER REASONS FOR A HOSPITAL VISIT IN THE PAST (NOT NECESSARILY WHILST ON THE STREET)

P.M.H.	N	% OF TOTAL
CHEST PROBLEMS	23	14.5
MENINGITIS	4	2.5
PULM. T.B.	1	0.6
MEASLES	2	1.3
OTHER	32	20.1
SUBTOTAL	62	39
TOTAL EVER TO HOSP	138	100

TABLE 27 TYPE OF TRAUMA RECORDED COMPARING TOTAL TO WHILE ON THE STREET

TRAUMA	NUMBER (STREET)	% (STREET)
M.V.A.	27 *(18)*	35.5 (36)
ASSAULT	35 (25)	46.1 (50)
OTHER	14 (7)	18.4 (14)
TOTAL	76 (50)	100 (100)

Other reasons indicated for hospitalisation in the past (not necessarily whilst strolling) included 4 for meningitis (one was allegedly for tuberculous meningitis), 1 for tuberculosis and 23 for chest problems. 2 indicated admission for rheumatic fever in the past (records verified at Cardiology Department, Red Cross Children's Hospital). In the group of other reasons for admission (N = 32), 3 were to have a baby, 3 were for convulsions and 5 were for dermatological problems.

Of the 35 (Table 28) admitted to hospital, 15 were to New Somerset Hospital, 5 to the Red Cross Children's Hospital and 4 to Groote Schuur Hospital. These were mainly for trauma.

TABLE 28 HOSPITAL ADMITTED WHILST ON THE STREET

HOSPITAL	NUMBER	%
GROOTE SCHUUR	4	11.3
N. SOMERSET	15	42.9
CONRADIE	1	2.9
VICTORIA	2	5.7
RED CROSS	5	14.3
WOODSTOCK	1	2.9
TYGERBERG	1	2.9
OTHER	6	17.1
TOTAL	35	100

Respiratory Tract Problems

Respiratory tract problems are of major concern to street children (Table 29). 69,2% had had problems, of these colds (40,9%) and a bad cough (37,7%) were the most frequently recorded. 4 children reported incidences of epistaxis.

TABLE 29 RESPIRATORY PROBLEMS EXPERIENCED

PROBLEMS	NUMBER	%
NO	49	30.8
YES	110	69.2
THOSE INDICATING YES	% (N =110)	
TIGHT CHEST	11.9	
BLOCKED NOSE	11.9	
COLD	40.9	
SHORT OF BREATH	9.4	
BAD COUGH	37.7	
OTHER	18.2	

Gastro-intestinal Problems

50,8% (Table 30) of street children indicated having had abdominal problems including 25,8% who had episodes of vomiting and 34,6% who had abdominal cramps.

TABLE 30 GASTROINTESTINAL PROBLEMS

PROBLEMS	NUMBER	%
NO	84	52.8
YES	75	47.2
THOSE INDICATING YES	(N =75)	
VOMIT		25.3
CONSTIPATION		3.1
DIARRHOEA		11.9
WORMS		8.2
ABD. CRAMPS		34.6
OTHER		2.5

Cardiac Problems

2 children had cardiac problems, both had rheumatic fever requiring hospitalisation, one during his time on the streets.

Dermatological Problems

Dermatological problems were both a worry to street children (Table 31) and were clinically obvious (Table 32). 43,4% had lice, 26,4% had scabies, 22% impetigo and 17% other which included urticaria (8), chickenpox (6), warts, eczema, acne, fever blisters and tinea capitis. At the examination 4% had lice, 2,7% scabies, 6,8% impetigo and 6,8% tinea capitis. Other findings on examination included verruca vulgaris, plantar warts, 3 with fresh burn wounds (from solvents) and 3 with acne.

TABLE 31 DERMATOLOGICAL PROBLEMS EXPERIENCED ON THE STREET

PROBLEMS	NUMBER	% of N = 159
LICE NO	69	43.4
SCABIES	42	26.4
IMPETIGO	35	22
OTHER	27	17

TABLE 32 DERMATOLOGICAL PROBLEMS NOTED ON EXAMINATION

PROBLEM	NUMBER N = 73	% OF TOTAL
LICE	3	4
SCABIES	2	2.7
IMPETIGO	5	6.8
TINEA CAP	5	6.8
OTHER	13	17.8

Neurological Problems

25 (15,7%) noted they had visual problems unrelated to solvent abuse. 18 (11,3%) indicated headaches unrelated to solvent abuse.

Sleep disturbances are an important factor disrupting the lives of street children (Table 33). In total 66% of children have some sleeping problems. Difficulties in falling asleep were related to hunger, cold and the anxiety of safety. Similar reasons were indicated for frequent awakening.

TABLE 33 SLEEP DISTURBANCES

SLEEP	N = 159	% OF TOTAL
CANNOT SLEEP	63	39.6
AWAKENING	75	47.2
BAD DREAMS	61	38.4
ALL SLEEP PROBLEMS	74	46.5

6 (3,8%) indicated a history of convulsions, 2 whilst on the street, but none had started on the street. None of these children were on anticonvulsants.

11 (6,9%) had problems with enuresis whilst strolling.

Ear, Nose, Throat and Dental Problems

60 (37,7%) had dental problems whilst strolling. On examination (N = 73) 17 or 23,3% had obvious dental carries. 16 (10,1%) had ear problems (either earache or otorrhoea). 17 (16,7%) complained of hearing problems and on examination 6,8% had perforated drums and 2,7% had otorrhoea (N = 73). On audiometry 13 (17,8%, N = 73) had > 30 dB hearing loss. Of these 3 > 60 dB hearing loss, one of whom had this bilaterally. She had severe bilateral serous otitis media and a long standing history of untreated allergic rhinitis.

Diet

Tables 34, 35 and 36 give a breakdown of the dietary habits and food sources of the street children. The tables are self-explanatory. Avocado was indicated as a food source in 13,3%. Questions were phrased so that the first food answered was recorded so although bread was most often recorded it was often together with avocado and vice versa. Amongst the foods recorded were curry, fruit and pizza.

Many of these recorded cool drinks as a source of liquid refreshment, of which Sweet Aid, a cheap powder used to make up into a drink, was the most popular.

TABLE 34 FOOD USUALLY OBTAINED ON THE STREET

FOOD	NUMBER	% of N = 158
BREAD	70	44.3
AVOCADO	21	13.3
SOUP	1	0.6
FISH & CHIPS	27	17.1
PIES/HAMBURGER	8	5.1
FISH	4	2.5
POLONY/MEAT	9	5.7
OTHER	18	11.4

TABLE 35 DRINK (THIRST QUENCHER) USUALLY OBTAINED ON THE STREET

DRINK	NUMBER	% of N = 158
SOUP	1	0.6
WATER	58	36.7
COFFEE	9	5.7
COOLDRINKS	55	34.8
FRUIT JUICES	10	6.3
MILK	24	15.2
OTHER	1	0.6

Some children totally shunned soup kitchens although they were often seen sitting nearby waiting for their friends. Some soup kitchens are free. The Salvation Army and one other charge 7c (service kitchen) for some bread, a stew or thick soup and coffee. Only one indicated that the rubbish bin was his source of food.

TABLE 36 USUAL SOURCE OF FOOD

FOOD SOURCE	NUMBER	% of N = 158
CAFE	78	49.4
THE PUBLIC	53	34.5
SOUP KITCHENS	26	16.5
RUBBISH BINS	1	0.6
TOTAL	158	100

Substance and solvent abuse

An important part of the study looked at the existence and patterns of abuse of solvents, alcohol, cigarettes and drugs.

Solvent Abuse

Tables 37, 38 and Figure 12 indicate the pattern and age related breakdown of solvent abuse. Some street children abused more than one type of solvent, however that recorded is the solvent mainly abused. 26,6% never abused solvents. 47,4% were regularly abusing solvents and 73,4% had abused solvents at some time. By 12 years of age 65% were abusing solvents and this rose to 76% by 16 years of age.

TABLE 37 PATTERN OF SOLVENT ABUSE

SOLVENT USE	NUMBER	% N = 158
THINNERS	71	44.9
GLUE	4	2.5
PETROL	0	0
OTHER	0	0
NEVER	42	26.6
ONLY 1 or 2 OCCAS	8	5.1
STOPPED	33	20.9
REGULAR ABUSE	108	68.3

BLE 38 SOLVENT ABUSE BY AGE

AGE GROUP	YES %	NO %	N
12	65.0	35.0	20
2 - <14	52.4	47.6	42
4 - <16	76.0	24.0	50
6 +	76.0	24.0	46
TOTAL	68.4	31.6	158

FIG 12 SOLVENT ABUSE BY AGE

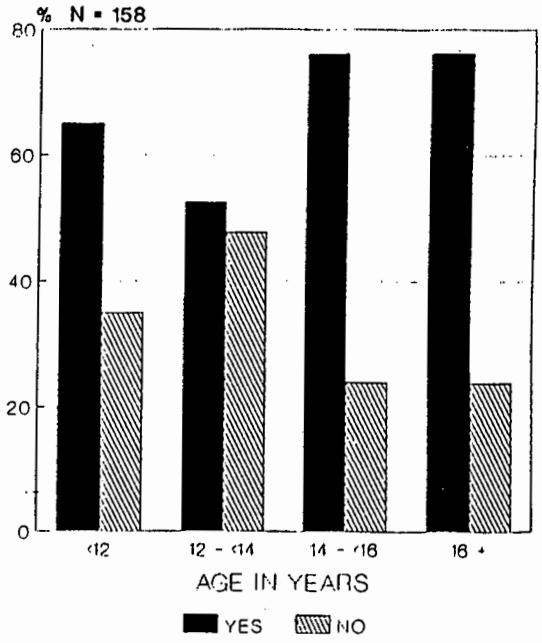
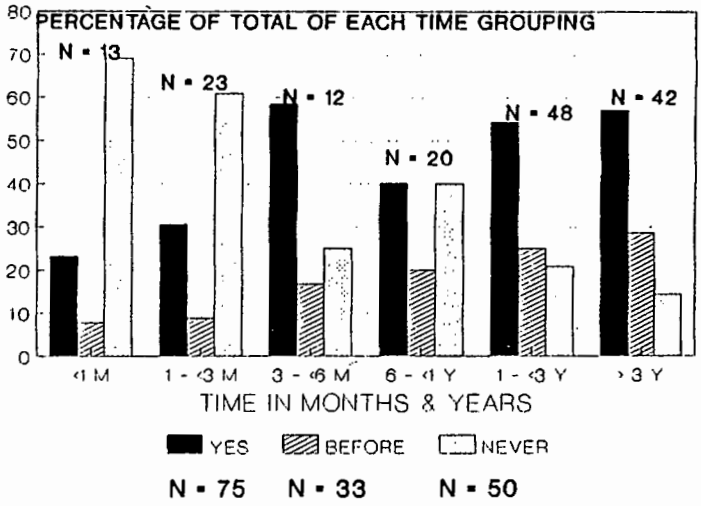


Figure 13 shows that the more time spent on the street the more likely they are to abuse solvents, however to note that the age does also increase with time.

FIG 13 SOLVENT ABUSE PATTERN VERSUS TIME ON THE STREET



Alcohol

Tables 39, 40 and Figure 14 refer to alcohol use. 49,4% did not drink alcohol. 25,9% of those questioned drank beer as their main drink. 2,5% indicated that they had dopped. Up to 14 years of age the number indicating alcohol abuse was less than those not abusing alcohol.

TABLE 39 TYPE OF ALCOHOL

ALCOHOL	NUMBER	%
WINE	31	19.6
BEER	41	25.9
SPIRITS	4	2.5
OTHER	4	2.5
TOTAL	80	50.6
NEVER	78	49.4
TOTAL	158	100

TABLE 40 ALCOHOL ABUSE BY AGE

AGE GROUP	YES %	NO %	N
<12	25	75	20
12 - <14	45.2	54.8	42
14 - <16	58	42	50
16 +	58.7	41.3	46
TOTAL N	80	78	158

FIG 14 ALCOHOL ABUSE BY AGE

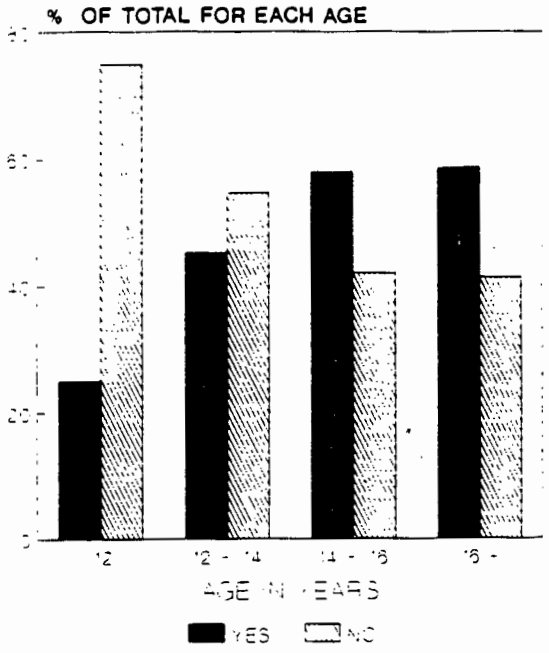


Table 41 gives a breakdown of where alcohol is obtained. Of the 15 "other", 5 obtained alcohol from picking up half empty bottles lying around disco clubs.

TABLE 41 USUAL SOURCE OF ALCOHOL

SOURCE	NUMBER	%
BOTTLE STORE	31	38.0
SHEBEEN	1	1.3
FRIENDS	33	40.6
OTHER	15	19.0
TOTAL	80	100

Smoking

Smoking is an important pastime for street children. Table 42, Figure 15, Table 43 and Figure 16 indicate the frequency, number of cigarettes smoked and pattern according to age group. Smoking is implied to mean smoking cigarettes. 87,3% smoked and 12,7% had never smoked. 50% smoked less than 5 cigarettes per day. Some strollers found it difficult to indicate the number of cigarettes smoked because of the habit of passing round cigarettes from one person to another. Although not recorded by observation most of the under 12 year olds smoked in this way. 85% of under 12 years olds (N = 20) smoked. 90% of 14 to 16 years olds (N = 50) smoked.

TABLE 42 SMOKING PATTERN

SMOKING PATTERN	NUMBER	% N = 158
DAILY	122	77.2
OCCASIONALLY	8	5.1
NEVER	20	12.7
STOPPED	8	5.1
TOTAL ABUSE	138	87.3

FIG 15 SMOKING PATTERN

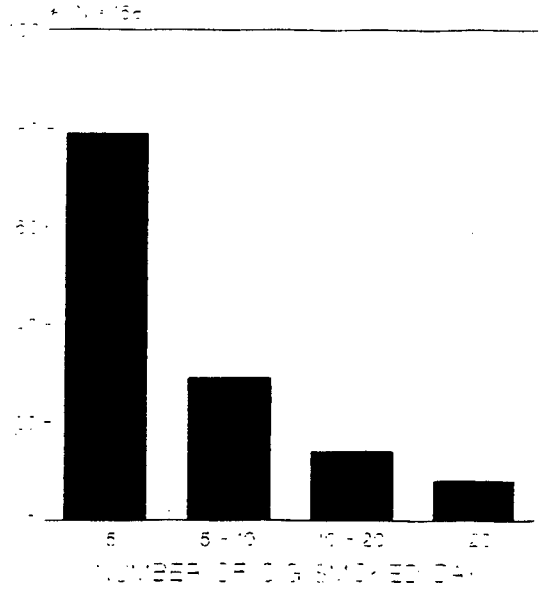
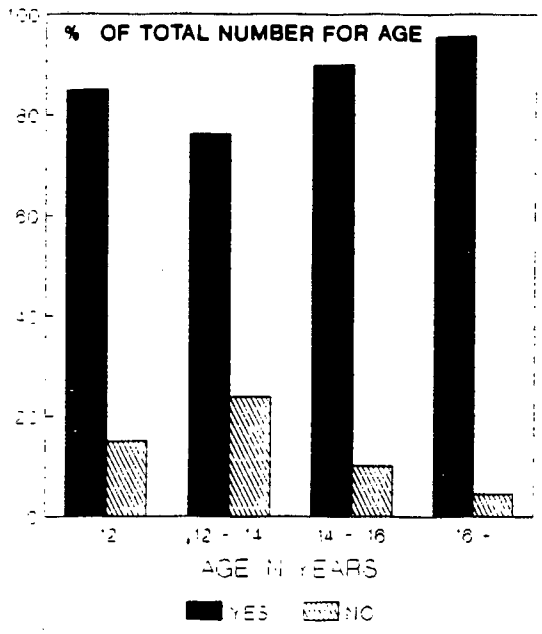


TABLE 43 SMOKING PATTERN BY AGE GROUP

AGE GROUP	YES %	NO %	N
<12	85	15	20
12 - <14	76.2	23.8	42
14 - <16	90	10	50
16 +	95.6	4.4	46
TOTAL N	138	20	158

FIG 16 SMOKING PATTERN BY AGE GROUP



Drug abuse

The patterns of drug abuse in Table 44 reveal that 43% of all the children abuse dagga, 10,8% white pipes (mixture of dagga and mandrax) and 7,6% mandrax (methaqualone) alone. Of the 43% (N = 68), 14 abused dagga on a daily basis, and of the 10,8% (N = 17) 2 abused white pipes on a daily basis.

