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Perceived Social Support, Life Optimism and Psychological Adjustment of Sickle Cell Anaemia Patients in Ile-Ife, Nigeria

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Abstract

The study investigated the level of psychological adjustment, perceived social support and life optimism of Sickle Cell Anaemia (SCA) patients in Ile-Ife and determined the influence of perceived social support and life optimism on their psychological adjustment. The study adopted the descriptive survey research design. The population of the study comprised of all Sickle Cell Anaemia patients in Ile-Ife, Osun state. Two Health Care Centres, Obafemi Awolowo University Teaching Hospital Complex (OAUTHC) and Obafemi Awolowo University Health Centre (OAUHC) were selected using purposive sampling technique based on the availability of the Sickle Cell Anaemia clinics. A total of one hundred (100) SCA patients were selected from these clinics using a proportionate sampling method, eighty (80) SCA patients were selected from OAUTHC while Twenty (20) SCA patients were selected from OAUHC. Life Orientation Test-Revised (LOT-R), The Adjustment Inventory (TAI) and Multidimensional Scale of Perceived Social Support (MSPPS) were used to collect data for the study. The results revealed that overall, SCA Patients in Ile-Ife exhibited an average level of psychological adjustment (50.5%) and the adult married patients were more psychologically adjusted than the younger group who were unmarried. Results also revealed that there was a significant influence of social support on the psychological adjustment of SCA patients. The study concluded that social support and life optimism are critical factors for the psychological adjustment of SCA patients in Ile-Ife.

Keywords: Psychological Adjustment, Stress, Sickle Cell Anemia (SCA), Social Support, Life Optimism

Introduction

A deficiency in, or deviation from the normal expectations of health status of an individual can be worrisome. Sickle Cell Anaemia is a disorder that falls within this category. It is a genetic blood disorder characterized by severe pain, and in many cases representing a life-threatening situation for the patient. According to Weatherall and Clegg (2001), the African continent is more popular with Sickle Cell babies out of a global rate of more than 300,000 babies born. When an individual is diagnosed with sickle cell disease, the family system is faced with stressors and demands (e.g., repeated hospitalizations with extensive and often painful treatments for the patient, alterations in the family-patient relationship, sibling care, parental occupation and role changes, and concerns about the long-term supports on the patient (Wilhamson, 2000). When Sickle Cell Anemia patients and their families are going through these crises, their hopes for life tend to become bleak. However, support from family, peers and counsellors can lead to their

psychological adjustment and help them to be more hopeful about life.

The psychological adjustment of Sickle Cell Anemia (SCA) patients is deemed to be of immense essence because it could determine their ability to perform well in their life pursuits, ambitions and other life endeavors. If the psychological adjustment of SCA patients was high, they may be able to interact well with people around them and their environment. Also, for them to be lucratively employed, they have to be psychological adjusted, useful for themselves and the society at large. On the other hand, SCA patients may feel unhappy, sad, lonely, and hopeless or even consider suicide due to some life challenges that confront them and possibly pose threats to them. Therefore, it is imperative that research is carried out to find out SCA patient's reactions to life challenges in order to determine the quality of their psychological adjustment. Thus, this study identifies social support and life optimism as factors that may contribute to the psychological adjustment of SCA patients.

While Gerrig (2013) suggests that social support is an important resource for coping with stress, he described social support as the resources which others provide, giving the message that one is loved, cared for, esteemed, and connected to other people in a network of communication and mutual obligation. He also indicated that anyone with whom the person of concern has a significant social relationship with, such as family members, friends, coworkers, and neighbours is part of the social support network. In the same vein, Kirmayer and Paul (2007) in their study of psychological adjustment agree that relationships with others in one's family and community are basic social determinants of psychological adjustment. According to Thompson (1995), Social support consists of social relationships that provide (or can potentially provide) material and interpersonal resources that are of value to the recipient, such as counseling, access to information and services, sharing of tasks and responsibilities, and skill acquisition.

