

IMPACT OF EDUCATION ON THE KNOWLEDGE AND ATTITUDE OF PEOPLE TOWARDS ALBINOS IN THE FEDERAL COLLEGE OF EDUCATION, PANKSHIN, PLATEAU STATE, NIGERIA

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ABSTRACT

Albinism is a genetic condition that affects the pigmentation of the skin, eyes and hair. Albinos are born with an unusual “white” skin colouration. The hair appears bleached and the eyes are affected as they have to squint to see clearly. In Africa they are the subject of many negative myths and misconceptions that have stigmatized them and rendered them as outcasts in many communities. One of the major challenges they encounter is non-acceptability and therefore isolation from their family peers. In the education sector, their opportunities are restricted because of this psychological challenge of isolation but also because the schools are generally designed for non-albino students. The study investigates the impact that education may have on the knowledge and attitudes of staff and students towards albinos in the Federal College of Education, Pankshin, which is a tertiary institution. The study adopted a quasi-experimental design, with a sample size of 334. A knowledge and attitude liker-scale questionnaire was administered after which a workshop was conducted to discuss albinism and its challenges. The respondents were then re-tested on the knowledge and attitude scale questionnaire again to determine if there have been any changes to the knowledge and attitude of respondents towards albinos. A chi-square, principal component and paired-sample t-test were used to test hypotheses. The study found that the participants were generally knowledgeable about albinism and had an accommodating and sympathetic attitude towards them though some of them also exhibited a distant/detached attitude as well. Age, gender, educational qualification and status were all found to significantly affect the knowledge of participants on albinism. The workshop also was also found to be significant in improving the knowledge base and attitudes of participants towards albinos. The study recommended that the institution should organize mandatory education and enlightenment workshops for its staff and students to sensitize them on disabilities especially albinism and how they can be fully integrated into the school systems.

KEYWORDS: *Knowledge and Attitudes, Organize Mandatory Education and Enlightenment Workshops*

INTRODUCTION

Albinism is an inherited genetic condition whereby persons affected have little or no pigmentation (melanin) in the eyes, skin and/or hair (National Organization for Albinism and Hypo pigmentation, NOAH, 2010). It is a phenomenon known to exist among all races and societies in the world. For example, Msomi (2014) provides a summary of the prevalence of albinism in several parts of the world to include the United States of America where 1 in 17,000 persons is afflicted with albinism; in Northern Ireland, it is 1 in 10,000 and in Norway, it is 1 in 9,650; in Zimbabwe and South Africa, the prevalence is high as 1 in 4000 people is believed to be living with albinism. In Nigeria, statistics indicate that about six

million Nigerians are living with albinism (Federal Ministry of Education, Nigeria, 2012).

Because it is associated with several limitations and challenges, albinism is generally regarded as a disability (Vernon et al., 2021). These challenges include physiological limitations such as poor vision and risks of skin cancer, and socio-psychological problems such as stigmatization and discrimination (Nwosu et al, 2019). Both sets of challenges affect Albinos (persons living with albinism, PLWA) in several ways and levels. One of these is the pursuit of education.

There are basically two types of albinism. The ocular albinism is the type where the lack of melanin or pigmentation manifests only in the eyes, while the skin appears normal. When the eyes and skin are affected, the condition is known as oculocutaneous albinism.

When the eyes are affected, albinos develop photophobia (the fear of light) and have to squint in order to see a little bit more clearly. The low vision is not correctable by eye glasses and is lifelong though not generally progressive (Lynch & Lund, 2011; Msomi, 2014). The implication for their educational pursuits is that albinos would desire to sit in particular spots away from the glare of lights, natural or artificial and reflections from objects or even the board. The low vision also means that there is a desire for proximity to the board area for the PLWA to see clearly any material being written or projected (NOAH, 2010). In addition to this, the ability of albinos to read the regular material, such as textbooks and other printed materials comes at great difficulty. Carney, Engbretson, Scammell and Sheppard (2003) asserted that colour contrast in reading materials may be more important than larger font sizes for convenience of albino students. For effective education of PLWA, therefore, textbooks and other learning materials should be customized to their capabilities. This would be an extra cost.

The socio-psychological challenges include the stigma that comes with albinism. In many areas of Africa, especially, albinism is a heavy burden to bear by those affected by it. There are many myths and legends that dehumanize the albino and render them almost subhuman to the effect that they become targets of ridicule and inhuman treatment. For example, in Tanzania, there is a belief that the body parts of albinos produce good fortune, which has led to the killings of albinos in many places (de Groot et al., 2022). In some of the myths, albinos are ghosts that do not die but will eventually just disappear from the face of the earth (Brocco, 2015), or that they are not human at all (Imafidon, 2017). The stigmatization of albinos result into many limitations such as fostering good social relations with peers as many people try to avoid them. In class, they are often isolated and seldom talked to by their peers. Such negative attitudes and behaviours towards PLWA affects their employment, mental health and educational attainment (Reimer-Khirkam et al, 2019).

Across the world, several efforts have been made to provide effective education to PLWA, generally within inclusive education settings. Vernon et al. (2021) indicated that the United Nations High Commission for Human Rights (UNHCHR) Act of 2013 provides for inclusive education of all people including those with disability. Different countries have also enacted legislation that protect the rights of the people living with disability, including albinism, to quality education. Nigeria has been making concerted efforts to improve the educational prospects of PLWA.