TABLE 44 DRUG ABUSE STATISTICS

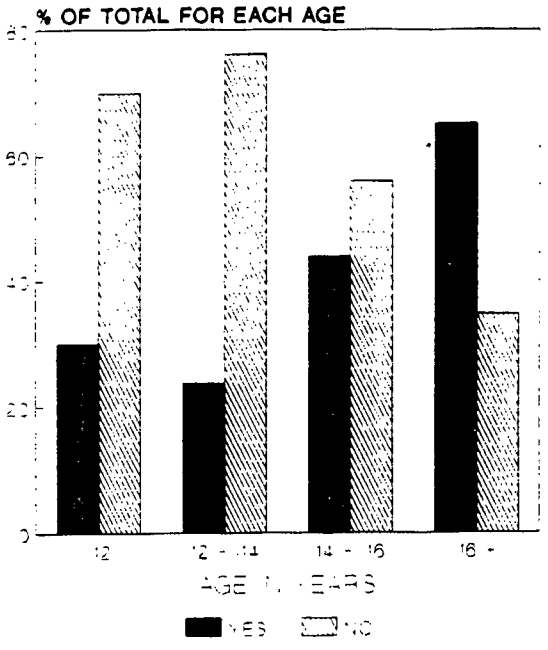
DRUG ABUSE	NUMBER	% of N = 158
DAGGA	68	43
'WHITE PIPE'	17	10.8
MANDRAX	12	7.6

TABLE 45 DAGGA ABUSE BY AGE

AGE GROUP	YES %	NO %	N
<12	30	70	20
12 - <14	23.8	76.2	42
14 - <16	44	56	50
16 +	65.2	34.8	46
TOTAL N	68	90	158

Table 45 and Figure 17 give a further breakdown of dagga abuse by age. There is an increase in abuse by age from 30% in the under 12 years age group to 66,2% in the over 16 years age group.

FIG 17 DAGGA ABUSE PATTERN BY AGE



Sexual exploitation

Tables 46 and 47 indicate the usual contact point known by the strollers and the number who indicated having been sexually exploited (see APPENDIX Glossary of Vernacular Terms). The total number of street children who indicated sexual exploitation was 17 (10,8%, N = 158). Of these 14 (10,9%) were boys and 3 (10%) were girls.

TABLE 46 CONTACT POINTS USED FOR SEXUAL EXPLOITATION

CONTACT POINT	N	%
CAFES (C.TOWN)	23	14.6
PARADE	5	3.2
SEA POINT	20	12.6
GREEN POINT	8	5.1
DON'T KNOW	83	52.5
OTHER	19	12.0
TOTAL	158	100

TABLE 47 TYPES OF SEXUAL CONTACT

SEX CONTACT	NUMBER	% *
BOYS BUNNY	8	
LARNIE	1	
SUGAR M	14	
TOTAL	14	10.9
TOTAL BOYS	128	
GIRLS SUGAR D	3	
DOCKS	2	
TOTAL	3	10
TOTAL GIRLS	30	

* * % of Total number of gender

Some children had more than one type of contact. These figures do not indicate the frequency of contact.

14,6% indicated one of two well known cafes in the centre of Cape Town as being the contact point.

Earnings

The strollers were asked what their average earnings were per day (Table 48). 26,6% were able to accumulate more than R10,00 per day and some indicated that at the month end they were able to collect as much as R80,00.

TABLE 48 AVERAGE EARNINGS PER DAY

RANDS	NUMBER	%
‹ 5	58	36.7
5 - 10	57	36.1
› 10	42	26.6
TOTAL	157	100

Further breakdown (Table 49) shows that those under the age of 12 years were the least successful in collecting money.

TABLE 49 EARNINGS BY AGE GROUP

EARNINGS	‹R5	R5 - 10	›R10	TOTAL N
AGE				
‹ 12	45%	35%	20%	20
12 - ‹14	40.5%	45.2%	14.3%	42
14 - ‹16	34%	34%	32%	50
16 +	34.8%	31.4%	34.8%	46
TOTAL N	59	57	42	158
%	37.3%	36.1%	26.6%	100

5. Clinical examination

Anthropometry

All heights were measured using a Raven Minimetre (Raven Equipment Limited) and weights were measured using a Salter Electra-Thin electronic scale (accuracy and repeatability tolerance = 1% of applied weight). Weight was assessed with children in underclothes only.

Tables 50, 51 and 52 are for height for age, weight for age and weight for height. Furthermore as there were 13 individuals who could only give an approximate age two columns are given. In the total group an individual indicating his age as 13 would be given a birth date for 01.07.1976. The tables indicate the difference between the total group and age known. Ages were verified as far as possible by birth records, hospital cards and social work records.

TABLE 50 HEIGHT FOR AGE

% OF STD	TOTAL GRP%	AGE KNOWN%
80 - <90	32.8	27.8
90 - <100	65.7	70.4
100 - <110	1.5	1.8
TOTAL N	67	54
%	100	100

TABLE 51 WEIGHT FOR AGE

% OF STD	TOTAL GRP%	AGE KNOWN%
50 - <60	3.0	3.6
60 - <70	22.4	20.4
70 - <80	19.4	14.8
80 - <90	38.8	42.6
90 - <100	11.9	13.0
100 - <110	3.1	5.6
110 - <120	1.4	0
TOTAL N	67	54
%	100	100

TABLE 52 PERCENT WEIGHT FOR PERCENT HEIGHT

PERCENT OF STD	TOTAL	AGE KNOWN
60 - <70	2.9	3.7
70 - <80	9.5	16.7
80 - <90	38.8	38.9
90 - <100	28.4	29.6
100 - <110	8.9	9.3
110 - <120		1.8
TOTAL N	64	54
%	100	100

National Centre for Health Statistics (NCHS) data was used for calculating percentages of standard weight and height and a Tanner chart used for plotting circumferences of the head results. This was only available to age 16. Similarly the Institute for Biostatistics only had data for their IBM computer available to age 18 years (216 months).

Figure 18 shows the various anthropometric data plotted on one bar graph. 2 children (3%) had weights less than 80% of the standard weight. 32,8% had heights less than 90% of the standard height.

FIG 18 WFA,HFA AND WEIGHT FOR HEIGHT
TOTAL GROUP

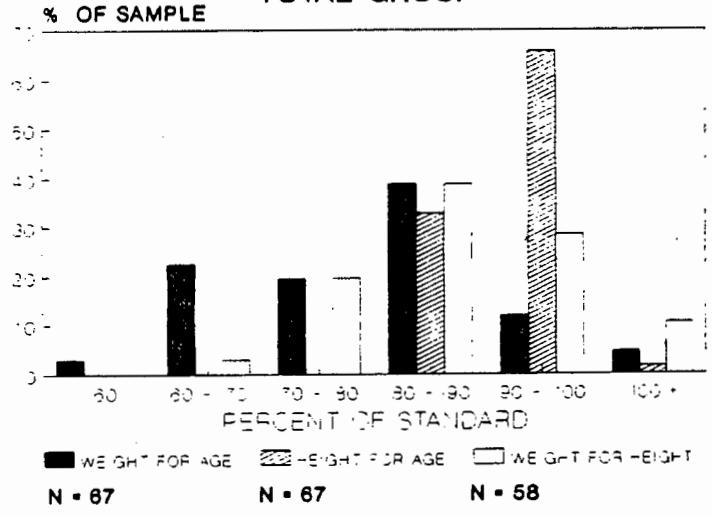
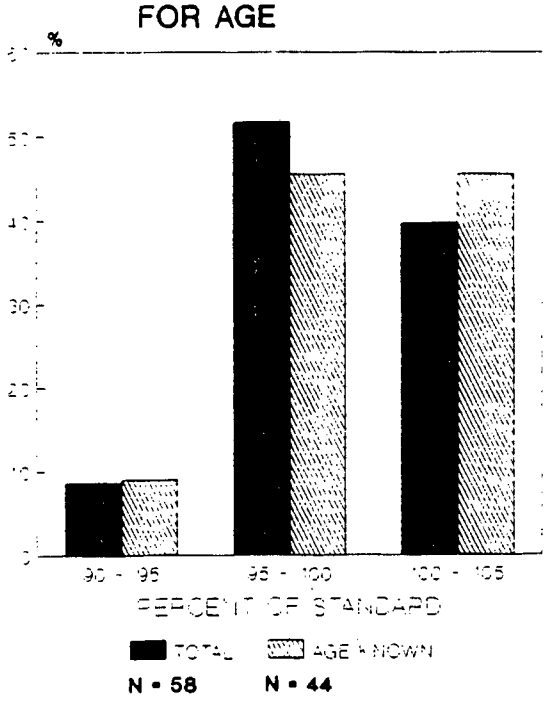


Table 53 and Figure 19 relate to measurements of circumference of the head. 8,6% were less than 95% of the standard.

TABLE 53 CIRCUMFERENCE OF HEAD FOR AGE

% OF STD	TOTAL GRP	AGE KNOWN
90 - <95	8.6	9.0
95 - <100	51.7	45.5
100 - <105	39.7	45.5
TOTAL N	58	44
%	100	100

FIG 19 CIRCUMFERENCE OF HEAD FOR AGE



Respiratory

On examination 1 female and 1 male were found to have lower airway obstruction. Both also had other features of atopy including allergic rhinitis. One also had bilateral serous otitis media with a 60-70 dB hearing los, as measured on a Madsen Portable Audiometer.

Cardiovascular system

On examination of the 2 who indicated a history of rheumatic heart disease, both had valvular heart disease, mainly initial incompetence. 2 further individuals were noted to have high blood pressures which needed further checking and possible investigation.

Perineal examination

1 male was found to have an ulcer on the coronal sulcus of the glans; a swab of this cultured a gonococcus species. 2 females were found to have non-specific vaginitis (out of the 10 who had perineal examinations). No other active or clinically detectable venereal diseases were noted on examination.

During the interview 12 of the 129 (9,3%) boys said that they had either had a urethral discharge or penile sores or penile warts. 5 of the 30 girls (16,7%) complained that they had had a vaginal discharge. No girls had had vaginal ulcers or warts.

On general examination 1 male was found to have dysmorphic features consistent with those of fetal alcohol syndrome.

No clinical evidence of pallor (apart from 1 female with atopy - allergic rhinitis), oedema, lymphadenopathy (> 1 cm) or conjunctivitis.

Ear, nose and throat as well as dental and dermatological findings have been discussed together with the interview findings.

There was no evidence of hepatomegaly or firm livers on palpation.

1 child was noted to have a squint. Visual acuity was not tested.

Neurological examination

9 of 73 examined (12,3%) were noted to have mild cerebellar signs manifested by inability to toe walk a straight line, intention tremor, past pointing and dysdiadochokinesis. None of them with these findings was obviously intoxicated or smelled of solvents. All 9 of those found to have cerebellar signs were male, all had a long history (> 3 years of solvent abuse - all abused thinners) of solvent abuse.

Blood and urine investigations

Full blood count.

Of the 64 who had haemoglobin (2 specimens clotted) measurements, 21 (33,9%) fall below their age/sex specific limits (taken from Karabus, 1988[85]).

Of the 63 serum iron measurements, 21 (33,3%) have low levels (serum iron limits 9.5 - 31.3µmol/l - Chemical Pathology Laboratory, Red Cross Children's Hospital). However of the 21 who were anaemic, 9 (42,9%) have low serum iron levels whereas 28,2% of those who are not anaemic have low serum iron levels.

5 (23,8%) of the 21 who had low haemoglobins had peripheral blood smears revealing hypochromia and microcytosis and low serum iron levels compatible with iron deficiency anaemia. However of those who had low serum iron levels (and low haemoglobin), no serum ferritins (N = 11) were below normal (range 21-210 µg/l).

1 female had an mean corpuscular volume of 100. (Range for 15-17 years - 78 f/l) (Karabus, 1988[85]).

Taking the upper limit of normal of the total eosinophil count as 700 cells/mm^3, 17 (27,4%) out of 62 were noted to have eosinophilia (Table 54).

TABLE 54 INCIDENCE OF EOSINOPHILIA

EOSINOPHILIA	NUMBER	%
NO	45	72.6
YES	17	27.4
TOTAL	62	100

Treponemal serology

4 (6.25%) individuals (all male) out of 64 were positive for Treponema pallidum haemagglutionation test (TPHA) and of these 3 Rapid plasma reagent (RPR) were less than 4 units and 1 was 512.

1 further individual had a gonorrhoea species grown from an ulcer on the coronal sulcus of the glans.

No females had a positive TPHA.

Hepatitis B serology

6 (9,4%) of 64 tested positive for Hepatitis B surface antigen. Further serology for Hepatitis B was not done.

HIV (human immuno-deficiency virus)

HIV antibody testing (Elavia - Pasteur Institute kit, Elisa ab tests HIV_1 and HIV_2) was carried out as an anonymous group screen. No positives were recorded in 64 specimens analysed.

Transaminases and liver functions (N = 64)

1 bilirubin result was abnormal, the total bilirubin was Total 27 µmol/l (normal < 17 µmol/l) with a conjugated bilirubin of 6 µmol/l. In this individual all other parameters were normal.

3 isolated raised ALT (alanine transaminase) with a maximum of 39 µmol/l (normal 5-25 µmol/l) and 3 isolated raised GGT (gamma glutamyl transferase) with a maximum of 26 µmol/l (normal 4-21 µmol/l) were recorded.

30 (46,9%) out of 64 raised ALP (alkaline phosphate) results were recorded. 3 were from children under 12 years of age (normal 150-500) and 27 were from children over 12 years of age (normal 150-600 u/l). The maximum recorded was 1380 u/l and 8 of the 30 were over 900 u/l. (None of these individuals recorded recent fractures or had evidence of hepatic disease.)

Renal function and urine testing

No abnormal urea and creatinine results were noted. Of 64 urines tested by multistix (Ames) 6 were noted to have a proteinuria of > 1^+. These samples were sent for random urine protein testing. Results recorded were as follows:

1. 3,8 g/l protein
2. 2,2 g/l protein
3. 0,63 g/l protein
4. 0,46 g/l protein
5. 0,328 g/l protein

1 of the 6 had frank haematuria. This urine was positive for schistosoma haematobium ova on microscopy.

All serum albumen levels were normal.

CHAPTER 4 - CONSTRAINTS

There are a number of problems with this type of study.

1. Reliability of information

In most instances information required for the interview needed recall, particularly for individuals residing in institutions. Even with interviews on the street information such as previous visits to hospital and other past medical history would imply long term recall. Furthermore the nature of the street children themselves calls for "distrust of adults"[52] as well as the manipulation of facts and information for secondary gain[9]. Information was particularly difficult to elicit when discussing personal facts such as sexual exploitation as "some of them avoid the more painful areas of their lives"[9] (Scharf, in "Growing Up in a Divided Society").

Recall was not the only problem related to reliability. A number of boys did not know their date of birth[10]. In institutions this was corroborated as far as possible with social worker files and hospital files. However on the street, apart from cross-referencing hospital files when and if available, dates of birth or past medical history were unreliable.

Other researchers have noted the problems of the poor concentration of street children from excess solvent abuse resulting in unreliable information[39].

Interviews on the street were extremely difficult as other strollers crowded around and confidential questions had to be asked at a later more suitable time. (One questionnaire could never be completed.)

2. Consistency

All the assistants helping with the interviews were briefed about what information was required from the street children questionnaire. A dummy run was done with the questionnaire to iron out interview technique and in the sections where personal habits were questioned emphasis was placed on how to make the interviewee comfortable with what was being asked.

The researcher was always available when the assistants were interviewing to help out with the interpretation of answers. All coding and final interpretation of the data was carried out by the researcher. Nevertheless, personalities differ and the ease with which information was extracted differed accordingly.

The majority of the children spoke or understood Afrikaans. The Afrikaans translation was retranslated into English to ensure accuracy.

The researcher conducted interviews in Xhosa where necessary. However in all instances a Xhosa interpreter was available.

3. Representativeness

Not only do street children live in central Cape Town but also in the Southern Suburbs and along the major routes such as Klipfontein Road into Cape Town. Despite the fact that the groups are highly mobile[12] the sample of street children was drawn from the three sites in Cape Town, namely the Grand Parade, the Service Dining Room and at St Andrews Presbyterian Church off Buitengracht Street. Richter[2] noted estimates of the population of street children in Cape Town to be between 300 and 600. Of 79 interviewed, 47 were on the street and 37 in institutions but still intermittently strolling. This implies that the sample could be as high as 26% (79 of 300). Another complicating factor was the population fluctuation according to the seasons. It became apparent that as the weather warmed up so did the visible numbers of street children increase.

The accessibility of the various stroller groups varied according to location and the make up of the group. The racial and sex distribution of groups also varied according to the location. Hence the street sample could not be said to be representative of strollers in metropolitan Cape Town.

4. Results

The small number of children investigated, particularly females, made most comparisons according to race and sex meaningless. Furthermore, the number of girls limited the value of any statistical analysis and inferences drawn therefrom.