Life optimism refers to patients' positive attitude to life and reaction to challenges with a sense of confidence and high personal ability. It is also the extent to which an individual maintains positive expectancies for the future (Scheier & Carver, 1985). It can be deduced that an individual's inability to have proper orientation in life may hinder the individual from expressing love and affection thereby affecting his/her psychological adjustment. Moreover, when patients are not properly oriented about their lives, they may not be able to cope with the medical treatments and their life ambitions. This may affect their psychological adjustment if attention is not given to them.

National efforts in public education and health as well as advances in hematological and medical sciences have successfully promoted health behaviors and extended lifespan for patients with this complicated disease. Also, with the widespread use of pharmacological interventions, individuals with SCA are now able to participate in traditional education and engage in developmentally appropriate activities. However, despite these advances, individuals with SCA still experience chronic symptoms related to inconsistent eating patterns, elevated body mass index, and frequent pain crises, among other ailments. Consequently, though patients with SCD may be living longer than ever but their optimism about life may still suffer. Thus, this paper specifically addresses the relationship between life optimism and social support as correlates of psychological adjustment among SCA patients.

Aim of the study

The main purpose of this study was to examine perceived social support and life optimism as correlates of psychological adjustment among sickle cell anemia patients in Ile-Ife on the basis of age, sex and marital status. To accomplish the purpose of this study, the following specific objectives were formulated. These are to;

(a) investigate the level of psychological adjustment of the Sickle Cell Anaemia patients in Ile-Ife;
(b) determine the level of perceived social support (family, peers and counsellors) and life optimism of SCA patients; and
(c) examine the influence of perceived social support and life optimism on the psychological adjustment of SCA.

Research Hypotheses

The following hypotheses were postulated:

1. Sickle Cell Anaemia patients' psychological adjustment is not significantly influenced by perceived social support**.**
2. Sickle Cell Anaemia patients' psychological adjustment is not significantly influenced by life optimism.

Method

A cross-sectional study was conducted within the two the major government institutions in Ile-Ife City; the Obafemi Awolowo University Teaching Hospital Complex (OAUTHC) and Obafemi Awolowo University (OAU). The population of the study comprised of all Sickle Cell Anaemia patients in Ile-Ife in Osun state in Nigeria. Two Health Care Centres OAUTHC and Obafemi Awolowo University Health Centre (OAUHC) were selected using purposive sampling, based on the availability of the Sickle Cell Anaemia clinics in Ile-Ife. One hundred (100) SCA patients were selected from these clinics using a proportionate sampling method; eighty (80) SCA patients were selected from OAUTHC while twenty (20) SCA patients were selected from OAUHC. Both In-Patients and Out Patients who had the SCA health condition participated in the study. Three adapted instruments, titled "Multidimensional Scale of Perceived Social Support (MSPSS)" (Zimet, Dahlem, Zimet & Farley, 1988), to measure perceived social support; "Life Orientation Test-Revised (LOT-R)", adatpted from Carver, Scheier and Segestorm (2010), to measure life optimism; and "The Adjustment Inventory (TAI)" adapted from the research work of Bell (1934) to measure psychological Adjustment, were used to elicit information from the respondents for the study. A trial-test was conducted to determine the reliability of the instrument by administering the three instruments to 15 patients. The obtained Cronbach's Alpha coefficients for MSPSS (0.882), LOT (0.714) and PS (0.842) were considered reliable for the purpose of this study. Ethical clearance was obtained from Obafemi Awolowo Teaching Hospital Clearance Board. In order to facilitate the success of questionnaire administration, the researchers secured the cooperation of the patients especially those on admission. The patients below 18 years, had their parents/guardians fill a consent form. Data collection lasted for a period of four weeks and a 95% return rate was recorded. The SCA patients' psychological adjustment was scored and the scores were categorized into 'low, 'average', and 'high'. On the psychological adjustment scale the total minimum and maximum score obtained were 12 and 31 with a mean of 25.69 and standard deviation of 2.68. Data obtained from the categorization in terms of students' sex, age and marital status were then analyzed with the use of frequency count and percentage. To predict the extent of the influences of the explanatory variables on the outcome variable as well as to test the significance of the relationship of explanatory variables on the outcome variable, Multiple regression model was adopted. The results of data collected are presented:

Results

Research Question 1: What is the psychological adjustment level of (SCA) patients?

