

## APPENDIX II: QUESTIONNAIRES

### QUESTIONNAIRE

**Study title: Assessment of pubertal development among sickle cell disease patients aged 8-19 years attending care at Mbale regional referral hospital, Uganda**

**Study no** .....

#### Screening question

Have you ever been told by a healthcare worker that you have Sickle Cell Disease? 1. Yes [ ]  
2. No [ ] *If Yes*, answer the questions in section numbered 1-9. *If No*, skip the questions in section numbered 1-9.

#### Social demographics

Patient's Initials .....

Phone number.....Date of evaluation.....

Age in years \_\_\_\_\_ Sex 1.M [ ] 2.F [ ] Date of birth \_\_\_\_/\_\_\_\_/\_\_\_\_

Current Address: district \_\_\_\_\_ village \_\_\_\_\_ Religion.....

What is your highest level of education? \_\_\_\_\_

Are you currently employed? 1. Yes [ ] 2. No [ ] If yes: what is your job? \_\_\_\_\_ Monthly income 1. (<300,000shs) [ ] 2. (>300,000shs) [ ]

#### Family -Socio-economic data

Who is your guardian? 1. [ ] Both mother and father 2. [ ] Mother alone 3. [ ] Father alone 4. [ ] Grandparent 5. [ ] Sibling 6. [ ] Aunt/Uncle 7. [ ] None 8. Other \_\_\_\_\_

Is your mother alive? 1. Yes [ ] 2. No [ ] 3. I don't know [ ]

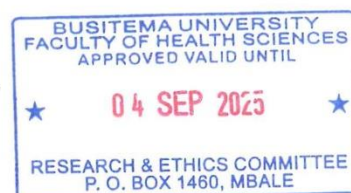
Is your father alive? 1. Yes [ ] 2. No [ ] 3. I don't know [ ]

Age of Parent/guardian.....

Parent/guardian's level of education: No education [ ] Primary level [ ] Secondary level [ ]  
Tertiary/University level [ ]

Employment status: Employed [ ] Unemployed [ ] Self employed [ ]

Family size: no. of children.....



Family income status per month: 1.Low income (50,000-100,00shs) [ ] 2.Middle income (100,000-300,000shs) [ ] 3. High income (>300,000shs) [ ]

Who brings you to the clinic? 1.Self [ ] 2.parent [ ] 3.guardian [ ] 4.other(specify).....

#### **Medical assessment**

In the past 1 year, how many times have you been sick enough to see a healthcare worker? [ ] 0 [ ] <5 [ ] >5

How many times have you been sick enough to require hospital admission? [ ] 0 [ ] 1 [ ] 2 [ ] >2

Previous HIV test? [ ] 1.Yes [ ] 2.No If yes, when? \_\_\_\_\_ Results \_\_\_\_\_

#### **Section (1-10): History of Sickle Cell Disease illness and past medical history**

1.Age at time of diagnosis \_\_\_\_\_

2.Date of registration in clinic \_\_\_\_\_

3.Number of hospital admissions in the last 1 year \_\_\_\_\_

4.Number of blood transfusions in the past 1 year \_\_\_\_\_

5.number of clinic visit in last year-----

6.In your lifetime, how many strokes (severe weakness on one side of the body, when you could not move arm, leg or part of face) have you had ? \_\_\_\_\_

7.How many days of school have you missed in the past 6 months of your school term due to Sickle Cell Disease illness? \_\_\_\_\_

8.Are you taking folic acid supplementation? 1.Yes [ ] 2.No [ ]

9.Have you ever taken hydroxyurea? 1.Yes [ ] 2.No [ ]

10.Are you currently taking Hydroxyurea 1.Yes [ ] 2.No [ ] If yes, duration on treatment \_\_\_\_\_

#### **Dietary history**

1.How many meals do you take in a day-----

2.What type of foods do you always take daily -----

3.What type of fruits and vegetables do you always day daily-----

#### **Sexual development History for Girls**

Age at first period \_\_\_\_\_ Age at breast bud development \_\_\_\_\_

Age at time of pubic hair development \_\_\_\_\_

#### **Sexual development History for Boys**



Age at time of pubic hair development \_\_\_\_\_ Age at time of penile enlargement or lengthening \_\_\_\_\_  
Age at time of scrotal enlargement \_\_\_\_\_

**Perception and attitude on development**

What is your perception on your sexual maturity in regards to your pubertal delay?