5. Generalisations

No group of street children is isolated in terms of life experiences. Numerous studies (Aptekar[48] quotes various studies) have shown that the causes of the phenomenon of street children, their habits, lifestyles and exploitation (physical, sexual or emotional) occur worldwide. However he warns that although researchers tended to "erroneously block them all together" they "failed to take into account their differences".

So here too in the South African situation and locally in Cape Town we have to be careful when generalising. What may be locally applicable may only in certain aspects of health be generalisable to a national level, and even less so to an international level. Certainly broad concepts of rehabilitation, management and resource allocation may be applied generally.

CHAPTER 5 - DISCUSSION

In an international literature, review no report was found in which the physical health of street children is documented comprehensively . Locally, apart from the Khayamnandi studies (Henneberg[34], Shelton and Geard[11]) and Richter's anthropometric study[7] in Johannesburg, no other physical health record has been reported. International studies that are of value for comparison are the Toronto study[20] and the Boston study[29] because they specifically examine the physical health of street children. In most other international studies the health of street children is either discussed superficially[31], or is discussed as part of the problem of homeless families or vagrants[15, 17, 18, 22, 32, 33, 45, 51,]. Other international studies look at aspects of street children problems such as physical and sexual abuse[32, 86].

It is therefore appropriate to compare the findings with trends, apparent problems and objective observations. Furthermore data from the study group (157 children) will be compared with data from those interviewed on the street only, (47 children) to indicate either representativeness or differences.

Age

The median age of boys in the total sample was 14,5 years and of girls 15,2 years. The median age in the institutions was 14,2 years with a range of 8-19,6 years and on the street the median age was 15,4 years with a range of 8,7-19,8 years. Coloured females had a median age of 15,5 years in the institutions while on the street the median age was 17,1 years, whereas coloured males in institutions had a median age of 13,9 years and on the street of 15,4 years.

Statistics for ages of street children in Cape Town are available. The age range for girls is 9-21 years with the majority being between 13 years and 17 years (Keen)[49] and for black and coloured males 7 years and 16 years respectively(Richter)[2]. The Khayamnandi study[11] noted the age range of black boys as 9 to 17 years with a mean age of 13 years 3,5 months. Garman[8] noted a mean age of 16 years 2 months (N = 15). However one was aged 23 years. Richter's study[7] noted that boys in Johannesburg had a median age of 13,5 years with a range of 7 to 18 years. In Swaziland[46] the majority of boys were aged between 11 and 14 years. In the Philippines[47] 40% of the street children were less than 7 years old. In Toronto[20] 75% of the sample were 15 years of age or younger. In Columbia[48] the average age was 11,6 years (although the non-random sample selected were aged 7

to 16 years) and 42,5% were up to 11 years of age. In the Philippines[293] most were in the 10 to 14 year age group.

The limitation of age on admission and the self-reliance of older children would explain the older age of boys on the streets. The older age of girls on the streets (Keen)[49] has previously been documented. One may however also interpret the younger median age of children in institutions as indicating the importance of shelters in providing the basic necessities.

Race and sex

This study noted that 81,1% (129 children) were male and 18,9% (30 children) were female. Swart[10] noted that in Johannesburg the street population was predominantly male and black. Scharf[9] noted that 10% of the street children in Cape Town were girls (May 1985). In Cape Town 71,7% of the street children were coloured. In the Philippines[47] 85% of the street children were boys. It makes no sense to compare racial make-up with international literature because of the different populations.

Girls are an integral part of the population of street children in Cape Town. Black children were all Xhosa speaking, although 3 were from the Sotho region.

With the rapid influx of black people into the Western Cape the black children will constitute more and more of the population of street children and so their specific needs will have to be addressed.(e.g. Khayamnandi Home for Boys)

Education

The education level indicated implied the highest level of education achieved. 3 children had received no education at all. The median level of education for boys was Standard 2 and for girls Standard 4. Girls were generally better educated than boys and 29,7% of coloured males had more than a Standard 3 education as opposed to 18,4% of black males.

McNamara[13] (N = 22) noted that 19% of black boys had attained more than a Standard 3 education. In the Khayamnandi study[11] (N = 13) 46,1% had achieved more than a Standard 3 education (black boys) whereas in the Richter study[7] (N = 97) 34% had achieved more than a Standard 3 education. Bothma's study[12] (N = 9) 44,4% had achieved more than a Standard 3 education. Garman[8] (N = 15) noted an average education level attained of Standard 3. Pinnock[50] noted that most children on the Cape Flats had only passed Standard 3. This was a similar finding by Scharf[9]. In Toronto[20] most street children had dropped out of school before turning 14 years of age (approximately Standard 6 education).

Black boys are worse off than their female and coloured counterparts. Richter[7] notes that a "pass in Standard 2 is considered the minimum educational level" for literacy. The majority of street children are functionally illiterate. The findings are compatible with other studies (Pinnock[50], Scharf[9]) and are an indictement on the state of education in South Africa. It is difficult to compare with international literature because of different educational systems; however internationally there is also an early school leaving age and the majority of street children are barely literate.

Origin

96,8% of street children in Cape Town are from the Western Cape, with a large number (45,9%) of those from Cape Town coming from Bonteheuwel, Elsies River, Guguletu, Mitchells Plain and Khayelitsha.

No local study is large enough to give some meaning to the origins of street children. Richter[7] noted that 87% of the sample came from the Johannesburg/Witwatersrand area. In Columbia Aptekar[48] found that 51% of street children in Cali (the capital of Cauca State) originated from Cali. He noted that in Ganados's Bogota study (ref?) 41% originated from Bogota. Kerfeldt's study[32] in Calgary, Alberta, Canada noted that 74% came from Calgary itself. However in San

Francisco[45] only 28% came from the city itself,with the majority coming from the surrounding regions.

This study also noted that 31,5% had previously been in either a reformatory or a place of safety and that 23,9% had not been living at home before going onto the streets. Richter[2] further noted that "second order runaways"(children who have run away from institutions such as orphanages) accounted for 10-20% of the street children population. She also noted[7] that 19% had been previously admitted either to a reform school or a place of safety.

Other studies have also noted that only a small number of street children are as a result of being orphaned (8% Richter[7]) (6% Scharf[9]).

Most street children originate from the immediate metropolitan area. However street children are present in areas other than the large metropolitan centres. The geographical situation of the city or town in relation to other centres, the ease of access by transport as well as the political situation account for major differences (e.g. San Francisco versus Calgary[32. 45]). The migrant labour system in South Africa brings its own unique situation.

Admission to street children institutions

59,6% of those interviewed on the street had not previously been in a street children institution. 49,1% of those interviewed in the institutions indicated that it was their first admission. Of note is that 23,3% of the total sample (21,3% of those interviewed on the street) had been admitted on three or more occasions (for more than two consecutive nights) to these institutions. Most of the children in Patrick's House had been referred from The Homestead.

A number of the street children who have recently come onto the street are not aware that there are facilities at their disposal. The fact that a number of children have previously been in a place of safety or in a reform school indicates the state of welfare services and the inability to cope with "delinquent" or destitute children adequately.

Time on the street

35,3% of street children interviewed had been on the street less than 6 months whilst 27% had been on the street for more than 3 years. As Richter[7] has indicated, time on the street is not necessarily a single period but may be interspersed with time spent at a home or in a street children shelter. She further described three groupings of "time on the street". Those who rapidly make their way to

institutions, i.e less than 6 months (36%), those who were on the street for 12 to 18 months (44%) and a more "chronic" group of children who were on the street for two years or more (20%). Aptekar[48] found that 66,7% of the street children of Cali, Columbia had been on the street for less than two years.

It would appear that the longer the child is on the street (Richter[7], Saltonstall[29]) the more he/she is distanced from rehabilitation resources and becomes absorbed into the street life culture.

Sicknesses

37,1% of street children perceived colds and chest ailments as problems. Only 5% perceived motor vehicle accidents as a problem and 17% assaults or burns. Comments were made such as "lots of problems because we live like bergies (vagrants)", "get dirty" and "get cold". Another noted that his problems were from solvent abuse. These comments were the exception rather than the rule. No other data exists on what street children perceive as being physical health problems on the street.

When considering the number of street children who have been pedestrian victims in motor vehicle accidents (MVA) (11,3% while on the street) as opposed to assault (15,7%), it is

evident that MVAs are not considered a problem, despite the severity of the outcome in most instances (89% required admission).

The fact that 10,7% did not know what physical problems were encountered and 7,5% indicated no problems, implies either a poor self esteem or a lack of understanding of the physical health of fellow strollers. Saltonstall[29] notes that street children accept the environment and physical health problems as part of the street culture, i.e. abnormality has become "part of a standard".

Medical resources

59,8% indicated that they would use a hospital (day or general) for a serious physical ailment, 3,8% would use The Homestead and 20,8% nobody at all. As far as obtaining medical supplies for minor problems, 36,5% did not worry about the problems, 18,9% used a hospital and 2,5% used The Homestead. The corner cafe was an important source of supply (22%).

Answers to actual facilities used noted that 37,7% used a hospital (although on questioning about admissions while on the street the figure obtained was 47,2%), 16,4% the dentist, 3,8% the TB clinic and 1,9% the venereal disease

clinic. (Some indicated that their venereal disease was treated at the hospital.)

An incident recorded by Bothma[12] relates that a girl was reluctant to go to a nearby hospital following trauma as she had not paid a bill for her confinement.

Only 15,1% indicated that they would use a day hospital despite the fact that the day hospital in Cape Town is in central Cape Town Centre. A number indicated that they found the service better at the general hospital as opposed to the day hospital. At the day hospital they were considered a nuisance and problems arose because they were not escorted. A small number would use a street children shelter. If medical facilities were improved this would become an important factor in drawing children from the street.

Of concern is the lack of use of available resources. In London[34] and Toronto[29] mobile vans have been introduced with effect to improve the access to basic health services. The Toronto mobile medical van offers assistance from counselling to management of sore throats and testing for venereal disease and hepatitis. In London the homeless tend to be "mutually supportive" rather than using day centres or clinics. In San Francisco[45] a "comprehensive array of services" are offered in a clinic directed towards street

youth. Miller et al[16] investigated homeless families in King County, Washington and concluded that there was an under-utilisation of medical services. The American Academy of Paediatrics[17] also documents a problem of access to health care by the homeless. McCormick[44] found that the reasons why the youth were not utilising large hospitals and clinics were that the young people "lacked trust" and found the health care resources intimidating as many of the health care providers showed a "lack of tolerance of the kids and their life styles". Other problems included unrealistic expectations of youth on the street, a fear of involvement with the medical establishment/authorities) and a lack of understanding or education about basic physiological and health care issues (Manov[26]). Brickner[51] in New York also noted the problem of access to health care. Goldman[20] quoted from a study by Goldberg on Toronto's street children where they found that there was a reluctance of street children to seek medical advice, that non-compliance in these adolescents was a problem and that few were "candid" about their circumstances. This last statement implied that the physicians or health care givers were not able to recognise or meet their real needs (Drake[52]).

Manov[26] showed that street youths are an "extremely high risk, hard to reach population whose multidimensional health care needs are largely unmet". She further stated that these youths tended to delay preventative and interventive medical care until there were genuine dysfunctional problems.

This study has revealed the inadequacy of medical facilities and resources for street children in Cape Town, which is exacerbated by the lack of tolerance and understanding for these children at these facilities.

Bathing

73% of the street children interviewed, bathed. However of the total sample, only 48,4% bathed regularly. The facilities most often used were the municipal showers or baths (63,8%). Other facilities used included water from taps used by the flower sellers and showers on the beach front at Sea Point. Clothing was washed by 61,6%. Bothma[12] noted that in a group of strollers a canal was used regularly for bathing and the washing of clothes was assigned to two girls in the group. (Children in Bogota[53] were using the fountains for bathing.)

41,6% of children either never bathed or bathed irregularly. The strollers of central Cape Town have access to a very

good, clean and well maintained public washing facility. I am not aware of other such facilities existing in other areas where street children congregate.

Sleeping facilities

Most street children sleep against a building (61%); this may be a verandah, in a doorway or in an alley. Generally however most children sleep in situations which did not afford much protection from the elements, be it wind, cold or rain.

In Nairobi[24] children slept in doorways or rubbish skips. In Botswana[52] they slept in culverts, empty buildings and vacant lots. Other references are to makeshift shelters and under bridges[25, 12], in the veld or mountains[54], in bus terminals, subways or parks[26]. Some would use just a blanket or sleep under a coat or newspaper[37, 6].

Sleeping facilities constituted a major problem for street children as they felt unsafe at night , were often robbed of their belongings and also had difficulties with sleeping. They often complained that they got cold at night or had aches and pains from the hard sleeping surfaces.

Past medical history

37,7% of strollers had been admitted to a hospital while they were on the street. A large proportion of these admissions were due to trauma (MVA 36%, assault 50% and other 4%). Overall, of the total sample, 31,4% suffered some trauma whilst strolling. Of those assaulted on the street (N = 25), 95,6% received stab wounds and 66,7% (N = 18) needed admission :- 1 laparotomy, 3 for chest drains, 1 fracture of the femur and 13 for observation and wound care.

77,8% of those involved in a MVA (N = 18) were admitted and 8 of these had fractures. Of the total sample therefore (N = 159) 5% required admission to a hospital for MVA related trauma. In all these instances the trauma was incurred while victims were pedestrian.

The majority of admissions to a hospital while strolling, other than for trauma, were due to respiratory tract infections. 2 individuals had been admitted for rheumatic fever; 1 of these whilst strolling.

Richter[7] noted that 34% of her sample had received a head injury at some time, of which 52% were as a result of assault and 48% were as a result of an accident (some related to car accidents and some to solvent abuse).

Trauma plays a significant part in the morbidity of street children. By virtue of their daily activities they are constantly exposed to the dangers of vehicular traffic. However it appears that their abuse of solvents (Sokol[28]) as well as drugs alter their perceptions and reflexes (SANCA[56], Watson[57]) and results in this high trauma rate. Physical abuse by the public and police are also common place (Scharf[9], Swart[86]).

The hospitals most frequently used are dependent on the street children's proximity to the various hospitals. The New Somerset Hospital was used for 42,9% of admissions. A number of young children said that they had been turned away from Groote Schuur Hospital for being "under age".

Respiratory problems experienced

69.2% (N = 110) of street children interviewed said that their major perceived physical problems whilst strolling were colds and chest complaints; of these 40,9% had colds and 37,7% had a "bad cough". Bad coughs and epistaxis may be related to solvent abuse (see discussion later under solvent abuse) which may account for the frequency of this symptom.

11,9% (N = 110) said that they had experienced a tight chest on the street. On examination 2 of the 73 (2,7%) were found to have clinical evidence of lower airways obstruction.

Manov[26] found that street youths in Los Angeles had persistent "flu" and coughs for weeks. Irving[58] and Cohen[40] described a persistent cough in habitual solvent abusers.

6 (3,8%) had been to a tuberculosis clinic whilst strolling but none at the time of interview were still attending this clinic. Slingsby[59] noted that one of the strollers, a 9 year old, had active pulmonary tuberculosis (PTB). Brickner[405] noted an incidence of 4,8% active PTB in people screened at shelters in New York, these were mainly adults. Epistaxis was also noted in 3,6% of street children who experienced respiratory problems. (Epistaxis has been associated with chronic solvent abuse.)

The majority of respiratory complaints were minor. A large number of problems may be related to chronic solvent abuse. Although 3,8% indicated pulmonary tuberculosis (PTB) infection whilst strolling none indicated that they were still attending a TB clinic or had symptoms of PTB.

Gastro-intestinal problems

47,2% (N = 75) complained of various gastro-intestinal problems. 25,3% of these were due to vomiting and 34,6% were due to abdominal cramps. In most cases the cause of vomiting was claimed to be "bad food". However abdominal cramps were due to hunger in most instances. 8,2% noted worms. The finding of 27,4% eosinophilia (N = 64) would suggest worm infestation is far more prevalent; however solvent abuse also causes an eosinophilia (see discussion later on eosinophilia). Diarrhoea was a problem in 11,9%. Here again respondents usually blamed this on eating old or bad food.

No reference is made on gastro-intestinal problems in other studies of street children.

Street children have themselves suggested solutions to many of the gastro-intestinal problems such as not eating from dustbins. However, a tempting packet of (old) sandwiches or food given away by cafe or restaurant owners cannot be resisted on an empty (cramping) stomach.

Dermatological problems

A large number of children had dermatological problems whilst strolling. 43,4% had had lice, 26,4% scabies and 22%

impetigo. Other problems in the history included chickenpox, eczema and urticaria. On examination (N = 73) 4% had lice, 2,7% scabies, 6,8% impetigo and 6,8% tinea capitis.

"Scabies and louse infestation are the major parasitic disorders of the homeless" (Brickner[51]). Most references to dermatological problems are subjective and anecdotal, such as "hands and arms covered with scabs, crusts and sores" (Drake[58]) and "evidence of lice" (Slingsby[59]) and "skin unhealthy, with sores and scars" (Ennew[60]) as well as scabies (Ramsden[39]).

Most common dermatological problems are simple to treat and can be done so by the strollers themselves with the minimum of assistance (ointments, etc.). It would be interesting to correlate the bathing habits with the extent of dermatological problems.