At the 57th National Council on Education (NCE) in Sokoto, 2010, a committee was set up to develop a Blueprint on Albinism Education in Nigeria. This Blueprint was approved at the 58th National Council on Education conference held in Federal Capital Territory (FCT), Abuja, in 2011, where other far-reaching decisions were reached. For example, the 5th of May every year was also approved as National Albinism Day to be observed annually. Also, in line with Article 24 (Education) of the United Nations Convention on the Rights of Persons with Disability and Optional Protocol, the Council

also approved and granted Persons with Albinism the “time and a half” concept (that is, a double and half of the original time) during examinations for all educational institutions and examination bodies. All these have culminated in the development of the National Policy on Albinism and the implementation guidelines which is geared towards mainstreaming albinism into Nigerian society (FME, 2012). In spite of these efforts and laudable policy statements, little research has been done on the domestication of these guidelines and policy in Nigeria (Nwosu et al., 2019).

The educational outcome of a student or pupil does not rest on the student or pupil alone. There are several other stakeholders such as the school management and teachers and the community or society at large. In many respects the role of the teachers and school management could be the determinant of the student’s outcome. If the school management does not provide the requisite school environment and materials for effective teaching and if the teachers are not accommodative of students’ differences and personalities, then the student’s efforts may not amount to much. In regards to disabilities this is much truer than for the so-called normal person because the student with disability comes with additional challenges to be accommodated. Often the example set by the teacher may go a long way to pave for better relations between the student with disability and his class and school peers. It is therefore imperative to examine the attitudes of the teachers and school management along that of the students to PLWD amongst them. This study therefore assesses the impact of education on the knowledge and attitudes of people towards albinos in the Federal College of Education, Pankshin, Plateau State, Nigeria. This includes students, lecturers and school management members.

AIM

To investigate the impact of education on the knowledge and attitude of people towards albinos in the Federal College of Education, Pankshin, Plateau State, Nigeria

OBJECTIVES

- To determine the extent of knowledge of albinism by staff (academic, non-academic and management) and students
- To identify the types of attitudes of management, staff, lecturers and students towards albinos
- To examine the extent of knowledge of the challenges of people with albinism in their pursuit of education
- To determine the impact of sensitization on knowledge and attitudes of people towards albinos

THEORETICAL FRAMEWORK

A major limitation to the achievement of effective education for PLWA is the stigma that comes with their condition. The study therefore adopted the Social Stigma theory proposed by Goffman (1963). The theory presents an effective thesis to consider the roles of lecturers, school management and students in providing a conducive environment for the education of albinos at the Federal College of Education, Pankshin, Nigeria.

Goffman (1963:3) defined social stigma as “an attribute (of a person) that is deeply discrediting,” which results in the person being classified as undesirable, rejected and discriminated against. This attribute could be discernible or hidden. A discernible attribute is one that is obvious and easy to see such as a physical deformity or skin colour (e.g., albinism). The hidden attribute, on the other hand, is one that is not readily discernible unless it is revealed upon which the person may be discredited, e.g., a criminal record. Once the attribute is labelled as undesirable, it becomes easy to discredit the

person and to be discriminated against. Goffman (1963) refined this broad classification into “tribal stigmas” such as race, ethnicity and religion; “physical deformities” such as deafness, blindness and leprosy; and, “blemishes of character” such as homosexuality, addition, criminal record, etc. Albinism is both discernible and may be regarded as a physical deformity.

Goffman (1963) also identifies three groups of people in relation to stigma. These are the stigmatized, which refers to the person against whom the stigma is labelled; the normal person, which refers to the person without the discrediting attribute and therefore is the one stigmatizing the other; and the wise, who is the discerning person who empathises and accepts the stigmatized person for whom they are without any prejudices. With the wise person, the stigmatized person feels comfortable and safe, with no shame that comes with stigma. Smith (2012) corroborated this classification, and further categorized the wise into active and passive wise. The active wise are person who engage in the education of the normal or stigmatizer person for the purpose of eliminating the stigma and discrimination against the stigmatized. The passive wise person on the other hand does not do anything about the stigma even though they do not stigmatize the individual themselves.

Generally, the lecturers, school management and even the student who share the same class and learning environment with the albinos are expected to be active wise persons. This is essential to the PLWA who need constant reminders and confirmation of their acceptance in the community to be able to become effective learners. This is because stigma usually comes with the loss of self-esteem and confidence, feelings of worthlessness and leads to isolation and avoidance behavior. Active wise persons acquire education about the attribute and how to disseminate the knowledge to others. In many instances, their behavior towards the stigmatized, especially in public may serve to enlighten stigmatizers about the stigmatized. This study seeks to examine how educating people about albinism can effect positive changes on their knowledge and attitudes towards albinos in FCE, Pankshin, to create an effective learning environment and especially to fully domesticate the much-lauded national policy on education of albinos in Nigeria. FCE, Pankshin is an inclusive tertiary education institution. It offers both national certificates in education and degree programmes, along other post-secondary school education programmes. It is expected that such an institution should be in the forefront of mainstreaming the national policy on education of albinos.

METHODOLOGY

Research Design

The study adopted a quasi-experimental design where respondents were tested before an intervention and then retested after the intervention to assess whether or not there was a change in knowledge and attitudes as a result of the intervention. In this case, the selected respondents were tested for the knowledge of albinism and the challenges associated with it in regards to educational attainment and their attitudes towards people living with albinism. After a workshop where issues’ surrounding the impacts of albinism on education of albinos was exhaustively discussed, the respondents were then retested to determine if any changes have occurred in knowledge and attitudes towards albinos in the college community.

To do this, however, a sample was first determined. These involved two stages: determining a suitable sample size and selecting the sample.

