



# Albinism: Awareness, Attitudes and Level of Albinos' Predicament in Sukumaland, Tanzania

Methusela M. Masanja<sup>1</sup>, Zebedayo S. K. Mvena<sup>2</sup>, Kim A. Kayunze<sup>3</sup>

<sup>1</sup>Local Government Training Institute, **Tanzania**

<sup>2</sup>Department of Agricultural Education and Extension, Sokoine University of Agriculture, **Tanzania**

<sup>3</sup>Development Studies Institute, Sokoine University of Agriculture, **Tanzania**

## ARTICLE INFO

Volume 3  
Number 5/2014  
Issue 9  
DOI: [10.15590/ajase/](https://doi.org/10.15590/ajase/)

Received: Oct 19, 2014  
Accepted: Dec 15, 2014  
Revised: Dec 21, 2014  
Published: Jan 04, 2015  
E-mail for correspondence:  
[methusela\\_masanja@yahoo.com](mailto:methusela_masanja@yahoo.com)

## ABSTRACT

In Tanzania, persons with albinism (PWA), continue to be less valued, rejected, attacked and killed for ritual purposes. This study examined the situation of PWA and their households resulting from killings and attacks on them. Specifically, the study assessed the level of awareness, attitudes towards albinism and PWA and level of predicament felt by members of households with PWA. An albinism understanding test and attitudinal scales (Likert and Semantic differential scales) were used to determine attitudes towards albinism and level of dilemma felt. A linear regression model was used to determine the impacts of various variables on the level of predicament. Knowledge on albinism was found to be moderate. Levels of awareness were significantly associated with respondents' age ( $p = 0.004$ ), sex ( $p = 0.017$ ), education level ( $p < 0.0001$ ), religion ( $p < 0.001$ ) and ethnic group ( $p = 0.025$ ). Four-fifths of the respondents (80%) had negative attitudes towards albinism and PWA. Unfavourable attitude was highly associated with education level and occupation ( $p < 0.001$ ). Level of PWA predicament was higher among household members being significantly impacted positively by level of albinism awareness ( $\beta = 0.500$ ), but negatively impacted by attitude towards albinism ( $\beta = -0.313$ ) and age ( $\beta = -0.191$ ). Age, education, sex and belief determined level of knowledge on albinism. Education level determined attitudes of respondents. Albinism awareness determined the level of predicament felt. The fight against negative beliefs and attitudes towards albinism requires properly designed albinism awareness creation programme.

**Key words:** albinism, awareness, attitude, albinos' predicament, Sukumaland

**Source of Support:** Nil, **Conflict of Interest:** Declared.

**How to Cite:** Masanja MM, Mvena ZS and Kayunze KA. 2014. **Albinism: Awareness, Attitudes and Level of Albinos' Predicament in Sukumaland, Tanzania** *Asian Journal of Applied Science and Engineering*, 3, 14-27.

This article is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. Attribution-NonCommercial (CC BY-NC) license lets others remix, tweak, and build upon work non-commercially, and although the new works must also acknowledge & be non-commercial.



## INTRODUCTION

Ritual murders are increasingly becoming common phenomena in Tanzania today and for different reasons, but all are related to witchcraft. For over the past seven years, Tanzania has witnessed and laboured to stop the persecution of her albino population, preventing their murder and general abuse such as amputating some parts of the body for example arms or legs by banning of witch doctors' activities, identifying people dealing with the business and taking legal actions to all participating in the business but with little success. From 2006 to 2014, there were over 74 documented brutal killings, 58 attacks in which victims left severely mutilated and 18 documented grave robberies (UTSS, 2014; UTSS, 2012; Burnett, 2012). Like other people with disability, people with albinism face discrimination and segregation and are often shunned by their families and communities (Braathen, 2005). Their distinctive appearance and unique conditions are surrounded by myths and stereotypes which have powerful negative impact on their lives (Lund, 2001; Palmer, 2007). In some societies it is believed that having a baby with albinism is a result of bewitchment (Nduru, 2006). A series of ritualistic murders forced people with albinism to request for police protection and refuge in places considered to be safe (Mushi, 2009; Natukunda and Ngatya, 2008).

More than five decades after independence (1961-2014), dozens of witchcraft-related murders of people with albinism in Tanzania have left people with albinism living in fear (BBC, 2007). These people with albinism are no longer able to live normal lives due to constant fear of being murdered (BBC, 2008a; John, 2008). The killings are happening despite the Government's strong commitment to the provision of basic education to its citizens (UNESCO, 2000; Dachi et al., 2010) which would make them behave differently. Murders of PWA are happening in Tanzania while recent decades have witnessed considerable improvement in the way persons with disabilities are viewed in the western nations (Anderson, 2004). In many developing nations including Tanzania, persons with disabilities continue to be less valued, dehumanized, and rejected principally for ritual purposes. Very little is known about the problem in terms of the nature and extent of the problem and how to mitigate it. This study examined awareness, attitudes and perceptions which create the supportive environment which favour albinos' inhuman treatment in the study areas.

