

9. Alao, A. A (2001). *The frequency of Discussion on HIV/AIDS Among Adolescents in Botswana*. In Roswith Roth and Sandra Neil (Eds.) **A matter of Life: Psychological Theory, Research and Practice**, Lengerich, Berlin, Riga, Rom, Wien, Zagreb, PABST Science Publishers pp. 84-91.

and Practice. – Roswith Roth, Sandra Neil (Eds.) –
Lengerich ; Berlin ; Riga ; Rom ; Wien ; Zagreb : Pabst
Science Publishers, 2001
ISBN 3-935357-73-7

TABLE OF CONTENTS

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in other ways, and storage in data banks. The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The authors and the publisher of this volume have taken care that the information and recommendations contained herein are accurate and compatible with the standards generally accepted at the time of publication. Nevertheless, it is difficult to ensure that all the information given is entirely accurate for all circumstances. The publisher disclaims any liability, loss, or damage incurred as a consequence, directly or indirectly, of the use and application of any of the contents of this volume.

© 2001 Pabst Science Publishers, D-49525 Lengerich

Printing: Sächsisches Digitaldruck Zentrum, D-01159 Dresden

ISBN 3-935357-73-7

Preface: An Appreciation to All Contributors
R. Roth, S.E.S.Neil 13

Dedication, Opening Adresses and Keynotes

Dedication to Prabha Khanna
S.E.S. Neil 17

Eclectic Existential Psychotherapy
P. Khanna 19

Opening Ceremony Speech at the 56th Annual Convention of ICP
S.E.S. Neil 23

Opening Ceremony Speech at the Regional Conference of ICP
in Bali, Indonesia
S.E.S. Neil 26

Opening Address
Z. Cowen 28

Perspectives on Women: Looking Ahead into the Next Century
F.L. Denmark, E.I. Heitner 32

Anglicization of Hindu Funerals in England: Its Impact
on Ancient Cultural Practices
P. Laungani 45

Scientific Sessions

Problem Gambling: A Global Overview with Illustrations
from Sweden and New Zealand
M. Abbott 63

Integrating Implicit Representations of Self and Significant Others:
Construing or Stereotyping?
E. Aidman 77

The Frequency of Discussion on HIV/AIDS Among Adolescents in Botswana <i>A.A. Alao</i>	84
If You Knew What You Know Now: Regrets Among Older Adults <i>S.K. Baum</i>	92
Culture and Spirituality as Resources for Effective Coping: Perspectives from a Sample of Aboriginal and Dutch Australians <i>L.B. Berends</i>	97
Children First! Priorities for Sinking Marriages <i>G. Berkove</i>	104
The Impact of Violence on the Media <i>W. Brewer-Jones</i>	113
The Concepts of Human Rights and the Care and Protection of the Mentally Ill <i>A.P. Butcher</i>	115
The Slow Rise of Psychology in Singapore <i>S.C. A. Chang</i>	122
Early Science Experiences of Northern-Sotho Speaking South African Pupils and Their Attitude Towards Science <i>L. Cherian</i>	125
Adjustment Problems of University Students <i>V.I. Cherian</i>	132
The Effects of Attitude-Treatment Interaction on Children's Learning Performance in Small-Group Cooperative Learning <i>L.-H. Chou</i>	137
The Reliability and Validity of the Beck's Depression Inventory-II After Adding Three Positive Graded Responses <i>P. Chow, N.L. Brenton</i>	145
Sesternary Victims: Trauma and Personality <i>M.C. Chung</i>	154
The Italian Job Stress Survey (JSS-I): Gender and Culture <i>A.L. Comunian</i>	160

An Italian Study of Parental Acceptance and Rejection <i>A.L. Comunian, U.P. Gielen</i>	166
The Tyranny of Silence – Couples' Experience after Miscarriage <i>K. Conway, G. Russell</i>	175
A Victimological Study of Male and Female Adult Rape: The Impact of Gender on Adjustment and The Therapeutic Process <i>S. Crome, M. McCabe</i>	180
Relationships Between Adolescent Self-Reports of Coping Styles and Depressive Syndromes <i>E. Cunningham</i>	189
Hypnosis in the Treatment of Psychoneuroimmunological Conditions <i>D. Elton</i>	199
The Sustainability of Reducing Heavy Drinkers' Consumption Through Empowering their Partners <i>J.A. Fairbairn, J.K. Grainger</i>	213
Can Psychoanalysis Accept Spirituality? <i>H.G. Fenchel</i>	221
Areas of Intervention and Principles of Ethical in Act of the Psychologist of Tourism Behavior: An Introductory Contribution <i>P. Fumai</i>	228
The Intriguing and Sometimes Difficult Process of Working in Um El Fahem as the School Psychologists' Supervisor 1995-1998 <i>S. Gal</i>	233
Women 50-65: The Forgotten Stage of Adult Development <i>M.K. Gershenfeld</i>	237
Wisdom of Some Elders: The Surviving Psychoanalytic Influences in the Practices of Family Therapists with Original Psychodynamic Training <i>J. Grimwade</i>	240
Scale for Comparison of Workplace Demands and Abilities of Disabled Persons (SWAD) – For Professional Integration and Development <i>M. Habicht</i>	249
Validity and Reliability Aspects for the Bruininks-Oseretzky Test of Motor Proficiency-Short Form as Applied in the United Arab Emirates Culture <i>M.M. Hassan</i>	260