Neurological problems

Questions were qualified to exclude the acute side effects of solvent abuse relating to vision, hearing, sensation, headaches and convulsions; however peripheral neuropathy is a side effect of chronic solvent abuse. 15,7% of children indicated that they had visual problems unrelated to solvent abuse. 1 of the 25 had double vision (on examination he had

a mild intermittent esotropia). The rest complained of reduced visual acuity.

No street children were examined for visual acuity and no other ophthalmological findings were noted on examination.

10,7% of street children complained of impaired hearing, (either bilateral or unilateral) whilst on examination 17,8% had ear-related problems and on audiometry 17,8% had > 30 dB hearing loss in at least one ear at the frequency range of 500 hz - 4 khz. (3 of the 13 of the above had a > 60 dB loss in the same range.)

Eghuono[218] also notes that otitis media and hearing loss are more common among the low socio-economic groups. Of great occurence are the sequelae of otitis media, including purulent otitis media, auditory processing defects, language delays and behavioural problems.

3,8% had had generalised seizures. 2 of the 6 had convulsions whilst strolling but all of them had begun before street life started.

Miller[16] in King County, Washington detected 10,4% (N = 77) of homeless children "required glasses". Cockburn[37] noted that on a visit to a street children shelter in South America that there appeared to be more than the usual number

of children wearing glasses. Eghuono[21] quoting from a National Centre for Health Statistics (NCHS) visual acuity survey states that although myopia is more common in those who are poor, it has a far greater functional impact on the poor.

6,9% had had problems of enuresis whilst strolling or in the institution. At the time of interview this figure was 4,4%.

At first it appeared that the number of enuretics was unduly high and hence the question was inserted into the questionnaire. Without taking into account the actual ages of those children who are enuretic, with the median age of street children at 14,6 years, the incidence for that age is normally 1-2% (Forfar[73]). The problems of enuresis are known to be greater in orphanages, places of safety and child welfare as enuresis is more common in children who have experienced psychosocial problems.

Genitalia/Perineal problems

The social workers and child care workers have reported that sodomy is not infrequent amongst the male street children.

9,3% of the boys (N = 129) had a urethral discharge or sores or warts on their genitalia. 5 of the 30 girls (16,7%) had had vaginal sores or warts or a vaginal discharge. In the

females the cause of vaginal discharges was not specified (being of venereal disease type or otherwise). Furthermore on examination of 9 girls, 2 had a non-specific vaginitis and no sera were positive, Treponema pallidum haemagglutination test (TPHA) or Rapid plasma reagent test (RPR) (syphilis). No swabs were taken for bacteriological investigation.

1 boy out of 73 examined had a penile ulcer from which neiserria species was cultured. (This same individual was actively involved in sodomy but had a negative TPHA and RPR.) 6,25% (N = 64) of males had a positive TPHA.

Chlamydia was detected in almost 50% of street youth in Toronto[20]. Sexually transmitted diseases were detected in 13% (N = 409) of sexually abused children in North Canada[38]. Swartz[30] noted that at a Toronto teen clinic gonorrhoea, chlamydia and urinary tract infection were common.

In a Los Angeles detention centre[26] where 40% of the population were street youth, gonorrhoea was present in 16,4% of the female population and also 19% had non-specific vaginitis. The recommendation made in this article was that single dose treatment was preferred as it did not rely on compliance.

Street youth are at high risk for sexually transmitted diseases (Alperstein[31]). Fortunately this statement in North American literature refers mainly to intravenous drug abusers. However it is still to a certain extent applicable here when noting the extent of sexual exploitation and sodomy (homosexuality).

Sleep disturbances

Not only is sleeping accommodation a problem for street children but also their quality of sleep. (66% have reported sleep problems.) The environment alone is a major factor for causing difficulty in getting to sleep (39,8%), frequent awakening (47,2%) or bad dreams (38,4%). The content of many dreams related to physical abuse, either at home or on the street. Frequent awakenings were recorded as those unrelated to toilet habits and many woke more than three times a night. The problems of frequent awakenings and bad dreams have also been noted in those already in institutions (Hempel[23]).

These facts are part of evidence of the hardship suffered by these youngsters: the implications for their health are not good.

Diet

49,4% of street children bought their food from a nearby cafe. 34,5% were given food by the public, including restaurants and "take-aways" and only 16,5% from soup kitchens. The quality or type of food purchased varied from fish and chips (17,1%) to bread (44,3%). Only 2 of the 18 "other" enjoyed a more balanced meal including cooked food (vegetables and meat). It was interesting to note that 13,3% bought avocados when available as their major food source. Cool drinks (34,8%) (either Coke, Fanta or Sweet Aid) and water (36,7%) were used to quench thirst. The soup kitchens provided in some instances only soup and bread and in others a gruel or stew with bread (plus jam or peanut butter), a fruit and coffee or tea.

Bothma[12] recorded that his group of strollers enjoyed avocados, guava juice and bread stuffed with pickled fish. He further indicated that though their diet consisted mainly of bread and tinned food and occasionally fruit they treated themselves with expensive cool drinks and sweets. Scharf[9] also noted that their diet consisted of leftover food, bread and cool drinks. One particular street child noted by Swart[61] "tried to eat balanced meals", heating up tins of food. This apparently was what he had been taught by his mother.

Unfortunately a large number relied only on bread and water for nutrition. A surprisingly small percentage used the soup kitchens despite the minimal cost (7c) or being free. Simple education of the nutritional value of foodstuffs such as peanut butter with bread and encouraging the use of avocado and fruit would be beneficial. (Avocado is of high nutritional value.) Milk would be of far greater nutritional value at often less expense than cool drinks. It would appear that the diet if adequate is not balanced at the important time of adolescence and growth spurt.

Substance abuse

Solvent abuse

Solvent inhalation was tried by 73,4% and regularly practised by 68,3%; 20,9% indicated that they had stopped. Thinners was mainly used (44,9% of the total sample) although the interviewees had also abused glue, benzene and petrol on occasions. Proportionately more street children abused solvents in the 14 to 18 years and older age groups than the under 14 years age group. No other solvents quoted by other researchers such as aerosol sprays or fluocarbons were abused. Garman[283] in her study on solvent abuse amongst street children in Rondebosch-Mowbray (Cape Town 1987) found that 93,3% (N = 15) abused solvents regularly and 86,6% started once they were on the streets. Only 13,3% (2 out of 15) had abused solvents prior to leaving home. No figures were given but it appeared that there was a "period of resistance" before they started abusing solvents on the street (the range was 2 months to 2 years). Age range of onset of solvent abuse was 7 years to 17 years.

The pattern of solvent abuse ranged from intermittent to that of a daily basis. McNamara[13] noted a 74% incidence of solvent abuse whilst Swart[62] estimated that 95% of street children became solvent abusers. In Shelton's study[11] 78% (N = 13) abused solvents with benzene being the major

solvent abused although 50% also actively abused glue. In the Detainees' Parents Support Committee Report[54] glue was indicated as the solvent mainly abused while Scharf[9] found that although thinners was abused, petrol was mainly abused at night to "keep them 'glowing' through the cold and wet".

Glue and petrol are abused in Nairobi[65], Sudan[72], Botswana[88, 63] and according to the UNICEF report[1] this is a universal problem with street children. The Toronto study[29] however found that in their 12-19 year old group 92,5% had not abused solvents (inhalents).

Solvent abuse is a universal problem and it appears to be particularly so amongst street children. The results of this study probably underestimate the true extent of solvent abuse because of the questionable reliability of the information obtained. However the extent and seriousness of the problem cannot be underestimated as the effects of solvent abuse are potentially very harmful.

Alcohol

It is well known generally that alcohol consumption increases with age. It is difficult to document the specific physical and psychological effect alcohol has on the street children because of other substances abused.

50,6% of street children took alcohol, mainly in the form of beer, and the incidence of alcohol usage increased with age (< 25% of 12 year olds versus 58,7% of children aged 16 years or more). The older the street child, the less likely it was he or she had acquired the alcohol from a friend. However an important source of alcohol for street children was from half empty bottles left over from night clubs

Shelton and Geard[11] found that 62% drank alcohol although Scharf[9] reported that they "seldom" used intoxicants as did vagrants. Drake[63] reports alcohol abuse in Botswana while in California[26] 60% drank regularly and 79%, occasionally (44,7% had serious problems with alcohol). In Toronto[29] 68,3% (N = 120) of 12-19 year olds drank alcohol.

Smoking (tobacco)

Many children have started smoking by the time they are 12 years old. Smoking is seen as acceptable by most of the street children institutions and is an important area for further research and intervention.

87,3% smoke or have smoked cigarettes. As in alcohol abuse there is an increase in smoking with age (< 12 years 85%, 16 years and over 95,6%). The majority (79%) smoke less than 5 cigarettes per day; for these the pattern of smoking is passing a lit cigarette from one individual to another.

Shelton[11] noted that 78% of the boys in Khayamnandi had smoked with an average age of onset of 10 years and 7 months. No other studies investigated smoking.

Other substances abused

Dagga abuse

Dagga abuse occurs throughout the world. Although it is not as much abused by street children in Cape Town as are solvents (Garman[8]) it is nevertheless a significant problem (de Miranda[64]). Dagga has profound acute side effects including hallucinations, paranoid delusions, acute anxiety reactions, psychosis, loss of control resulting in motor vehicle accidents as well as chronic side effects such as lung damage and depressed immune function[64].

Dagga was abused by 43% of the sample. Shelton[11] found that 20% of her sample abused dagga; in Garmans'[8] series 93% abused dagga whilst Scharf[7] comments that "they (the Cape Town strollers) seldom indulge in dagga". Bothma[12] was aware of the use of dagga in his study and noted it to be part of "leisure activity" although the high cost tended to limit its abuse. Dagga is also abused by street children in Nairobi[65] and Botswana[63].

However dagga abuse is not only limited to the African continent. In Boston[29] 62% (N = 120) had abused maruajana or hashish (cannabis). As with alcohol abuse, the frequency of dagga abuse increases with age.

"White Pipe" and "Mandrax"

The use of "white pipe", a mixture of "Mandrax" (methaqualone) and dagga which is smoked, is unique to the South African situation (de Miranda[64]). "White pipe" was abused by 10,8% of the Cape Town sample

"Mandrax" is a mixture of methaqualone and diphenhydramine hydrochloride and was originally manufactured as a non-barbiturate hypnotic. "Mandrax" abuse results in physical dependence; chronic abuse results in loss of weight and malnutrition (de Miranda[64]). In the acute situation "Mandrax" produces pleasant feelings such as relaxation and a sensation of unreality.

"Mandrax" alone in the form of either "buttons"#, "ewings"# or "doelie"# (# see glossary of vernacular terms pg210) was abused by 7,6%. In Boston[29] 5% of the street youth had abused methaqualone or a similar substance. Shelton[11] did not find any evidence of "white pipe" abuse in Khayamnandi neither did Scharf[7] nor Garman[8] mention it.

The combination of solvent, dagga and "Mandrax" abuse can have dire consequences on perceptions. It is the acute situation particularly in relation to motor vehicle accidents to which one's attention is drawn. It is difficult to relate the high incidence of motor vehicle accidents and other trauma directly to substance abuse but it certainly must play a role which is not too insignificant.

Respiratory tract problems are an important physical complaint of street children. One that seems particularly prevalent is the chronic cough. Here it would also be interesting to know what role substance abuse (as opposed to other factors such as environment) has on respiratory tract problems.

Sexual Exploitation

A lot of myths seem to exist about street children's sexual exploitation. Scharf[89] mentions a preliminary study by Smith and notes that girls do not necessarily fall into preconceived patterns of prostitution. He also states that some "reject" prostitution[9]. This rejection was also noted by Bothma[12] in that he found that it was not "particularly popular". Richter[7] may explain this by her statement that there was an "adherence to conventional morality" by street children despite the numerous reports indicating the number

of street children and runaways who had been sexually abused prior to leaving home[8, 30, 66].

Sexual exploitation of street children occurs in Cape Town. Some particular places of contact were noted but what is important is that wherever the street children congregate either by virtue of contact points or because of resources or "facilities available" members of the public abuse them. The night clubs are notorious places of contact. 10,9% of boys and 10% of girls indicated that they had had sexual contact, some on more than one occasion and by more than one type of sexual contact (i.e. homosexual or heterosexual). More boys indicated heterosexual contact than homosexual.

Scharf[9] found that 14,3% of street children made money from prostitution. In his sample boys had both heterosexual and homosexual contacts but more income was generated from "male prostitution".(which is heterosexual)

Keen[49] mentions that in Cape Town prostitution by boys and girls is "fairly common". Swart[62] also mentions that in Johannesburg girls "tend to become prostitutes" and that a "number of boys sell sexual favours to men and women" . Prostitution by street children is also noted in Botswana[63], Nairobi[65], Brazil[54], North America[26], Europe[66] and the East[67]. 7,5% of the street youth in America, West Germany

and Britain[66] were noted to be involved with prostitution although males were more involved than girls.

This subject certainly is emotionally charged and facts are difficult to elicit. This is a particularly sensitive subject which has already been discussed in the chapter on constraints the problem of reliability and representativeness of information obtained. Despite this limitation and low figures obtained for sexual exploitation as compared to broad statements made in the literature, 47,5% of street children interviewed were aware of sexual exploitation and where contacts could or were made. There does appear to be a correlation between the extent of sexual abuse at home and sexual exploitation on the street (Manov[26]).

Earnings

Although one street child indicated that she refused to beg for money, in most situations the street children were organized and earned sufficient money to provide themselves with a meal. It appears from other studies that much of their earnings is spent either on gambling[3], solvents, socialising, going to the cinema or dancing[12]. It is interesting that a system of resource allocation according to need seems to exist among these children (a potential salutory lesson to society at large!).

The earnings taken into account here are those earnings derived by begging or doing odd jobs as opposed to engaging in sexual activity. Despite the picture that the smaller boys did all the begging, the earnings indicated that they were worse off than their peers. An older member of a group of strollers tended to collect the money from the younger boys and redistribute it according to need such as for buying food, going to a soup kichen or leisure activity. Money is earned by numerous "occupations" including washing cars, "parking" cars, sweeping pavements, rubbish sorting, carrying shopping or distributing advertising leaflets[1, 9, 12, 24, 54, 62, 68, 69].

A University of Cape Town research questionnaire[68] noted that street children can earn up to R15 per day although in this study some strollers mentioned earnings of up to R75 on a good Friday at the end of the month. (Motorists at traffic intersections were the main source of money.) Richter[7] noted that street children were able to make up to R20 per day and more on the weekend.

The numbers involved in derivation of earnings from sexual exploitation were too small to make any meaningful assessment. Amounts ranged from one who had not earned anything to one who received R500.

Results of Examination

Anthropometric data

The interpretation of the results of the examination are complicated by the fact that anthropometric data require accurate birth data for interpretation. The tables on anthropometric data have been presented with two groups, total sample and a sample where the age was presumed to be known and correct. However I will discuss the results of the total group as presented on the bar graph.

Hansen[70] and McDonald[71] have both used the NCHS values as references for appropriate growth amongst children in South Africa. Hansen further indicates that height and weight for age are useful as the simplest measure of growth and thus of food intake in children and also that weight for height is useful in extremes of obesity or wasting.

Height for age

32,8% of the sample (N = 67) were less than 90% of expected height for age. In the Johannesburg study[7] 21% of the boys were below 90% of reference. This implies that the Cape Town street children are more stunted (chronically malnourished) than their Johannesburg counterparts.

Weight for age

3,0% were less than 60% of reference and 44,8% were less than 80% of the expected weight for age. The Johannesburg study[7] found that 53% could be classified as underweight (< 80% weight for age).

Weight for age tends to indicate acute malnutrition and height for age for chronic malnutrition or in other words indicates stunting. In his discussion Hansen[70] comments on the fact that about 33,3% of black, coloured and Asian children below the age of 14 years are underweight and stunted. However there is tremendous variation from region to region and within regions. Furthermore underweight and stunting problems tend to taper off towards puberty.

Weight for height (N = 58)

11,5% of the total sample were assessed as having a weight for height as being < 80% of standard. Richter[7] using the Harvard mean as reference found that none of her sample were below 80% of standard.

Circumference of head

8,6% (N = 58) of the children examined had a circumference of head 95% below standard (Tanner and Whitehouse chart in

Buckler[91]). 95% of standard is approximately the 3rd centile and any measurements below this reference value are interpreted as indicating microcephaly. In one child this was presumed to be on the basis of foetal alcohol syndrome and in another as a result of significant trauma to the skull.

It is difficult to compare this study with other studies. The only similarity is that these youngsters come from a situation of deprivation - nutritional, educational, emotional or physical. Comparison would have to be made with low socio-economic areas, particularly the rural areas which have been shown to be worst off in terms of underweight and stunting.

Aptekar[48] challenges the theory that the street children from these poor communities are the worst off and makes the statement that the street children's physical and emotional health was superior to that of those who remained at home as they had had to survive the rigours of the street. He further hypothesises that the most resilient children in any given family actually left or abandoned the home.

Richter[7] compared anthropometric data obtained from two other studies of urban black boys (not street children). She concluded that there were no significant differences and that the psychosocial factors in the backgrounds of the

samples were indistinguishable from those alleged to exist in the backgrounds of street children.

