

https://dspace.org/

Social and dietary practices of Soweto families who protect agains overt malnutrition in their children

Bloom, Deborah Yael

2015-01-09
http://hdl.handle.net/10539/16324

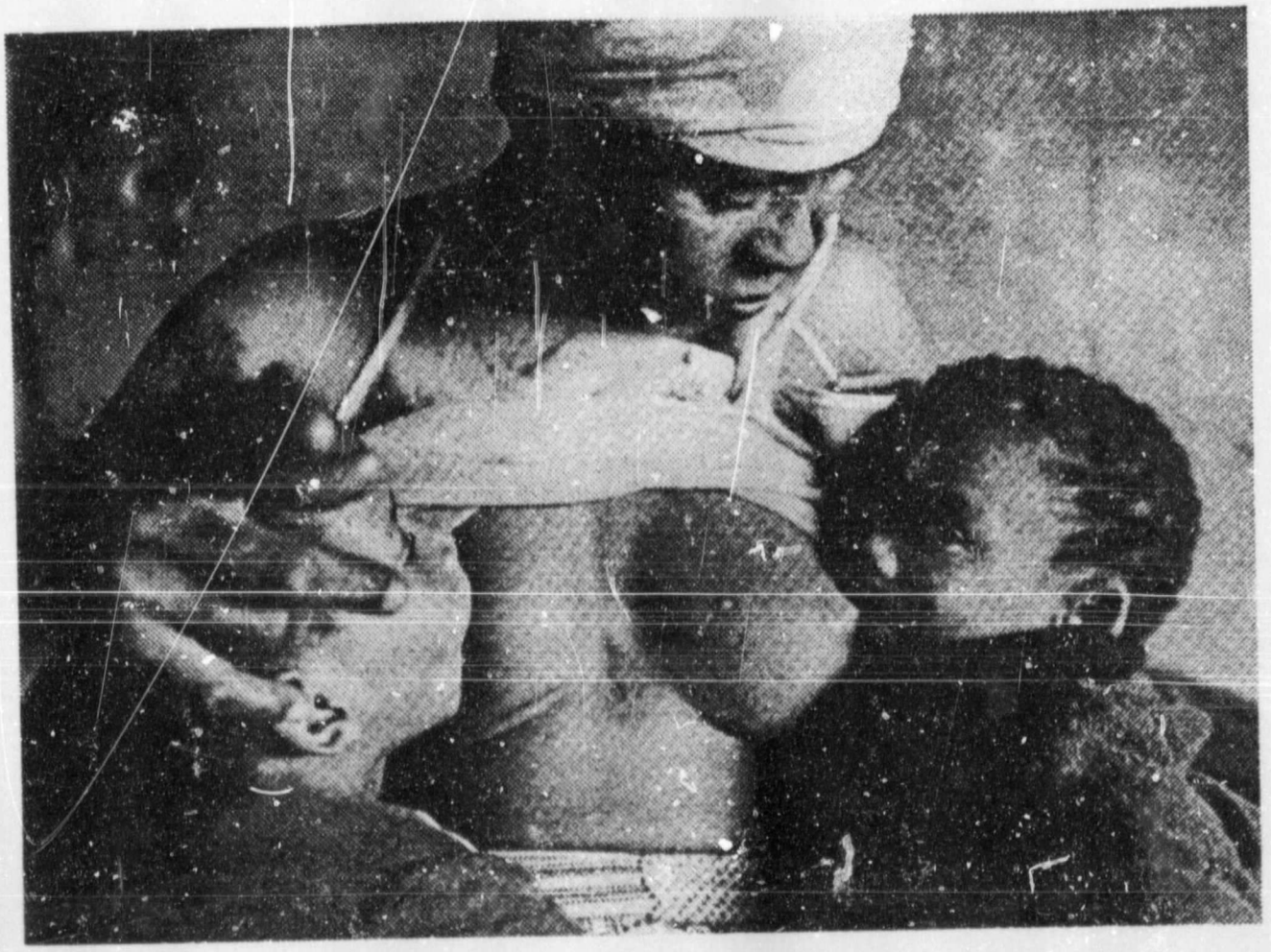
Downloaded from a DSpace repository. https://dspace.org/

SOCIAL AND DIETARY PRACTICES OF SOWETO FAMILIES WHO PROTECT AGAINST C[illegible]RT MALNUTRITION IN THEIR CHILDREN

Deborah Yael Bloom

A dissertation submitted to the Faculty of Arts, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Master of Arts in Social Work.

Johan[illegible]esburg, 1988.



Photograph by Karl Sansom. Reprinted from Staffrider Magazine: South Africa Through the Lens, 1983, Ravan Press.

"Kwashiorkor" (Protein Energy Malnutrition) is a Ghanaian word which means "illness of the displaced child". "It was given as a name for the syndrome by Cicely Williams in 1935 on the basis of the observation that the disease usually followed on the disruption of breast-feeding by the arrival of another sibling" (Evans, Moodie & Hansen, 1971:1418).