According to Ntinda (2009), in Africa many people are affected by albinism, but people with albinism in Africa stand out in stark contrast to those around them due to being among black people. Their distinctive appearance has a powerful impact on their lives from birth to death (Lund, 2001). In African communities where traditional explanations concentrate on fortune of illness or deviance rather than on biomedical explanations, deviant appearances impact on socialization (Lund and Gaigher, 2002). According to the African Report (2012), in some African communities it is believed that albinos are a bad omen. Other challenges include social and cultural challenges inhibited by ridicule, discrimination, or even fear and violence. African albinos endure segregation and threat throughout their lives, and in some cases they are killed after birth to avoid discrimination (Masakhwe, 2009).

Studies on albinism reveal that most people with albinism in Africa die in early adulthood or in middle ages (Okoro, 2006; Aquaron, 1990). Due to African cultures which embrace supernatural based explanations rather than scientific explanations, the presence of people with albinism is regarded and treated differently from other parts of the world and thus people with albinism in African countries are at higher risks (Lund and Gaigher, 2002). According to Haar (2007) cited by Harries (2010), changing witchcraft beliefs in Africa can

only be the result of a long-term process which will cultivate alternative modes of interpretation of life-events in order to eventually undermine the witchcraft mentality.

Like with other African countries, in Tanzania, there are many superstitions surrounding albinism and the majority in the community fail to realize that, albinism is a genetic disorder (Kiprono et al., 2012). Albinism like another kind of disabilities is associated with a sense of worthlessness or uselessness. Explaining this, Haihambo and Lightfoot (2010) reveal that beliefs and myths regarding the causes of disabilities and community responses and interventions regarding people with disabilities were similar across regions.

## **METHODOLOGY**

### **Description of the study area**

The Sukuma dominated regions of Mwanza, Geita, Shinyanga and Simiyu, form what was known as Sukumaland. Sukumaland lies in north-western Tanzania on the southern shores of Lake Victoria. The regions have the most reported albino deaths and mutilations in Tanzania (Ackley, 2010).

### **Study Design**

The study population for this study was members of households with persons with albinism. The study used a cross-sectional research design in which data were collected from subsets of the population and from which multiple outcomes had been studied (Mann, 2003). A relatively small sample of 156 respondents was considered to be able to give representation of the study population. Ten households with persons with albinism from each region were involved in this study. The study sampled household heads, a person with albinism and two household members purposively.

Quantitative methods were employed to address explanations which needed statistical analysis. Quantitative methods in this study helped in collecting data which helped in making prediction and generalization of findings (Fisher and Foreit, 2002). A set of structured questionnaire was used for data collection from heads of households with PWA, people with albinism and their relatives. The set of questionnaire was used to assess albinism awareness, attitudes and level of felt predicament. The questions in the questionnaire included awareness and attitudinal tests for which Likert and Semantic differential scales were used.

### **Data analysis**

Quantitative data were edited, coded and analyzed using the Statistical Package for Social Sciences (SPSS) for Windows computer software. Computed descriptive statistics included means, frequencies, percentages, cross-tabulations, and minimum and maximum values of various variables. Qualitative responses description of attitudes, perceptions, beliefs, knowledge and feelings on albinism and people with albinism's predicament were transformed into numerical values (using Likert and Semantic differential scales) to allow statistical computation. Measures of association and effect between several independent (predictor) variables and the dependent variable (predicament of albinos) were done using multiple linear regression analysis.

## **LEVEL OF ALBINISM AWARENESS**

The level of albinism awareness was determined using awareness test to 156 respondents from different categories. Four awareness categories namely poorly aware, moderately aware, aware and highly aware were established. The maximum score on the awareness test was 95 scores, and a minimum score was ten scores. The mean of the scores was 45.2.

Table I: Awareness categories among categories of respondents with regard to albinism awareness

Categories of respondents	Poorly aware (n=12)	Moderately aware (n=82)	Aware (n=37)	Highly aware (n=25)	Total (n=156)
PWA	50.0	23.2	21.6	12.0	23.1
PWA's relatives	50.0	45.1	59.5	60.0	51.3
Head of family	0.0	31.7	18.9	28.0	25.6

Table I shows that 50% of those who were poorly aware were PWA and 50% were relatives of PWA. Only 12% of those who were highly aware were PWA.

Several variables associated with the level of albinism awareness (Table II) were tested. All the variables, except household head's level of education, marital status and number of children with albinism were significantly associated with the level of albinism awareness as seen in Table II.