Determining Sample Size

The sample size was computed using the formula provided by Krejcie & Morgan (1970)

$$s = \frac{\chi^2 NP(1 - P)}{d^2 (N - 1) + \chi^2 P(1 - P)}$$

Where N is known population size, χ^2 is Chi-square table value at 1 degree of freedom at required level of significance (0.05), which is 3.8416, equivalent to Z^2 value at same level of confidence; P is population proportion assumed at 0.5, which gives the maximum sample size; and d is the degree of accuracy expressed as a proportion (0.05 for 95% confidence level)

Data collected from the Registrar's office of the Federal College of Education, Pankshin estimated the population at about 5,000 including students and staff members. This yielded a sample size of 357. It was estimated that about 80% of this population is students, while the academic and non-academic staff population accounts for the remaining 20%.

At the end of data collection, 334 respondents had completed the full course of the study including responding to the questionnaire, attending one of the three workshops organized and filling in the post-workshop questionnaire. This is a response rate of 93.56%.

Sampling Technique

FCE, Pankshin consists of seven Schools and 28 Departments. Using a simple lottery-styled random sampling method, four Schools and eight departments were selected; two departments from each School. From the departments, the study set out to recruit two hundred and sixty eight students (80%) by advertising for volunteers and through convenience sampling. Ford (2014) in her study of attitudes towards albinism in the Caribbean asserted that this sampling approach is suitable for such a study because it reduces bias. From the lecturers and non-academic and management staff of the school, 71 respondents were sampled, with a little bias towards academic (lecturers) than non-academic staff because the former are more relevant to the study. Care was also exercise to ensure that the non-academic staff selected were those that were close to management level and could influence decision in the conduct of educational instructions in the College. This is because the latter group of participants was considerable less in number than the student population. These sampling methods were adopted because of the nature of school calendar. It would be almost impossible to have all respondents selected on the basis of random sampling to attend the intervention educational workshops because of mismatches in activity schedules. Certain steps were, therefore, taken to reduce any effects of these non-probability sampling methods and incompatible schedules on the quality of data collected.

First, volunteers were told the study would be on knowledge and attitudes towards people living with disability in FCE without mentioning albinism in particular. This was meant to reduce selection bias that may come up with those not willing to discuss their views on albinism, if they knew in advance. Second, three options were provided for time to attend a workshop on disability and education that would not last more than 45 minutes. And third, a light refreshment was offered after each workshop. Second, three different sessions of intervention were held, only 20-30 minutes apart in three different auditoriums to provide opportunities for volunteers to be able to attend at least one of them. Volunteers indicated what time period was conducive for them and attendance was taken to ensure that no volunteer was counted twice. The three sessions were scheduled to take place in sequence. Third, each session took only 45 minutes or less in order to attract attendance of volunteers and keep their attention.

The researcher also interviewed a randomly selected group of persons from each designation in the school on the impact of the educational workshop on knowledge and attitude of people in FCE towards albinos and the way forward. Six students, two non-academic, two academic and one management staff were interviewed.

Data Collection Procedure

Three steps were involved in the data collection process. The first was the pre-test survey carried out before the educational workshops were undertaken. After sampling procedure was completed, the selected sample were administered a structured questionnaire, the Attitude and Knowledge Scale Questionnaire that consisted of 30 items on facts about albinism, challenges of albinos among others. The questionnaire contained liker-like scale items, with scores between 1 and 4, where 1 represented “Strongly disagreed,” “disagreed,” “agreed” and “strongly agreed” options, respectively. The second stage was the intervention, which involved educating the participants on albinism, their challenges, especially in regards to educational achievements and social relations and how they may be helped to achieve better educational outcomes. Expert were recruited from the School’s Department of Special Education and Rehabilitation Science and the Albino Foundation, Jos. Workshops were conducted at this stage. The third stage was the post-test survey. The participants were now presented with the same set of questions in a new questionnaire to examine if their views on albinism and albinos had changed after the workshop. The two questionnaires were the basis of data analysis and discussion.

Data Analysis

The data collected was sorted out based on key IDs that had been provided to each participant to ensure that the pre-test and posttest views are being analyzed for the same person. The data was then entered in Microsoft Excel for processing. The Microsoft excels and IBM Statistical Package for Social Sciences (SPSS) version 23 was used for data processing and analysis.

The Chi-square test was used to determine the significance or otherwise of associations between knowledge on albinism and each of the following respondent variables: age, gender, educational qualification and status (designation). To determine if there was a statistically significant difference in views of participants about albinism and albinos between the period before and after the intervention (workshop), a paired-sample t-test was used and tested in Microsoft excel. The paired-sample t-test is appropriate because it measures significant differences in data collected for the same person or location over two different periods. The pre-test survey responses were therefore measured against the post-test survey responses of each person for the entire participants at the 0.05 level of significance. The SPSS was used to extract attitudinal characteristics of respondents towards albinos through the principal component analysis (PCA) method. The results are then presented as frequency tables and discussed.

RESULTS AND DISCUSSION

Characteristics of Respondents

Table 1 presents the general characteristics of the survey participants.

Table 1: Characteristics of Respondents

	Range	Freq	%
Age	< 20	7	2.10
	21-30	242	72.45
	31-40	54	16.17
	41-50	21	6.29
	51 +	10	2.99
		334	100
Sex	Male	175	52.40
	Female	159	47.60
		334	100
Education	Postgraduate	45	13.47
	Graduate	21	6.29
	Post-Secondary	153	45.81
	Secondary	115	34.43
		334	100
Designation	Management	10	2.99
	Non-Academic	17	5.09
	Academic	39	11.68
	Student	268	80.24
		334	100

Four variables relating to the characteristics of respondents, which have bearing on the study were considered. These are age, gender, highest educational qualification and status. The data showed that most respondents are young with 90.72% being 40 years old or younger. This is expected as the respondents are involved in a tertiary educational institution, which usually is predominated by young persons. The modal age group is actually the 21-30 year-old group with a percentage point of 72.45%.

The male gender (52.40%) is larger than the female (47.60%). This is also expected because the male gender has better access to education in Nigeria, generally than the female gender.