Abstract

The present study investigated social and dietary practices of Soweto families who:

(a) had a child with overt Protein Energy Malnutrition (PEM), and
(b) did not have a child with overt PEM,

in their six month to two year old children.

The research design consisted of a retrospective case-control study which was descriptive in nature and compared environmental characteristics of children with overt PEM (the 'diseased' Case group), to those children without these forms of PEM (the 'non-diseased' Control group). Precision control individual sampling methods were used.

The subjects for the present study were fifty PEM children and their mothers (Cases), and fifty Adequately Nourished children and their mothers (Controls) i.e. a total of 200 subjects consisting of 100 children and 100 mothers.

PEM Cases and Adequately Nourished Controls were identified with respect to clearly defined criteria from Baragwanath Hospital paediatric wards, and the Diepkloof and Senoane Community Health Centres (polyclinics) in Soweto. In-depth, face to face interviews were conducted with the mothers of the Case and Control children. The interviews were structured according to an interview schedule. They took place in the child's home, to allow observation of the household and to evaluate family wealth.

Statistical analysis was in terms of frequencies and essential first order differences (e.g. means and standard deviations). The statistical significance of differences between the Case and Control groups were established by means of the parametric two tailed t-test. The Kolmogorov-Smirnov two sample test was applied to the cumulative distributions (e.g. the birth intervals). The test for differences of proportion using the normal (z) distribution was performed between the Case and Control groups. Statistical tests of significance were calculated at the 0,05 and 0,01 probability levels.

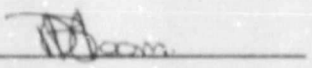
Statistical analysis revealed that the Case group differed from the Control group in ten major respects. These differences are summarised in section 5.6, and were related to:

(i) the level of household impoverishment;
(ii) the family structure;
(iii) dietary patterns of the child and of the household;
(iv) the mothers' source of nutritional knowledge;
(v) childminding;
(vi) the childrens' previous hospital admissions;
(vii) the childrens' medical conditions;
(viii) the mothers' first language;
(ix) the mothers' alcohol consumption; and
(x) the mothers' social support systems.

The implications of the findings suggest a link between malnutrition and the degree of adaptation to the urban setting. Recommendations to improve adaptability to the urban environment, and thereby alleviate child malnutrition, are offered.

DECLARATION

I declare that this dissertation is my own unaided work, and that it has not been submitted to another university, or for any other degree.



26.2.88

D.Y. Bloom **Date**

For my father Dr. Abe Bloom, whose life's work and dedication to healing has inspired this study; and

for my mother Marcella, who taught me that compassion must express itself in action.

Acknowledgements

I wish to express my sincere appreciation to:

Professor Brian McKendrick, Head of the School of Social Work, University of the Witwatersrand, for his interest, encouragement and guidance. It has been a privelege to complete my dissertation under his expert supervision.

Professor Eric Rosen, Department of Paediatrics, Baragwanath Hospital, for the sharing of his ideas, knowledge and experience, and for his invaluable assistance in the initial stages of this research.

Ms. Essie Shuenyane, Department of Paediatrics, Johannesburg Hospital, for her professional manner in conducting the interviews of the mothers in the sample. Her integrity, and her understanding of the socio-economic and cultural issues in the townships, has taught me a great deal.

Mr. Peter Fridjhon, Department of Statistics, University of the Witwatersrand, who gave me his assistance with considerable thought and generosity.

All the professionals who gave so willingly of their time and expertise, and especially:

- Professor John Hansen, Head of the Department of Paediatrics, Johannesburg Hospital (at the time of this study);
- Professor Lucy Wagstaff, Department of Community Paediatrics, Baragwanath Hospital;
- Dr. David Webster and Ms. Barbara Klugman, both of the Department of Social Anthropology, University of the Witwatersrand; and
- Ms. Caroline Eyberg, Department of Human Nutrition, Medical University of South Africa.

Melanie Marks, my closest friend, who believed in my ability to undertake this study.

My husband, Edwin Woolf, for his major efforts with editing, layout and typing (especially of tables and figures), and his commitment to the production of this manuscript. His devotion and love have enabled me to complete this dissertation.

All my family and friends, whose support and patience gave me hope and strength throughout this research project, particularly Mica Bloom, Tracey Segel, Lauren Gütter, and Adele Subel.

Those mothers and the children of Soweto who constituted the sample of this study. Without the mothers' open and frank sharing of their personal situations, this study would not have been possible.

The Human Sciences Research Council for financial assistance in the form of a bursary. The opinions expressed in this study do not necessarily reflect those of the Human Sciences Research Council.

The University of the Witwatersrand, for financial assistance in the form of a Senior Bursary.