Table II: Association between variables and albinism awareness

Variables	$\chi^2$	DF	p = Value	Remarks
Respondent's age	28.923	12	0.004	**
Social status	54.0	9	0.000	***
Sex	10.234	3	0.017	*
Occupation	31.855	12	0.001	***
Education level	1.353	9	0.000	***
Head's education level	15.75	9	0.072	Ns
Religion	24.787	6	0.000	***
Marital status	10.406	9	0.319	Ns
Ethnic group	14.4	6	0.025	*
Respondent's number of CWA	15.411	9	0.080	Ns

\* = significant at  $p \leq 0.05$

\*\* = significant at  $p \leq 0.01$

\*\*\* = significant at  $p \leq 0.001$

ns = Not significant

### Albinism Awareness in Various Age Categories

From the results in Table II, there was a significant association between categories of awareness and various age categories ( $p = 0.004$ ). Respondents below 16 years had moderate knowledge on albinism (57.1%) while those with age above 60 years (33.3%) were highly aware. Braathen (2005) in a study in Malawi revealed that in general the community lacks proper information and knowledge about albinism. Albinism was seen as a condition immersed in myths and superstition. According to Lund (2001), lack of knowledge about albinism leads to many superstitions which when combined with poverty magnifies problems related to skin and eyesight. This lack of correct knowledge on albinism, results in myths about albinos being spread which has horrifying effects on the albinos in Tanzania (Stensson, 2008). Nzagi (2009) insists that the lack of awareness of the condition is not only among those in rural areas, but also trained medical professionals. Thus, PWA's quality of life is severely affected and worsened by the lack of community awareness (Kiprono et al., 2012).

**Albinism Awareness among Respondents of various Social Statuses**

The results in Table II show that there was a strong association between albinism awareness and social status of respondents ( $p < 0.001$ ). Community leaders were involved in the intervention to save PWA's lives through community engagement not only in Tanzania but also in other African countries (PHPAFRICA, 2012). Community engagement was done to bolster the response and weed out deeply-rooted superstitious beliefs that incite the murders (UN, 2008). It was critically important to engage communities through community leaders in which albinos lived if stigmatization and discrimination that negatively affect PWA's lives were to be mitigated. Community involvement was important because murders of albinos are, to a large extent, fuelled by spiritual, cultural and or religious beliefs as well as a lack of understanding of the causes of albinism (PHPAFRICA, 2012).

**Albinism awareness among Males And Females**

Albinism awareness was significantly associated with sex of respondents (Table II) in which males were slightly more aware of albinism than females ( $p = 0.017$ ). Relatively poor awareness among females can be explained in the light of gender inequality in African cultural family settings in which women have unequal access to information compared to men (McLin-Bronson et al., 2009). Traditions which ignore women's wellbeing are deeply rooted in African communities which place women at a disadvantage in many aspects. Like in many African traditions, women in rural Sukumaland where traditions still dominate are required to remain silent. While insufficient information and communication network being an obstacle to improving women status, men's attitudes are unsupportive of women's efforts (Rwebangira, 1996).

**Albinism awareness and respondents' occupation**

From the results, respondents who were government employees and religious leaders were more aware than peasants and traditional leaders ( $p = 0.001$ ). Poor awareness among peasants and traditional leaders (mainly indigenous in the study area) reflects how they are deeply rooted traditions in the study area. Ignorance, prejudice, traditional beliefs and poverty are what drive people to kill albinos under the influence of witch doctors and the belief in traditional magic which are still strong in many remote villages (Hogan, 2012). The killings indicate that there are some primitive, superstitious beliefs attached to people in the study area that make some wicked men to continue hunting PWA (Good and Bad Culture, 2012). In general people in this area don't look at the Albino as part of the community but still stand firmly in their traditional beliefs (Aljazeera, 2009).

**Albinism awareness and respondents' education level**

Albinism awareness was highest among those with secondary school education (100%) and those with education beyond secondary school (100%). Two-thirds (60%) of those with primary education and those with no formal education (56.6%) had moderate awareness. The association between awareness among groups and different education level was significant ( $p < 0.001$ ). As a result, many rural areas where most of the killings have been taking place were poor and not able to afford to fulfil their basic things like accessing high and quality education. In these areas, primary level of education was the highest level the majority had reached. Therefore, due to lack of education, people become ignorant and likely to involve themselves in inhumane acts (Mtholyoke, 2009).

### Albinism awareness and respondents' religious affiliation

About a half of Christians (48.8%), all Muslims (100%) and more than a half of traditional believers (56.5%) were moderately aware of albinism. However, 26.1% of traditional believers were poorly informed, and 20% of Christians were highly aware of albinism. Statistically, the association between albinism awareness and religion affiliation was significant ( $p < 0.001$ ). Traditional believers agreed that the use of human body parts in preparations of charms is common in Sukumaland. Albino parts are believed to be the best parts especially the males and females private parts (Lubus, 2010). The Sukuma traditionally killed their babies with albinism as soon as they were born, and baby's remains were used for witchcraft rituals (UTSS, 2012). Therefore, poor knowledge among those who believe in traditions reflects what is in their mind. People with albinism used to be killed by groups of Sukuma so that parts of their bodies could be used in the preparation of supposedly protective magic medicines (Tanner, 2010). The medicines could be used to relieve a range of suspected and real misfortunes, ranging from witchcraft to the prevention of rain and the spread of AIDS as well as to increase the possibilities of success (Tanner, 2010). Being largely religious but still adhering to traditions, people generally are still very rooted in superstitions beliefs. Dave-Odigie (2010) commented that public enlightenment strategies to deal with the issue and sensitizing the populace should be strengthened.