Table 1: Sickle Cell Anaemia Patients' Psychological Adjustment Level

		Patients' Psychological Adjustment Level			
		Low Level	**Average Level**	**High Level**	**Total**
Age Range	Less than 18	5(11.4%)	27(61.4%)	12(27.3%)	44
	18-20	6(25.0%)	13(54.2%)	5(20.8%)	24
	Above 20	5(18.5%)	8(29.6%)	14(51.9%)	27
	Total	16(16.8%)	48(50.5%)	31(32.6%)	95
Patient's Sex	Male	5(12.8%)	24(61.5%)	10(25.6%)	39
	Female	11(19.6%)	24(42.9%)	21(37.5%)	56
	Total	16(16.8%)	48(50.5%)	31(32.6%)	95
Marital Status	Married	5(22.7%)	6(27.3%)	11(50.0%)	22
	Single	11(15.1%)	42(57.5%)	20(27.4%)	73
	Total	16(16.8%)	48(50.5%)	31(32.6%)	95

Table 1 revealed high, moderate and low psychological adjustment levels to be 32.6%, 50.5% and 16.8% respectively. Results also showed that regarding their ages, while 51.9%, 29.6% and 18.5% of SCA patients with age above 20 years, 18-20 years and less than 18 years respectively have high psychological adjustment level, 18.5%, 25.0% and 11.4% of SCA patients with age above 20 years, 18-20 years and less than 18 years respectively have low psychological adjustment level. The table also showed that 50.0% and 27.4% of married and single SCA patients respectively have high psychological adjustment level.

Research Question 2: What is the level of perceived social support of SCA patients?

Table 2: Sickle Cell Anaemia Patients' Perceived Social Support Level

		Perceived Social Support Level			
		Low Level	Average Level	High Level	Total
Age Range	Less than 18	8(18.2%)	27(61.4%)	9(20.5%)	44
	18-20	4(16.7%)	15(62.5%)	5(20.8%)	24
	Above 20	5(18.5%)	18(66.7%)	4(14.8%)	27
	Total	17(17.9%)	60(63.2%)	18(18.9%)	95
Patient's Sex	Male	6(15.4%)	24(61.5%)	9(23.1%)	39
	Female	11(19.6%)	36(64.3%)	9(16.1%)	56
	Total	17(17.9%)	60(63.2%)	18(18.9%)	95
Marital Status	Married	4(18.2%)	16(72.7%)	2(9.1%)	22
	Single	13(17.8%)	44(60.3%)	16(21.9%)	73
	Total	17(17.9%)	60(63.2%)	18(18.9%)	95

The results as presented in Table 2 showed that while the social support level of 18.9% of the sampled SCA patients was high, 63.2% of the patients perceived their social support to be average and 17.9% of the SCA patients' level social support given to them was low. Table 4.1.2 also showed that for age, while 14.8%%, 20.8% and 20.5%% of SCA patients with age above 20 years, 18-20 years and less than 18 years respectively that the level of social support given them was high, 18.5%, 16.7%% and 18.2% of SCA patients with age above 20 years, 18-20 years and less than 18 years respectively that the level of social support given them was low. The table also showed that 9.1% and 21.9% of married and single SCA patients respectively perceived that the level of social support given to them is high.

Table 3: Sickle Cell Anaemia Patients' life optimism Level

		Life Optimism Level			
		Low Level	**Average Level**	**High Level**	**Total**
Age Range	Less than18	12(27.3%)	26(59.1%)	6(13.6%)	44
	18-20	9(37.5%)	13(54.2%)	2(8.3%)	24
	Above 20	9(33.3%)	14(51.9%)	4(14.8%)	27
	Total	30(31.6%)	53(55.8%)	12(12.6%)	95
Patient's Sex	Male	12(30.8%)	25(64.1%)	2(5.1%)	39
	Female	18(32.1%)	28(50.0%)	10(17.9%)	56
	Total	30(31.6%)	53(55.8%)	12(12.6%)	95
Marital Status	Married	6(27.3%)	13(59.1%)	3(13.6%)	22
	Single	24(32.9%)	40(54.8%)	9(12.3%)	73
	Total	30(31.6%)	53(55.8%)	12(12.6%)	95