Stress and Health: The Letting Go Response <i>C.C. Hiew</i>	268
Cognitive Profiles of Acute Stress Disorder and Posttraumatic Stress Disorder Following Motor Vehicle Accident Trauma <i>G.E. Holmes, C.L. Williams, J. Haines</i>	277
A Specific Not A Generalized Shifting Deficit in Parkinson's Disease <i>S. Hsleh</i>	286
Leadership And Intuition <i>B. Johnson</i>	299
Transpersonal Psychotherapy – An Innovative Psychotherapy <i>J.L. Khanna</i>	308
Attitude Toward School Counseling System Among Teachers, Students and Parents in Japan <i>S. Kobayashi, T. Ogawauchi</i>	317
A Cross Cultural Comparison of Coping Styles and Physical Reactions to Stress <i>R.Y. Lao, M.C. Hansen, L. Fang</i>	321
Another Look at Hostage Taking (Strategies for Dealing with Hostage Takers) <i>L.F. Lowenstein</i>	326
The Perception of Adolescents Concerning the School and Identity Formation <i>P. Maree, C.P.H. Myburgh, J.C. Kok, R.C. Grobler</i>	337
Identifying and Enhancing Talent in Israel: A High National Priority <i>R.M. Milgram</i>	346
A Social Relations Analysis of Interpersonal Perception in Children <i>R.K. Montvilo, T.E. Malloy, D.B. Sugarman</i>	352
The Interface of Intrapsychic and Structural Variables in Couples Relationship <i>F. Naude, G. Lindegger</i>	355
Human Rights Forum: Endangered People and Children World Summit <i>S.E.S. Nell</i>	365

When Tragedy Strikes: The Psyche and the Soma <i>S.E.S. Nell, R.L.N. Silverberg</i>	394
A Matter of Life After World War Two After Tragedy Strikes <i>S.E.S. Nell</i>	410
Role-Playing Factors that Influence African School Principals' Use of Coping Strategies <i>L. Niehaus, C.P.H. Myburgh</i>	416
Promoting Resilience in Children at Risk for Homelessness <i>J.E. Papházy, E.H. Grotberg</i>	430
From Senior Psychologist to Junior Psychologist: From Experience to Ideas <i>E.D. Pensa</i>	438
A Successful Mentoring Program for At Risk Hispanic Children and Adolescents <i>L. Perez Schreier</i>	444
Professional Ethics: Social Responsibility or the Status Quo? <i>J. Pettifor, K. Horne</i>	449
Posttraumatic Stress and Other Psychological Disorders in Victims of Gross Human Rights Violations <i>B.J. Pillay</i>	457
How Recruitment Influences Male and Female Prospective Athletes in their Choice of a University? <i>M.E. Pollok, R.J. Parikh, R.C. Chia</i>	462
Social Anxiety and Cognitive Interference in Students' Public Performance <i>M. Puklek</i>	468
Environmental Psychology and the Representation of Nature <i>R. Raffaelli</i>	477
Communication (In)Effectiveness of University Teachers in the Classroom <i>A. Rego, S.L. Arménio</i>	480
Reminiscences On My Training As A Clinical Psychologist <i>V.D. Sanua</i>	487

Brave New World. The Medicalization of Clinical Psychology In the United States <i>V.D. Sanua</i>	502
Psychological/Physiological Symptoms and Treatment of Women at Mid-Life in Australia <i>L. Shand</i>	508
Processing Chinese Characters: Speech Recoding and Related Issues <i>T.-C. V. Shen</i>	518
How Motives Relate with Performance in the Degree Course <i>L. Sousa, A. Rego</i>	527
Moral Development in Japanese Culture Using Gibb's Sociomoral Reflection Measure – Short Form <i>Y. Takaki</i>	536
Self- Management in a Changing Career World <i>I.E. Walters</i>	543