### ATTITUDES TOWARDS ALBINISM

A five points Likert scale including strongly disagree, disagree, undecided, agree and strongly agree was used to measure attitudes towards albinism and PWA. Results were summarized into three points Likert scale as shown in Table III. Half of the statements in the Likert scale had negative connotations while the other half had positive connotations. The most negative attitude was represented by 20; the neutral attitude was represented by 60 and the most positive attitude was represented by 100. The range of points for negative attitudes was 20 to 59; and that of points for positive attitudes was 61 to 100.

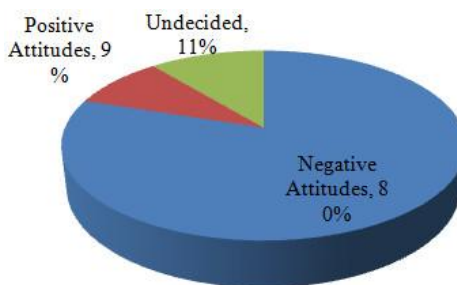


Figure 1: Proportions of attitudes towards albinism

The results show over four-fifths (80.1%) of the respondents had negative attitudes towards albinism and PWA, 9% had positive attitudes and 10.9% were undecided (Fig.1). As in other communities across the world, albinism is hardly understood in this area too. Due to negative attitudes towards albinism and PWA, many women have been divorced by their husbands and shunned by families after giving birth to children with albinism (Kiprono et al., 2012). They have been accused of sleeping with men of other races, of being cursed and unclean, and of being witches thus abandoned by spouses and isolated in their communities (Wilkinson, 1998). Children with albinism have also been hidden from the public, forbidden from socializing with others and treated as outcasts (Thuku, 2011).



Due to negative attitudes towards PWA, derogatory names for persons with albinism like Zeru Zeru, Albino, Mzungu, Dili, Dau, or Mkwana (in Kiswahili) or Mbilimwili (in Kisukuma) were commonly used in the study area. It is obvious that such names lead to prejudice and stereotypes which lead communities to condemn PWA basing on their condition rather than appreciating their humanity (UTSS, 2012). Due to negative attitudes, PWA suffers rejection by the community, denial of the right to found families and killings done for the purpose of getting their body parts. These pose serious impacts on their psychological and economic status. Negative attitudes in these regions may be due to what historically happened in the past among the Sukuma in response to albinism as the Commission for Human Rights and Good Governance –CHRAGG (2010) reports:

*“...Children with albinism were instantly killed at birth for fear of shame attached to the condition or beliefs that they carry bad luck ... In some cases, birth of a child with albinism resulted into marital discord, leaving children without proper parental care...”*

Due to such attitudes towards albinism in Sukumaland, the murders went on unreported for a long time and thus there is no reason to believe that it has ended (Jozen, 2012). Since the killings are due to witchcraft beliefs which has been a potent force in African life for a long time and goes far back into prehistoric times it thus continues today, not only among primitive people, but also among the civilized (Nemec, 1974). It is then obvious that it is difficult to detach Africans still committed to their traditional religions and cultures that existed before the coming of Christianity and Islam (The Citizen, 2011).

#### **Association of attitudes towards albinism and PWA with other variables**

Six factors (variables) were tested using chi-square statistical test to determine their association with attitudes towards albinism and PWA. Table III summarizes the results. Education and occupation showed a significant association with attitudes towards Albinism and PWA. However, attitude had no significant association with age, type of respondent, religion and sex. The result confirms the relationship between education and attitudes in which there is liberalizing effect of education on attitudes (Ohlander et al., 2005). Association between education and favourable attitudes towards albinism shows that, education can help in changing people's negative attitudes towards albinism.

#### **Association between education level and attitudes towards albinism**

From the results in Table III, all who had not gone to school and 88.7% of those with primary school education had negative attitudes towards albinism and PWA. While larger proportions of those with secondary education and above had positive attitudes towards albinism and PWA. Attitudes towards albinism and PWA were highly related with education level of respondents. The association of attitudes with education levels was statistically significant ( $p < 0.001$ ).

Ignorance makes people discriminate against each other. Thus awareness and education are the keys to overcoming discrimination (BBC, 2006). Ohlander et al. (2005) insist that the relationship of education and attitudes is not a spurious one, but there is liberalizing effect of education on attitudes. The association between education level and attitudes towards albinism suggests that the negative attitude of the community is to change as people know more about albinism and PWA. Then widespread dissemination of accurate information about the genetics and health management of albinism is a relevant measure to counter the many myths and misconceptions surrounding albinism and PWA (Lund, 2001).