Table of Contents

Chapter 1. Introduction

1.1 The Rationale for the Study 1-1
1.1.1 Definition of Malnutrition 1-2
1.1.2 Focus on the 0-2 Years Age Group 1-2
1.1.3 The Mutual Concern of the Professions of Social Work and Medicine with regard to Malnutrition 1-3
1.2 Aims of the Study 1-4
1.3 Nature of the Research Study 1-5
1.4 Limitations of the Study 1-6
1.5 Description of Terms 1-7
1.6 Overview of the Dissertation 1-8

Chapter 2. PEM: Its Causes, Consequences and Assessment

2.1 Circumstances Associated with PEM 2-1
2.2 Effects of PEM 2-2
2.2.1 Mortality 2-2
2.2.2 Morbidity 2-3
2.2.3 Growth 2-4
2.2.4 Intellectual and Emotional Development 2-4
2.2.5 Social and Economic Development 2-5
2.3 Assessing PEM 2-5

Chapter 3. Soweto: The Setting for the Study

3.1 Historical Background 3-1
3.2 Geography: The Physical Structure 3-2
3.3 Demography: The People 3-4
3.4 Socio-Economic and Political Characteristics 3-5
3.5 Community Resources Directly Relevant to the Present Study 3-6
3.5.1 Pre-School Child Care Systems 3-6
3.5.2 Health Services 3-8

Table of Contents

Chapter 1. Introduction

1.1 The Rationale for the Study 1-1

1.1.1 Definition of Malnutrition 1-2

1.1.2 Focus on the 0-2 Years Age Group 1-2

1.1.3 The Mutual Concern of the Professions of Social Work and Medicine with regard to Malnutrition 1-3

1.2 Aims of the Study 1-4

1.3 Nature of the Research Study 1-5

1.4 Limitations of the Study 1-6

1.5 Description of Terms 1-7

1.6 Overview of the Dissertation 1-8

Chapter 2. PEM: Its Causes, Consequences and Assessment

2.1 Circumstances Associated with PEM 2-1

2.2 Effects of PEM 2-2

2.2.1 Mortality 2-2

2.2.2 Morbidity 2-3

2.2.3 Growth 2-4

2.2.4 Intellectual and Emotional Development 2-4

2.2.5 Social and Economic Development 2-5

2.3 Assessing PEM 2-5

Chapter 3. Soweto: The Setting for the Study

3.1 Historical Background 3-1

3.2 Geography: The Physical Structure 3-2

3.3 Demography: The People 3-4

3.4 Socio-Economic and Political Characteristics 3-5

3.5 Community Resources Directly Relevant to the Present Study 3-6

3.5.1 Pre-School Child Care Systems 3-6

3.5.2 Health Services 3-8

Chapter 4. Method

4.1 Design 4-1
4.2 Subjects 4-3
4.3 The Research Tool 4-6
4.3.1 Nature of the Indices 4-7
4.4 Procedure 4-11
4.5 Statistical Analyses 4-15
4.6 Methodological Limitations 4-15

Chapter 5. Findings

5.1 Household Structure/Composition 5-3
5.1.1 Household Inventory 5-5
5.1.2 Family Type 5-7
5.1.3 Household History 5-9
5.2 Child Care Practices 5-11
5.2.1 Types of Child Care Arrangements 5-13
5.2.1.1 When Mother Cares for Child Herself 5-13
5.2.1.2 When Mother is at Work or School 5-13
5.2.2 Mother's Attitude towards the Child Care Arrangements 5-16
5.3 Maternal Characteristics 5-16
5.3.1 Age 5-16
5.3.2 Language 5-17
5.3.3 Education 5-17
5.3.4 Employment Status and Work History 5-18
5.3.5 Nutritional Status 5-20
5.3.6 Reproductive History 5-21
5.3.7 Attitude towards Child 5-23
5.3.8 Drinking Habits 5-24
5.3.9 Social Support 5-24
5.4 Nutritional Practices 5-26
5.4.1 Dietary Patterns 5-26
5.4.2 Breast-feeding and Weaning Practices 5-29
5.4.2.1 Milk Formulae 5-29
5.4.2.2 Hygiene in Milk Preparation 5-31
5.4.2.3 Introduction of Solids 5-32

CONT--2

5.4.3 Mothers' Attitude towards the Child's Nutrition....5-33
5.5 Medical Aspects....5-33
5.5.1 Medical History of Child....5-33
5.5.2 Medical Condition of Child at the Time of This Study....5-35
5.5.3 Use of Primary Health Services....5-39

