

Assessment of Counselling Needs of Sickle Cell Anaemia Patients Attending Specialist Hospital Sokoto State

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Abstract

Abstract

The study examined the counselling needs of sickle cell anaemia patients attending specialist hospital in Sokoto Metropolis. The study used cross-sectional survey research design. The population of the study consisted of 3322 sickle cell patient attending Specialist Hospital Sokoto from 2021-2023. Purposively represented by 346 respondents as a sample size. . The instrument used for this study was entitled "Counselling Needs of Patients with Sickle-cell Anaemia Disease Questionnaire (CNPSADQ) with 0.78 and 0.82 validity and reliability indexes respectively. Two research objectives and two research hypotheses were formulated as guide to the study. The data collected were used to test the hypotheses and the results indicated that, there is a significant counselling needs' on the sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on mental health and also revealed that there is significant difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on gender Finally it was recommended that Counseling programs shall specifically focus to address the unique mental health needs of sickle cell anemia patients and government shall create gender-sensitive counselling interventions that recognize and address the distinct emotional and social support needs of male and female patients.

Key Words: Counselling Needs & Sickle cell Anaemia Patients

Introduction

Sickle cell is a disease of the blood. It is an inherited chronic anaemia that is caused by a decrease in the normal amount of oxygen that is carried by blood due to abnormal haemoglobin. Hassell (2010) explained that sickle cells in blood vessels can result into vaso-occlusion; it is very painful and damaging to the tissues and organs of the body. Also, sickle cell disease (SCD) is an inherited disorder in which the shape of red blood cells are C-shaped sickles and can get stuck in blood vessels, thereby blocking the blood vessels. This blockage is known as a pain crisis or sickle crisis. According to Agomoh and Kanu (2015), there are millions of red blood cells, white blood cells and the platelets in the human blood.

The sickle cell sticks together and blocks the movement of oxygen in the tiny vessels in the lungs. In fact, multiple experiences of acute chest syndrome can cause permanent lung damage. In addition, sickle cell can damage an organ that fights infection i.e. (spleen), leaving the patients more vulnerable to infections. Sickle cell anaemia is caused by mutation in the gene that allows the body to make red blood cell (iron-rich compound that gives blood its red colour called haemoglobin) (Obi, 2018).

When afflicted with sickle cell anaemia, the patients' abnormal haemoglobin causes red blood cells to become rigid, sticking and deformed. The sickle cell gene is transferred from generation to generation in a pattern of inheritance that is called autosomal recessive inheritance. This means that both the mother and the father must transfer on the defective form of the gene for a child to be affected. There are series of health challenges associated with sickle cell anaemia.

Adolescents with sickle cell anaemia may have several counselling needs. The counselling needs of adolescents with sickle cell anaemia may include counselling on self-concept medical care, communication, awareness of the symptoms of sickle cell anaemia, knowledge of the medical services available for the disease (Adegboyega, 2020). Udoh (2017) identified the counselling needs of people with sickle cell anaemia. He listed some of them as new for effective communication, self-understanding and medical care. Nwanju (2018) identified such needs as need for positive self-concept and self-acceptance as well as need for special attention by teachers. According to WHO (2017), the presence of this abnormal state causes vasoocclusion and anaemia and may cause damage to major organs in the body when not treated. In a recent report by United Globally, 5% of the world population have genetic traits of haemoglobin disorders largely sickle cell disease and thalassemia (WHO 2017). Also, it is estimated that 300,000 babies are born with severe haemoglobin disorders each year (WHO, 2016). SCD has been discovered to be more prevalent in the USA and UK (Saraf et al. 2014).

Mental health encompasses an individual's emotional, psychological, and social well-being, significantly influencing their thoughts, feelings, and behaviors. It serves as a foundation for how people handle stress, relate to others, and navigate life's challenges. Mental health is not merely the absence of mental disorders, but it includes the presence

of positive characteristics such as emotional resilience, adaptability, and the ability to maintain healthy relationships (World Health Organization [WHO], 2022). Several factors shape an individual's mental health, including genetic predispositions, environmental conditions, and life experiences. Research highlights that mental health is deeply intertwined with both biological and environmental influences.