Most of the respondents had attained secondary or postsecondary (80.24%) but not graduate education. These are generally students of the College who are either in the National Certificate of Education (NCE) programmes after their secondary school education or are in the degree programmes of the institution either after having completed their secondary school education or NCE programmes, which is a post-secondary school qualification. Those with graduate or postgraduate education are the academic, non-academic and management staff of the College.

The students, by far, formed the largest bloc in the sample with 80.24%. As a tertiary educational institution, this distribution is equally expected.

These variables are important to the study because they can potentially shed light on the issues being raised by the research study, which is the impact of education on knowledge and attitude of people towards albinos in the Federal College of Education, Pankshin in Plateau State, Nigeria. For example, higher educational attainment may be an indicator of possible exposure to disabilities and probably albinism either in theory or practically and therefore the respondent may

have informed opinion or knowledge compared to others of lower educational qualification. These characteristics therefore may be important in discerning the patterns of results that the study may find.

Knowledge of Albinism by Staff (Academic, non-Academic and Management) and Students

Table 2 presents the results of a likert-scaled questionnaire administered for the study. The questionnaire examined the depth of knowledge of respondents on general issues surrounding albinism.

Table 2: Respondents' Knowledge On Albinism

Items	Percentage (%)				Total
	HK	MK	K	NK	
Albinism is hereditary/genetic	46.4	21.3	12.4	19.9	100
The "White" skin is caused by lack of melanin pigmentation	30.7	23.1	31.3	14.9	100
Albinism affects the eye and causes vision problems	63.8	18.5	13.6	4.1	100
The skin can develop (skin) cancer because of albinism	36.4	17.8	34.7	11.1	100
Albinos see better at night than in the day	26.2	20.6	22.9	30.3	100
Albinos don't like too much light or sunshine	58.5	24.4	11.8	5.3	100
Albinism is caused by witchcraft	63.3	18.3	12.3	6.1	100
Albinos are cursed by God for their sins or their parents' sins	58.6	17.5	15.4	8.5	100
Albinos are less intelligent than non-albinos	26.8	31.6	14.3	27.3	100
Albinism is contagious	54.6	21.2	22.5	1.7	100
Albinos are all the same	17.4	24.5	26.6	31.5	100
A woman will give birth to an albino if she gets close to one (albino) during her pregnancy	38.2	21.2	15.4	25.2	100

HK: High Knowledge; MK: Moderate knowledge; K: knowledge; NK: Low or No knowledge

The data showed that most respondents have some level of knowledge about albinism, generally. Naturally, some would have much greater knowledge than others and some issues are better known about albinism and albinos than others. For example, most respondents indicated high knowledge on the fact that albinism causes vision problems (63.8%), is not caused by witchcraft (63.3%), albinism is not a curse by God (58.6%), albinos are affected by too much light and sunshine (58.5%) and that albinism is not contagious (54.6%). However, many respondents indicated low or no knowledge of the fact that albinos are not all the same (31.5%), and whether or not albinos see better at night than at day (30.3%). There were also those who believed that albinos are less intelligent than non-albinos and that a pregnant woman was likely to birth an albino if she got close to a person with albinism during her pregnancy. These were some of the myths and misconceptions about albinism that appeared strongest among the respondents.

Table 3 tested the level of knowledge on albinism across the different characteristics of respondents to determine which variables significantly influenced respondents' knowledge of albinism.

Table 3: Chi-Square Test Result on Respondents' Knowledge on Albinism

Variable	Range	HK	MK	K	NK	Total	χ^2 p-value
Age	< 20	1	4	1	1	7	
	21-30	38	94	47	15	194	
	31-40	11	21	28	14	74	0.000643
	41-50	16	11	5	6	38	
	51 +	8	7	5	1	21	
		74	137	86	37	334	
Sex	Male	57	39	41	38	175	0.000101
	Female	58	63	25	13	159	
		115	102	66	51	334	
Education	Postgraduate	22	13	7	3	45	
	Graduate	6	8	5	2	21	
	Post-secondary	21	82	37	13	153	0.000527
	Secondary	19	57	27	12	115	
		68	160	76	30	334	
Designation	Management	5	5	0	0	10	
	Non-Academic	5	7	5	0	17	
	Academic	24	9	6	0	39	0.000499
	Student	68	95	82	23	268	
		102	116	93	23	334	

The results showed that all variables significantly affected respondents' knowledge on albinism. The p-value for all four variables was less than the level of significance at 0.05. This indicated that the variables significantly affected knowledge of albinism.

The p-value of the Chi-square test was 0.000643, which is much less than 0.05. The hypothesis that age does not influence knowledge on albinism is therefore rejected. The data showed that older respondents had a much larger proportion of persons with high knowledge on albinism than the younger persons. For example, 42% of respondents within 41 and 50 years and 38% of those 51 years old and above showed high knowledge as against only 19% for those between 21 and 30 years old. Masanja, Mvena and Kayunje (2014) in a study in Tanzania found that age was a determinant of awareness and knowledge on albinism. This may be due to exposure of the aged and the possibility of having had some experiences with albinos. In such circumstances, some of the myths and misconceptions may have already been dispelled.