Chapter 6: Discussion of Main Research Findings

6.1 Household Structure....6-1
6.1.1 Impoverishment in the Household....6-1
6.1.2 Type of Family Structure....6-2
6.1.2.1 Urbanisation and the Family....6-3
6.1.2.2 Families in Crisis and the ABCX Model....6-4
6.2 Child Care Practices....6-6
6.2.1 Quality of Child-Care....6-6
6.2.1.1 Parental Capability....6-7
6.2.1.2 Capability of the Child-minder....6-8
6.3 Maternal Characteristics....6-10
6.3.1 Age....6-10
6.3.2 Reproductive Factors....6-10
6.3.3 Education....6-11
6.3.4 Language....6-12
6.3.5 Drinking Habits....6-12
6.3.6 Social Support....6-14
6.4 Nutritional Practices....6-16
6.4.1 Dietary Patterns....6-16
6.4.2 Breastfeeding and Weaning Practices....6-17
6.4.3 Mothers' Attitude to Nutritional Practices....6-18
6.5 Medical Aspects....6-19
6.5.1 The PEM-Infection Cycle....6-19

Chapter 7. Conclusions and Recommendations

7.1 Responding to Poverty....7-3
7.1.1 Changing the Socio-economic and Political System....7-3
7.2 Family Intervention....7-5
7.2.1 Family Therapy....7-5
7.2.1.1 The Communications Approach....7-6

7.2.1.2 Structural Family Therapy 7-6
7.2.2 Families in Crisis 7-7
7.2.2.1 Responding to Situational Crises 7-7
(a) The Problem-Solving Approach 7-7
(b) The Task-Centred Approach 7-8
(c) Environmental Intervention on Behalf of the Client 7-9
7.2.2.2 Responding to Transitional State Crises 7-9
(a) Behaviour Modification 7-10
(b) Cognitive Restructuring 7-11
7.2.2.3 Responding to a Cultural/Social-Structural Crisis 7-12
7.2.3 Implementing family Intervention 7-12
7.3 Enhancing Mothers' Social Support 7-13
7.3.1 Types of Networking 7-13
(a) Natural Support Systems 7-14
(b) Client-Agency Linkages 7-14
(c) Interprofessional Linkages 7-15
(d) Human Service Organization Networking 7-15
7.3.2 Mobilizing Support From a Social Network 7-15
7.3.3 Integration into the Urban Setting 7-16
7.3.4 Limits of Enhancing Social Support 7-16
7.4 Improving Child-Care 7-16
7.4.1 Increasing Parental Capability 7-17
7.4.2 Developing Community Child-minding 7-17
7.5 Reducing the PEM-Infection Cycle 7-20
7.5.1 Promoting Constructive Use of Milk Formulae 7-20
7.5.2 Creating an Equitable Health System 7-21
7.6 Summary 7-23

Appendix A. Interview Schedule and Code Scheme A-1
Appendix B. Growth Charts B-1
Appendix C. Map: Soweto's Location in South Africa C-1
Appendix D. Map: Soweto's Internal Structure D-1
Appendix E. Press Report on Food Price Increases E-1

Bibliography

List of Illustrations

Table 1. Household Composition 5-3
Table 2. Generational Spread 5-4
Table 3. Inventory of Household Possessions and Selected Expenses 5-6
Table 4. Marriage Types 5-8
Table 5. Birth Order 5-9
Table 6. Substance Abuse Per Household 5-11
Table 7. Time Mother Spent with Child per Day 5-12
Table 8. Age of Care-Givers 4
Table 9. Time Child Spent with Care-Giver per Day 5-15
Table 10. Language Group of Mothers 5-17
Table 11. Highest Standard of Schooling achieved by Mothers 5-18
Table 12. Extra-school Training and Education of Mothers 5-18
Table 13. Occupation of Mothers 5-19
Table 14. Number of Jobs that Mothers had During the Past Five Years 5-20
Table 15. Weights of Mothers as Perceived by the Interviewer 5-21
Table 16. Age of Mothers at Each Pregnancy 5-22
Table 17. Dietary Patterns of the Household 5-27
Table 18. Selected Dietary Patterns of Child 5-28
Table 19. Types of Non-breastmilk Consumed 5-30
Table 20. Amount of Non-breastmilk Consumed per Day 5-31
Table 21. Detergents used for Sterilising 5-32
Table 22. Diagnoses of the Child's Previous Hospital Admissions 5-35
Table 23. Primary Medical Diagnoses of the Child 5-36

Figure 1. Structure for Presentation of Findings 5-2
Figure 2. Frequency Bar Chart of Case Group's Standard Ratio Weights 5-37
Figure 3. Frequency Bar Chart of Control Group's Standard Ratio Weights 5-38
Figure 4. Classification of Conclusions and Recommendations 7-2

