

# Knowledge, Attitudes and Practices of Caregivers of Children With Sick Cell Disease Towards Sick Cell Disease At Kitwe Teaching Hospital, Kitwe Zambia.

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## Supplementary

### Appendix 1: Information sheet

Dear respondent,

My name is Veronica Musonda, am at student at Michael Chilufya Sata, School of Medicine, Copperbelt University. Am currently pursuing a Bachelor's degree in Medicine and Surgery (MBChB). Therefore, in partial fulfilment of the requirements for the award of this degree, is carrying out a research entitled Knowledge, Attitude and Practices of care givers of children with sickle cell disease towards sickle cell disease at Kitwe teaching hospital in Kitwe, Zambia

This research seeks to find out what Knowledge, Attitude and Practices care givers of children with sickle cell disease have towards sickle cell disease at Kitwe teaching hospital. This will help provide information of how knowledgeable care givers are about sickle cell disease, what attitudes they have and the kind of practices they carry out as a contribution to the disease management. From the results which will be obtained, recommendations to implement measures that will help and improve the well-being of every child suffering from SCD with regards to home based healthy practices offered by caregivers will be made.

The information provided by the participant in the given questionnaire and interviews will be treated with uttermost confidentiality and shall strictly be used for academic purposes. No names or identification number will be required. Participation is voluntary and hence you are free to withdraw from the research at any point. No incentives will be awarded for participation. Your full participation will highly be appreciated.

Thank you.

For any queries, you can contact

## Appendix 2: Consent form

Having read through the information form and understood the nature of the study provided by the researcher. I give consent to participate in the study because it is with clear understanding and recognition of:

1. The objective of the study.
2. My right to withdraw from the study at any stage of the study.

Participant signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher Signature ..... Date.....

## Appendix 3: Questionnaire

### Section A

Bio demographic data

1. How old are you?

- a. 15-19 years [ ]
- b. 20-24 years [ ]
- c. 25-29 years [ ]
- d. 30-34 years [ ]
- e. 40 and above [ ]

2. What is your marital status

- a. Single [ ]
- b. Married [ ]
- c. Divorced [ ]
- d. Widowed [ ]
- e. Separated [ ]

3. How many children do you have?

- a. 1 [ ]
- b. 2 [ ]
- c. 3 [ ]
- d. More than 3 [ ]

4. How many of your children have sickle cell disease?

- a. 1 [ ]
- b. 2 [ ]
- c. 3 [ ]
- d. More than 3 [ ]

### Section B

Social economic data

5. What is the level of your education?

- a. never been to school [ ]
- b. primary school [ ]
- c. secondary school [ ]
- d. college [ ]
- e. university [ ]

6. Are you in formal employment?

- a. Yes [ ]
- b. No [ ]

7. What is your occupation?

- 1. Formal employment [ ]
- 2. Business person [ ]
- 3. Unemployed [ ]

8. How much is your family income per month?

- a. Above K3000 [ ]
- b. K1000 to K3000 [ ]
- c. K500 to K999 [ ]
- d. Below k500 [ ]

9. Is your income adequate to take care of your sickle cell disease child at home?

- a. Yes [ ]
- b. No [ ]

### Section C

Knowledge of caregivers of children with sickle cell disease on prevention of sickle cell crises.

10. What is sickle cell disease?

- a. A common blood disorder [ ]
- b. A genetic disease of the red blood cells [ ]
- c. A bleeding disorder [ ]

11. What is sickle cell crises? (in your own words)

.....  
.....  
.....

12. What are the symptoms of sickle cell crises( tick the correct answer, you can tick more than one answer)

- a. Pain [ ]
- b. Difficulties breathing [ ]

c. Diarrhoea [ ]

d. Vomiting [ ]

13. Are sickle cell crises preventable?

a. Yes [ ]

b. No [ ]

14. If yes to question 11, how do you prevent crises?

.....  
.....  
.....