Table.3 showed that while 12.6% of the sampled SCA patients have high level life optimism, 55.8% have average level life optimism and 31.6% of SCA patients have low life optimism level. Results also showed that on the basis of age, while 14.8%, 8.3% and 13.6% of SCA patients with age above 20 years, 18-20 years and less than 18 years respectively have high optimism level, 33.3%, 37.5% and 27.3% of SCA patients with age above 20 years, 18-20 years and less than 18 years respectively have low life optimism level. The table also showed that 13.6% and 12.3% of married and single SCA patients respectively have a high level of life optimism.

Hypothesis 1: There is no significant influence of perceived social support on the psychological adjustment of sickle cell anemia patients

Table 4: Influence of Perceived Social Support on Sickle Cell Anemia Patients' Psychological Adjustment

R= 0.252 R^2 = 0.064 Adj. R^2 = 0.053 F = 6.31*		**Unstandardized Coefficients**		**Standardized Coefficients**		
		B	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	22.255	1.395		15.951	.000
	Patients' Perceived Social Support	.118	.047	.252	2.511	.014

a. Dependent Variable: Psychological Adjustment

Table 4 showed the multiple R and coefficient of determination (R^2) for the regression model. The R^2 = 0.064 indicated that 6.4% of the variance in patients' psychological adjustment can be explained by the regression model and with the significant F-value (F = 6.31, p< 0.05) it could be concluded that the model predicts the outcome accurately. Table also showed the constant or intercept term and the regression coefficients (β) for the independent variable. The constant value (22.26) represents the intercept, which is the predicted patients' psychological adjustment not accounted for by social support. The unstandardized beta value (β = 0.118) showed that there is a significant predicted increase of 11.8% in patients' psychological adjustment as social support increase by one unit. The null hypothesis is therefore rejected since p value is less than 0.05. Thus, it could be concluded that there is significant influence of social support on the psychological adjustment SCA patients.

Hypothesis 2 Sickle Cell Anaemia patients' psychological adjustment is not significantly influenced by life optimism.

Table 5: Influence of life optimism on Sickle Cell Anaemia patients' psychological adjustment

R= 0.305 R^2 = 0.093 Adj. R^2 = 0.083 F = 9.56*		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**T**	**Sig.**
1	(Constant)	21.623	1.343		16.103	.000
	Patients' Life Optimism	.213	.069	.305	3.092	.003

a. Dependent Variable: Psychological Adjustment

Table 5 showed the multiple R and coefficient of determination (R^2) for the regression model. The $R^2 = 0.093$ indicated that 9.3% of the variance in patients' psychological adjustment can be explained by the regression model and with the significant F-value ($F = 9.56$, $P < 0.05$) it could be concluded that the model predicts the outcome accurately. Table 4.1.5 also showed the constant or intercept term and the regression coefficients (β) for the independent variable. The constant value (21.62) represents the intercept, which is the predicted patients' psychological adjustment not accounted for by patients' life optimism. The unstandardized beta value ($\beta = 0.213$) showed that there is a significant predicted increase of 21.3% in patients' psychological adjustment as life optimism is increase by one unit. Thus, it could be concluded that SCA patients' psychological adjustment is significantly influenced by life optimism. The regression equation therefore is:
Patients' Psychological Adjustment = 21.62 + 0.118 (Life Optimism)

Discussions

The main objective of the study was to determine the relationship among social support, life optimism and psychological adjustment of Sickle Cell Anaemia patients in Ile-Ife. The first objective of the study was set to provide empirical evidence on the psychological adjustment levels of SCA patients in Ile-Ife, on the basis of age, sex and marital status. The study revealed that only half of the respondents experienced moderate level of Psychological Adjustment of SCA patients. On the basis of age, the study revealed that adult patients reported a higher level of psychological adjustment. The study also revealed that married patients were more psychologically adjusted than their unmarried counterparts. This finding agrees with that of Akpabio, Uyanah, Osuchukwu and Samson-Akpan (2010), who investigated the influence of marital status on the psychological, social, and spiritual adjustment of respondents living with HIV/AIDS in southern Nigeria and found out that those that were married had better psychological adjustment than those who had never married.