Murders of albinos are, to a large extent, fuelled by spiritual, cultural and religious beliefs as well as the lack of understanding of the causes of albinism. Stigmatization and discrimination

affect lives of PWA and their families. Such practices can be traced from the way socialization processes take place and might have been in favour of many cultural backgrounds which lead to illusory correlations (Tanner, 2010).

Table III: Factors associated with attitudes towards Albinism and PWA

Variables	Attitude towards albinism and people with albinism (%)			Significance levels
	Negative attitudes	Undecided	Positive attitudes	
Type of respondent				
Persons with albinism (n=36)	72.2	13.9	13.9	$\chi^2 = 2.198$
PWA relatives (n=80)	62.5	26.3	11.2	p =0.699 ns
Heads of family (n=40)	65.0	22.5	12.5	
Age categories				
0-15 years (n=7)	85.71	14.29	0.00	
16-30 years (n=26)	76.92	15.38	7.69	$\chi^2= 10.526$
31-45 years (n=64)	85.94	10.94	3.13	p = 0.230 ns
46-60 years (n=41)	78.05	4.88	17.07	
61-75 years (n=18)	66.67	16.67	16.67	
Sex				
Males (n=92)	76.09	10.87	13.04	$\chi^2 = 4.595$
Females (n=64)	85.94	10.94	3.13	p = 0.101 ns
Education levels				
Not gone to school (n=23)	100.00	0.00	0.00	
Primary educ. Level (n=115)	88.70	9.57	1.74	$\chi^2 = 1.044$
Secondary educ. Level (n=16)	0.00	31.25	68.75	p < 0.001
Beyond sec. educ. Level (n=2)	0.00	50.00	50.00	***
Occupation				
Peasant (n=130)	87.69	8.46	3.85	
Government employee (n=19)	31.58	26.32	42.11	$\chi^2= 43.600$
Traditional leader (n=4)	100.00	0.00	0.00	p < 0.001
Religious leader (n=3)	33.33	33.33	33.33	***

\*\*\* = significant at  $p \leq 0.001$

ns = not significant

$\chi^2$  = Chi-square

### Association between occupation and attitudes towards albinism

Results show that while all (100%) traditional leaders had negative attitudes towards albinism, 87.69% of peasants also had negative attitudes toward albinism (Table III). Only Government employees had a slightly higher proportion of respondents (42.11%) who had positive attitudes towards albinism and PWA. Traditional leaders were equally divided in which 33.33% had negative attitudes and the same had positive attitudes, and 33.33% remained undecided. Results show a high proportion of traditional leaders and peasants having negative attitudes while Government staff had positive attitudes towards albinism and PWA. Such findings are very painful experience for PWA, who would need physical expressions of love, care, interaction and acceptance from the whole community. Lund et al. (2002) explain the negative attitudes towards PWA as unhappy consequence for PWA



being labelled as socially unacceptable and that people's stigma can come to dominate the perceptions that others have.

Negative attitudes among traditional leaders and peasant confirm the fact that negative attitudes toward albinism reflect a general lack of information and the degree of negativism in a respective community (Estrada-Hernández, and Harper, 2007). Though traditional healers are mostly blamed to be behind the killings of PWA, traditional leaders are also behind the killings of children with albinism secretly as far as the killings are related to culture and traditions which traditional leaders are custodians of. Sukuma traditions which demanded elimination of babies with albinism as soon as they were born, and baby's remains were used for witchcraft rituals (UTSS, 2012). Traditional leaders were keen enough to see that people adhere to traditional norms so as to keep the community safe from angry gods.

### LEVELS OF ALBINOS PREDICAMENT

As part of the interview process, a semantic differential scale was used to determine the level of predicament (as felt by respondents). Being assigned numerical values of 1 to 7 to the various spaces on the scales, then a neutral score was 4, a very positive endorsement was 1, and a very negative endorsement was 7. The range of points for a positive attitude was 20 to 79, neutral point was 80 and that of points for a negative attitude was 81 to 140. The overall level of predicament is as shown in Fig.2. Three variables that had significant impact on the level of predicament of people with albinism were identified in Table 4. A linear regression analysis of the factors gave a coefficient of determination ( $R^2$ ) of 0.536 an indication that the model used was able to explain 53.6% of the variables influencing the level of predicament of people with albinism. The factors with strongly impact on the level of predicament were albinism awareness ( $p < 0.001$ ), attitudes towards albinism ( $p < 0.001$ ) and age of respondents ( $p = 0.001$ ).