15. What are the predisposing factors to sickle cell crises?

(Tick correct answer)

a. Infection [ ]

b. Exposure to cold [ ]

c. Fever [ ]

d. Doing activities demanding more oxygen [ ]

e. Sleeping under mosquito net [ ]

f. Dehydration [ ]

16. What is the source of your information on sickle cell crises prevention? [ ]

a. hospital [ ]

b. books [ ]

c. internet [ ]

d. Others specify.....

17. If the source of your information was from the hospital staff, was the information adequate? a. Yes [ ]

b. No [ ]

### Section D

Practices of caregivers with children with sickle cell disease on prevention of sickle cell crises.

17. Do you prevent sickle cell crises before a child goes into a crisis?

a. Yes [ ]

b. No [ ]

18. How do you prevent sickle cell crises?

(Tick all correct answers)

a. Give child plenty of fluid? [ ]

b. Feed the child nutritious food [ ]

c. Ensure that the child sleeps under a treated mosquito net [ ]

- d. Give prophylactic drugs ☐
- e. Take a child to a traditional healer ☐
- f. Dress the child warm clothes ☐
- g. Restrict the child from doing exercises demanding more oxygen ☐

#### Section E

Social and cultural practices of caregivers with children with sickle cell disease on prevention of sickle cell crises

19. Are there any social and cultural practices towards prevention of sickle cell crises which you know?

- a. Yes ☐
- b. No ☐

20. If yes to question 20, what are some of these practices?

.....  
 .....

21. Do you do some of these social and cultural practices mentioned in question 21?

- a. Yes ☐
- b. No ☐

#### SECTION F

Attitude of care givers towards prevention of sickle cell crises

22. Are the preventive measures of sickle cell crises very difficult for one to put into practice?

- a. Yes ☐
- b. No ☐

23. What do you do when a child falls sick?

(Tick the answer(s) of your choice)

- a. rush the child to the hospital ☐
- b. call relatives for help ☐
- c. take the child for prayers ☐
- d. Stay at home ☐

24. Have you ever felt that the child should just die because you are tired of taking care of them?

- a. Yes ☐
- b. No ☐

24. What recommendations /suggestions can you give on how knowledge, attitudes and practices of caregivers to children with sickle cell disease towards sickle cell disease can be improved?.....

.....

Table 5.1

**Appendix 4: Budget**

Description of item/fee	Amount (ZMK)
Ethical clearance fee	500.00
Pens	10.00
Photocopying of questionnaire's/ consent forms	400.00
Printing and binding of the project report	150.00
Refreshments	400.00
Transportation	400.00
Miscellaneous	800.00
Total	2260.00

Table 5.2

**Appendix 5: Time lines**

Task to be performed	June- october 2022	October- november 2022	November- december 2022	January-march (2023)
Submission of project topic				
Approval of research topic + handling in of project proposal				
Data collection				
Data entry				
Data analysis				
Report writing				
Submission of final research report				

**Appendix 6: Ethical approval letter**

TROPICAL DISEASES  
Tel/Fax: +260212 615444  
P.O. Box 71769  
tdrc-ethics@tdrc.org.zm  
NDOLA, ZAMBIA



RESEARCH CENTRE

TDRC RESEARCH ETHICS COMMITTEE  
IRB REGISTRATION NUMBER: 00002911  
FWA NUMBER: 00003729

TRC/C/4/12/2022

22<sup>nd</sup> December, 2022

Veronica Taonga Musonda  
Principal Investigator  
Copperbelt University School of Medicine  
NDOLA

Dear Ms Musonda,

**RE: ETHICAL APPROVAL OF STUDY PROTOCOL**

Reference is made to the protocol entitled "Knowledge, attitudes and practices of caregivers of children with sickle cell disease towards sickle cell disease at Kitwe Teaching Hospital, Kitwe Zambia, TDREC/144/12/22"

On behalf of the Chairman of the TDRC Research Ethics Committee (REC), I am pleased to inform you that your protocol was reviewed and granted ethical approval based on the following conditions:

Ensure that you obtain permission from the Kitwe Teaching Hospital authorities prior to commencement of your research.