Reports from the investigation of the second objective of the study revealed that the younger age group (20 years and below) reported a higher level of perceived social support than the older age group (Above 20 years). The study also revealed that males reported a higher level of perceived social support than females. Although on the average, females reported a higher perception of social support. This finding reveals a low gender disparity in the perception of social support among SCA patients. Although, studies indicate that support functions that are effective cushions for women may not be effective for males and vice versa Cohen and Wills (1985), Bruwer, Emsley, Kidd, Lochner and Seedat (2000) however suggest that healthy population of girls have higher support than boys. Findings of the study also revealed that although, both the married and unmarried patients perceived a moderate level of social support, the unmarried patients reported a higher level of social support than their married counterparts. On the contrary, one would assume that the married patients would report a significantly higher perceived level when considering spousal support. Cohen and Wills (1985) attest that the presence of a significant inter-personal relationship such as marriage or close friendship shows buffering interactions, particularly when analyzed in relation to specific stress measures. Their reason, being that on the average an enduring and intimate relationship

such as marriage is likely to provide several kinds of functional support. Similarly, Segrin (2006) also revealed that social support from a spouse or partner, was most strongly and negatively related to the psychosocial problems.

The findings from research question three showed that the Sickle Cell Anemia patients of Ile-Ife experienced average life optimism. This kind of optimism will help patients react to problems with a sense of confidence and also give them high personal ability to maintain positive expectancies for the future. The average optimism of the patients will also improve their psychological adjustment and physical health. The findings of the study revealed that female patients are more optimistic than male patients while married sickle cell anemia patients showed more optimism about life than the unmarried patients. This finding corroborates the study of Segerstrom (2007), who believes that optimists tend to place more effort into relationships, where relationship here is the marital relationship, as this study does not consider other types of relationships.

The first hypothesis of the study was rejected as the study revealed that SCA patients of Ile-Ife psychological adjustment is significantly influenced by social support which might enhance the quality of interpersonal relationship, effectiveness, happiness, and productivity among their family members, friends' nurses, doctors and counsellors. The finding of this study was in accordance with the work of Kirmayer and Kenneth (2007) who investigated on mental health, social and community wellness and explained that the relationships with others in one's family and community are the basics of social determinants of mental health and well-being. Stice, Radar and Randall (2004) investigated the differential direction of effects for parent and peer support in the prospective relations between social support and depression. They asserted that family support was the type of social support experienced more by adolescents followed by friends and the school which proved to be in line with the current study.

The findings of the present study are also in line with the findings of Karimi, Smira, Kalyani, Kokabi, and Piriaee (2015). who identified the relationship between social support and psychological adjustment in infertile women and revealed a perceived adequacy of social support and psychological adjustment considering the mediating role of problem-focused coping. Karimi et.al. (2015) further stated that social support helps women to think that they are not alone and can share their painful experiences with others so that they can be relieved of tensions and anxiety through the expression of intrusive thoughts and feelings. The current study also found that social support can be linked to psychological adjustment.

The findings from the second hypothesis also showed that there was a significant relationship between psychological adjustment and the life optimism of SCA patients in Ile-Ife which enhanced their ability to manage their pains, the daily activities as patients and as well as their sense of belonging in their community. This was in line with Viren et al. (2007) that examined the associations between life optimism, loneliness, general health and depression. Their study explained that there existed some evidences that psychological adjustment had relationship with life optimism. The findings of this study were contrary to the findings of Bahman and Kahrazei (2010) whose results indicated that there is a significant negative correlation between the scores of life optimism and general health sub-scales (physical symptoms, anxiety, social dysfunction, depression and total general health questionnaires).

The results were contrary to the study of Besier and Goldbeck (2012) who conducted a study aimed at analyzing the vocational and social achievements, life optimism, and psychological well-being of adults. These researchers found that mental health was negatively related to life optimism adults. Again, Choudhary (2013) assessed the relationship between life optimism and physical and mental health of old age people. The researcher found that that mental health was negatively related to life optimism of old age people. Although his finding contradicts the present study which shows that there was a significant relationship between life optimism and psychological adjustment, the variation in findings may be associated with the difference in age group.