The results of analysis equally showed a significant difference in knowledge on albinism due to gender. The p-value of 0.000101 is less than the level of significance at 0.05, which means that the hypothesis that there is no significant difference in knowledge on albinism by gender is rejected. About 76% of the female respondents showed either high or moderate knowledge about albinism, as against only 55% for the male gender. This is contrary to the findings of Masanja et al. (2014), who explained that the male gender higher knowledge on albinism may have resulted from better access to information as is commonly found in African society. The result may not be comparable here because of the nature of respondents. Masanja et al. (2014) dealt with a largely rural population, while the study respondents are urban and generally much more educated. Females are usually more affected when a child with albinism is born into the family. Of the child's parents, the woman is the one more stigmatized and blamed for the child's albinism. Braathen and Ingstad (2006) reported several cases in Malawi where the husband of the woman and father of the child either divorced the wife and mother of the albino or simply just left and never came back. In some cases, the woman was accused of infidelity with a white person and ostracized from the community. This is culturally the case in many African societies, where women are often lorded over by the men. In such situations it is possible for the educated women to immerse themselves more in the

knowledge on disability and albinism either for the purposes of avoiding it or equipping themselves with knowledge on how to deal with the situation should they become involved in it. This may be a plausible explanation for the higher level of knowledge on albinism by the female than the male gender.

The results also showed that there is a significant difference in knowledge on albinism based of educational qualification of respondents. The p-value was 0.000527, which is less than 0.05. The data showed that respondents with graduate (49%) and post graduate (29%) qualifications had much greater proportion of people with high knowledge than those with secondary (17%) and/or post-secondary (14%) educational qualification only. This is similarly he case with designation of respondents. All staff respondents had a higher proportion of persons with high knowledge on albinism, with none of them indicating low or no knowledge at all. Fifty percent of management staff, 29% of non-academic staff and 62% of academic staff displayed high knowledge while only 25% of students showed similar level of (high) knowledge. The p-value of 0.000499, which is less than 0.05 means that there is a significant difference in knowledge on albinism based on status or designation of respondents in the college This finding affirms Masanja et al. (2014) as well. The reason may be that those with higher educational qualification were more exposed and experienced about albinism than others. This may be because of their encounters with Albinos in some of the different schools they attended to earn their educational qualifications or due to exposure from some of the courses they took in pursuit of their education. Similarly this reason may suffice to explain disparity due to status or designation in the College. The staff are generally more exposed and experienced in such things than many of the students.

The results suggest that for positive changes to be effected, younger people, male, less educated and people of lower status in the college should be the target of enlightenment campaigns as they have less knowledge and are likely liable to being taken in by misconceptions and myths about albinism an albinos. However, even the others (by implication, all persons) can still learn a few things and shed off some of the misconceptions they have about albinism.

Attitudes of Management, Staff, Lecturers and Students towards Albinos

The study examined the attitudes of staff and students of the College towards albinos. Twelve items were examined on the liker-scale. The mean scores of the items are presented in Table 4.

Table 4: Responses on Attitudes of Staff and Students Towards People with Albinism

Item	Mean Score	Mean Criterion	Decision
I try to make friends with people with albinism	3.49	2.50	Agreed
People with albinism should be given special consideration by government and people	3.15	2.50	Agreed
I feel sympathy for people with albinism because of their condition	3.1	2.50	Agreed
I am more patient with people with albinism	3.05	2.50	Agreed
I am more understanding with albinos than with non-albinos if they cross me	2.98	2.50	Agreed
I get angry quickly with albinos	2.92	2.50	Agreed
Albinos should deal with their problems on their own	2.67	2.50	Agreed
I don't want to be close to people with albinism	2.42	2.50	Disagreed
Albinos should be in a special education programme not inclusive	2.42	2.50	Disagreed
I have a fear for people with albinism	2.34	2.50	Disagreed
I feel irritated around people with albinism	2.00	2.50	Disagreed
Albinos should stick together	2.00	2.50	Disagreed

The data showed that people generally have positive attitude towards people with albinism. Most respondents agreed (mean scores greater than mean criterion of 2.50) with the positive sentiments in the items such as attempting to befriend albinos (3.49), feeling sympathy (3.10) and being more patient (3.05) and understanding with them (2.98).

A Principal Component Analysis (PCA) was conducted on the responses using varimax rotation. Minimum eigen value was set at 1.00 for component extraction. The scree plot (Figure 1) showed that three principal components were extracted from the items. Small coefficients of absolute values below 0.30 were suppressed. The Kaiser-meiyer-Oilkin (KMO) Statistics test result was 0.747 and the Bartlett’s test of sphericity had p-value of 0,000, both of which signify that PCA was an appropriate test statistics to use for the data (Ford, 2014).

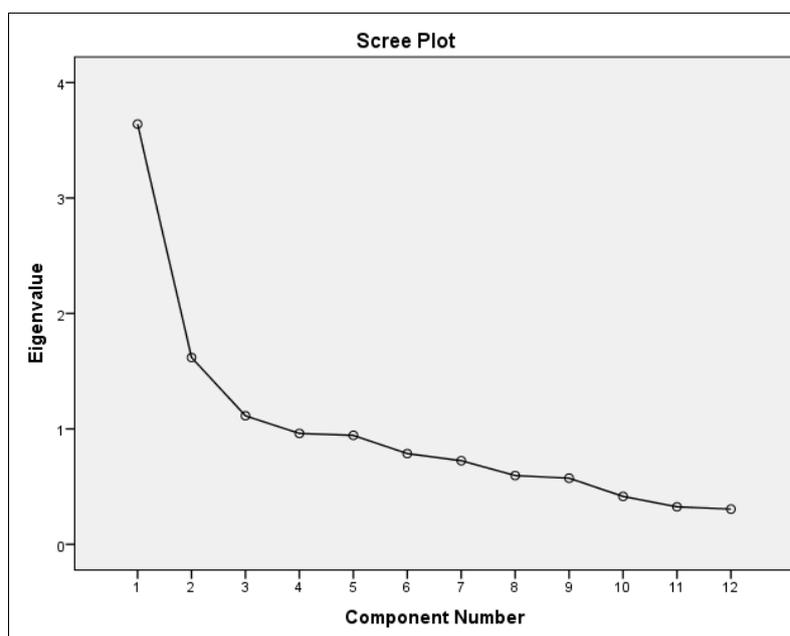


Figure 1: Screen Plot of PCA on Attitudes of Staff and Students towards Albinos.