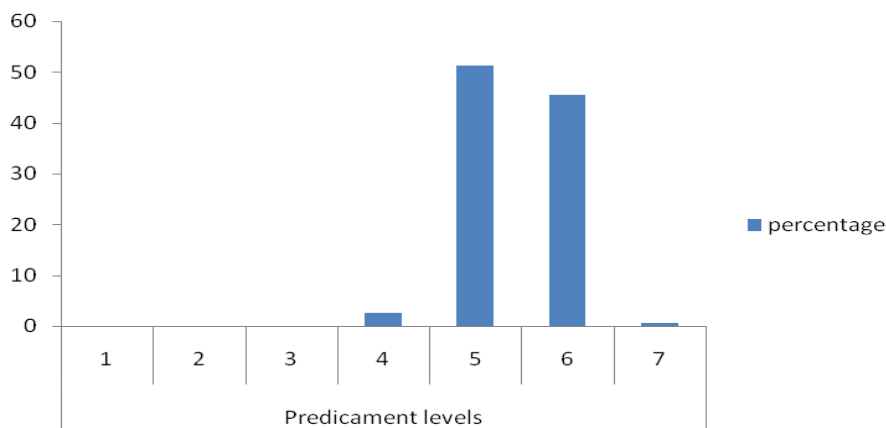


Figure 2: Level of Predicament

Table IV: Multiple linear regression results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	B		
1	(Constant)	5.704	0.212		26.897	< 0.001
	Education	0.002	0.021	0.009	0.104	0.917
	Attitudes towards albinism	-0.394	0.093	-0.313	-4.244	< 0.001
	Age category of the respondent	-0.168	0.049	-0.191	-3.393	0.001
	Albinism awareness	0.027	0.005	0.500	5.551	< 0.001

a. Dependent Variable: Felt level of predicament

### Impact of Attitudes towards PWA on level of Predicament

Table IV shows that attitudes towards albinism and PWA had a negative impact on the level of predicament ( $\beta = -0.313$ ). Negative impact implies that negative attitudes lowered the level of predicament (felt by respondents). Lowering the level of predicament does not imply that family members were happy with the ongoing situation. Hanna et al. (2000) explain that sometimes the humiliated possess a very powerful and admirable ability that develops through their hardship and strife. They don't need to be seen solely as helpless victims (Hanna et al., 2000). In some cases in the name of culture, humiliation, oppression and discriminations are accepted like in case of the untouchables in India who seem to accept their low position to the extent that no struggle arises (Ouwkerk, 1945). However, sometimes acceptance of low position or humiliation may be influenced by perceived harmful consequences of rejecting the reality (Sokolowska and Tyszka, 1995).

### Impact of Albinism awareness on levels of Predicament

Table IV shows a positive impact of albinism awareness on the level of predicament ( $\beta = 0.5$ ). From the results, it means that raised awareness on albinism in the community, stigma and discriminations due to albinism are felt at high level. Ignorance and negative attitudes are among the greatest obstacles that people with disabilities have to contend with (Rao et al., 2002). It is obvious that negative attitudes commonly arise from ignorance rising from people who do not know. But Rao et al. (2002) insist that awareness on disability is not only about an individual becoming aware but it is a collective identity among the community. Public education and awareness still remain central to changing the understandings of people on albinism (Rao et al., 2002).

### Impact of Age on levels of Predicament

Table IV shows a negative impact of age on levels of predicament ( $\beta = -0.191$ ). Negative impact of age on level of predicament reflects the existence of witchcraft beliefs that disregard people with albinism. Mecoamere (2007) explains that:

*"...countless, dangerous myths and superstitions surround albinism. People with albinism are erroneously said to vanish at death. They are also said to be products of a curse or punishment to the parents by the gods or ancestors..."*

According to Mihangwa (2000), traditional ways of solving social problems in this area through divination, future telling and witchcraft which is used by many includes the elite Universities graduates and other personalities in high government ranks who are supposed to

participate in war against these beliefs. Beliefs in witchcraft are deep-seated in African traditional culture and religion and to the surprise are being held to some degree even by more highly educated individuals (Anderson, 2004). Prominent businessmen, government and political figures are highly involved in the killings of PWA (CHRGAG, 2010). Since the learned ones and those who are in various ranks in Tanzania government are said to be behind the killing of PWA, then education level or age is not necessarily a factor in fighting against beliefs behind PWA attacks and killings in the study regions.

## CONCLUSIONS

Awareness (knowledge) on albinism among family members was moderate. Categorically, awareness was poor among those with lower level of education while awareness increased with increase in age categories and formal education level. Males were slightly more aware than females. Awareness was highly associated with religious affiliation and ethnic groups of respondents. Attitudes towards albinism and PWA were poor; the problem was highly associated with a high level of illiteracy. Higher education was associated with a high level of predicament felt among respondents. Negative attitude towards albinism had negative effect on level of predicament felt by respondents. Negative attitudes among illiterates implies that illiteracy, besides limiting understanding about albinism, reduces their humanity by making them feel inferior and putting obstacles which restrict them from enjoyment of their basic rights. Relationship between education and attitudes and awareness confirm the liberalizing effect of education on attitudes and general awareness of community related issues.

## RECOMMENDATIONS

The findings of this study reveal that illiteracy is the main force behind the beliefs and attitudes towards albinism and PWA. A policy for a long time solution should be formulated to insist on positive perception of pupils on albinism from primary schools level. Knowledge on albinism will comparatively increase understanding on the condition which are lacking among people with low level of education (below secondary school education). Awareness on albinism should accompany socialization of children with positive attitudes towards PWA. Awareness creation among young people will widen the knowledge of albinism and will help young people not to hold on cultural beliefs that contribute to killing of people with albinism for dangerous myths and superstitions. Albinism awareness creation will ensure having a nation with positive attitudes towards PWA as well as towards other people with disabilities.