List of Illustrations

Table 1. Household Composition 5-3
Table 2. Generational Spread 5-4
Table 3. Inventory of Household Possessions and Selected Expenses 5-6
Table 4. Marriage Types 5-8
Table 5. Birth Order 5-9
Table 6. Substance Abuse Per Household 5-11
Table 7. Time Mother Spent with Child per Day 5-12
Table 8. Age of Care-Givers 5-14
Table 9. Time Child Spent with Care-Giver per Day 5-15
Table 10. Language Group of Mothers 5-17
Table 11. Highest Standard of Schooling achieved by Mothers 5-18
Table 12. Extra-school Training and Education of Mothers 5-18
Table 13. Occupation of Mothers 5-19
Table 14. Number of Jobs that Mothers had During the Past Five Years 5-20
Table 15. Weights of Mothers as Perceived by the Interviewer 5-21
Table 16. Age of Mothers at Each Pregnancy 5-22
Table 17. Dietary Patterns of the Household 5-27
Table 18. Selected Dietary Patterns of Child 5-28
Table 19. Types of Non-breastmilk Consumed 5-30
Table 20. Amount of Non-breastmilk Consumed per Day 5-31
Table 21. Detergents used for Sterilising 5-32
Table 22. Diagnoses of the Child's Previous Hospital Admissions 5-35
Table 23. Primary Medical Diagnoses of the Child 5-36

Figure 1. Structure for Presentation of Findings 5-2
Figure 2. Frequency Bar Chart of Case Group's Standard Ratio Weights 5-37
Figure 3. Frequency Bar Chart of Control Group's Standard Ratio Weights 5-38
Figure 4. Classification of Conclusions and Recommendations 7-2

Chapter 1. Introduction

The present study is concerned with environmental factors (e.g. dietary, family, social, economic conditions, etc.) associated with child malnutrition in an urban black township. There is surprisingly little information in this area and the need for investigating environmental influences on malnutrition (compared to clinical and metabolic aspects of the condition) has been recommended by Rosen, 1978; Shuenyane, Mashigo, Eyberg et al, 1977; Sims, Paolucci and Morris, 1972; Johnston, Scholl, Newman et al, 1980; Cravioto and DeLicardie, 1973a; and others.

Sims, Paolucci and Morris (1972:197) assert that:

> It is simply not sufficient to view poor nutritional status as a result of consuming an inadequate diet... Nutrient intake is recognised as one of many environmental factors which act upon the genetic potential of the young child to influence his/her physical development. The syndrome of malnutrition occurs not in isolation, but within the context of an entire constellation of environmental factors which together contribute to the final manifestation of the problem.

1.1 The Rationale for the Study

Malnutrition is an indication that the humans suffering from it are not satisfactorily adjusted to their environment and, in fact, may ultimately not survive.

> It has been said that the history of nutrition is the history of humankind on this planet. Since human survival has always depended on food, nutrition has been the main determinant of where humans have lived, the culture they have developed and, in effect, the kind of people they have become. (Moodie, 1982:349).

Malnutrition continues to be a problem of enormous magnitude among the black people of South Africa (South African Institute of Race Relations, 1976; Rosen, 1978; Walker, 1980; Critical Health 1981; Bac, 1984). Yet, there are no accurate statistics kept of the degree of under-nutrition in South Africa and from 1968, the keeping of statistical records on malnutrition was officially discontinued i.e. it is no longer considered a notifiable disease

and when detected, does not have to be reported to the Department of Health (Critical Health, 1981).

The last year for which official figures were collected was 1967, when the following cases of kwashiorkor (protein energy malnutrition) were notified (South African Institute of Race Relations, 1968:272):

Whites	7
Indians	12
Coloureds	1 046
Africans	9 765

Despite official denial of the extent of malnutrition , a relatively recent study (Coovadia,1981) indicates that the 1967 figures have not improved and have actually increased, especially with the recent drought.

1.1.1 Definition of Malnutrition

There is considerable controversy over the concept of malnutrition (Webster, 1981). Viewed holistically, though, malnutrition refers to diseases caused by:

- Insufficient intakes of energy (kilojoules) and/or particular nutrients (proteins, vitamins, minerals), aggravated by infections, unhygienic circumstances, and other adverse environmental factors; and

- Excessive intakes of energy and/or particular nutrients (Walker, 1980:695).

This research is concerned with Protein Energy Malnutrition (PEM).

1.1.2 Focus on the 0-2 Years Age Group

It should be noted that in the 0-2 years age group, "the maximum intensities of morbidity and mortality from malnutrition and under-nutrition diseases prevail" (Walker, 1980:697). As Bac (1984:8) states:

> There is no question about the need for extra care for children in preference to adults, as a disproportionately large percentage of total deaths occurs at the young ages (more than one third in developing countries, well under five percent in industrialised countries).

The focus on children goes beyond the concern for preventing mortality, as children surviving with malnutrition are nevertheless seriously affected: malnutrition inhibits resistance to illness, growth, and intellectual, social and economic development (King, King, Morley et al, 1972; Moodie, 1982). For further discussion see section 2.2.

