APPENDIX A. International Neurobehavioural Test Battery
APPENDIX B. Socio-demographic Questionnaire

THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF PSYCHIATRY
P. O. Box 32379, Lusaka, Zambia

NEUROPSYCHOLOGY
DATA COLLECTION QUESTIONNAIRE

INSTRUCTIONS

A. Please give/tick [✓] the appropriate answer to the question.

B. All the information you will provide will be used for the purpose of this study only, therefore, provide genuine information and ensure that all questions are carefully answered.
AGE & GENDER

Q1. What is your age?
   1.1. 20 – 35 [ ]
   1.2. 36 – 45 [ ]
   1.3. 46 – 55 [ ]
   1.4. 56 and above [ ]

Q2. What is your gender?
   2.1. Female [ ]
   2.2. Male [ ]

Q3. What is your current status?
   3.1. Single [ ]
   3.2. Married [ ]
   3.3. Widowed [ ]
   3.4. Divorced [ ]
   3.5. Living with opposite sex [ ]

EDUCATION

Q3. In general, what type of school did you attend?
   3.1. Primary [ ]
      3.1.1. Community school [ ]
      3.1.2. Private school [ ]
      3.1.3. Mission [ ]
      3.1.4. Government school [ ]
   3.2. Secondary [ ]
      3.2.1. Community school [ ]
      3.2.2. Private school [ ]
      3.2.3. Mission [ ]
      3.2.4. Government School [ ]

Q4. What were the qualifications of most (≥70%) of your teachers:
   4.1. Primary
      4.1.1. I do not know [ ]
      4.1.2. Primary teachers’ Certificate [ ]
      4.1.3. Secondary teachers’ diploma [ ]
      4.1.4. Bachelors degree [ ]
   4.2. Secondary
      4.2.1. I do not know [ ]
      4.2.2. Primary teachers’ Certificate [ ]
4.2.3. Secondary teachers’ diploma
4.2.4. Bachelors degree
4.2.5. Masters degree

Q5. Has your education been helpful in your execution of daily activities?
5.1. Yes
5.2. No

Q6. In what four major ways would you say your education has been helpful? (please indicate)
6.1. ..............................................................
6.2. ..............................................................
6.3. ..............................................................
6.4. ..............................................................

Q7. With your currently attained education, are you considering furthering your studies?
7.1. Yes
7.2. No

EMPLOYMENT, INCOME, & RESIDENCE

Q8. What are you currently doing?
8.1. Unemployed
8.2. Self-employed
8.3. Employed
8.4. Retired

Q9. What is your occupation?
9.1. Unskilled (e.g. maid, farm laborer, etc)
9.2. Semi-skilled (e.g. plumber, bus driver, etc)
9.3. Skilled (e.g. accountant, physician, etc)
9.4. Specialist (e.g. consultant, economic analysts)

Q10. What is your income per year?
10.1. Less than K30 million
10.2. K30 million to less than K60 million
10.3. K60 million to less than K120 million
10.4. K120 million and above

Q11. Where do you currently live?
11.1. Low cost rural area (e.g. village)
11.2. High cost rural area (e.g. ‘boma’)
11.3. Low cost urban area (e.g. high density area)
11.4. High cost urban area (e.g. low density area)
Q12. What is your mother tongue?
12.1. Bemba [ ]
12.2. Nyanja [ ]
12.3. Tonga [ ]
12.4. Lozi [ ]
12.5. Kaonde [ ]
12.6. Luvale [ ]
12.7. Lunda [ ]
12.8. Other (please indicate)................................... [ ]

Q13. How much do you use your mother tongue in communicating?
13.1. Rarely (just know and use one or two words) [ ]
13.2. Sometimes (few times at home) [ ]
13.3. Often (in home conversations) [ ]
13.4. Very often (in almost all my conversations) [ ]

Q14. Which languages would you say you fluent in and at what age did you acquired them? (Indicate ONLY 3 or less in the order of fluency)