Conclusions and Recommendations

It has been shown in this study, that social support and life optimism were linked to psychological adjustment. It is evident from numerous studies reviewed and the results of these findings that the combination of social support and life optimism significantly correlates to psychological adjustment of Sickle Cell Anemia patients. It is important to emphasize those patients experiencing more social support and having a positive disposition to and interpretation of life (life optimism) stand a better chance of having higher psychological adjustment. It was concluded finally that psychological adjustment depended on the combined relationship of social support and life optimism. Findings from the study should be applied in various educational, health, counseling and social welfare settings. Hence, it is recommended that schools, university, hospital both public and private should provide conducive environment that will enhance psychological adjustment by providing counsellors who will counsel patients on how to handle their challenges.

References

Akpabio I. I., Uyanah D. A., Osuchukwu N. C., and Samson-Akpan P. E. (2010). Influence of marital and educational status on clients' psychosocial adjustment to HIV/AIDS in Calabar, Nigeria. *Nursing Health and Science*, 12(2), 155-61

Anie, K. A., Egunjobi , F. E., & Akinyanju O.O. (2010). Psychosocial impact of sickle cell disorder: perspectives from a Nigerian setting. *Globalization and Health* 2010, 6:2 http://www.globalizationandhealth.com/content/6/1/2

Besier, Gold beck, (2012). Social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin 119*(3), 48

Cohen S., & Wills T. A. (1985). Stress, Social Support, and the Buffering Hypothesis. *Psychological Bulletin.* American Psychological Association *98*(2), 310-357

Gerrig, R. J. (2013). *Psychology and Life.* 20th Edition. Pearson, U. S. A.

Ilechukwu S. (2007). Ogbanje/abiku and cultural conceptualizations of psychopathology in Nigeria. *Mental Health, Religion and Culture* 10(3), 239- 255

Karimi, S., Smira, S., Kalyani, M., Kokabi, R., & Piriaee, S. (2015). The Relationship between Social support and mental Health in Infertile Women: The Mediating Role of Problem-focused coping. *Journal of Applied Medical Sciences (SJAMS), 3(ID), (4), 244-248).*

Kirmayer, J. & Kenneth W. P. (2007). *Mental Health, Social Support and Community Wellness.* Institute national de santé Publique du Quebec. Nunavik Regional Board of Health and Social Services / Regie regionale de la santé et de service du Nunavik. Canada. SBN 13(2), 98-2-550-50630-0 (printed version).

Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, *4*(3), 219–247

Scheier, M.F; & Carver, C.S. (1985), Effects of Optimism on psychological and physical well-being: theoretical outcome expectancies. *Health Psychology*. *4*(3), 219-240.

Segerstrom, S. C. (2007). Optimism, and Resources; Effects on Each Other and on Health over 10years. *Journal of Research Personality; 41*(3), 772-786. PubMed Abstract.

Segrin C. (2006). Age Moderates the Relationship Between Social Support and Psychosocial. Problems. *Human Communication Research* 29(3) https://doi.org/10.1111/j.1468-2958.2003.tb00842.x

Stice, E., Ragan, J.,& Randall, P. (2004). Prospective Relations Between Social Support and Depression: Defferential Direction of Effects for Parent and Peer Support? *Journal of Abnormal Psychology, 113*(1), 155-159.

Viren, S., Thomas, C. P., Dhachayani, S., Thambu, M., Kumaraswani, Debb, S., & Adrian, F. (2007). General health mediates the relationship between loneliness, life satisfaction and depression. A Study with Malaysian Medical Students. *Journal of Social Psychiatry and Psychiatry Epidemiology, 42*(2), 161-166.

Weatherall D. J., & Clegg J. B. (2001) Inherited haemoglobin disorders: an increasing global health problem. *Bulletin of the World Health Organisation.* 79(8):704-12

Wilhamson, C. N. (2000). Effects of Sickle Cell on Labour Productivity: A cross sectional survey in Sub-Sahara Africa. *Journal of Urban Health, 2*(2), 23-56.