Rosen (1978:15) stresses that "although the field of PEM has been well researched, most workers have concentrated on the clinical and metabolic aspects of the condition and almost completely ignored its epidemiology". Yet, the foundations of malnutrition are deeplying and structural (Webster,1981). As explained in the journal of Critical Health (1981:61):

> Malnutrition is not the result of the ignorance of those who suffer from it. It is a disease that results from the fundamental structure of our society. It is a disease related to the exploitation of workers, the migrant labour system, the high prices of basic foods, the lack of access to land – factors at the very root of the structure of our society.

In paraphrasing Okeahialam (1975), Rosen (1978:12) agrees that "poverty and resulting inadequate diet are underlying causes of overt PEM in Africa". Without denying or refuting the structural analysis, it has been noted that "within deprived populations where the economic status of families is relatively homogeneous, there are families whose children escape overt PEM, and it is hypothesised that these families have adopted specific protective practices" (Rosen, 1978:12; supported by Pereira and Begam, 1974; Wishik and Van der Vynct, 1976; Keet, Moodie, Wittman, Hansen, 1971; Moodie,1982).

1.1.3 The Mutual Concern of the Professions of Social Work and Medicine with regard to Malnutrition

In the past two decades, there has been an increased awareness that the professions of social work and medicine are closely related, in that both illness and health are not merely physical, but have a social dimension as well (Maykovich, 1980; Tuckett and Kaufert, 1978). This research study represents the mutual concern of the two professions with regard to the

issue of malnutrition. The tradition of placing malnutrition within a medical framework alone, has been recognised as inappropriate. Malnutrition is a problem that must be confronted by all helping professions and by those who are committed to the social, economic and health development needs of the majority of South Africans (Webster,1981; Critical Health,1981). Social Work is a helping profession committed to precisely this.

> Social Work is concerned with the interactions between people and their social environment which affect the ability of people to accomplish their life tasks, alleviate distress, and realise their aspirations and values. Thus, the purpose of Social Work is:
>
> - To enhance the problem-solving and coping capacities of people;
> - To link people with systems that provide them with resources, services, and opportunities;
> - To promote effective and humane operation of these systems; and
> - To contribute to the development and improvement of social policy.
>
> (Pincus and Minahan, 1973:9)

Social Work is also concerned with making research more relevant and useable to practitioners (Fanshel, 1980).

1.2 Aims of the Study

The two main aims of the present study may be summarised as follows:

(i) To identify social and dietary practices adopted by Soweto families which protect against overt Protein Energy malnutrition (PEM) in their six month to two year old children; and

(ii) To yield data that will enhance the design of a community-compatible prevention programme directed towards reinforcing indigenous social and dietary practices which prevent PEM.

issue of malnutrition. The tradition of placing malnutrition within a medical framework alone, has been recognised as inappropriate. Malnutrition is a problem that must be confronted by all helping professions and by those who are committed to the social, economic and health development needs of the majority of South Africans (Webster,1981; Critical Health,1981). Social Work is a helping profession committed to precisely this.

> Social Work is concerned with the interactions between people and their social environment which affect the ability of people to accomplish their life tasks, alleviate distress, and realise their aspirations and values. Thus, the purpose of Social Work is:
>
> - To enhance the problem-solving and coping capacities of people;
> - To link people with systems that provide them with resources, services, and opportunities;
> - To promote effective and humane operation of these systems; and
> - To contribute to the development and improvement of social policy.
>
> (Pincus and Minahan, 1973:9)

Social Work is also concerned with making research more relevant and useable to practitioners (Fanshel, 1980).

1.2 Aims of the Study

The two main aims of the present study may be summarised as follows:

(i) To identify social and dietary practices adopted by Soweto families which protect against overt Protein Energy malnutrition (PEM) in their six month to two year old children; and

(ii) To yield data that will enhance the design of a community-compatible prevention programme directed towards reinforcing indigenous social and dietary practices which prevent PEM.

This latter goal is an adaptation of an objective formulated by Rosen (1978) in a proposal entitled "The Bantu Child at Risk of Developing Malnutrition". This research was never executed, and Professor Rosen's personal permission was obtained to utilise the objective.

In summarising Scrimshaw (1975a) and Wishik and Van der Vynct (1976), Rosen (1978:12) argues that:

> These intervention programmes may prove successful where past intervention programmes have failed because of cultural incompatibilities and misunderstandings. Protective Practices demonstrated by PEM-free families are also likely to be immediately feasible for other Soweto families despite economic deprivations and without violation of cultural norms.

Thus the outcome of this study is a series of recommendations indicating how social workers and members of the helping professions may act in order to counter malnutrition in urban African areas such as Soweto.