## REFERENCES

- Ackley, C. (2010). The Fetishization of Albinos in Tanzania. [<http://www.underthesamesun.com/sites/default/files/The%20Fetishization%20of%20Albinos%20in%20Tanzania.pdf>]
- Aljazeera (2009). Life of fear for Tanzania's Albinos: A string of murders of white-skinned residents has shocked the African country. [<http://www.aljazeera.com/programmes/general/2008/08/20088171455171120.html>] site visited on 5/1/2012.
- Anderson, D. W. (2004). Human Rights and Persons with Disabilities in Developing Nations of Africa. Presented at: The Fourth Annual Lilly Fellows Program National Research Conference Christianity and Human Rights. Samford University Birmingham. 21pp.
- Aquaron, R. (1990). Oculocutaneous albinism in Cameroon a 15-year follow up study. *Ophthalmic Genetics* 11(4): 255 – 263.
- Braathen, S. H. (2005). Albinism in Malawi. A qualitative study on attitudes and beliefs. Thesis for Award of Master of Philosophy Degree in International Community Health at University of Oslo, Norway, 66pp.

- British Broadcasting Corporation (2006). What do you know about albinism? [<http://news.bbc.co.uk/2/hi/africa/4997644.stm>] site visited on 17/7/2010.
- British Broadcasting Corporation (2007). Tanzania fear over albino killing. [<http://news.bbc.co.uk/2/hi/africa/7148673.stm>] site visited on 10/1/2010.
- British Broadcasting Corporation (2008a). In hiding for exposing Tanzania witchdoctors. [<http://news.bbc.co.uk/2/hi/africa/7523796.stm>] site visited on 20/4/2011.
- British Broadcasting Corporation (2008b). Tanzania in witchdoctor crackdown. [<http://news.bbc.co.uk/2/hi/africa/7327989.stm>] site visited on 10/1/2010.
- Burnett, J. (2012). Tanzania's Albinos face constant threat of attack. [<http://www.npr.org/2012/11/30/165643518/tanzanias-albinos-face-constant-threat-of-attack>] site visited on 20/3/2012.
- Dachi, H. A., Alphonse, N. R., Kahangwa, G., Boniface, R. and Moshi, M. (2010). Leadership and Management of Change for Quality Improvement: In: Baseline Study in Selected Districts of Tanzania Mainland. EdQual Working Paper No. 21. University of Dar-es-salaam. 71pp.
- Dave-Odigie, C. P. (2010). Albino killings in Tanzania: Implications for security. *Peace Studies Journal* 3(1): 68 – 75.
- Estrada-Hernández, N. and Harper, D. C. (2007). Research on psychological and personal aspects of albinism: A critical review. *Rehabilitation Psychology* 52(3): 263 – 271.
- Fisher, A. A. and Foreit, J. R. (2002). Designing HIV/AIDS Intervention Studies. An operations research handbook. Population council Dag Hammarskjold plaza, New York, USA. 79pp.
- Good and bad culture (2012). African culture at a glance. [<http://www.good-and-bad-culture.com>] site visited on 4/1/2013.
- Haihambo, C. and Lightfoot, E. (2010). Cultural Beliefs Regarding People with Disabilities in Namibia: Implications for the Inclusion of People with Disabilities. *International Journal of Special Education* 25(3): 76 – 87.
- Hanna, F. J., Talley, W. B., and Guindon, M. H. (2000). The Power of Perception: Toward a model of cultural oppression and Liberation. *Journal of Counselling and Development* 78(4): 430 – 441.
- Harries, J. (2010). Witchcraft, culture, and theology in African Development. *Kima International School of Theology Maseno, Kenya. African Nebula* 2(2): 138 – 152.
- Hogan, S. (2012). Fear of white. [<http://www.ourworldtoday.com.au/news/article/fear-of-white>] site visited on 4/1/2013.
- John, C. (2008). Albinos issue threat to flee the country. [<http://thecitizen.co.tz/newe.php?id=8152>] site visited on 10/1/2010.
- Jozen, A. (2012). Signs of the end: Converting albinos into capital. [<http://www.ippmedia.com>] site visited on 15/8/2012.
- Kiprono, S. K., Joseph, L. N., Naafs, B. and Chaula, B. M. (2012). Quality of life and people with Albinism in Tanzania: More than only a loss of pigment. *Scientific Reports* 1: 2 – 83.
- Lubus, J. (2010). The practice of witchcraft in Tanzania in relation to killings of Albino and old women. [<http://witchcraftintanzania.wordpress.com/>] site visited on 4/2/2011.
- Lund, P. M. (2001). Health and Education of children with albinism in Zimbabwe. *Health education research. Theory and Practice* 16(1): 1 – 7.
- Lund, P. M. and Gaigher, R. (2002). A health intervention programme for children with albinism at a special school in South Africa. *Health education research. Theory and Practice* 17(3): 365 – 372.
- Mann, C. J. (2003). Observational research methods. *Research design II: Cohort, cross sectional and case-control studies. Emergence Medical Journal* 20(1): 54 – 60.
- Masakhwe, P. W. (2009). Dispelling Africa's myths about albinism. [<http://www.afronline.org/?p=1684>] site visited on 6/3/2010.
- McLin-Bronson, H. R., Paige, S. D., Berrett, K. S., Wilson, C. D. (2009). Women, Children, Families and Social Change in South Africa. [<http://www.jsums.edu/cil/new%20website%202008.2/pdf/Women%20Children%20Families%20and%20Social%20Change%20in%20South%20Africa.pdf>] site visited on 20/10/2012.
- Mecoamere, V. (2007). Help quash the many myths about albinism and you could be a provincial or even a national winner. [<http://www.sowetanlive.co.za/sowetan/archive/2007/06/22/help>