TABLE OF AUTHORS

<i>Abbott, Max W. Dr.</i> Dean, Faculty of Health Studies Auckland Institute of Technology PO Box 92006 AUCKLAND, NEW ZEALAND max.abbott@ait.ac.nz	<i>Brenton, Nancy L.</i> Nipissing University 100 College Drive NORTH BAY ONTARIO, P1B6L7, CANADA
<i>Aidman, Eugene Dr.</i> University of Ballarat Gear Avenue MT. HELEN VIC 3350, AUSTRALIA e.aidman@ballarat.edu.au	<i>Brewer-Jones, Wendy</i> Principle Consultant Performance, Policy & Change PO Box 1093 WERRIBEE PLAZA VIC 3030, AUSTRALIA wbj@onth.net.au
<i>Alao, Amos A.A., Dr.</i> Counselling Centre University of Botswana P/Bag 0022 GABORONE, BOTSWANA ALAOAA@mopipi.ub.bw	<i>Butcher, Anthony</i> PO Box 167 Jamison Centre CANBERRA ACT 2614, AUSTRALIA tonebut@bigpond.com
<i>Baum, Steven K., Dr.</i> Family Center Mercy Memorial Hospital 716 Macomb Street MONROE, MI 48162, USA	<i>Chang, Agnes S.C., Dr.</i> Associate Professor National Institute of Education Nanyang Technological University 469 Bukit Timah Road SINGAPORE 259756, SINGAPORE scachang@nie.edu.sg
<i>Berends, Lynda</i> Monash University 900 Dandenong Road EAST CAULFIELD, VIC 3145, AUSTRALIA lynda.berends@arts.monash.edu.au	<i>Cherian, Lily, Dr.</i> Dept. of Psychology of Education University of the North PB X 1106 SOVENGA 0727, Northern Province, SOUTH AFRICA
<i>Berkove, Gall, Dr.</i> Clinical Psychologist 17020 Margate SOUTHFIELD, MI 48076, USA iberkove@umich.edu	<i>Cherian, Varghese I., Prof. Dr.</i> Dept. of Psychology of Education University of the North PB X 1106 SOVENGA 0727 Northern Province, SOUTH AFRICA

Chia, Rosina C., Dr.
Department of Psychology
East Carolina University
GREENVILLE, NC 27858-4353, USA

Chou, Li-Hsiun, Dr.
Associate Professor
Department of Education
National Chiayi Teachers College
85 Wenlong
Mingsuin Chiayi
CHIAYI TAIWAN 621,
REPUBLIC OF CHINA
chouli@sun11.ncytc.edu.tw

Chow, Peter, Dr.
Assistant Professor
Nipissing University
100 College Drive, Box 5002
NORTH BAY ONTARIO, P1B8L7,
CANADA
peterc@unipissing.ca

Chung, Man Cheung, Dr.
Institute of General Practice
& Primary Care
University of Sheffield
Com. Sciences Centre
Northern General Hospital
Herries Road
SHEFFIELD, S5 7AU,
UNITED KINGDOM
M.C.Chung@sheffield.ac.uk

Comunian, Anna L., Prof.
University of Padua
Via Venezia 8
PADOVA 35100, ITALY
comunian@ipdunivx.unipd.it

Conway, Kim
Honorary Associate in Psychology
School of Behavioural Sciences
Macquarie University
SYDNEY, NSW 2109, AUSTRALIA
kconway@bunyip.bhs.mq.edu.au

Crome, Sarah A., Dr.
Research Consultant
Vict. Parliamentary Drugs & Crime
Presentation Committee
Level 8/35 Spring Street
MELBOURNE, VIC 3150, AUSTRALIA
sarah.crome@parlia.ment.vic.gov.au

Cunningham, Everarda G.
PhD Student
Faculty of Education
Dept. of Learning and Educational
Development
Melbourne University
PARKVILLE, VIC 3052, AUSTRALIA
a.cunningham@edfac.unimelb.edu.au

Denmark, Florence L., Prof. Dr.
Department of Psychology
Pace University
41 Park Row
NEW YORK, NY 10038, USA
fdenmark@fsmail.pace.edu

Elton, Diana, Dr.
Department of Psychology
University of Melbourne
31 McHenry Street
RIPPONLEA, VIC 3182, AUSTRALIA
diazel@lavalink.com.au

Fairbairn, Janice
University of Wollongong
PO Box U252
WOLLONGONG, NSW 2500, AUSTRALIA
jaf@uow.edu.au

Fang, Liliu
Institute of Psychology
Chinese Academy of Sciences
BEIJING, PEOPLES REPUBLIC OF CHINA

Fenchel, Gerd, Dr.
Dean/Director
Washington Square Institute
41-51 East 11th Street
NEW YORK, NY 1003, USA

Fumal, Pino, Dr
Via Roccantica, 9
ROME 00199, ITALY

Gai, Shulamit
16, Hankin Street
HAIFA 32763, ISRAEL

Gershenfeld, Matti K., Dr.
Couples Learning Center
Benson East, Suite 1201
100 Old York Road
JENKINTOWN, PA 19046, USA
matti@nni.com