1.3 Nature of the Research Study

The information required for the present study was obtained from two primary sources: one, the medical records at Baragwanath Hospital paediatric wards and the Diepkloof and Senoane Community Health Centres (polyclinics) in Soweto; and two, by means of in-depth, face to face interviews with mothers of identified Protein Energy Malnourished (PEM) and Adequately Nourished (AN) children. Interviews were conducted in the child's home to allow observation of the household and to evaluate family wealth. The research design consisted of a retrospective case-control study which was descriptive in nature and compared the environmental characteristics such as dietary, family, socio-economic, health service utilisation and medical history aspects of children with overt PEM (the 'diseased' Case group) to those children without these forms of PEM (the 'nondiseased' Control group). Precision control individual matching sampling methods were used.

1.4 Limitations of the Study

(i) The descriptive design of the present study lends itself to a quantitive rather than a qualitative understanding of Soweto families with PEM and AN children. See section 4.6(i).

(ii) The use of a case-control survey design aimed to identify risk factors and protective practices, and was limited to hypothesis-generation. Further, because the nature of the present study was exploratory, it is unlikely that all salient characteristics of the children's environment were investigated. See section 4.6(ii).

(iii) The present cross-sectional survey is essentially a prevalence study and therefore cannot establish the temporal sequence of events necessary for proving causality. See section 4.6(iii).

(iv) Generally, information for the present study was both objective and uniformly available for all subjects. However, some of the information obtained by the interviewer through the use of the interview schedule may be less accurate. See section 4.6(iv).

(v) The difficulties of a white researcher investigating the 'black social world' have been alleviated to some extent by employing a black interviewer. Nevertheless, the problem with relying on a black interviewer is that "it is in all probability, not possible for a white project director to check upon the procedures of data gathering, reliability of the findings, etc." (Simon, 1986:3).

(vi) With the use of an interviewer, there must be some degree of interviewer bias. See section 4.6(vi).

(vii) Generalisability of the research results is limited to those Soweto families whose children utilise hospital or clinic services. See section 4.6(vii).

(viii) Inter-family comparisons between Cases and Controls is limited because the nutritional status of the child's siblings were not determined. See section 4.6(viii).

1.5 Description of Terms

AN Child — Adequately Nourished Child (for full definition, see section 4.2).

Child/Children: — Very Young Person(s) up to the age of ten years (University of the Witwatersrand, Dept. of Paediatrics, working definition).

Cleanliness — Refers to an overall impression of general hygiene, (not tidyness) influenced by the absence of a combination of the following:

indoors/house: — accumulated dust, cobwebs, decaying food, large amounts of animal fur, vomit, faeces, musty smells (i.e. inadequate ventilation).

outdoors/garden: — uncontained waste products, litter, sewerage.

Drinking or Drug Problem: — Implies the use of a chemical substance with adverse psychological, social, occupational or physical consequences which can be directly attributed to the substance used (Camberwell Council on Alcoholism, 1980).

Household: — A household is a group of people who live regularly at the same address for at least six months and who are all catered for, (at least one meal a day) by the same person(s). Regularly means four nights a week or more, or, for persons working away from home, one night a week or more. If other people living at the same address separately cater for themselves, they form a separate household. (Hoinville and Jowell, 1978).

Mother: — Refers to the biological mother.

PEM: — Protein Energy Malnutrition (For a full definition, see section 1.1.1 and section 4.2.).

Soweto Resident: Refers to anyone who has been living in the area of Soweto for six months or longer (Webster,1985: personal communication).

This or The Child: Refers to the child treated as a patient at the hospital or clinic, i.e. the PEM Case child or the adequately nourished Control child, but not his/her siblings.

1.6 Overview of the Dissertation

The dissertation, after the introduction, is organised as follows:

Chapter Two outlines the causes, consequences and assessment of Protein Energy Malnutrition; Chapter Three describes Soweto, the setting of the study; Chapter Four explains the research design and methodology; Chapter Five presents the research findings; Chapter Six contains a discussion and interpretation of the main research findings; and Chapter Seven, the conclusion of the study, recommends intervention strategies to alleviate the problem of child malnutrition in South Africa's urban black townships.

Chapter 2. PEM: Its Causes, Consequences and Assessment

2.1 Circumstances Associated with PEM

Circumstances that are directly and indirectly associated with PEM, were identified by surveying the literature. These circumstances are listed below and constitute the areas of concern for the present study. Further discussion follows in chapters 4, 6 and 7.

(i) Urbanisation and Industrialisation e.g. breakdown of rural community life and changes from agricultural life style to paid workers (Mayer and Mayer, 1971; de Beer, 1984; Jinabhai, Coovadia and Abdool-Karim, 1986; Coovadia, 1986; 1987a, 1987b).

(ii) Structure of South African Society e.g. low socio-economic groups, no meaningful participation in political decisions, migrant labour system (South African Institute of Race Relations, 1983; 1984; de Beer, 1984; Jinabhai, Coovadia and Abdool-Karim, 1986; Coovadia, 1986; 1987a; 1987b; Wilson, 1984).