Gender differences can play a role in the manifestation and experience of sickle cell crises, a defining characteristic of sickle cell anaemia. While sickle cell anaemia affects both males and females, certain aspects of the condition may vary between genders. Studies suggest that males with sickle cell anaemia may experience more frequent and severe sickle cell crises compared to females (Platt et al., 2018). The reasons for this difference are not entirely clear but could be related to hormonal influences or genetic factors. Hormones, particularly estrogen, may have a protective effect in females (Cegile et al., 2019). Estrogen has been proposed to have a positive impact on the red blood cell and may help mitigate some of the complications associated with sickle cell anaemia. This hormonal influence may contribute to the observed gender differences in the frequency and severity of crises.

Udoh (2017) observed that there is no significant difference between the counselling needs of adolescents with sickle cell anaemia based on gender. Hassell (2010) however, observed differences between the counselling needs of adolescents with sickle cell anaemia based on parental education and parental socio-economic background. On the other hand, Nwanju (2018) observed that there is no significant difference between adolescents with sickle cell anaemia from broken and intact families. This study contributes in the literature on the counselling needs of sickle cell anaemia patients attending public hospitals outside of Sokoto metropolis on the bases of four variables - their mental health, gender, marital status, and religious beliefs, it is against the backdrop that the study investigate the counselling needs of sickle cell anaemia patientss attending government hospital in Sokoto Metropolis.

Objectives of the Study

1. Examine the counselling needs of sickle cell anaemia patients, attending Specialist hospital in Sokoto metropolis, based on their mental health.

2. Examine the counselling needs of sickle cell anaemia patients, attending Specialist hospital in Sokoto metropolis, based on their gender differences.

Research Hypotheses

H₀₁: There is no significant difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto metropolis based on their mental health.

H₀₂: There is no significant different in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on their gender differences.

Methodology

The study adopted a cross-sectional survey research design. The population of the study comprises all sickle cell Anaemia patients attending Specialist Hospital Sokoto from 2021-2023

According to record from Specialist Hospital Sokoto there are three thousand three hundred and twenty two (3322) sickle cell anaemia patients.

Table 1: Population of Sickle cell Aneamia Patients Attending Specialist Hospital Sokoto from 2021 to 20203

YEAR	2021			2022			2023		
	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL
January	16	45	61	38	96	134	77	47	124
February	34	63	97	37	20	57	12	10	22
March	47	22	69	33	27	60	-	-	-
April	29	09	38	31	42	73	14	19	33
May	22	19	41	13	18	31	20	27	47
June	-	-		26	13	39	22	06	28
July	10	65	75	107	91	198	20	17	37
August	48	64	112	14	16	30	47	34	81
September	37	31	58	40	25	65	14	17	31
October	14	44	58	47	61	108	61	83	144
November	109	110	219	124	139	263	19	17	36
December	50	99	149	371	296	667	10	17	27
Total	416	571	987	881	844	1725	316	294	610

Source: Specialist Hospital (2024)

Purposive sampling was used to select Specialist Hospital Sokoto as an area of study because it satisfy the specific needs of the researcher since it is the only general Hospital providing easy access to target respondents. The research adviser (2006), table was used to determine the sample size from a given population, and arrived at three hundred and forty six (346) participants of the study.

Table 2: Sample size of the population of sickle anaemia patients attending Specialist Hospital

S/NO	YEAR	M	F	TOTAL
1	2021	416	571	987
2	2022	881	844	1725
3	2023	316	294	610
GRAND TOTAL				3322

Field Survey (2024)

The questionnaire tagged ‘Counselling Needs of Patients with Sickle-cell Anaemia Disease Questionnaire (CNPSADQ) was used. After scrutiny, some items were dropped and some were added and its was concluded that the instrument has construct and content validity with validity index of 0.82 and reliability index of 0.78. The completed questionnaires were retrieved from the patients and subjected to data analysis using independent t-test and ANOVA to test significance level at 0.05.

Tests for Hypotheses

HO₁: There is no significant difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto metropolis based on their mental health.