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<th>Language</th>
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Q15. How much would you say you use the English language in communicating?
15.1. Rarely (just know and use one or two words) [ ]
15.2. Sometimes (only in formal situations) [ ]
15.3. Often (at least in one conversation in a week) [ ]
15.4. Very often (in almost all my conversations) [ ]

Q16. How often do you use computers?
16.1. Not at all [ ]
16.2. Sometimes (less than 4 times in a year) [ ]
16.3. Often (at least once in a month) [ ]
16.4. Very often (at least once in a week) [ ]
NUTRITIONAL STATUS

Q1. Have you ever received nutritional advice since testing for HIV?
   1.1 Yes [   ]
   1.2 No  [   ]

Q2. Are you following the nutritional advice given to you at the health centre?
   2.1 Yes [   ]
   2.2 No  [   ]

Q3. If not, what would be the reasons for not following the nutritional advice?
   3.1 Advice is not necessary to me [   ]
   3.2 Lack of money to buy the prescribed foods [   ]
   3.3 Lack of time to prepare the food [   ]
   3.4 Too many family members [   ]
   3.5 Others reasons please indicate………………[   ]

Q4. How many meals do you eat per day?
   4.1 One meal [   ]
   4.2 Two meals [   ]
   4.3 Three or more meals [   ]

Q5. How would you describe the quality of food that you usually eat at each meal
   5.1 Not enough [   ]
   5.2 Just enough [   ]
   5.3 Plenty [   ]

Q6. How much fluid (water, juice, coffee, tea, milk) do you consume per day?
   6.1 Less than one cup/ glass [   ]
   6.2 Three to five cups/glasses [   ]
   6.3 More than 5 cups/glasses [   ]
APPENDIX C. Informed consent form

Information Sheet

University of Zambia
School of Medicine
Department of Psychiatry

PLEASE READ THIS DOCUMENT CAREFULLY. SIGN YOUR NAME BELOW ONLY IF YOU AGREE TO PARTICIPATE AND YOU FULLY UNDERSTAND YOUR RIGHTS. YOUR SIGNATURE IS REQUIRED FOR PARTICIPATION. FOR THIS PROJECT, YOU MUST BE BETWEEN 20 AND 65 YEARS OF AGE TO PARTICIPATE. IF YOU DESIRE A COPY OF THIS CONSENT FORM, YOU MAY REQUEST ONE AND WE WILL PROVIDE IT.

Introduction:

This study is entitled the effects of malnutrition as a co-morbid factor on neurocognitive functioning in HIV positive individuals. This research is directed by Prispa Mwila a masters students in Clinical Neuropsychology at the University of Zambia and is sponsored by NOMA Project. This document defines the terms and conditions for consenting to participate in this study. A total number of 320 participants will be recruited for the study.

Description of the Study:

You are being invited to take part in the study that is looking at the effects of nutritional status as a co-morbid factor on neurocognitive functioning in HIV positive adults. You will be required to undergo medical screening and laboratory/blood tests done by qualified medical personnel. You will also be required to have your height and weight with minimum amounts of heavy clothes (like jackets) and shoes taken by a qualified medical practitioner Measures of heights and weight will be obtained Thereafter, you
will be required to complete questionnaires and take a group of tests to assess brain functioning using the Neuropsychological test battery.

Confidentiality

All the information you will give shall be confidential and shall be kept under key and lock. The findings in the research shall be presented in aggregate form with no identifying information to ensure confidentiality.

Risks and Benefits:

- You may experience minimal pain during drawing of blood. A cold compress will be used to reduce pain.
- You may experience fatigue due to the length of time required for the testing process. To reduce on this you are free to ask for a short break whenever you require it.
- We cannot guarantee that you will receive any direct benefits from this study though you will have an opportunity to contribute to neuropsychological assessments that will help Zambians in general by participating in this study.

Time Involvement

The whole process will take approximately 2:30 to 3:00 hours to complete.

Compensation for Your Time:

You will be compensated for your time and transport with K50, 000.