You are now required to submit your protocol to the NHRA for final approval following the link: <https://www.nhra.org.zm>. A final report to the study should be submitted to the REC Secretariat at the end of the study.

This approval is valid for the period, 22<sup>nd</sup> December 2022 to 21<sup>st</sup> December 2023.

The Committee wishes you success in academic work and execution of the study.

Yours faithfully,

TROPICAL DISEASES RESEARCH CENTRE

Sydney Mwambi  
DEPUTY SECRETARY – TDRC Ethics Review Committee



## Appendix 7: Approval from national health research authority.



### NATIONAL HEALTH RESEARCH AUTHORITY

Lot No. 18961/M, off Katama Road, Chalala, P.O. Box 30075, LUSAKA  
Tell: +260211 250309 | Email: [znhrasec@nhra.org.zm](mailto:znhrasec@nhra.org.zm) | [www.nhra.org.zm](http://www.nhra.org.zm)

Ref No: NHRA00005/8/02/2023

Date: 8<sup>th</sup> February, 2023

The Principal Investigator,  
Veronica Musonda,  
Copperbelt University,  
Ndola, Zambia.

Dear Ms. Musonda,

#### Re: Request for Ethical Clearance and Authority to Conduct Research

The National Health Research Authority is in receipt of your request for ethical clearance and authority to conduct research titled "Knowledge, Attitudes and Practices of Caregivers of Children with Sickle Cell Disease towards Sickle Cell Disease at Kitwe Teaching Hospital, Kitwe Zambia."

I wish to inform you that following submission of your request to the Authority, our review of the same and in view of the ethical clearance, this study has been **approved** on condition that:

1. The relevant Provincial and District Medical Officers where the study is being conducted are fully appraised;
2. Progress updates are provided to NHRA bi-annually from the date of commencement of the study;
3. The final study report is cleared by the NHRA before any publication or dissemination within or outside the country;
4. After clearance for publication or dissemination by the NHRA, the final study report is shared with all relevant Provincial and District Directors of Health where the study was being conducted, University leadership, and all key respondents.

Yours faithfully,

NATIONAL HEALTH RESEARCH AUTHORITY

Prof Victor Chalwe,  
ACTING DIRECTOR/CHIEF EXECUTIVE OFFICER

## Appendix 8: Permission letter from provincial health office.

PHO/CB/ 2/17/1

All Correspondences should be addressed to the  
Provincial Health Director  
Telephone/Mobile No. +260861274/+260 978529175  
Email: copperbeltpho@gmail.com



REPUBLIC OF ZAMBIA  
MINISTRY OF HEALTH

### COPPERBELT PROVINCIAL HEALTH OFFICE

PWD Yard, Kabompo Road  
P.O. Box 70032,  
Kusenshi  
NDOLA

6<sup>th</sup> January, 2023

Veronica Taonga Musonda  
Copperbelt University,  
School of Medicine,  
P.O Box 71191  
NDOLA

Dear Musonda,

#### RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Reference is made to your letter regarding the above captioned subject.

I am pleased to inform you that Management has favourably considered your request and has granted you permission to conduct the Research entitled: **"Knowledge, attitudes and practices of caregivers of children with sickle cell disease towards sickle cell disease at Kitwe Teaching Hospital, Kitwe, Zambia."**


Kindly note that the data you will collect should not be used for any other purposes other than for academic purposes only.

Share your findings with this office for our reference and information purposes.

I wish you a successful study.

Yours faithfully

COPPERBELT PROVINCIAL HEALTH OFFICE

  
Dr. Christopher M Dube  
Public Health Specialist

For/PROVINCIAL HEALTH DIRECTOR





## Appendix 9: Permission letter from Kitwe teaching hospital management.