Table 6: ANOVA result comparing the difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto metropolis based on their mental health.

Source of Variation	Sum of squares	Df	Mean square	F	P-value	Decision
Between Groups	0.118	3	496.086	0.054	.000	HO ₁ : Rejected
Within Groups	308.582	332	9.999			
Total	308.640	335				

Source: Field Work, 2024

$$\alpha = 0.05$$

Table 6 shows the ANOVA result comparing counseling needs among sickle cell anemia patients at the Specialist Hospital in Sokoto metropolis, based on mental health, shows a p-value of 0.000, which is lower than the alpha level of 0.05 ($p < 0.05$). This outcome leads to the rejection of the null hypothesis, indicating a significant difference in the counseling needs' impact on the mental health of these patients.

HO₂: There is no significant different in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on their gender differences.

Table 7: t-test result comparing the difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on their gender differences.

Source of Variation	N	Mean	Std. Deviation	t-value	P-value	Decision
Male	336	1.66	.474	6.514	.000	H ₀₁ : Rejected
Female	336	1.42	.494			
Total	672	2.88				

Source: Field Work, 2024

Table 6 shows the t-test result comparing the difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on their gender. From the Table, the p-value 0.000 is less than the alpha value of 0.05 ($p < 0.05$). This indicates that the null hypothesis was rejected. Since the p-value (0.000) is less than the significance level of 0.05, we reject the null hypothesis. This result suggests that there is a statistically significant difference in the counselling needs of male and female sickle cell anemia patients attending Specialist Hospital in Sokoto Metropolis.

The summary of finding shows that:

3. There is significant difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto metropolis based on their mental health.
4. There is significant difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on their gender differences

Discussions

The result of the hypothesis one which stated that, there is no significant difference in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto metropolis based on their mental health indicated a significant counselling needs' on the mental health of these patients. This outcome is agreed with the research finding of Puskar and Bernardo (2020), which posited that counseling interventions can effectively improve mental health by addressing the unique psychological stressors that chronic illness patients face. They argue that counseling equips patients with coping mechanisms and resilience strategies that enhance focus, motivation, and overall well-being. Similarly, research by Irwin et al. (2021) underscores that patients with chronic conditions, including sickle-cell anemia, often experience setbacks due to physical and

emotional stress; however, counselling provides a structured support system, fostering a sense of stability that benefits their mental engagement. These scholarly insights validated the present findings, and that counselling services are integral to helping sickle-cell anemia patients to overcome barriers and reach their mental potential

The result of the hypothesis two which stated that there is no significant different in the effect of counselling needs of sickle cell anaemia patients attending Specialist hospital in Sokoto Metropolis based on their gender differences indicated that there is a statistically significant difference in the counselling needs of male and female sickle cell anemia patients attending Specialist Hospital in Sokoto Metropolis. This finding goes in line with, Geronimus and Thompson (2021) who stated that chronic illness patients often face different emotional and social challenges based on gender, and counselling that is attuned to these differences can improve the therapeutic outcome. Additionally, Larson and Dear (2019), find out that male and female patients tend to have different coping mechanisms and support preferences in managing chronic illnesses like sickle-cell anemia. They argue that while female patients may benefit from emotionally expressive counseling sessions, male patients might prefer structured, solution-focused approaches. These insights support the need for tailored counselling interventions that address the specific gender-based needs of sickle-cell anemia patients, thereby enhancing the effectiveness of counseling in improving patient well-being.

Conclusion

In conclusion, the findings highlight the critical need for personalized counselling services that address the diverse needs of sickle cell anemia patients at the Specialist Hospital in Sokoto metropolis. The significant impact of mental health on counseling needs suggests that tailored mental health support is essential for these patients, who may face unique psychological challenges associated with their condition. Furthermore, the marked differences in counselling needs based on gender demonstrate the importance of gender-sensitive counseling strategies, which could help to ensure that both male and female patients receive appropriate and effective support.