(iii) Poverty and the pattern of life that it dictates (WHO, 1972; Schertz, 1973; Cohn, 1978; Wilson, 1984; Okeahialam, 1975; Moodie, 1982).

(iv) Family Structure i.e. nuclear, broken, predominance of women etc., and PEM child's position in the family, i.e. birth order, rank, age and sex of child (Minuchin, 1974; Aponte, 1982; McCubbin et al, 1982; 1983; O'Neil, 1987; Simkins, 1986; Burman and Reynolds, 1986; Jellife, 1966; and Scrimshaw, 1975a).

(v) Family History i.e. length of residence and mobility within the last three years, alcohol and drug use, illness, etc. (Rosen, 1978; Bolon, 1979; Louw, 1974).

(vi) Maternal factors e.g. mothers' age, nutrition, education, employment status, reproductive history, drinking habits, social support, etc. (Antcobus, 1971; Baxi, 1957; James, 1976; Swenson, 1981; 1984; Wolfers and Scrimshaw, 1975; Chen, 1974; Rosen,

1978; Hoffman, 1976; Comasso and Comasso, 1986; Mitchell and Moos, 1984; Kaplan, Robbins and Martin, 1983).

(vii) Methods of child rearing i.e. the quality of care that the child receives,

(a) when the mother rears the child herself; and
(b) when someone other than the mother attends to the child (Cock, Emdon and Klugman, 1984; 1986; Rosen, 1978; Bronfenbrenner, Goodson and Hess, 1974; Keniston, 1975).

(viii) Infant feeding patterns e.g. breastfeeding and use of infant milk formulae (Finklehor, 1978; May and McLellan, 1971; Walker, 1961; 1966; Webster, 1981; Griffiths, 1962).

(ix) Medical history of child e.g. the PEM-infection cycle (Scrimshaw, Taylor and Gordon, 1968; Scrimshaw, 1975b; McLaren, 1981; Rowland, 1983; Geefhuysen, Rosen, and Katz, 1971; Chandra, 1977; Poston, 1979).

2.2 Effects of PEM

PEM can be, but is not always, fatal. Survivors with malnutrition may suffer some or all of the following:

(i) reduced resistance to illness (i.e. increased morbidity),
(ii) stunted growth,
(iii) intellectual functioning that is below their potential; and
(iv) inhibited social and economic development.

2.2.1 Mortality

The most severe and devastating effect of nutritional disease and disease related to nutrition, is mortality. Malnutrition and its associated infections are preventable diseases and yet they are major killers of children in the world today (Morley, 1973).

The infant mortality rate, i.e. the number of deaths during the first year of life per 1000 live births, is a universal parameter of child health (Dogramaci, 1981). Grant (1985) showed that in 1981 South Africa, with a rate of 90/1000 live births, was placed "sixtieth out of 130 nations in order of descending infant mortality rate and fell in the group of high infant mortality rate countries" (Molteno, Kibel and Roberts, 1986:46). On further analysis, these figures reveal that the infant mortality rate for blacks far exceeds that for whites.

Official infant mortality rates were as follows (South African Institute of Race Relations, 1984:723):

	1982
White	13,4
Indian	20,7
Coloured	59,2
African	80,0

As PEM is no longer a notifiable disease, "the incidence of overt PEM can only be surmised from infant mortality rates and death rates from diseases associated with PEM" (South African Institute of Race Relations 1983:503). Professor Allie Moosa, head of the Department of Paediatrics at the University of Natal, claimed that "between three and four children die each hour of malnutrition-related causes in South Africa" (South African Institute of Race Relations 1983:504).

It is hoped that the present study will contribute towards eradicating mortality from preventable diseases such as malnutrition.

2.2.2 Morbidity

Molteno, Kibel and Roberts (1986:47) explain that:

> There is an important relationship between nutrition and infective illness. Just as the poorly nourished child is predisposed to infections and has a poor capacity to fight them, so also infective illness -- especially diarrhoea -- contributes to the state of nutrition.

The synergistic relationship between malnutrition and infection is discussed in section 6.5.1.

Author Bloom Deborah Yael
Name of thesis Social And Dietary Practices Of Soweto Families Who Protect Against Overt Malnutrition In Their Children. 1988

PUBLISHER:
University of the Witwatersrand, Johannesburg
©2013

LEGAL NOTICES:

Copyright Notice: All materials on the University of the Witwatersrand, Johannesburg Library website are protected by South African copyright law and may not be distributed, transmitted, displayed, or otherwise published in any format, without the prior written permission of the copyright owner.

Disclaimer and Terms of Use: Provided that you maintain all copyright and other notices contained therein, you may download material (one machine readable copy and one print copy per page) for your personal and/or educational non-commercial use only.

The University of the Witwatersrand, Johannesburg, is not responsible for any errors or omissions and excludes any and all liability for any errors in or omissions from the information on the Library website.