What do your friends and family say about it?

Do you have any sexual drive?

What do you think about your future?

**Physical Examination**

General exam

Temperature..... Jaundice: none[ ] mild[ ] moderate[ ] severe[ ]

Pallor: none[ ] mild[ ] moderate[ ] severe[ ]

Frontal bossing [ ] 1. None [ ] 2. Present [ ] Oedema grade 1. none [ ] 1[ ] 2 [ ] 3 [ ]

Anthropometry

Weight [ ] [ ] [ ] kg Height [ ] [ ] [ ] m BMI \_\_\_\_\_

BMI for age Z score \_\_\_\_\_

Tanner stage \_\_\_\_\_

Testicular volume for boys \_\_\_\_\_



## APPENDIX III: TANNER STAGING CHARTS

### TANNER STAGING CHARTS

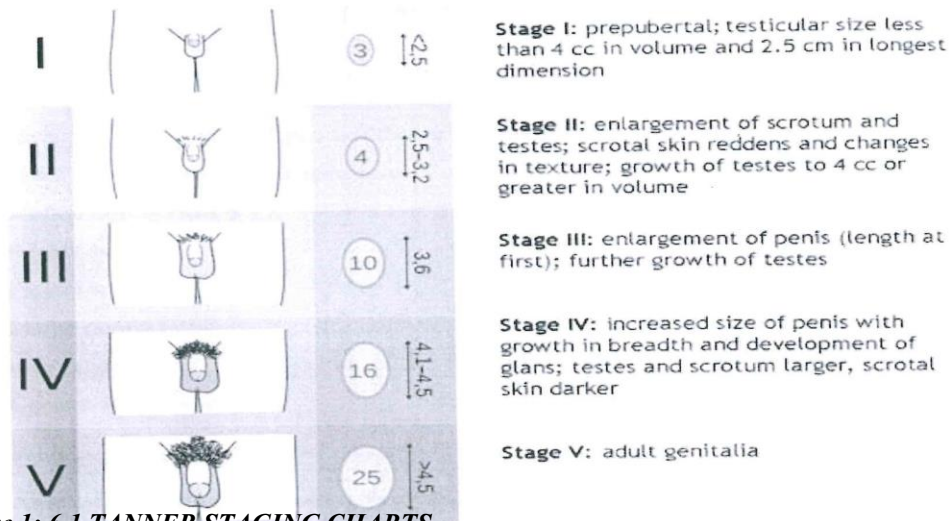


Figure 1: 6.1 TANNER STAGING CHARTS

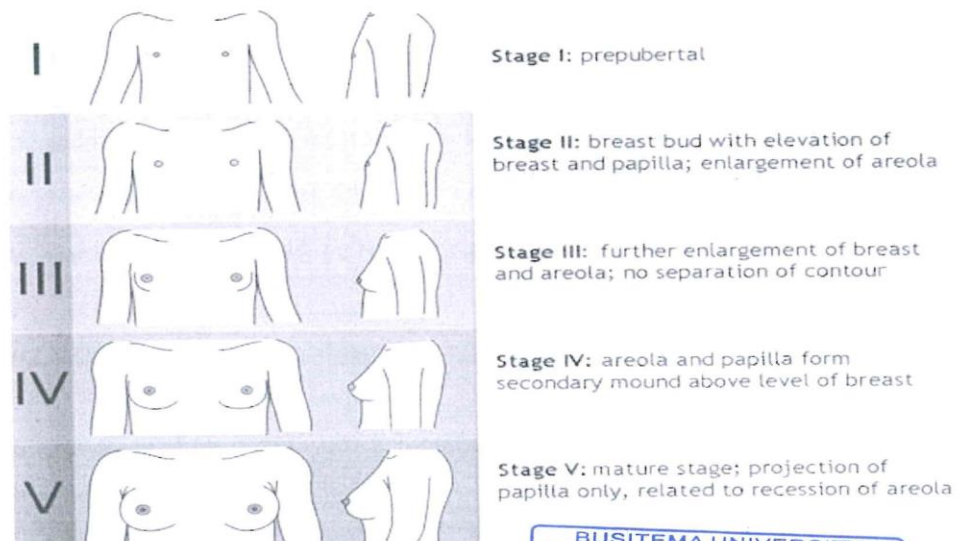


Figure 2:6.2 TANNER STAGING CHAT