Table 4 showed that the three extracted components explained 53.1% of the total variances in the attitudes. This means that the items that explain 53% of attitudes can be grouped into three.

The three extracted components were grouped as accommodating attitude, sympathetic attitude and distant attitude. These are presented on Table 5.

Table 5: Component Matrix Showing Types of Attitudes Extracted Through PCA

Component Matrix a			
	Component		
	1.Accommodating	2.Sympathetc	3.Distant
I try to make friends with people with albinism	0.703		
People with albinism should be given consideration by government and people	0.681		
I am more patient with people with albinism	0.671		
I feel sympathy for people with albinism because of their condition		0.688	
I am more understanding with albinos than non-albinos if they cross me		0.610	

Table 5 Contd.,

I don't want to be close to people with albinism			0.601
Albinos should be in a special education programme not inclusive			0.592
Albinos should deal with their problems on their own			0.541
Eigen Value	3.640	1.680	1.114
Percentage variable explained	30.335	13.486	9.279
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

KMO Statistics = 0.747; Barlett's Test = 1000.021 (df = 66); p = 0.000

Most respondents expressed a positive attitude that is labelled as accommodating. They are ready and willing to make friends with them, patient and feel that they should be given special consideration by both government and people. This is a good attitude. Ford (2014) saw this attitude as in which those concerned is willing to have the people with albinism engaged in the community. This factor explained 30.335% of total variance. This group may be classified as the wise (Goffman, 1963; Smith, 2012). These are categories of normal people who empathies with people with albinism. Because they are ready and willing to accommodate or help, the people with albinism also feel safe and free with them. It is difficult to know how many of these people with positive attitude are active wise persons or passive wise persons (Smith, 2012). The active wise persons do not only empathise with albinos but actively advocates on their behalf. Passive wise persons empathise but do not engage in advocacy on their behalf.

The second groups of persons were the sympathizers. These are people who expressed concern over the plight of the albinos but instead of understanding the complexity of their lives, they feel more of pity for them. It is nevertheless a good attitude since it suggests willingness to try to understand the person. Sympathy can be viewed as reaching out to a person and associating with their predicament. Consequently, it is a welcome attitude towards people with albinism.

The third attitude expressed was classified as distant. These are normal people who did not want to be associated with people with albinism. Probably, but not necessarily, they are those who stigmatize the albinos because of their condition. They do not want to get close to them and would prefer that there was a special school albinos could attend rather than come to an inclusive college as they are. They also expressed the feelings that albinos should deal and solve their problems by themselves without necessarily involving other people. The implication may be that they feel albinos should be left on their own but also that albinos should leave normal people alone, probably not mingle with them. This is a negative attitude. Studies by Gold (2002), Estrada-Hernandez and Harper (2006) and Masanja et al. (2014) found negative attitudes expressed by normal people towards people with albinism. These are some of the psychosocial problems and challenges that people with albinism live and deal with.

Knowledge of the Challenges Faced by Albinos in FCE

The extent of knowledge of the challenges that albinos face regarding their educational pursuits in FCE Pankshin was investigated. The mean scores of the responses given are provided in Table 6.

Table 6: Responses on Knowledge of Challenges Faced by Albinos in their Educational Pursuits

Items	Mean Score	Mean Criterion	Decision
Albinos require appropriately coloured materials for study	2.35	2.50	Disagreed
Albinos require print materials in bold, large font size for study	2.70	2.50	Agreed
Albinos cannot see letters written on the board in normal size	2.90	2.50	Agreed
Albinos need to sit in front of the class close to the board to be able to see what is written	3.15	2.50	Agreed
The lights in the class need to be dimmed to enable albinos see better	2.45	2.50	Disagreed
Albinos require extra time to finish copying materials written on the board	2.45	2.50	Disagreed
Albinos need extra time beyond normal time given to finish tests and examinations	1.45	2.50	Strongly Disagreed
Albinos do not feel accepted by classmates and peers	2.85	2.50	Agreed
The school facilities are not albino-friendly	2.60	2.50	Agreed

The data showed that there appears to be an underestimation of the nature and severity of challenges that albinos face in their educational pursuits. Though most respondents agreed with the items, they are scored lower than expected. Most respondents conceded that albinos needed to sit in front seats in class, close to the board to be able to read it (3.15). In Table 3, respondents demonstrated one of the highest levels of knowledge on albinism in the fact that it affects the eyes and causes vision problems. This is one of the more obvious characteristics associated with albinos, probably only second to their skin colour. It is therefore not surprising that this element of challenge is the most obvious to respondents. The next most important challenge is also associated with vision, which is that albinos cannot see clearly what is written on the board in normal sizes (2.90). Other important challenges identified included the fact that albinos are often isolated by their classmates and peers (2.85) and that albinos require print materials to be in large, bold font sizes to be able to read them clearly.

Despite this recognition, most respondents still felt that albinos do not require coloured study materials (2.35), classroom lights do not need to be dimmed (2.45), and they do not require extra time to copy notes from the board. Importantly, most respondents felt that albinos do not deserve to be given extra-time during tests and examinations. These responses probably reflect a general ignorance about the nature of challenges that albinos face in the classrooms and outside of it. Though most respondents associated albinism with vision problems, they apparently thought it affected only the size of the reading text. They did not associate it with difficulty in differentiating colours. Consequently, they did not see how multi-coloured reading materials may be of help.