General examination

The aim of the general examination was to detect any evidence of dysmorphic features, to document dermatological problems, to seek any evidence of generalised adenopathy suggesting AIDS and lastly to look for any evidence of solvent abuse manifested by conjunctivitis, peri-oral dermatitis or rhinorrhoea.

Only one child was found to have typical facial features and physical findings suggesting foetal alcohol syndrome. No child was found with generalised adenopathy and all clinical signs suggesting solvent abuse could be explained on the basis of other findings such as atopy or an upper respiratory tract viral infection.

Dermatological findings have been included and discussed under the questionnaire section.

Ear, Nose, Throat, and Dental examination

Ear and audiological findings are of major concern and will have important implications for the future management of street children. 16,1% had either earache or otorrhoea, 16,7% complained of hearing problems whilst on examination

6,8% had either unilateral or bilateral perforation and a further 2,7% had otorrhoea. 15 of 73 (or 23,3%) had one or more ear or audiological related problem, including serous otitis media, significant wax impaction (i.e. causing reducing hearing), scarring of drum, otitis externa and a retracted drum. Audiometry detected a greater than 30dB hearing loss in 17,8% and a greater than 60dB loss in 4,1%. In a study done on SUB B pupils (March 1989) in the Hex River Valley (N = 246, age range 6 years-13 years, mean age 8.25 years), 89 (36%) had an abnormal physical examination and 93 (38%) had a hearing loss of greater than 20dB (personal communication, Dr.D.McClean Child Health Unit, University of Cape Town).

The audiometry was done in the range frequency range (500 hz - 4khz) and amplitude (20dB) of normal human conversation. The findings suggest that many are at risk for hearing impairment in terms of education. Eghuono[21] noted that among the low socio-economic groups otitis media and hearing loss and particularly the sequelae thereof, including purulent otitis media, auditory processing defects, language delays and behavioural problems are more common. This has fundamental implications for the rehabilitation of street children and to ensure the best education opportunity.

Dentition

The questionnaire revealed that 37,7% (N = 159) had had dental problems whilst strolling, while the examination (N = 73) noted 23,3% had obvious dental caries. Dental health is a part of basic hygiene and overall health. Miller[16] found that in homeless children older than 5 years 36% had dental problems (Washington, Seattle). These findings confirm that dental health services, both preventative and curative need to be made more accessable.

Cardiovascular System

2 of 73 children (2,7%) had had rheumatic fever and both of these had residual rheumatic heart disease complications. No other abnormal findings were noted. The fact that rheumatic heart disease is the most commonly acquired heart disease in children in the developing world (Forfar[73]) suggests that a general examination of all children is important, be they street children or not.

Respiratory

Although 37,7% indicated that they had had a bad cough whilst strolling, examination only noted two children with respiratory tract signs, both of whom had lower airways obstruction and other evidence of atopy.

Despite the extent of chronic solvent abuse as well as dagga and "white pipe" abuse no evidence existed clinically of respiratory tract effects. The sample examined (during winter) were those in institutions and the possible effects of environmental exposure (cold wet Western Cape winter) reduced, but by no means stopped substance abuse, may account for this finding. Cohen[46] and Irving[58] found that habitual solvent abuse may result in a persistent cough. De Miranda[64] states that chronic dagga abuse damages the respiratory tract and may result in bronchitis and possible ultimate lung cancer. Here again the lack of respiratory tract findings may suggest tht the degree to which substance abuse occurs (either amount or time) is not sufficient for clinical damage to occur.

Abdominal Examination

No abnormalities were found on abdominal examination. This is despite a Hepatitis B infection rate of 9,4% as detected by serological screening and the degree of solvent abuse which has been noted to cause hepatomegaly (Sokol[28]). One street child examined had a laparotomy scar; the operation had followed an assault.

Neurological Examination

Visual and auditory problems have been discussed elsewhere. Cerebellar signs, albeit mild, were noted in 12,3% (N = 73). At the time of examination none of those with cerebellar signs were obviously intoxicated from either solvents or other substances. All of the above had abused solvents for more than 3 years (one individual had been abusing solvents for 6 years). The most striking feature on examination was the inability of individuals to walk heel to toe along a marked straight line. Other signs such as past pointing, intention tremor and dysdiadochokinesis were more subtle. Watson[77], Irving[58] and Kelly[75] have found cerebellar effects from acute and long term solvent abuse. These effects were noted from both toluene and hexane which are constituents of thinners and plastic cements (glue)[74]. Long term solvent abuse, particularly toluene (Kelly[75]) can result in cerebellar degeneration. Moosa[76] has documented benzene sniffing neuropathy in black children in Natal. No evidence of myopathy or neuropathy was found in this study. Only two respondents indicated having abused benzene in the past although hexane is also known to produce a neuropathy. In one institution where only one respondent was still abusing solvents, he was the only individual with some cerebellar signs.

These findings are important not only in documenting the deleterious effects of solvents but also emphasises the urgency with which the practice must be addressed.

INVESTIGATIONS

Full blood count

33,9% of the haemoglobin measurements done (N = 64)) were low for age and sex and of these 5 had peripheral blood smear pictures compatible with iron deficiency anaemia (namely hypochromia and microcytosis). It is difficult to interpret the serum iron, a total iron binding capacity and percentage saturation findings in relation to anaemia as 28,2% had low serum irons and were not anaemic; 42,9% of those who were anaemic had low serum iron levels. 11 of those who had both low serum iron levels and low haemoglobin had serum ferritins done. No serum ferritins were low. Serum ferritin is an indicator of tissue stores of iron and less sensitive to external influences such as acute or chronic illness.

This degree of anaemia in this population can be partially explained by the bone marrow suppression effect of solvent abuse (Bowers[27], Cohen[40], Sokol[28], Watson[78], Press[79]). Other haematological effects of solvent abuse reported by the above authors include basophilic stippling (Sokol[28]) and

eosinophila (Watson[78], Press[79]) as well as morphological red blood cell changes such as poikilocytosis, anisocytosis and hypochromia. In this study there was no evidence of basophilic stippling. This can be attributed to the fact that this finding in other studies occured in relation to petrol or benzene abuse.

Eosinophilia was noted in 27,4% (N = 64). There are a number of causes of eosinophilia and an important one which was not excluded was parasitic infestation. No stools were collected for parasites. Eosinophilia can therefore not be attributed to solvent abuse.

Another haematological effect of solvent abuse noted by Sokol[28] was the raised white blood cell count. In this study no white cell counts were raised.

Hepatitis B serology

9,4% of the sample (N = 64) tested positive for hepatitis B surface antigen. As no further serology was done no conclusions about infectivity can be drawn. However this result needs to be discussed further in relation to other research on hepatitis in South Africa.

Alperstein[31] comments that the (United States) street youth are at risk for hepatitis B infection by virtue of their lifestyles (i.e. intravenous drug abuse).

Karrim and others[80], in a study on the prevalence and transmission of Hepatitus B infection in urban,rural and institutionalized Black children of Natal noted that in the 6-14 year age group the prevalence rates of hepatitis B antigenaemia for the urban youth was 10%, the rural group 18,5% and in institutions was 25,1%. These results are for the black population group. Karrim quotes the Vos study which found that the prevalence of hepatitis B surface antigen in adult blood donors was 7,4%. However when comparing the prevalence in this study to other studies in higher socio-economic groups of industrialised nations (references quoted by Karrim[80]) such as Europe < 1% and Israel 1,8% this group of street children is at particular risk for developing later complications of hepatitis B infection (chronic hepatitis, cirrhosis and hepato cellular carcinoma) and for being infectious to other people. Although hepatitis B infection has been linked to vertical transmission in the neonatal period, recent investigations (Karrim[80]) indicate that horizontal transmission is particularly important in institutions where there is overcrowding and close physical contact).

The implications for this study are that street children are at a higher risk than the general population for having a hepatitis B infection and that overcrowding in institutions for street children must be limited. The infectivity of hepatitis B is far greater than human immunodeficiency virus (HIV) and if appropriate education and prevention is done for hepatitis B, then HIV infection will be easier to deal with.

HIV antibodies

Antibody results were negative for all 64 specimens tested. The subject of HIV in relation to street children has been broached by a number of researchers and authors. Goldman[20] in Toronto presented findings from a pilot study on the street children in which girls were questioned, regarding contraceptive use and their risk of falling pregnant or of contracting among other sexually transmitted diseases AIDS (auto immune deficiency syndrome). Most felt that they were at little or no risk to contracting AIDS. Alperstein[31] in New York noted that street youth were at risk from contracting AIDS. In Nairobi[65] street children did not believe in AIDS despite efforts to educate them. Baizerman[81] comments that the practice of sodomy amongst street youth may change because of AIDS. People throughout the world have taken cognisance of the fact that street

children are at risk for contracting AIDS. AIDS Action[82], a journal published in London by AHRTAG (Appropriate Health Resources and Technologies Action Group Ltd) has a section on resources, and a video on AIDS which is specifically directed towards the education of street children throughout the world. Even though no positives were detected in this study, effort needs to be directed specifically towards the education of street children, as well as to the public at large.

The issue of AIDS testing of street children is a highly controversial subject and raises various dilemmas. Arguments for the testing of street children for AIDS included:-

- the need to know, particularly with the extent of sexual abuse documented in street children
- for health planning by the care giver
- future planning of resources for street children

Arguments raised against testing of street children included:-

- the further discrimination of an already prejudiced group
- the problem of truly informed consent in children
- if positives were to be encountered, how were the children to be managed.

The University of Cape Town Ethics and Research Commitee reached a consensus that street children could only be tested if the following criteria were met:-

1) Adequate pre-test counselling and education as regards the nature of the disease, risks and outcome.
2) Individual informed consent.
3) The survey was to be anonymous which implied no sample was to be identifiable.
4) Adequate post-test counselling.

Transaminases and liver functions

The results of the bilirubin, ALT (alanine transaminase) and GGT (gamma glutamyl transferase) estimations are difficult to interpret. No single individual had elevation in all parameters which excludes hepatic pathology of infective, toxic or other aetiology. Sokol[28] reviewed various researchers who described hepatic damage as a result of solvent abuse. Press[79] mentions a finding by Sokol of raised lactate dehydrogenase and a Swedish report on hepatomegaly. It is difficult to ascertain from the literature the significance of thinners in relation to hepatic damage. Other hydrocarbons such as carbon tetrachloride and chloroform are far more hepato toxic.

The finding of 46,9% raised alkaline phosphatase levels is interesting. Enzyme studies on these sera attributed this raised alkaline phosphatase to the bone fraction. Pathologists of the Red Cross Children's Hospital chemical pathology laboratory attributed this result to the fact that these individuals are all pubertal and having been malnourished are now undergoing an accelerated phase of pubertal growth (catch up).

Renal function and urine testing

One particular individual had arrived from Natal (a stowaway on a train) and had complained of terminal haematuria for a year prior to strolling. This child had schistosomiasis. Any street child who has resided in the areas endemic to schistosomiasis will need to have bilharzia excluded as a matter of course.

5 individuals had significant proteinuria as assessed by dipstix (Ames-multistix). On random urine protein measurement the results included a range of proteinuria from 0,32 g/l to as high as 3,8 g/l. One street child not included in the study, but known to the street children workers, was admitted to a local hospital in acute renal failure during the time of the study. He was diagnosed as having Goodpasture's syndrome secondary to solvent abuse (thinners in his case).

Watson[78], Press[79], Will[83] and Irving[58] have all documented the nephrotoxic effects of solvent abuse. Some have documented albuminuria, haematuria and cast formation. It is not clear whether the effect is direct toxicity, toxicity of metabolites or an idiosyncratic reaction as may be the case in Goodpasture's syndrome. The proteinuria documented in this study may due to the toxic effects of solvent abuse but other more common problems such as orthostatic proteinuria were not be excluded. Here again the dangers of solvent abuse are manifested and have important implications for the management of the problem of solvent abuse.

Health care practices

There are no standard admission criteria and practices and institutions differ widely. One institution does routine chest X-rays and Heaf tests to exclude pulmonary tuberculosis as well as a full physical check up but no dental care or any venereal disease screening. There is no uniform policy for monitoring health other than management of any new medical problems that may arise.

No uniform policy exists with regard to health care practices amongst the various street children institutions. This is because of the different way in which each one had come into being and also because of differences in local and volunteer services available.

Further, only one institution had any guidance by a professional dietician in terms of meal management and planning. This is complicated by the fact that the institutions depend a great deal on donations of food by major retail outlets at times there is an oversupply of various foodstuffs and a deficiency of others.

Most institutions have more than adequate rules regarding basic hygiene such as bathing, washing of clothes, brushing of teeth and regular changing of bedding.

Generally any programmes for basic intra-institutional (and on the street) education on matters concerning basic hygiene, sex education, AIDS, smoking or substance abuse are limited. All institutions had first aid boxes, which generally contained adequate material for basic first aid, including medication such as antiseptics, anti scabies and anti lice preparations. Some South American[37] shelters have either volunteer nursing staff or nursing assistants as part of their child care worker staff.

No uniformity or policy exists as to responsibility for medication dispensing or the containment of potentially harmful medication.

As far as possible comparison has been made with local and Southern African studies, and then where relevant, with similar studies internationally. No other study has extensively researched the health aspect of street children. The results of this study should help to improve the medical care of street children and hopefully lead to further research to answer the questions and issues raised.

CHAPTER 6 - CONCLUSION

In the interviews a certain number of individuals indicated that they would use The Homestead as a resource for help, either for significant illness or trauma or for minor illness. This has important implications as regards future outreach to street children. The accessibility of medical help and other resources is a problem for street children and other homeless people worldwide; in a number of research articles (UNICEF[1], Baizerman[81], Tacon[92], Balanon[47]) various programmes are discussed to improve the accessibility of basic services, including health and nutrition, to these "hard to reach" (Manov[26]) people.

Reuler[84] quotes Aneurin Bevan. "No society can legitimately call itself civilised if a sick person is denied medical aid because of lack of means." This statement is certainly applicable here today as not only do street children find it difficult to get to medical help but the attitude of personnel at medical facilities tends to keep them away unless they are in dire straits. Not only are street children at risk for physical ailments (Shane[4]) but it is the street youth's own unmet health care needs which constitute a considerable risk to themselves (Manov[26]).

This study has shown that both accessibility and availability of services are a problem. Street children need not become aware of 'help' by default. Introduction of services such as an outreach programme for street children may be important for early intervention.

Substance abuse and particularly solvent abuse appear to have significant health implications for street children. The various studies quoted have demonstrated that numerous organ systems are affected, particularly respiratory, neurological, renal and haemopoietic. Further local research with regard to solvent abuse needs to be carried out to document the impact this has on the street children's health and on their subsequent rehabilitation.

Something that has not been touched upon in this study but was obvious is the problem of babies born to mothers on the street. 5 of the 30 girls interviewed were either pregnant or had babies in the previous two years. First of all there are indications that this will only increase and secondly it is being or has been recognised as a problem in other parts of the world. Bassuk[42, 43] describes problems of neglect and abuse as well as developmental and emotional problems amongst the children of homeless mothers. Alperstein[31] found that there is a high incidence of low birth weight babies as well as a high infant mortality rate and hospital admission rate of children of homeless

mothers. Locally (Keen[49]) the problem of babies/children of street mothers has been highlighted. Manov[26] noted that it may be the fact of a teenage pregnancy that may result in a young girl being forced to leave home and live on the street.

Children of street mothers will become a major problem; new strategies and new programmes will be required to deal with this. This however does emphasise the poor state of preventative programmes in family planning and both street boys and girls need to be educated about family planning.

At the present time there is a tremendous influx of African people into the Western Cape and one can expect that the racial composition of street children in Cape Town will change with time. Few services exist for African children, and especially those on the street. Although delivery of services according to race should be abolished, where comprehensive services do exist attention must be drawn to the particular needs, frustrations and aspirations of black children.

This study has shown that the extent of substance abuse does increase with time spent on the street and consequent problems of trauma. Other problems that would benefit from early intervention are sexual exploitation, physical ailments and their sequelae, malnutrition and functional illiteracy.

The social and economic policies of the present and past South African governments have contributed towards the development of the phenomenon of street children. In a system where people are separated and discriminated against and where the economically disadvantaged bear the burden of poor health, malnutrition, inadequate education and housing, children who have disrupted families and homes are bound to seek refuge on the street. This is the international experience. Even if South African policies were to change in the near future, the phenomenon of street children will remain. The lack of a uniform policy with regard to health care practices in institutions for street children and elsewhere does not help towards future planning. Guidelines need to be drawn up for the improvement of existing services and for the development of new services throughout the country.

CHAPTER 7 - RECOMMENDATIONS

The following recommendations arise from this study:

1. The accessibility of health care resources needs to be improved by

   - Improving basic health care facilities at the street children shelter (as a form of outreach)

   - Liaising with local hospitals and clinics and improving the referral service in existence of contact groups within a hospital or clinic

   - Increasing the number of volunteer medical personnel including doctors, nursing and paramedical

   - Key child care workers may be nursing personnel or be trained in basic first aid.

2. The availability of health services can be improved by increasing the number of services specifically directed towards street children through

   - Contact with the Student Health and Welfare Centres Organisation (SHAWCO) at the University

of Cape Town with the possibility of establishing a mobile medical clinic

- Establishing contact between street children organisations and the Child Health Unit of the Department of Paediatrics and Child Health which could help to identify needs and request more services from the authorities.