Gielen, Uwe, Dr.
St. Francis College, Psych. 607S
108 Remsen Street
BROOKLYN HEIGHTS,
NY 11201-4398, USA
uglielen@hotmail.com

Grainger, Jessika K.
Department of Psychology
University of Wollongong
WOLLONGONG, NSW 2500,
AUSTRALIA

Grimwade, Jolyon
Lecturer
Victoria University
Box 14428
Melbourne City MC
MELBOURNE, VIC 8001,
AUSTRALIA
Jogrimwade@vut.edu.au

Grobler, R.C.
Dept. of Educational Sciences
Rand Afrikaans University
PO Box 524
Auckland Park
JOHANNESBURG 2006,
SOUTH AFRICA
corgrop@iafrica.com

Grotberg, Edith, Dr.
Senior Scientist
Civitan Intern. Research Center
#1216.4141 N. Henderson Road
ARLINGTON, VA 22203-2477, USA
egrot@erols.com

Habicht, Manuela H., Dr.
PO Box 2600
BRISBANE, QLD 4000, AUSTRALIA
Manuela.Habicht@defence.gov.au

Haines, Janet
School of Psychology
University of Tasmania
GPO Box 252-30
HOBART 7001, TASMANIA, AUSTRALIA

Hansen, Michael C.
North Carolina State University
RALEIGH NC, USA

Hassan, Mohammed, Dr.
United Arab Emirates University
PO Box #7923
DUBAI, UNITED ARAB EMIRATES

Heltner, Erica I.
Department of Psychology
Pace University
41 Park Row
NEW YORK, NY 10038, USA

Hiew, Chok, Prof.
Department of Psychology
University of New Brunswick
FREDERICTON, NB E3B 6E4, CANADA
hiew@unb.ca

Holmes, Georgina
Research Assistant
Psychology Department
University of Tasmania
PO Box 252-30
HOBART 7001, TASMANIA, AUSTRALIA
geholmes@tassie.net.au

Home, Kathrin, Dr.
Peak Services
11006 - 83 Avenue
EDMONTON, AB T660T7,
CANADA
peakserv@planet.eon.net

Hsieh, Shurian, Dr.
Associate Professor
Psychology Department
National Chung Cheng University
160 San-Hsing
MING-HSIUNG, CHIA-YI TAIWAN 621
REPUBLIC OF CHINA
psyhsi@ccunix.ccu.edu.tw

Johnson, Barbara R.
1/14 Highbury Grove
PRAHRAN, VIC 3181,
AUSTRALIA
brjohn@cassius.ist.unimelb.edu.au

Khanna, Jaswant Lal, Prof.
Department of Psychiatry
University of Tennessee
135 N. Pauline, Suite 633
MEMPHIS, TN 38105, USA

Kobayashi, Sayoko
Associate Professor
Tamaki Women's Junior College
1-33, Kazagashira-Machi
NAGASAKI, KYUSHU 850-0803,
JAPAN

Kok, J.C.
Department of Educational Sciences
Rand Afrikaans University
PO Box 524
Auckland Park
JOHANNESBURG 2006,
SOUTH AFRICA

Lao, Renee Y.
North Carolina State University
RALEIGH NC, USA

Laungani, Pittu, Dr.
Associate Professor
Division of Psychology
South Bank University
Erland House, Borough Road
LONDON, SE1 0AA,
UNITED KINGDOM
pittu.laungani@sbu.ac.uk

Lindegger, Graham, Dr.
Associate Professor
Psychology Department
Natal University
Private Bag X01
SCOTTSVILLE 3209, SOUTH AFRICA
lindegger@psy.unp.ac.za

Lowenstein, Ludwig F., Dr.
Allington Manor
Allington Lane, Fair Oak
EASTLEIGH, Hants S050 7DE
UNITED KINGDOM

Malloy, Thomas E.
Psychology Department
Rhode Island College
600 Mt. Pleasant Avenue
PROVIDENCE, RI 02908, USA

Maree, Pieter, Prof.
Former Dean
Rand Afrikaans University
PO Box 524
Auckland Park
JOHANNESBURG 2006, SOUTH AFRICA

McCabe, Marita, Prof
Department of Psychology
Deakin University
MELBOURNE, VIC 3150, AUSTRALIA

Milgram, Roberta M., Dr.
School of Education, Tel Aviv University
Ramat Aviv 69984
TEL AVIV, ISRAEL
milgram@post.tau.ac.il

Montvilo, Robin K., Dr.
Associate Professor
Psychology Department
Rhode Island College
600 Mt. Pleasant Avenue
PROVIDENCE, RI 02908, USA
montvilo@ric.edu

Myburgh, C.P.H.
Department of Educational Sciences
Rand Afrikaans University
PO Box 524
Auckland Park
JOHANNESBURG 2006,
SOUTH AFRICA
cphm@edcur.rau.ac.za