Participation Rights:

- Participation in this study is purely voluntary so that if you decide to withdraw at any point, there will be no consequences to you.
- All personal identifying information will be kept confidential and the data sheets will be kept in secured lockers in accordance with the standards of the University of Zambia Biomedical Ethics Committee. If the results of this study are required for publication as we hope, your identity will still be kept private.

Contacts

If you have any further questions about this research please contact:
The Principal Investigator
Miss Prispa Mwila
School of Medicine
University of Zambia
Lusaka
Cell no: 0976312271
Biomedical Research Ethics Committee
Ridgeway Campus
P.O. Box 50110
University of Zambia
LUSAKA.
Telephone: +260-211- 256067
Fax: + 260-211-250753
E-mail: unzarec@zamtel.zm or unzarec@unza.zm
I………………………………………………………………………… (Name) have read and understood the terms and conditions of this study and I hereby agree to participate in the above-described research study. I understand that my participation is voluntary and that I may withdraw at any time without penalty. As the participant in this project, my signature under here testifies that I understand the consent process and management of confidentiality as indicated above. I also understand that I can withdraw at any time.

Signature of Research Participant:
…………………………………………………………………………Date………………...

Name and Signature of Witness:
…………………………………………………………………………/………………..……..Date……………….

Name and Signature of researcher:……………………………………………………/………………..……..Date……………….
APPENDIX D. Biomedical Research Ethics approval letter

THE UNIVERSITY OF ZAMBIA
BIOMEDICAL RESEARCH ETHICS COMMITTEE


Your Ref: 012-05-12.

Ms Prisca Mwila,
School of Medicine,
Department of Psychiatry,
PO Box 3019,
Lusaka.

Dear Ms Mwila,

RE: RE-SUBMITTED RESEARCH PROPOSAL: "THE EFFECTS OF NUTRITIONAL STATUS AS A CO-MORBID FACTOR ON NEUROCOGNITIVE FUNCTIONING IN HIV POSITIVE ADULTS IN LUSAKA PROVINCE"

The above mentioned research proposal was re-submitted to the Biomedical Research Ethics Committee with recommended changes as of 14th July, 2012. The proposal is approved.

CONDITIONS:
- This approval is based strictly on your submitted proposal. Should there be need for you to modify or change the study design or methodology, you will need to seek clearance from the Research Ethics Committee.
- If you have need for further clarification please consult this office. Please note that it is mandatory that you submit a detailed progress report of your study to this Committee every six months and a final copy of your report at the end of the study.
- Any serious adverse events must be reported at once to this Committee.
- Please note that when your approval expires you may need to request for renewal. The request should be accompanied by a Progress Report (Progress Report Forms can be obtained from the Secretariat).
- Ensure that a final copy of the results is submitted to this Committee.

Yours sincerely,

[Signature]
CHIEF PERSON

Date of approval: 25 September, 2012  Date of expiry: 24 September, 2013
APPENDIX E. Ministry of Health letter

Thursday, July 19, 2012.

Professor MPS Ngoma  
Associates Professor  
Paeadiatrics and Child Health  
University Teaching Hospital  
LUSAKA.

Dear Dr. Ngoma,

RE: PERSSION TO CONDUCT RESEARCH AT LUSAKA DISTRICT CLINICS: MASTERS IN CLINICAL NEUROPSYCHOLOGY.

The District Health Office is in receipt of your letter dated 16th July, 2012 on the above subject.

Approval has been granted for the ten named students to conduct research in the Lusaka District Clinics.

However, the research should only commence upon production of a copy of UNZA REC approval.

You will also be required to furnish the DHO with a summary of your research findings at the completion of the study.

Yours sincerely,

[Signature]

DR. M. M. CHIKO  
ACTING PRINCIPAL CLINICAL CARE OFFICER  
For/ACTING DISTRICT MEDICAL OFFICER.

cc: Health Centre in-charges.
# APPENDIX F. Zambia Achievement Test (ZAT)

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