3. Outreach to street children organisation health services must be extended beyond research by employing field health workers who will contact, inform and liaise with street children.

4. A health care policy for street children institution and field workers must be drawn up. The following health care practice is suggested:

i. <u>For administration</u>

- General examinations by a medical officer or specially trained nurse

Specifically check : Dentition
: Ear, nose and throat
: Hearing
: For skin problems
: Vision
:Neurological examination to exclude a neuropathy or cerebellar disorder
: Venereal disease testing
: Random urine testing for proteinuria
: Routine haemoglobin testing
: Tuberculosis testing to be done if recommended by the medical examiner
: Management for worms routinely

: Management for scabies, lice and impetigo on an ad hoc basis

ii. <u>For ongoing care</u>

i. Limit overcrowding as far as possible.

ii. Educational programmes with regard to:

Substance abuse, including smoking
Personal hygiene
Sexual hygiene and family planning
AIDS education.

iii. Yearly dental assessments.

iv. Medical review for unexplained school failure.

v. Other clinical tests and examinations dependent on the lifestyle and medical problems of the individual.

vi. Daily bathing and regular brushing of teeth.

vii. Meal management/dietary advice.

5. Venereal disease management must be limited to single dose treatment to improve compliance and acceptability.

6. Further studies are needed to:

   - Further define the extent and clinical significance of substance abuse.

   - Identify the reasons for street children failing to utilize existing health care resources.

   - Identify the reasons for street children not utilizing current street children shelters and institutions.

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APPENDIX 1

ADMISSION CRITERIA AND HEALTH CARE PRACTICES

APPENDIX 1

Date of Questionnare:..... 1

Card No..... 7 .....

QUESTIONNAIRE TO FULFIL OBJECTIVE 2

To define the admission criteria and health care practices of these institutions

1. Name of institution 9

2. Address of institution

3. How many children can the institution accomodate? 12

4. Number of children in home 14

5. Are there any limitations to admission?

		1 2	
1)	Age If yes, state	Y/N	15
2)	Race If yes, state	Y/N	16
3))	Sex If yes, state	Y/N	17
4)	Any other limitations		
	1) Ongoing solvent abuse	Y/N	18
	2) Drug abuse eg.dagga,witpyp etc.	Y/N	19
	3) Ongoing alcohol consumption	Y/N	20
	4) Sexual activity	Y/N	21
	5) Aggressive behaviour	Y/N	22
	6) Antisocial behaviour	Y/N	23
	7) Other (specify):	Y/N	24

6. How do children arrive at the institution?

	1	2	
1) Self-referred	Y/N	☐	25
2) Referred from another institution for street children	Y/N	☐	26
3) Referred from a non-street children institution e.g. police; Child Welfare; social welfare organisation; Children's homes etc.	Y/N	☐	27
4) Other, e.g. members of the public (specify):	Y/N	☐	28

7. Is/are any statutary procedure/s entered into once admitted to the the home?

Y/N ☐ 29

State:

8. Are any other children, other than "Strollers", admitted to the institution?

Y/N ☐ 30

State:

9. Who is responsible for dispensing the medication?

1) Patient/child	Y/N	☐ 31
2) Social worker	Y/N	☐ 32
3) House-parent	Y/N	☐ 33
4) Other (specify)	Y/N	☐ 34

10. Where are potentialy harmful medications kept, such as anticonvulsants, antipsychotic, sedatives?

1) With child	Y/N	☐ 35
2) In an unlocked cupboard	Y/N	☐ 36
3) In a locked cupboard	Y/N	☐ 37
4) In a locked medicine cabinet/box	Y/N	☐ 38
5) Other (specify):	Y/N	☐ 39

11. Whose responsibility is the menu and nutritional aspect of the institution?(Usually)

☐ 40

1) Principal
2) House-parent
3) Cook
4) Dietitian/Nutritionist
5) Children

12. Are there any children who wet their beds?

Y/N ☐ 41

If yes;Do you have a management programme?

Y/N ☐ 42

13. Are there any limitations on duration of stay?

Y/N ☐ 43

If yes: what are the discharge criteria?

14. Are there any other reasons for the street child to be transferred/discharged?

Y/N ☐ 44

If yes: what?

15. Does a rehabilitation programme exist for street children in the institution?

Y/N ☐ 45

If yes: what is the programme?

APPENDIX 2

HISTORY, EXAMINATION AND SPECIAL INVESTIGATIONS

APPENDIX 2A

HISTORY

Number: RMH..... ☐☐☐ 1

Card No..... ☐☐☐ 4

Date of interview: .. ☐☐☐☐☐☐ 7

Name of institution/Street situation: ..... ☐☐ 13 ....

NAME .....

(Nickname or other name)

1. Age ..... Years .... Months ....

   Date of birth .../.../... ☐☐☐☐☐☐ 15

   Sex ..... ☐ 21

   Race .....

2. Questionnaire administered by:

   .....

3. Educational level of child:

   ..... ☐ 22

4. Are/were you in an adaptation class?

   Y/N ☐ 23

5. Date of admission to the institution:

   .../.../... ☐☐☐☐☐☐ 24

6. Child came from (addresses)

a) Home (Suburb Cape Town) (Other Towns) Area Code [ ][ ][ ][ ] 30

b) Other Town:

c) Other than home (Suburb) e.g. relatives/Foster parents Area Code [ ][ ][ ][ ] 34

d) Other institution:
1) Prison/Reformitory [ ] 38
2) Street Children shelter eg.Homestead,Ons Plek, Highway Home)
3) Place of safety/welfare
4) Other

7. Previous admission/s to institution for street children

	1 2	
1) The Homestead	Y/N	[ ] 39
2) Ons Plek	Y/N	[ ] 40
3) Highway Home	Y/N	[ ] 41
4) Khayamnandi	Y/N	[ ] 42
5) Patrick's House	Y/N	[ ] 43
6) Beth Uriel	Y/N	[ ] 44
7) Other	Y/N	[ ] 45
8) Nil	Y	[ ] 46

8. If admitted to an institution for street children: how many times previously?(for more than two consecutive days)

1) 1 [ ] 47
2) 2
3) 3
4) >3
5) 0

9. Time on street (approximate):

1) <= 1 month [ ] 48
2) > 1 month < 3 months
3) > 3 months < 6 months
4) > 6 months < 1 year
5) > 1 year < 3 years
6) >= 3 years

10. Why did you leave home or the institution?

1) Parents hit me [ ] 49
2) Parents drink too much
3) No room for me to stay
4) People fight too much
5) No money
6) sexual abuse/harassment
7) Parents told me to leave home (throwaway)
8) No answer
9) other (specify)

QUESTIONNAIRE TO FULFIL OBJECTIVE 4

1. What kind of sicknesses do children get on the street?

   1) Don't know ☐ 50
   2) Motor accidents
   3) Assaulted/burnt
   4) Colds/Chest problems
   5) Stomach problems
   6) No problems
   7) No answer
   8) Other

2. If you hurt yourself badly today or were sick where would you go for help?

   1) Hospital ☐ 51
   2) Day hospital
   3) Private doctor
   4) Other people
   5) Friends
   6) Nobody
   7) Other stroller
   8) Other

3. If you had a bad headache or cold where could you get tablets or medicine?

   1) Pharmacy ☐ 52
   2) Corner cafe
   3) Clinic
   4) Doctor
   5) Hospital
   6) Other (specify)
   6) Nil

4. Since you have been on the street have you been to the:

	1 2	
1) Dentist	Y/N	☐ 53
2) TB Clinic	Y/N	☐ 54
3) VD Clinic	Y/N	☐ 55
4) Other clinic	Y/N	☐ 56
5) Any hospital	Y/N	☐ 57
6) Nil	Y	☐ 58

5. Do you have any hospital or clinic cards?

   Y/N ☐ 59

   If yes: Note the hospital/clinic names and numbers

6. Now that you are living on the street do you get a chance to wash?

   Y/N ☐ 60

a. If you do wash/bathe, how often?

1) Every day ☐ 61
2) More than 3 times a week
3) Once a week
4) Once in a while

b. Where do you wash?

1) Do you use a tap? ☐ 62
2) Do you use a bath?
3) Do you use a shower?
4) Is there anything else you use?

c. Do you get a chance to wash your clothes?

Y/N ☐ 63

If yes: who washes your clothes?

1)Self ☐ 64
2)Another stroller
3)Other (specify)

7. Where do you usually stay at night?

1) The Dungeon ☐ 65
2) The Jungle
3) At Jesus is Lord
4) Under a bridge
5) Under bushes
6) In a building
7) In a drain pipe
8) With other people
9) Against a building/Under a veranda
10) Other

9. What worries you most from day to day?

1) Is it, Am I going to get food today? ☐ 66
2) Is it, Am I going to get caught by the police?
3) Is it, Where am I going to sleep?
4) Is it, What am I going to do when I am an adult?
5) No answer
6) Is it,What am I going to do when I grow up?
7) Other (specify):

PREVIOUS MEDICAL HISTORY

Patient No.....☐☐☐...3

Card No.....☐....4.....

1. Have you ever been to a hospital?

Y/N ☐ 5

Were you admitted?

Y/N ☐ 6

If yes:

Was it while you were strolling?

Y/N ☐ 7

a. What was wrong with you?

Prompt:

i. Was it because of an accident? Y/N ☐ 8

If yes, what?

If no,

ii. Was it for an operation? Y/N ☐ 9

If yes, what?

If no,

iii. Was it for other reasons? ☐ 10

1)Chest problem (define)
2)Meningitis
3)T.B.
4)Measles
5)Other (specify)

b. To which hospital did you go when you slept over? (While strolling)

1) G.S.H.
2) N.S.H.
3) Conradie
4) Victoria
5) R.X.H.
6) Woodstock
7) Tygerberg ☐ 11
8) Other
9) Don't know

2. Have you had any breathing problems?

1 2
Y/N ☐ 12

If yes: have you ever

1) Had a tight chest (asthma) Y/N ☐ 13
2) Had a blocked nose Y/N ☐ 14
3) Had a runny nose or cold Y/N ☐ 15
4) Been short of breath Y/N ☐ 16
5) Bad cough Y/N ☐ 17
6) Had any other chest problems Y/N ☐ 18
Specify:

3. Have you had any tummy problems?

Y/N ☐ 19

If yes: have you ever had

1) Vomiting? Y/N ☐ 20
2) Constipation? Y/N ☐ 21
3) Diarrhoea? Y/N ☐ 22
4) Worms? Y/N ☐ 23
5) Abdominal cramps? Y/N ☐ 24
6) Any other problems? Y/N ☐ 25
Specify:

4. CVS:

Does your heart ever beat very fast?

Y/N ☐ 26

When does your heart beat fast?
Is it when you use your pinie?

Y/N ☐ 27

Any other time?

Specify:

Have you had any other problems with your heart?
Y/N ☐ 28

Specify:

5. Skin:

Have you had scabies?

1 2
Y/N ☐ 29

Have you had any skin or hair problems? Such as:

1) Lice Y/N ☐ 30
2) Impetigo Y/N ☐ 31
3) Any other rash (specify) Y/N ☐ 32
4) None Y ☐ 33

6. CNS:

Have you had any problems

a) With seeing, such as:

1) Double vision
Y/N ☐ 34

2) Is this when you use your pinie? Y/N ☐ 35
3) Reduced vision
Y/N ☐ 36

4) Is this when you use your pinie? Y/N ☐ 37
5) Hallucinations
Y/N ☐ 38

6) Is this when you use your pinie? Y/N ☐ 39

b) With hearing, such as:

1) Decreased hearing
Y/N ☐ 40

2) Hearing voices
Y/N ☐ 41

3) When do you hear voices?
4) Is it when you use your pinie?
Y/N ☐ 42

c) 1) With numbness in your hands or feet?
Y/N ☐ 43

2) Is it when you use your pinie? Y/N ☐ 44

d) 1) With headaches:
Y/N ☐ 45

2) Is it when you use your pinie? Y/N ☐ 46

e) With sleeping:
1) Do you find you can't get to sleep?
Y/N ☐ 47

If yes, why?

f) 1) Do you wake often at night?
Y/N ☐ 48

2) What wakes you up?

g) 1) Do you have bad dreams?
Y/N ☐ 49

2) What do you dream?

h) 1) Have you had any fits?
Y/N ☐ 50

2) If yes:
When did your fits start
1) While you were strolling
2) Before you began strolling
3) When you were still small
4) Don't know

3) Do you know why you get fits?
1) From a motor accident
2) From another head injury
3) From meningitis
4) Don't know
5) Other

7. GUT:

a) 1) Have you ever wet your bed?
Y/N ☐ 51

2) If yes, are you still wetting your bed?
Y/N ☐ 52

b) Have you ever had the drip/clap?
Y/N ☐ 53

c) Have you ever had sores on your onderdele/peel?
Y/N ☐ 54

d) Have you ever had warts or growths on your onderdele/peel?
Y/N ☐ 55

e) Have you ever had a vaginal discharge?
Y/N ☐ 56

8) Have you got any toothache or rotten teeth?
Y/N ☐ 57

9) Have you got any problems with your ears such as runny ears or earache?
Y/N ☐ 58

DIET

On the street:

(If in an institution, only answer Q.1 if appropriate.)

1. What did you eat yesterday (on the street)?

2. What is your favourite food (on the street)?

☐ 59

1) Bread
2) Avocado
3) Soup
4) Fish and Chips
5) Pies/Hamburger
6) Fish
7) Polony/Meat
8) Other (specify):

3. What do you drink when you are thirsty (on the street)?

☐ 60

1) Soup
2) Water
3) Coffee
4) Cooldrink
5) Friut juices
6) Milk
7) Other (specify):

4. Where do you usually get your food (on the street)?

☐ 61

1) Madeira/Small shop/Cafe
2) Supermarket
3) People (Who give away Sandwiches etc.)
4) Stalls
5) Rubbish bins/Food left around
6) Restaurant/Take away
7) Soup kitchen
8) Other (specify):

BEHAVIOUR

Patient No.....☐☐☐....3

Card No.....☐☐...5....

1. Solvents

a) What do you usually use in your pinie?

1) Thinners ☐ 6
2) Glue (Genkem)
3) Petrol
4) Other
5) Never used a pinie
6) Only tried once or twice
7) Stopped using a pinie

b) When did you start using a pinie?

1) <= 1 month ☐ 7
2) > 1 month < 6 months
3) > 6 months < 1 year
4) >= 1 year

2. Alcohol

a) What do you usually drink?

1) Wine ☐ 8
2) Beer
3) Spirits
4) Other (specify)
5) Don't drink

b) How often do you drink?

1) Every day ☐ 9
2) Two or three times a week
3) Less than once a week
4) Other

c) Where do you usually get your wine?

1) Bottle store/kanteen ☐ 10
2) Shebeen
3) Friends
4) Other

3. Smoking

a) When did you last smoke 'n entjie? ☐ 11

1) Today/Yesterday
2) Last week
3) Never
4) Stopped

b) How many do you smoke a day?

1) < 5 ☐ 12
2) 5 - 10
3) 10 - 20
4) > 20

4. Drugs

a) You enjoy smoking entjies, how often do you smoke dagga?

1) Daily ☐ 13
2) Weekly
3) Other
4) Never

b) How often do you use witpyp?

1) Daily ☐ 14
2) Weekly
3) Less often
4) Never
5) Other

4 How often do you use doelie, ewings or buttons?

1) Daily ☐ 15
2) Weekly
3) Less often
4) Never
5) Other

5. Sexual Behaviour

a) Where is it easiest to find a bunny-catcher,a larnie-catcher,a sugar-mummy or a sugar-daddy?

1) Madeira ☐ 16
2) Parade
3) Sea Point
4) Greenpoint
5) Don't know
6) Other (specify)

b) How often do you get a bunny-catcher?

1) More than once a week ☐ 17
2) Less than once a week
3) Never

c) How often do you get a larnie-catcher?

1) More than once a week ☐ 18
2) Less than once a week
3) Never

d) How often do you get a sugar-mummy?

1) More than once a week ☐ 19
2) Less than once a week
3) Never

e) How often do you get a sugar-daddy?

1) More than once a week ☐ 20
2) Less than once a week
3) Never

f) Did you go to the Docks or the Chinese or other people in the harbour?

Y/N ☐ 21

g) Have you been given money by a bunny-catcher or larnie-catcher or by people in the Docks?

Y/N ☐ 22

h) How much do you usually get paid?

1) <= R50 ☐ 23
2) > R50 < R100
3) >= R100
State exactly how much:

6. How much money do you collect a day?

1) < R5 ☐ 24
2) R5-R10
3) > R10

APPENDIX 2 B

INSTITUTION ..... [ ][ ] 1

NAME .....