Naude, Fiona
School of Psychology
University of Natal
P/Bag X01
SCOTTSVILLE 3209,
SOUTH AFRICA

Nell, Sandra E.S., Dr.
Honorary Lecturer
Monash University
1 Satir Centre auf Australia
1051 A/B High Street
ARMADALE, VIC 3143,
AUSTRALIA
100236.543@compuserve.com

Niehaus, Linda, Dr.
Institute for Educational Research
Faculty of Education
University of South Africa
PO Box 392
PRETORIA 0003, SOUTH AFRICA
niehal@alpha.unisa.ac.za

Ogawauchi, Tetsuo
Tamaki Women's Junior College
1-33 Kazagashira-Machi
NAGASAKI, KYUSHU 850-0803,
JAPAN

Papházy, Judith E., Dr.
Counselling & Assessments
Consultant Psychologists
7 Burwood Highway
BURWOOD, VIC 3125, AUSTRALIA
jepcaa@internex.net.au

Parikh, Rajasi J., Dr.
Department of Psychology
East Carolina University
GREENVILLE, NC 27858-4353, USA

Pensa, Evelina D., Dr.
Corso Vittoria Emanuele II, 199
TORINO 10139, ITALY

Perez Schreier, Lucia, Dr.
2410 East Hammond Lk.Dr.
BLOOMFIELD HILLS, MI 48302, USA
lperez@oakland.edu

Pettifor, Jean L., Dr.
Adjunct Professor
University of Calgary
2731 Crawford Road NW
CALGARY, ALBERTA T2L 1C9, CANADA
pettifo@cadvision.com

Pillay, Basil, Dr.
Deputy Head
Dept. of Medicatly Applied Psychology
Faculty of Medicine, University of Natal
Private Bag 7
CONGELLA, DURBAN 4013,
SOUTH AFRICA
pillayb@med.und.ac.za

Pollok, Mary E., Dr.
Department of Psychology
East Carolina University
GREENVILLE, NC 27858-4353, USA

Puklek, Melita, MA
Dept. of Psychology / Faculty of Arts
University of Ljubljana
Askerceva 2
1000 LJUBLJANA, SLOVENIA
melita.puklek@guest.ames.si

THE FREQUENCY OF DISCUSSION ON HIV/AIDS AMONG ADOLESCENTS IN BOTSWANA

A.A.A. ALAO

University of Botswana, Botswana

INTRODUCTION

The issue of HIV/AIDS (Human Immuno Deficiency Virus/Acquired Immune Deficiency Syndrome) has become a source of concern to individuals, families, communities and nations at large. Researchers have made attempts to study the trends of HIV/AIDS and scientists are searching for ways to treat and cure the AIDS pandemic. Some studies have focused on AIDS Education and Prevention Strategies to reduce the spread of HIV, knowledge attitude and belief of different groups to HIV and People with AIDS (PWA). Different approaches to care of people with AIDS, effective HIV/AIDS interventions are being explored, while Governments are assessing the social-economic implications of HIV/AIDS, on the people. The issue of HIV/AIDS have been studied from different backgrounds and by varied professionals with the united goal of preventing the spread of HIV/AIDS, changing HIV risk behaviour, providing adequate counselling, treatment and care for the infected, support for the affected and possibly an eventual cure in future for the disease.

GLOBAL TRENDS OF AIDS

AIDS which was first described by Dr. Michael Gottlieb in Los Angeles in 1981, is a deadly disease spreading at an alarming rate. In a publication reported by WHO (1991) the world case total rose from 202, 599 (December 1989) to 314,611 (December 1990) and increase of 55%. By March 1991, a cumulative global total of 334,215 cases of AIDS had been reported from 159 countries, which represented an increase of nearly 11,000 cases over the previous 14 months as observed in WHO (1991) update AIDS cases.

Data from industrialized countries suggest that in the 1990s, AIDS and other HIV related diseases will become an important cause of morbidity among young adults living in many large urban Centres.

Harries (1991) noted that the cumulative number of AIDS in Africa rose from 2,978 in 1986, 10,697 in 1987, 20,905 in 1988, 38,248 in 1989 to 81,091 in 1990. The HIV/AIDS pandemic overview by World Health Organization (WHO) noted that by 1st July 1994, a total of 985,119 AIDS cases had been reported world wide. The global estimates and projections of HIV/AIDS by WHO in the 1994 overview, is that during this decade, around 10-15 million HIV infections may be expected in adults in most developing countries while as many as 5-10 million children will be HIV infected through their mothers, the majority of them in the sub-Sahara Africa.