Recommendations

Based on the findings of the study, the following recommendations were made;

5. Counseling programs should be established specifically to address the unique mental health needs of sickle cell anemia patients.
6. The government should create gender-sensitive counselling interventions that recognize and address the distinct emotional and social support needs of male and female patients.

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APPENDIX I

PATIENTS WITH SICKLE-CELL ANAEMIA DISEASE QUESTIONNAIRE (PWSCADQ)

Dear respondent,

I am a post graduate student of Guidance and Counselling, Sokoto State University, Sokoto. I am currently conducting a research on **COUNSELLING NEEDS OF SICKLE CELL ANAEMIA PATIENTS ATTENDING GOVERNMENT HOSPITAL IN SOKOTO METROPOLIS**. Any information given would be treated with utmost confidentiality and for academic purpose only.

SHAFI' ABDULLAHI

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

- 1. **Sex** (a) Male (b) Female
- 2. **Age** (a) 10-15 years (b) 16-20 years (c) 21-25 (d) 26-30 (e). Over 31 years
- 3. **Marital status** (a) Single (b) Married (c) Divorced (d) Widow
- 4. **Highest Educational Qualification**
 (a) Secondary (b) Diploma (c) B.sc/ HND (d) Masters (e) P.hD
 Others specify _____
- 5. **Are you a sickle-cell anemia patient?**
 (a) YES (b) NO

SECTION B: TO EXAMINE THE COUNSELLING NEED OF SICKLE-CELL ANAEMIA PATIENTS ATTENDING GOVERNMENT HOSPITAL IN SOKOTO METROPOLIS BASED ON THEIR MENTAL HEALTH					
S/ N	QUESTION	SA	A	D	SD
	Sickle cell condition affect my mental health				
	Sickle-cell anaemia disease is a major source of stress that impedes the academic achievements of a sickle cell anaemia patients				
	My academic goals have been impeded by sickle cell anaemia condition				

	The current counselling services available to address the challenges you face in your mental health due to sickle cell anaemia?				
	Counselling support you receive to the enhancement of your mental health while dealing with sickle cell anaemia?				
SECTION C: TO EXAMINE THE COUNSELLING NEEDS OF SICKLE-CELL ANAEMIA PATIENT, ATTENDING GOVERNMENT HOSPITAL IN SOKOTO METROPOLIS, BASED ON THEIR GENDER DIFFERENCES					
	Gender has relationship with the challenges you face as a sickle cell anemia patient in your daily life				
	Psychological aspects related to sickle cell anaemia influence on your gender believe.				
	Counseling support benefit you in overcoming gender specific challenges as a sickle cell anaemia patient				
	Counselling services you have received so far in addressing gender-related concerns linked to your sickle cell anaemia				
	Counseling service is important in tailoring to address gender specific needs of sickle cell anemia patient				
SECTION D: EXAMINE THE COUNSELLING NEED OF SICKLE CELL ANAEMIA PATIENT, ATTENDING GOVERNMENT HOSPITAL IN SOKOTO METROPOLIS, ON THE BASIS OF THEIR MARITAL STATUS					
	Challenges in sickle cell anaemia affect individual marital status				
	Sickle cell anemia disease can affect spouse/marital status				
	Counseling services can address your emotional wellbeing				
	Counselling services received help to resolve addressing the challenges associated with sickle cell anaemia in the context of individual marital status				
	Counselling services should be used to address the specific needs of sickle cell anaemia patients based on their marital status?				
SECTION E: EXAMINE THE COUNSELLING NEED OF SICKLE CELL ANAEMIA PATIENTS, ATTENDING GOVERNMENT HOSPITAL IN SOKOTO METROPOLIS, ON THEIR BASIS OF THEIR RELIGIOUS BELIEFS					
	Religious belief influence individual coping mechanisms with sickle cell anaemia				
	Counselling services aligned with individual religious belief have address the challenges associated with sickle cell anaemia				
	Availability of counselling services that are blended with religious belief in managing sickle cell anaemia				
	Religious belief play a vital role in shaping individual experience with sickle cell anaemia				
	Religious considerations play a vital role in designing and implementation of counselling services for sickle cell anaemia patients attending government hospitals in Sokoto metropolis				