NUMBER RMH ..... [ ][ ][ ] 3

CARD NO ..... [ ][ ] 6

DATE OF EXAMINATION ..... [ ][ ][ ][ ][ ][ ] 8

EXAMINATION

1. General

Weight: ..... kg			14 [ ][ ][ ][ ]
Height: ..... cm			18 [ ][ ][ ][ ]
COH: ..... cm			22 [ ][ ][ ]
		1 2	
Dysmorphic features:	- FAS	Y/N [ ]	25
	- other		
		1 2	
Evidence of:	- BCG scar	Y/N [ ]	26
	- pallor	Y/N [ ]	27
	- oedema	Y/N [ ]	28
	- LN (> 1 cm) state where ...	Y/N [ ]	29
	- conjunctivitus/ watery eyes	Y/N [ ]	30
Skin:	- perioral vesic rash	Y/N [ ]	31
	- scabies	Y/N [ ]	32
	- lice	Y/N [ ]	33
	- impetigo	Y/N [ ]	34
	- tinea capitis	Y/N [ ]	35
	- other (specify)	Y/N [ ]	36

2. ENT

		1 2	
Ear	Perforation	Y/N [ ]	37
	Otorrhoea	Y/N [ ]	38
Nose (discharge)		Y/N [ ]	39
Dental caries		Y/N [ ]	40
Other		Y/N [ ]	41

3. CVS

		1 2
Pulses	N/Abn ☐	42
BP:	N/Abn ☐	43
AB:	N/Abn ☐	44
Heart sounds:	N/Abn ☐	45

4. Respiratory — N/Abn ☐ 46

Cough:

Focal signs:

Wheeze:

5. Abdominal

		1 2
Hepar Size (MCL in cm) Character: *firm *hard *irregular	N/Abn ☐	47
Spleen	N/Abn ☐	48
Other masses	N/Abn ☐	49
Anal	N/Abn ☐	50

Warts - accuminata
- lata
Evidence of abuse
Excoriation
Piles
Other

6. Genitalia

		1 2
Male: - rash - ulcer - warts *accuminata *lata - discharge	N/Abn ☐	51
Female: - ulcer - discharge - warts	N/Abn ☐	52

7. CNS

Mannerisms: - tics
- twitches

1 2
Y/N ☐ 53

Evidence of squint Y/N ☐ 54

Hearing screen at 20dB (Test using portable audiometer - Madsen electronics)

N/Abn ☐ 55

	R	L
500hz		
2khz		
4khz		

Power N/Abn ☐ 56

Tone N/Abn ☐ 57

Reflexes N/Abn ☐ 58

Sensation
(excl. peripheral neuropathy) N/Abn ☐ 59

Cerebellar Si - nystagmus N/Abn ☐ 60
- walking along a straight line
State abnormality in full. N/Abn ☐ 61

APPENDIX 2 C.

INSTITUTION ..... [ ][ ][ ] 1

NAME .....

NUMBER RMH ..... [ ][ ][ ] 3

CARD NO..... [ ][ ] 6

DATE OF EXAMINATION ..... [ ][ ][ ][ ][ ][ ] 8

SPECIAL INVESTIGATIONS

1.	FBC	Hb.	14	[ ][ ][ ]
		MCV	17	[ ][ ][ ]
		RDW	20	[ ][ ][ ]
		WBC	23	[ ][ ]
		PLAT	25	[ ][ ][ ]
	Diff:	N	28	[ ][ ]
		L	30	[ ][ ]
		M	32	[ ][ ]
	Eosinophils:	1 2 N/↑	34	[ ]
	Basophilic stippling	N/Y	35	[ ]
2.	LFT			
	- Bilirubin		36	[ ][ ][ ]
	- alb		39	[ ][ ]
	- ALT		41	[ ][ ][ ]
	- ALP		44	[ ][ ][ ]
	- GGT		47	[ ][ ][ ]
3.	Iron studies:			
	- Se.Fe		50	[ ][ ][ ]
	- T.I.B.C		53	[ ][ ][ ]
	- % Sat		56	[ ][ ]
	- Se Ferritin (if ↓Se.Fe/↑TIBC)		58	[ ][ ][ ]

CARD NO..... 1

R.M.H. No..... 3

4. Renal function

- urea 6
- creat 9

5. Serum lead(to be processed at a later date)

6. Sereology

	1 2	
- VDRL	-ve/+ve	12
- TPHA	-ve/+ve	13
- HIV (anonymous group screen)		
- Hepatitis		
HBsag	-ve/+ve	14
HBeag	-ve/+ve	15
HBsab	-ve/+ve	16
HBeab	-ve/+ve	17

7. Urine Multistix:

Leuc	-ve/+ve	18
Nitrite	-ve/+ve	19
Urobil	-ve/+ve	20
Protein >1+	-ve/+ve	21
Blood	-ve/+ve	22
Ketone	-ve/+ve	23
Bili	-ve/+ve	24
Glucose	-ve/+ve	25

8. Urine MC & S if indicated. -ve/+ve 26

Any other test would be as a result of abnormal findings in the above.

APPENDIX 3

HEALTH CARE RESOURCES USED BY THE INSTITUTION

HEALTH CARE RESOURCES USED BY THE INSTITUTION

Name of institution .....☐☐..2....

Card No.....☐☐4.....

1. Is there a routine medical check-up on admission?

Y/N ☐ 5

2. Are children sent routinely/regularly to any of the following clinics?

	1 2	
1) VD Clinic (STD)	Y/N ☐	6
2) Dentist	Y/N ☐	7
3) TB Clinic	Y/N ☐	8
4) City Health Clinic	Y/N ☐	9
5) Day Hospital	Y/N ☐	10
6) Hospital	Y/N ☐	11
7) Medical Personnel	Y/N ☐	12
8) Other institutions (specify)	Y/N ☐	13

If yes to any of the above, please elaborate.

3. Are any immunisation records available

Y/N ☐ 14

If no, are any children referred for immunisation?

Y/N ☐ 15

4. Do any medical facilities exist at the institution?

Y/N ☐ 16

If yes,any of the following:	1 2	
1) First aid box	Y/N ☐	17
2) Plasters	Y/N ☐	18
3) Antiseptics	Y/N ☐	19
4) Anti-scabies medication	Y/N ☐	20
5) Vitamin syrups	Y/N ☐	21
6) Analgesics	Y/N ☐	22
7) Antipyretics	Y/N ☐	23
8) Cough remedy	Y/N ☐	24
9) Flu/Runny nose remedy	Y/N ☐	25
10) Anti lice	Y/N ☐	26
11) Other(specify):	Y/N ☐	27

5. If an emergency, e.g. convulsion/injury, arises:

i. What facility is used for most emergencies during hours?
1) Day Hospital ☐ 28
2) Hospital
3) Other(specify):

ii. What facility is used for most emergencies after hours?
1) Day Hospital ☐ 29
2) Hospital
3) Other(specify):

iii. How is the patient usually transported to a medical facility?
1) Private transport ☐ 30
2) Ambulence
3) Other(specify):

iv. Is a district surgeon ever used?

Y/N ☐ 31

If yes,What for?
1) Rape Y/N ☐ 32
2) Assault Y/N ☐ 33
3) Indescent assault Y/N ☐ 34
4) Other(specify): Y/N ☐ 35

6. Are toothbrushes and toothpaste supplied?

Y/N ☐ 36

7. Is there any supervision of ablutions?

Y/N ☐ 37

If yes:

	1 2	
1) Daily bathing/showering	Y/N	38
2) Washing of clothes	Y/N	39
3) Weekly cleansing of bedding	Y/N	40

8) Does any education project exist with reference to health? e.g. in Learn to Live

1) Nutrition	Y/N	41
2) Dental care	Y/N	42
3) Hygiene	Y/N	43
4) Sex education	Y/N	44
5) Smoking	Y/N	45
6) Drug/solvent/alcohol abuse	Y/N	46
7) Aids	Y/N	47
8) Other (specify)	Y/N	48

APPENDIX 4

AFRIKAANS TRANSLATION OF APPENDIX 2A

APPENDIX 4

GESKIEDENIS

Nommer: RMH .....[ ][ ][ ]... 1

Kaart No.....[ ][ ][ ]... 4

Datum van onderhoud: [ ][ ][ ][ ][ ][ ] 7

Naam van inrigting of straat omgewing: [ ][ ]..... 13

NAAM .....

(Bynaam of ander naam)

1. Ouderdom ..... Jare ..... Maande .....

   Geboortedatum .../.../... [ ][ ][ ][ ][ ][ ] 15

   Geslag 21

   Ras .....

2. Vraelys behartig deur:

   .....

3. Opvoedingspeil van kind:

   22

4. Was jy in 'n aanpassings klas?

   J/N 23

5. Datum van toelating:

   .../.../... [ ][ ][ ][ ][ ][ ] 24

6. Kind het gekom vanaf (adres)

a) Tuis (Kaapstad voorstede) (Buite Kaapstad) Area Kode ☐☐☐☐ 30

b) Ander as tuis b.v. familie/pleegmense (voorstad) Area Kode ☐☐☐☐ 34

c) Ander inrigting:
1) Gevangenis/Verbetering Skool ☐ 38
2) Straat Kinder inrigting b.v.Homestead,Ons Plek,Highway Home
3) Plek van veilighied/welsyn
4) Ander

8. Vorige toelatings tot inrigtings vir straatkinders

1) Die Homestead	J/N	☐	39
2) Ons Plek	J/N	☐	40
3) Highway Home	J/N	☐	41
4) Khayamnandi	J/N	☐	42
5) Patrick's House	J/N	☐	43
6) Beth Uriel	J/N	☐	44
7) Ander	J/N	☐	45
8) Nil	J	☐	46

9. Indien toegelaat tot inrigting vir straatkinders, hoeveel keer (vir meer as twee opeenvolgende dae)

1) 1 ☐ 47
2) 2
3) 3
4) >3
5) 0

10. Tydsduur op straat (ongeveer):

1) <= 1 maand ☐ 48
2) > 1 maand < 3 maand
3) > 3 maand < 6 maand
4) > 6 maand < 1 jaar
5) > 1 jaar < 3 jare
6) >= 3 jare

11. Hoekom het jy jou huis/inrigting verlaat?

1) Ouers slaan vir my ☐ 49
2) Ouers drink baie
3) Geen plek vir my om te bly
4) Mense baklei te baie
5) Geen geld nie
6) Seksuele misgebruik
7) Ouers het my weggejaag
8) Wil nie se nie
9) Ander (spesifiseer):

VRAELYS OM DOELWIT 4 UIT TE VOER

1. Watter soort siektes kry straat kinders?

1) Weet nie ☐ 50
2) Motor ongeluk
3) Aangeraand/verbrand
4) Verkoue/Borsprobleme
5) Maag probleme
6) Geen probleme
7) Geen antword
8) Ander

2. As jy seergekry het of siek was waarnatoe gaan jy?

1) Hospitaal ☐ 51
2) Dag hospitaal
3) Die dokter
4) Ander mense
5) Vriende
6) Niemaand
7) Ander Stroller
8) Ander

3. As jou kop seer is of as jy verkoue is waar kry jy pille of medisyne?

1) Apteek ☐ 52
2) Kafee op die hoek
3) Kliniek
4) Dokter
5) Hospital
6) Ander (spesifiseer)
7) Nil

4. Vandat jy op straat is, was jy al by:

	1 2	
1) Die tandarts	J/N	☐ 53
2) TB Kliniek	J/N	☐ 54
3) VD Kliniek	J/N	☐ 55
4) Ander kliniek	J/N	☐ 56
5) Enige hospitaal	J/N	☐ 57
6) Nil	J	☐ 58

5. Het jy 'n hospitaal of kliniekkaart?

J/N ☐ 59

Indien ja, Neem hospitaal/kliniek name en nommers

6. Kry jy 'n kans om te was as jy op straat bly?

J/N ☐ 60

a. As jy was of bad, hoeveel keer:

1) Elke dag ☐ 61
2) Meer as 3 maal per week
3) Een keer per week
4) Elke nou en dan

b. Waar was jy?

1) Is daar 'n kraan? ☐ 62
2) Is daar 'n bad?
3) Is daar 'n shower?
4) Is daar enigiets anders wat jy gebruik?

c. Is daar kans om jou klere te was?

J/N ☐ 63

Indien ja: wie was jou klere?

1) Jyself ☐ 64
2) 'n Ander stroller
3) Ander (spesifeer)

7. Waar bly jy gewoonlik in die nag?

1) Die Dungeon ☐ 65
2) Die Jungle
3) By Jesus is Lord
4) Onder 'n brug
5) Onder bosse
6) In 'n gebou
7) In 'n pyp
8) By ander mense
9) Teen 'n gebou/by 'n afdak
10) Ander

8. Wat worry jou die meeste van dag tot dag?
Spoor aan:
1) Is dit, Waar gaan ek kos kry vandag? ☐ 66
2) Is dit, Sal die polisie my vang?
3) Is dit, Waar gaan ek slaap?
4) Is dit, Wat gaan ek doen as ek 'n groot mens is?
5) Geen antwoord
6) Is dit,Sal ek skool toe kan gaan?
7) Ander(Spesifiseer):

VORIGE MEDIESE GESKIEDENIS

Patient No.....☐☐☐....3

Kaart No.....☐.....
4

1. Het jy al ooit na 'n hospitaal toegegaan?

1 2
J/N ☐ 5

Was jy opgeneem?

J/N ☐ 6

Indien ja:

Was dit terwyl jy gestrol het?

J/N ☐ 7

a. Wat was verkeerd met jou?

Spoor aan:

i. Was dit 'n ongeluk? J/N ☐ 8

Indien ja, spesifeer?

Indien nee,

ii. Was dit 'n operasie? J/N ☐ 9

Indien ja, wat?

Indien nee,

iii. Was dit vir ander redes? ☐ 10

1) Borsprobleme (spesifiseer)
2) Meningitis (Breinvlies ontsteking)
3) TB
4) Masels
5) Ander (spesifiseer)
6) Nee

b. In watter hospitaal het jy geslaap?(Terwyl jy gestrol het) ☐ 11

1) G.S.H.
2) N.S.H.
3) Conradie
4) Victoria
5) R.X.H.
6) Woodstock
7) Tygerberg
8) Ander
9) Weet nie!

2. Het jy asemhalings probleme gehad? 1 2

J/N ☐ 12

Indien ja: Het jy hierdie probleme al gehad

1) Toe bors (Asma)? J/N ☐ 13
2) Toe neus? J/N ☐ 14
3) Snotneus,Verkoue J/N ☐ 15
4) Kort van asem J/N ☐ 16
5) Erge hoes J/N ☐ 17
6) Enige ander bors kwale? J/N ☐ 18

Spesifiseer:

3. Het jy maagprobleme gehad?

J/N ☐ 19

Indien ja: Het jy hierdie probleme gehad?

1) Braak/opgooi? J/N ☐ 20
2) Hardlywigheid/maag wil nie werk nie? J/N ☐ 21
3) Maagwerk? J/N ☐ 22
4) Wurms? J/N ☐ 23
5) Krampe in jou buik? J/N ☐ 24
6) Enige ander probleem? J/N ☐ 25

Specifiseer:

4. SVS:

Klop jou hart partymaal baie vinnig?

J/N ☐ 26

Wanneer klop dit so?
Is dit as jy die pinie gebruik?

J/N ☐ 27

Klop dit vinnig op enige ander tyd?

Spesifiseer:

Het jy al ander probleme met jou hart gehad?

J/N ☐ 28

Spesifiseer:

5. Het jy al help my krap op jou vel gehad?

1 2
J/N ☐ 29

Het ander probleme met jou vel of haar gehad? Soos:

1) Luise J/N ☐ 30
2) Sere(Impetigo) J/N ☐ 31
3) Uitslag (spesifiseer) J/N ☐ 32
4) Nee J ☐ 33

6. SSS:

a) Het jy probleme met kyk soos:

1) Dubbel sien
J/N ☐ 34

2) Is dit as jy die pinie gebruik? J/N ☐ 35

3) Nie goed kan sien nie
J/N ☐ 36

4) Is dit as jy die pinie gebruik? J/N ☐ 37

5) Sien jy snaakse dinge
J/N ☐ 38

6) Is dit as jy die pinie gebruik? J/N ☐ 39

b) Het jy probleme om te hoor soos:

1) Nie goed kan hoor nie
J/N ☐ 40

2) Hoor jy stemme?
J/N ☐ 41

3) Wanneer hoor jy stemme?

4) Is dit as jy 'n pinie gebruik?
J/N ☐ 42

c) 1) Raak jou hande en voete dood?
J/N ☐ 43

2) Is dit as jy 'n pinie gebruik? J/N ☐ 44

d) 1) Het jy probleme met kopseer?
J/N ☐ 45

2) Is dit as jy 'n pinie gebruik? J/N ☐ 46

e) Met slaap:

1) Is dit swaar om aan die slaap te raak?
J/N ☐ 47

2) As ja, hoekom?

f) 1) Word jy baie keer wakker in die nag?
J/N ☐ 48

2) Wat maak jou wakker?

g) 1) Het jy slegte drome?

J/N ☐ 49

2) Wat droom jy?

h) 1) Het jy al stuipe/fits gehad?

J/N ☐ 50

2) Indien ja:
Wanneer het die stuipe begin?
1) Terwyl jy gestrol het
2) Voor jy gestrol het
3) Weet nie

3) Weet jy hoekom kry jy stuipe?
1) Van motor ongeluk
2) Van ander kop besering
3) Van meningitis
4) Weet nie
5) Ander

7. Urinewee:

a)1) Het jy al jou bed natgemaak?

J/N ☐ 51

2) Indien ja: Maak jy nog jou bed nat?