Dr. Peter Piot, the Executive Director of UNAIDS in 1997 noted that the bulk of infections are in the sub-Saharan Africa where the bulk of infection have been concentrated today. South Africa estimated that one in ten adults are living with HIV up by more than a third since 1996. And in Namibia, AIDS kills twice as many people as malaria, the next common killer. In Zimbabwe, infection was estimated at one in five adults in 1996, UNAIDS and WHO Report 1997.

A new report released by the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) in 1997 noted that infection with HIV, is more common than previously thought. Over 30 million adults and children are believed to be living with HIV infection, one in every 100 sexually active adults worldwide and if the current transmission rates hold steady, by the year 2000, the number of people living HIV/AIDS will be over to 40 million. UNAIDS and WHO estimate that 5.8 million people were infected in 1997 at a rate of 16,000 new infections every day, while the total number of children under the age of 15 currently living with HIV/AIDS was estimated at 1.1 million. UNAIDS also estimated conservatively that 9 out of 10 HIV positive people have no idea they are infected.

TRENDS IN BOTSWANA

The Ministry of Health, Gaborone AIDS update of June 1992 noted that the first AIDS case was reported in Botswana in 1985. The cumulative AIDS cases reported as of June 5 1992 was 353 of which 190 were females.

The results of a pilot study on the issue undertaken in Botswana in 1992, enabled the National AIDS Control Programme (NACP) in Botswana to estimate that about 35,000 people in Botswana were HIV seropositive by the end of 1991. Surveys have also been carried out in Botswana on the issue of HIV/AIDS. The surveys use HIV prevalence among pregnant women who attend antenatal clinics as a proxy for infection among women and men in the larger population. The HIV sentinel surveillance in Botswana carried by the

AIDS/STD Unit (1994) revealed that out of the 3374 pregnant women and 1027 men with sexually transmitted diseases (STD) tested for the presence of antibodies to the HIV in serum, 30% of the pregnant women were found to be HIV positive, while between 25% and not more than 50% of the men were found to be HIV positive.

On the Basis of 1997 sentinel survey data by AIDS/STD Unit in Botswana, it was estimated that over 207.000 individuals are likely to have been infected with HIV in Botswana. This is an increase of about 148.000 infected individuals between 1992 and 1997. Compared to the general population of Botswana, it means that 14% of the total population have been infected with HIV, and that 25% of the sexually active and economically productive age group (15-49) are infected with HIV.

The Botswana Human Development Report (1997) which was a collaborative effort between the Botswana Government, the United Nations Development Programme (UNDP) and the wider civil society noted that while there is no reliable data on the extent to which children are being orphaned as a result of HIV/AIDS, it projected that:

- i) there will be 65,000 AIDS orphans in Botswana by the year 2000
- ii) the pandemic will see Botswana's life expectancy reduced from an expected 67 years to 52 years, plummeting down to 33 years by 2010.

THE PROBLEM

Like any other country, Botswana is concerned with the issue of prevention, management of the AIDS pandemic. The Ministry of Health (1993) in the review of Botswana Medium Term Plan for the prevention and control of HIV/AIDS highlighted the major achievement of the Government of Botswana in the programme management of HIV/AIDS. A number of non-governmental agencies have also been involved in the prevention of HIV/AIDS and the management of People with AIDS (PWA). There is the need for a multifaceted approach to the prevention and control of HIV/AIDS. Studies on HIV/AIDS among different age groups can also be helpful to understand this issue of concern among this group.

The focus of this paper is on adolescents and the issue of HIV/AIDS. One of the characteristics of adolescent is rapid development which include secondary sexual characteristics. The sexual behaviour of the young adults is that they can be described as being sexually active. It can be reasonably assumed that the extent of discussion of HIV/AIDS among this group may be an indication as to what this group knows and the possible consequences for their sexual behaviour.

Different researchers have expressed a growing awareness of the threat to adolescents from the AIDS pandemic. Brooks-Gunn J, et al. (1988) contend

that in USA, it is believed that majority of today's teenagers have had sexual intercourse before the age of 15. Flora et al. (1988) argued that the risk for adolescents of HIV transmissions and AIDS infection results from high rate of unprotected sexual activity and lack of knowledge. Brooks-Gunn et al. (1988) believe that adolescent's behavioural risks are strengthened by adolescent's ignorance about the causes and the prevention of HIV and AIDS infection.