Table 3 also suggested that many respondents associated albinism with less intelligence. This misconception seems to appear in the response that people with albinism should not be given extra time to complete tests and examinations. A closer scrutiny of the details of the responses revealed that most of those that felt this way were students. The respondents probably believed that extra time would amount to some type of cheating since they associated albinism with less intelligence and normal students with less intelligence were not being accorded the same privilege. It appears that though general knowledge about albinism and attitudes towards people with albinism are good and positive, there are still misconceptions about details of challenges albinos face especially regarding their education. These are some of the reasons why a workshop was proposed to investigate the possible influence of education on the knowledge and attitude of people towards albinos.

The Impact of Sensitization on Knowledge and Attitudes of People towards Albinos

Three workshops were conducted to provide information on albinism and their challenges as a sensitization strategy to examine how it impacts knowledge and attitudes of staff and students towards albinos. Each respondent was required to attend only one of the three workshops whose time was convenient to them. All three workshops had identical content and were presented by the same set of people. After the workshop, respondents were required to fill in their responses to the section of the questionnaire on knowledge of challenges being faced by albinos in education. Table 7 presents the post-workshop responses.

Table 7: Post-Workshop Responses on Knowledge of Challenges Faced by Albinos in their Educational Pursuits

Items	Mean Score	Mean Criterion	Decision
Albinos require appropriately coloured materials for study	3.25	2.50	Agreed
Albinos require print materials in bold, large font size for study	3.10	2.50	Agreed
Albinos cannot see letters written on the board in normal size	3.15	2.50	Agreed
Albinos need to sit in front of the class close to the board to be able to see what is written	3.30	2.50	Agreed
The lights in the class need to be dimmed to enable albinos see better	2.60	2.50	Agreed
Albinos require extra time to finish copying materials written on the board	3.00	2.50	Agreed
Albinos need extra time beyond normal time given to finish tests and examinations	3.25	2.50	Agreed
Albinos do not feel accepted by classmates and peers	3.20	2.50	Agreed
The school facilities are not albino-friendly	3.15	2.50	Agreed

There was a remarkably marked improvement in the knowledge of the challenges albinos face in their pursuit of education in an inclusive setting after the workshop. In almost all items, respondents readily agreed. The most improved response and understanding was the change in mean scores from 1.45 to 3.25 for albinos to be given extra time to write tests and exams. It is apparent that the workshop provided enough information to convince the respondents on the justice of giving albinos extra time for tests and examinations, and also to be provided with coloured materials (2.35 to 3.25), more time to copy materials from the board (2.45 to 3.00).

The significance of the improvement was tested using paired-sample t-test. Table 8 presents the results of the test.

Table 8: T-Test: Paired Two Sample For Means

	Mean Score1	Mean Score2
Mean	2.54444444	3.11111111
Variance	0.23340278	0.04486111
Observations	9	9
Pearson Correlation	0.04343396	
Hypothesized Mean Difference	0	
Df	8	
t Stat	-3.2754447	
P(T<=t) one-tail	0.0056321	
t Critical one-tail	1.85954804	
P(T<=t) two-tail	0.01126419	
t Critical two-tail	2.30600414	

The analysis showed that at both one- and two-tail tests, the p-values were less than the level of significance at 0.05. The implication is that the hypothesis that mean scores of responses in the pre- and post-workshops are not significantly different should be rejected. This means that the differences in knowledge on challenges faced by albinos pre- and post-workshop were significant. This may be seen reflected in the larger mean scores at post-workshop compared to those at the pre-workshop. The workshop had achieved its aim of educating staff and students on albinism and its challenges as albinos pursue educational goals.

However, the change in mean score for classroom lights to be dimmed to the benefit of albinos was only marginal and insignificant (from 2.45 to 2.60). It may not be known for certain if respondents did not get the necessity for the lights to be dimmed or whether the post-workshop responses reflected a different dimension of thought by the respondents. It is being hypothesized here that the responses to this item at both pre- and post-workshop represented a type of protest against what may have been perceived as favoritisms for the albino. A dimmed classroom may benefit the albino in light of the vision problem they experience because of light glare and reflection. However, it may affect the normal students who may need the light to remain “on” to be able to see better, especially in crowded classrooms. In such a situation, dimming the light favours only a few students with albinism but it takes away from the majority their ability to function optimally. Rather than a lack of knowledge the response may have been a consideration of the practicality of the problem and workability of the solution. This requires to be examined more closely.

The question of whether or not the workshop had succeeded in educating participants on albinism and its impact on their knowledge and attitude towards people with albinism was posed to participants. Table 8 presents the mean scores of the responses.

Table 8: Responses on Impact of Education on Knowledge and Attitudes of Respondents on Albinism

Item	Mean Score	Mean criterion	Decision
The workshop organized by the researcher has educated staff and management on albinism as a whole	3.30	2.50	Agreed
Workshop has educated the management team on the needs of albinos that need to be provided when furnishing classrooms	2.90	2.50	Agreed
Lecturers are also better educated on types and nature of educational materials that will better help students with albinism	3.10	2.50	Agreed
Students are also better educated to understand the plight of albinos regarding stigmatization and their educational needs	3.20	2.50	Agreed
Many myths and misconceptions surrounding albinism have been adequately addressed by the workshop	3.30	2.50	Agreed

Most respondents agreed that the workshop had educated staff and students and provided adequate knowledge to the on albinism and dispelled misconceptions and myths about the condition (3.30 each). Lecturers and students are now aware about the educational needs of the albinos and how best they can be integrated into the class room setting. Management members were also now better educated on how best to furnish classrooms for maximum benefits to albinos.