J/N ☐ 52

b) Het jy al die drip/clap gehad?

J/N ☐ 53

c) Het jy al sere aan jou onderdele gehad?

J/N ☐ 54

d) Het jy al vratte of groeisels aan jou onderdele gehad?

J/N ☐ 55

e) Het jy 'n afskeiding van jou vagina gehad?

J/N ☐ 56

8) Het jy tandpyn of vrot tande?

J/N ☐ 57

9) Het jy probleme met jou ore soos lekoor of seer ore?

J/N ☐ 58

KOS

Op die straat:

(As 'n inrigting beantwoord Vra. 1 as moontlik)

1. Wat het jy gister geeet (op die straat)?

2. Van watter kos hou jy die meeste (op die straat)?

1) Brood ☐ 59
2) Avocado
3) Sop
4) Fish and Chips
5) Pies/Hamburger
6) Vis
7) Polony/Vleis
8) Ander (spesifiseer):

3. Wat drink jy as jy dors is (op die straat)?

1) Sop ☐ 60
2) Water
3) Koffie
4) Kooldrank
5) Vrugte sap
6) Melk
7) Ander (spesifiseer):

4. Waar kry jy gewoonlik jou kos (op die straat)?

1) Madeira/Klein Winkel/Kafee ☐ 61
2) Groot Winkel
3) Mense (wat hulle toebroodjies e.n.s. weggee)
4) Stal
5) Vullis bakke/Kos wat agter gelos is
6) Restaurant/Take away
7) Soup kitchen
8) Ander (spesifiseer):

GEDRAG

Patient No.....☐☐☐...3

Kaart No.....☐☐....5..

1. Oplosmiddels

a) Wat sit jy gewoonlik in jou pinie?

1) Thinners ☐ 6
2) Glue (Genkem)
3) Petrol
4) Ander
5) Nog nooit 'n pinie gebruik nie
6) Net een of twee keer probeer en gelos
7) Snif nie meer 'n pinie nie

b) Wanner het jy begin met die pinie?

1) <= a maand ☐ 7
2) > een maand < 6 maande
3) > 6 maande < 1 jaar
4) > 1= jaar

2. Alkohol

a) Wat drink jy gewoonlik?

1) Wyn ☐ 8
2) Bier
3) Spirits
4) Ander (spesifiseer)
5) Nog nooit gedrink nie

b) Hoeveel drink jy?

1) Elke dag ☐ 9
2) Twee of drie keer per week
3) Minder as een keer per week
4) Ander

c) Waar kry jy gewoonlik jou wyn

1) Bottle store/kantien ☐ 10
2) Shebeen
3) Vriende
4) Ander

3. Rook

a) Wanneer laas het jy 'n entjie gerook?

1) Vandag/Gister ☐ 11
2) Laas week
3) Nog nooit
4) Opgehou

b) Hoeveel rook jy per dag?

1) < 5
2) 5 - 10
3) 10 - 20
4) > 20

☐ 12

4. Dwelm middels

a) Jy hou van entjies, hoeveel dagga rook jy?

1) Daagliks
2) Weekliks
3) Ander
4) Nog nooit gerook nie

☐ 13

b) Hoeveel witpyp rook jy?

1) Daagliks
2) Weekliks
3) Minder as dit
4) Nog nooit gerook nie
5) Ander

☐ 14

4. Hoeveel doelie, ewings of buttons gebruik jy?

1) Daagliks
2) Weekliks
3) Minder as dit
4) Nog nooit
5) Ander

☐ 15

5. Seksuele gedrag

a) Waar is dit die maklikste om 'n bunny-catcher,'n larnie-catcher,'n sugar-mummy of sugar-daddy te vind?

1) Madeira
2) Parade
3) Seepunt
4) Greenpoint
5) Weet nie
6) Ander (spesifiseer)

☐ 16

b) Hoeveel keer kry jy 'n bunny-catcher?

1) Meer as een maal per week
2) Minder as een maal per week
3) Nooit

☐ 17

c) Hoeveel keer kry jy 'n larnie-catcher?

1) Meer as een maal per week
2) Minder as een maal per week
3) Nooit

☐ 18

d) Hoeveel keer kry jy 'n sugar-mummy?

1) Meer as een maal per week ☐ 19
2) Minder as een maal per week
3) Nooit

e) Hoeveel keer kry jy 'n sugar-daddy?

1) Meer as een maal per week ☐ 20
2) Minder as een maal per week
3) Nooit

f) Was jy al by die Docks ,of by die Chinese of by ander mense in die hawe?

J/N ☐ 21

g) Het jy geld van 'n bunny-catcher of larnie-catcher of by die Docks gekry?

J/N ☐ 22

h) Hoeveel betaal hulle gewoonlik?

1) <= R50 ☐ 23
2) > R50 < R100
3) >= R100
Skryf presies hoeveel: R

6. Hoeveel geld kry jy op 'n dag?

1) < R5 ☐ 24
2) R5-R10
3) >R10

APPENDIX 5

CODING SHEET

APPENDIX 5

CODING SHEET

1) Name of Institution

1) The Homestead
2) Ons Plek
3) Highway Home
4) Patrick's House
5) Khayamnandi
6) James House
7) Beth Uriel
8) Bruce Duncan Home
9) Interview on the Street
10) Other

2) Race/Sex

1) White male
2) White female
3) Coloured male
4) Coloured female
5) Asian male
6) Asian female
7) Black male
8) Black female

3) Level of Education

0) No schooling
1) Sub A
2) Sub B
3) Std 1
4) Std 2
5) Std 3
6) Std 4
7) Std 5
8) Std 6
9) = or > Std 7

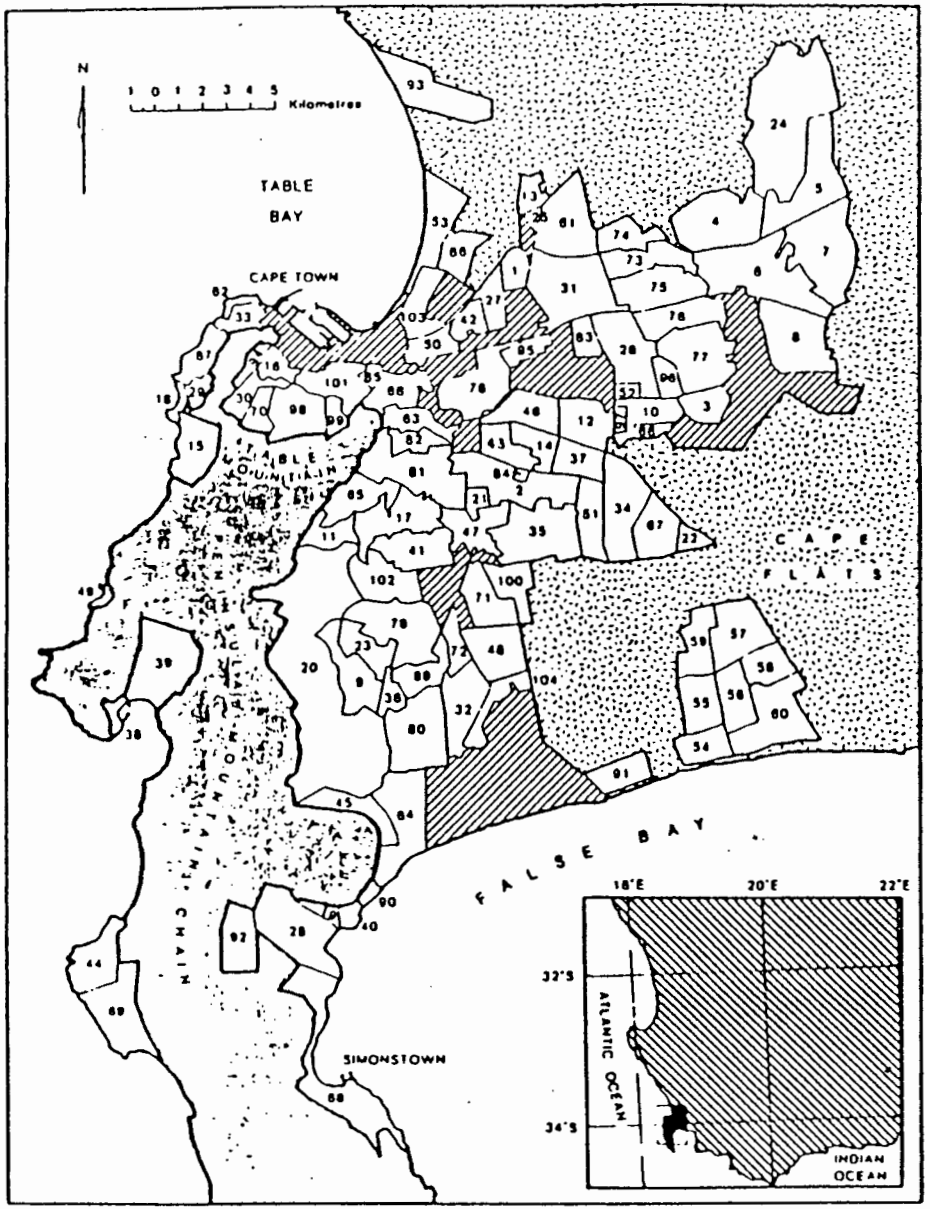
4) Area code

1) For Metropolitan Cape Town see map
2) Other

Khayalitsha	105
Philippi	106
Rest of Western Cape	107
Rest of Cape	108
Rest of R.S.A.	109
Other	110

APPENDIX 6

MAPS

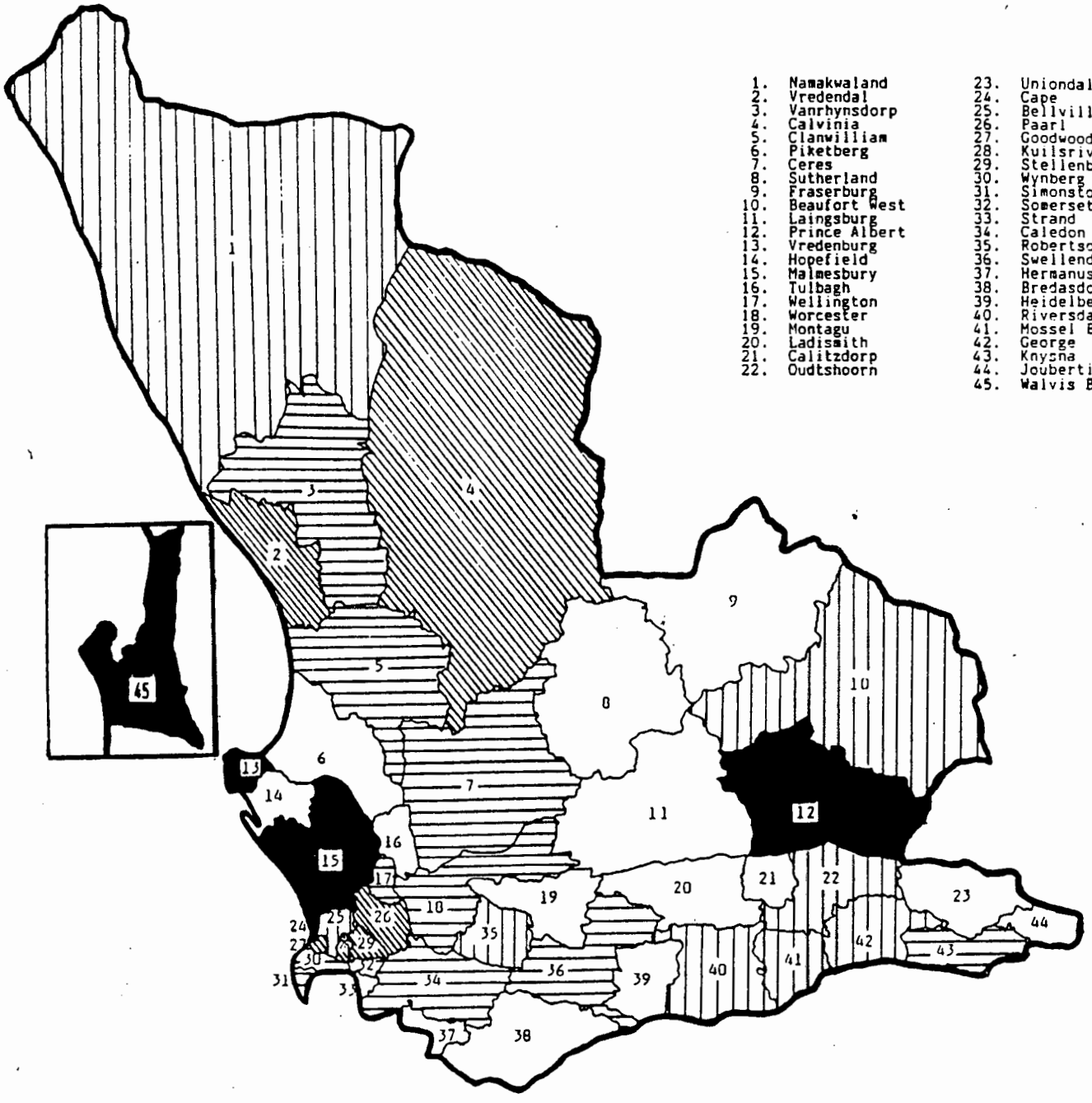


Non-Residential Areas within Metropolitan Cape Town Mountain Areas Rural Areas

Map showing the 104 suburbs of Metropolitan Cape Town.

Suburb No.	Suburb/area name
1	Acacia Park
2	Athlone
3	Belhar
4	Bellville North 1
5	Bellville North 2
6	Bellville Central
7	Bellville East
8	Bellville South
9	Bergvliet
10	Bishop Lavis
11	Bishopscourt
12	Bonteheuwel
13	Bothasig
14	Bridgetown
15	Camps Bay
16	Cape Town
17	Claremont
18	Clifton
19	Clovelly
20	Constantia & Tokai
21	Crawford
22	Crossroads
23	Diep River
24	Durbanville
25	Edgemead
26	Elsies River
27	Factreton
28	Fish Hoek
29	Fresnaye
30	Gardens
31	Goodwood
32	Grassy Park
33	Green Point
34	Guguletu
35	Hanover Park
36	Heathfield
37	Heideveld
38	Hout Bay Harbour
39	Hout Bay
40	Kalk Bay
41	Kenilworth
42	Kensington
43	Kewtown
44	Kommetjie
45	Lakeside
46	Langa
47	Lansdowne
48	Lotus River
49	Llandudno
50	Maitland
51	Mannenberg
52	Matroosfontein
53	Milnerton
	Mitchell's Plain:
54	Rocklands
55	Westridge
56	Portlands
57	Lentegeur
58	Beacon Valley
59	Woodlands
60	Eastridge & Tafelsig
61	Monte Vista
62	Mouille Point
63	Mowbray
64	Muizenberg
65	Newlands
66	Nooitgedacht
67	Nyanga
68	Observatory
69	Ocean View
70	Oranjezicht
71	Ottery
72	Parkwood
73	Parow North 1
74	Parow North 2
75	Parow Central
76	Parow South 1
77	Parow South 2
78	Pinelands
79	Plumstead
80	Retreat
81	Rondebosch
82	Rosebank
83	Ruyterwacht
84	Rylands
85	Salt River
86	Sanddrift
87	Sea Point
88	Simonstown
89	Southfield
90	St James
91	Strandfontein
92	Sun Valley
93	Table View
94	Tamboerskloof
95	Thornton
96	Uitsig
97	Valhalla Park
98	Vredehoek
99	Walmer
100	Welton
101	Woodstock
102	Wynberg
103	Ysterplaat
104	Zeekoevlei

WESTERN CAPE HEALTH REGION



APPENDIX 7

DUMMY TABLES

APPENDIX 7 : DUMMY TABLES

A. Frequency Distribution Tables

1.	Basic Data:	Age Sex Race
2.	Medical Problems:	Past Current
3.	Surgical Problems:	Past Current
4.	Behaviour:	Solvent Abuse Alcohol Abuse Smoking "Sexual Abuse" Bedwetting
5.	Anthropometric Measurements:	Ht Wt Wt/Ht
6.	Diet on the Street:	Where food is obtained Type of food

B. Association Tables

To indicate the association between time spent on the street prior to admission to the institution and:

1. Solvent abuse
2. Sexual abuse
3. Malnutrition
4. Serum Pb level

To indicate the association between time spent on the street prior to admission to the institution and:

1. The time taken to settle into the institution.
2. The number of readmissions to the institution.

APPENDIX 8

GLOSSARY OF VERNACULAR TERMS

GLOSSARY OF VERNACULAR TERMS

Pinie - Plastic container into which is placed a rag soaked with solvent. The mouth is placed over the orifice and the vapours are rapidly inhaled and exhaled

Thinners - benzine (for paint)

Madiera - reference to cafe usually run by people of Portuguese origin

Entjies - cigarettes

Witpyp - mixture of crushed mandrax tablet and dagga

Buttons - mandrax tablets

Doelie, Ewings - types of mandrax

Bunny-catcher - implied by street children to mean a young homosexual male

Larnie-catcher - implied by street children to be an older, well dressed male seeking sexual favours from male street children

Sugar-mummy - a woman seeking sexual favours(heterosexual)

Sugar-daddy - a male seeking sexual favours(heterosexual)