METHODS

This paper highlights the frequency of talk or discussion of HIV/AIDS issues by adolescents which is part of a Knowledge, Attitude and Beliefs (KAB) study conducted among adolescents in Botswana, (Alao, Odirile and Kandjoo-Murangi, 1995). The subjects in the study were 644 adolescents randomly selected from twelve Community Junior Secondary Schools and four Senior Secondary Schools in Gaborone, Botswana. The subjects reflected the varying socio-economic background of the society. Three hundred and sixty three female and two hundred and eighty one male students were involved in the study. The instrument used in data collection was adapted from similar inventories used by the World Health Organization and other relevant organization, to collect information on knowledge, attitude, belief and talk about issues related to HIV/AIDS. The questionnaire was pre-tested on 50 adolescents in secondary schools not used in the study to ensure clarity of terms and/or to detect ambiguities in the questionnaire, if any. Section A of the questionnaire dealt with demographic variables such as sex, educational background and socio-economic status. Section B of the questionnaire comprised items on six areas one of which is the frequency by which students talk about HIV/AIDS to different people, which is the focus of this paper. Other areas covered in the study by Alao, Odirile and Kandjoo-Murangi (1995) but not highlighted in this paper include:

- i) the frequency of time, information on HIV/AIDS is received by subjects,
- ii) where subjects would prefer to acquire information about HIV/AIDS Education
- iii) knowledge of how AIDS virus is transmitted and the AIDS disease in general
- iv) attitudes to people with AIDS virus and AIDS and
- v) belief about AIDS virus and AIDS in general

DISCUSSION OR TALK ABOUT HIV/AIDS

The talk or discussion of AIDS by subjects in the past month or so, with parents, friends, school mates, teachers, a doctor or health worker was analysed from never (with a score of 1) to once/twice (with a score of 2), three/four times (with a score of 3) and more than four times (with a score of 4). Given the concern on the issue of AIDS in general, discussion or talk about AIDS less than twice in a month was considered in-adequate while talk or discussion on the issue at least twice or more in a month, was considered adequate. Table 1 revealed the percentages of inadequate talk among subjects with reference to the different demographic variables under consideration.

Table 1: Percentage of subjects with Inadequate Discussion or Talk on AIDS with reference to Education, Gender and Socio-Economic Status

	Total Number	Mean	Standard Deviation	Inadequate Number	Talk Percent
EDUCATION					
JSS	309	11.36	4.23	224	78.96
SSS	250	11.30	3.82	200	80.00
GENDER					
Male	287	10.88	4.15		82.58
Female	344	11.68	4.07	257	74.71
Socio-Economic Status					
Low	143	11.43	4.44	110	76.92
Medium	307	11.47	4.20	235	76.55
High	73	11.38	3.92	56	76.71

From Table 1, eighty percent of the Senior Secondary School subjects with a mean of 11.36 had less talk on AIDS compared to 78.96% of Junior Secondary School subjects with a mean of 11.30. More males 82.58% with a mean of 10.88 had inadequate talk on AIDS, while 74.71% of female subjects with a mean of 11.68 had inadequate talk on AIDS.

Approximately the same percentage of subjects from low, medium, high socio-economic status had inadequate talk about AIDS. The percentages were 76.92%, 76.55% and 76.71%, respectively. From Table 2, there was no significant difference between the JSS subjects and the SSS subjects with reference to the extent to which the subjects had talk or discuss AIDS issues with parents, friends and significant others. The *t*-ratio was 0.18, the degree of

freedom was 557, and the *P*-value was 0.8600, hence the null hypothesis that there will be no statistically significant difference in the talk about AIDS between subjects from Senior Secondary schools and Junior Secondary Schools was not rejected.

Table 2: Comparison of responses of subjects on Talk about AIDS according to educational background, sex and socio-economic background.

	<i>t</i> -ratio	Df	<i>P</i> -value	Conclusion
Education (JSS vs SSS)	0.18	557	0.8600	Do not reject H ₀
Sex (Male & Female)	-2.45	629	0.015	Reject H ₀
Socio-economic background (Low, Medium & High)	0.18	557	0.8600	Do not reject H ₀

Table 2 revealed statistical significant difference between male and female subjects with reference to talk about AIDS to parents, friends both sexes had inadequate talk on the AIDS, the males had more inadequate talk.

There was no significant difference among subjects from low, medium and high socio-economic background with reference to talk about AIDS to parents, friends, and significant others. The subjects displayed inadequate talk in the following order, socio-economic background. The significance or otherwise of each hypothesis is judged by the *P*-value associated to that hypothesis. The *P*-value can be interpreted as the probability that the null hypothesis is not false, given the observed data. Thus a "large" *P*-value implies that the null hypotheses cannot be rejected, while a "small" *P*-value indicates evidence against the null hypothesis; the smaller the *P*-value, the stronger the evidence against the null hypothesis. The value of 0.05 was used as a cut-off point above which the null hypothesis cannot be rejected.

DISCUSSION

The level of awareness of the subjects on issues related to AIDS sometimes can be assessed by the frequency of discussion on the topic under consideration, by this group under study. Taking initiatives by subjects to talk about AIDS could also be a measure of the concern attached to the topic of AIDS by this group. This study has revealed that the discussion about AIDS between young adolescents and parents, friends, school mates, teachers and the health worker or doctor appears inadequate. Willingness to discuss issues related to AIDS may also be a function of the attitude, belief or seriousness

attached to the issue. There is the need to encourage this group to feel free to discuss issues related to AIDS not only to update their information on the subject but also to correct misconception from time to time. The statistical significant difference between male and female subjects with reference to talking about AIDS, seem to suggest that the male subjects need to be encouraged to talk or discuss more about AIDS issue. Both sexes however exhibited inadequate discussion. The more the students talk about issues, the more awareness on this topic.