DISCUSSION OF FINDINGS

The overall sentiment was that the workshop was successful in imparting education on participants that would positively impact their knowledge and attitudes towards people with albinism in the College. Several participants in interviews conducted by the researcher to further discuss the issues raised in the questionnaire and workshop indicated they were glad

they volunteered for the study because they had gained a lot more knowledge about albinism. They expressed both hopes and fears about how this additional knowledge may become more practically relevant to the albino community in the College. One of the student-participant stated that:

There are many myths about albinism, many of them that made me scared of them. I do not have to fear them anymore because they only have a condition, which makes them different. I do not know how I am going to relate to them now but I know I won't be scared any longer.

This shows a possible conversion of a distant attitude towards sympathy and accommodation. A few students, especially presented similar views as well. A female student participant may have summarized the sentiments of many others when she said:

I know for sure that albinism is a disability just like other types of disability. I also know that a lot of the discriminations they experience is not necessary, which shouldn't be. I wish people will stop making life difficult for them just because of their condition. They are human like us all.

Generally, it is easier to philosophise these sentiments than to have them put into practice. Years and layers of societal myths and misconceptions cannot be wished away in a moment. However, the journey to full integration for the albinos in schools such as the FCE Pankshin starts with a gradual erosion of these misconceptions and implementation of policies and strategies that will provide conducive environment for albinos to thrive despite any psychosocial challenges. This requires that the basic minimum facilities needed by albinos be put in place. A member of the management team who participated hoped that:

The school management should take another look at facilities or approaches to teaching albinos. I think that there should be some provision for albinos to fit into the system. Probably the first step would be to consult our Special Education programme about how this can be achieved at minimal cost. The financial crunch is biting hard everywhere and allocations are grossly inadequate. I think another problem is the fact that there are not many albino students here so talking about large scale changes to classroom structures and lighting may not be feasible. But each albino student can be accommodated through customized service provision. But I think our Special Education experts may have better ideas

This would be a right step in the right direction. An academic staff buttressed the point further:

There are few albinos in the school. In fact there are few albinos in schools anywhere in Plateau state. This is not because there are no albinos but the school environments have been hostile to them so they drop out quite quickly. I can now understand why. We used to think it was for lack of intelligence but apparently, they need more customized care to bring out the best in them. But teachers like me may not have had the patience to guide them due to misconceptions... the way forward, I believe is to educate more people just as we just did at the workshop and try to change people's attitudes towards them and embrace them. Let them gain back their self-confidence and am sure they will succeed like one of the workshop facilitators who himself is albino.

Another lecturer was more pointed about what needed to be done in the College:

We need the management to facilitate a workshop for the lecturers and students especially on how to relate to albinos in their classrooms. The lecturers, just as e learning, should all be required to give the albinos the amount of time they need on tests and examinations and produce special print materials for them if they are in their courses. It will be

easier done if the school management makes such things mandatory for lecturers to do, otherwise, they may be not do it even if they know they should. Educating them may not be enough; there is need to enforce the right thing.

Very often the problem of policy making in Nigeria is the will power to implement and enforce their implementation. This is the position of many participants.

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

Summary

The study has found that:

1. Many participants are knowledgeable about albinism. For instance, most of them know that it is a condition that is hereditary and not contagious and not caused by witchcraft even though several misconceptions persist, such as those albinos are less intelligent than non-albinos.
2. Chi-square tests of association revealed that age, gender, educational qualification and status were all significantly associated with knowledge on albinism
3. A principal component analysis also revealed three strands of attitudes towards people with albinism in FCE, Pankshin. These are: accommodating, sympathetic and distant.
4. Many respondents are still grappling with the nature and severity of challenges that people with albinism study under in schools. For example, most of them do not think that albinos should be given extra time to complete tests and examinations as a result of their condition.
5. An educational workshop facilitated for respondents revealed positive knowledge outcome compared to before the workshop. A paired sample t-test showed that there was a significant improvement in knowledge on albinism after the educational workshop.
6. Respondents also affirmed that the workshop had enlightened and educated them on albinism and the educational challenges of albinos

RECOMMENDATIONS

Several recommendations are put forward. These include:

1. More enlightenment and education programmes to sensitize people about albinism and their challenges. The wider society should be involved in this education.
2. Since it is a genetic condition, people should be advised to get tested before marriage to avoid the many challenges parents of children with albinism and the albinos themselves face in life. This is as researches suggest that Nigeria has one of the most prevalent cases in the world.
3. Educational policies enacted to ensure proper and inclusive education to people with albinism should be enforced.
4. Adequate funding should be made available to schools for the education of people with albinism.

5. FCE, Pankshin can blaze the trail by making it obvious as a matter of policy for lecturers to accommodate people with albinism in their courses through provision of albino-friendly materials and customise service to people with albinism
6. Mandatory workshops for new students and for lecturers should be conducted by the College on how to integrate people with disability including albinos into the programmes of the College.
7. The current national discourse on the plight of people with albinism should be sustained but practical steps should be taken at the national level to implement all policy statements on education of people with albinism
8. Statewide study of the plight of albinos in educational institutions at all levels (primary, secondary and tertiary) should be conducted for better insights into how best to help them achieve their educational goals.

CONCLUSIONS

Of recent, the National Albino Foundation has become more vocal and visible about the rights of people with albinism in Nigeria including education. This national visibility has brought about a lot of interest in albinism and its challenges. However, for this attention to benefit the people with albinism and by extension the country as a whole, there is need for greater education of people about albinism at the grassroots and in schools. The benefit of such an education will be enormous because once the albinos feel accepted in the communities and schools and begin to make their life's ambitions, societal outlook and attitude would change as well. For a school like FCE Pankshin, they have the opportunity to start the train towards integrating albinos into the school system by providing an institution-based awareness and education policy on albinism that would impact attitudes for the better. This study has already demonstrated that education has a positive impact on the knowledge and attitude of staff, (management, non-academic and academic) and students towards albinos and can serve as a guide and model towards achieving this noble goal.

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