Weeks, et al. (1997) tested the effectiveness of involving parents in school based AIDS education with respect to altering AIDS related knowledge, attitudes, behavioural intentions, communication patterns and behaviour of students. Results of the study indicated that both treatment conditions (a) parent-interactive (classroom curricular + parent interactive component) and (b) parent non-interactive (classroom curricular only) had a strong impact on enhancing students knowledge, attitudes, communication patterns and behaviour intentions, compared to the control group (exposed to AIDS education ordinarily provided by the school). Best (1989) also observed that the family and the school are recognized as important, both as setting and context for health promotion and intervention.

Consequently, encouraging discussion of AIDS issues with parents and significant others with more knowledgeable about AIDS issues may be helpful to the adolescents. Results of recent epidemiological studies according to the Centre for Disease Control (1993), Hein (1992) indicate that the incidence of HIV infection is on the rise among heterosexuals, particularly among young adults. Vermund, et al. (1989) also observed that given the sometimes long latency period from infection to the showing of AIDS symptoms, it is likely that many of these young adults contracted HIV as adolescents. Consequently, there is the need to focus on adolescents understanding of AIDS with the aim to provide appropriate prevention programmes targeted at this group.

Adolescents in secondary schools in Botswana need to be encouraged to talk more about the issues related to AIDS. When information on HIV/AIDS is presented to students, they also need to be encouraged to discuss this information to reinforce what is known with parents, friends and significant others. Group discussions on AIDS or debates can increase the awareness of students on the topic.

REFERENCES

1. AIDS/STD Unit (1977). Update: Ministry of Health, Gaborone, Botswana, pp.9.
2. AIDS/STD Unit (1994). Update: Ministry of Health, Gaborone, Botswana.
3. AIDS/STD Unit, (1992) Update: Ministry of Health, Gaborone, Botswana, June.

4. Alao AA, Odirile L.W, Kandjoo-Murangi (1995). Knowledge, Attitude and Beliefs related to HIV/AIDS Among Adolescents in Secondary Schools in Gaborone Research project funded by the National Institute of Development and Documentation and the Centre for Graduate Studies and Research, Faculty of Education; University of Botswana on behalf of the Swedish Agency for Research Co-operation in Developing Countries, Gaborone, Botswana, pp.52.
5. Best JA (1989). Intervention perspectives in school health promotion research. *Health Education Quarterly*, 16(2), 299-306.
6. Botswana Human Development Report (BHDR) (1997). Government Printer, Gaborone.
7. Brooks-Gunn J, Boyer CB, Hein (1988). Preventing HIV Infection and AIDS in children and adolescents, Behavioural research and intervention strategies. *American Psychologist*, 43(11), 958-964.
8. Centre for Disease Control (1993). HIV/AIDS surveillance report. Atlanta, Ga: Author.
9. Flora JD, et al. (1988). Prospects for the future, *Death Suicide*, 12, 597-607.
10. Harries A (1991). Facing up to AIDS in Africa *Health*, Vol.13.No.15,July, p.25.
11. Hein K (1992). Adolescents at risk for HIV infection. In R. Di Clemente (Ed.) *Adolescents and AIDS* (pp. 3-16) Beverly Hills, CA; Sage.
12. Ministry of Health (1992). AIDS Update: Epidemiological Unit, Private Bag 00269, Gaborone, Botswana, June edition.
13. Ministry of Health (1993). Review of Botswana Medium Term Plan for the Prevention and Control of HIV/AIDS 1983 to 1993, Gaborone, Botswana, November 18-29.
14. UNAIDS and WHO (1997). United Nations Programme on HIV/AIDS Press Release, Paris, November 26.
15. Vermund S, Hein K, Goyle H, Cary J, Thomas P, Drucher E (1989). AIDS among adolescents. *American Journal of diseases in Children*, 143, 1220-1225.
16. Weeks K, Levy SR, Gordon AK, Handler A, Perhats C, Flay BR (1997). Does Parental Involvement Make a Difference? The Impact if Parent Interactive Activities on Students in a School Based AIDS Prevention Programme AIDS Education and Prevention: Supplement A, 90-106, New York, Guilford Press.
17. World Health Organization (1991.) AIDS Cases reported to Surveillance, Forecasting and Impact Assessment Unit (AFI) – Global programme on AIDS, March edition.
18. World Health Organization (1994). Global AIDS Update, Geneva, 1st July.