- quash-the-many-myths-about-albinism-and-you-could-be-a-provincial-or-even-a-national-winner] site visited on 14/5/2012.
- Mihangwa, J. M. (2000). Violence Against the Aged: The case of killings on witchcraft beliefs in Shinyanga region. TAMWA, Dar es Salaam, Tanzania. 25pp.
- Mtholyoke, (2009). Killings of albinos in Tanzania: Causes of the Killings. [[http:// www. Mtholyoke.edu/~marik22b/classweb/worldpolitics/page%20%20killing%20of%20albino%20tab2.html](http://www.Mtholyoke.edu/~marik22b/classweb/worldpolitics/page%20%20killing%20of%20albino%20tab2.html)] site visited on 20/2/2011.
- Mushi, D. (2009). Media can end albino killings. [[http:// www.dailynews.co.tz/feature/?n=395](http://www.dailynews.co.tz/feature/?n=395)] site visited on 10/2/2010.
- Natukunda, C. and Ngatya, K. (2008). Ritual killings: Albino hunted. [[http://www. newvision.co.ug/D/8/12/663061](http://www.newvision.co.ug/D/8/12/663061)] site visited on 10/3/2010.
- Nduru, M. (2006). Albinos also victims of discrimination in Africa. [<http://www.humanrights-geneva.info/spip.php?article496>] site visited on 10/2/2010.
- Nemec, J. (1974). Witchcraft and medicine. US Department of Health, Education and Welfare. [<http://www.nlm.nih.gov/hmd/pdf/witchcraft.pdf>] site visited on 25/06/2013.
- Ntinda, R. N. (2009). Customary practices and children with albinism in Namibia: A constitutional challenge? [[http://www.kas.de/upload/auslandshomepages/Namibia/Children\\_Rights/Child ren\\_n.pdf](http://www.kas.de/upload/auslandshomepages/Namibia/Children_Rights/Child ren_n.pdf)] site visited on 10/3/2010.
- Nzagi, I. (2009). Securing the Rights of People with Albinism in Tanzania Mainland: The Fight against Social Exclusion: Dissertation for Award of Degree of Masters of Arts in Development Studies Specialization in Human Rights, Development and Social Justice. The Hague, The Netherlands. 59pp.
- Ohlander, J., Batalova, J. and Treas, J. (2005). Explaining educational influences on attitudes toward homosexual relations. *Social Science Research* 34(4): 781 – 799.
- Okoro, A. N. (2006). Albinism in Nigeria. A clinical and social study. *British Journal of Dermatology* 92(5): 485 – 492.
- Ouwerkerk, L. (1954) *The Untouchables of India*. The Trinity Trust. Spencer and Co. Ltd., London, England. 322pp.
- Palmer, C. (2007). Myths, stereotypes and self-perception: the impact of albinism on self-esteem. *British Journal of Visual Impairment* 25(2): 144 – 154.
- PHPAFRICA (1012). Community engagement project to address problems faced by albinos. [<http://www.phpafrica.org/projects/community-engagement/community-engagement-project-address-problems-faced-albinos>] site visited on 10/1/2012.
- Rao, A. J., Sharmila, M. and Rishita, N. (2002). Awareness of and attitudes to disability in rural and urban communities of Andhra Pradesh, India: A comparative study. *International Journal of Disability, Community and Rehabilitation* 2: 1 – 2.
- Rasmussen, S. D. H. (2009). *Illness And Death Experiences In Northwestern Tanzania: An Investigation Of Discourses, Practices, Beliefs And Social Outcomes Especially Related To Witchcraft Used In A Critical Contextualization And Education Process With Pentecostal Ministers*. A Dissertation Submitted To The Faculty In Partial Fulfillment Of The Requirements For The Degree Of Doctor Of Philosophy In Intercultural Studies At Trinity International University. Deerfield, Illinois, USA. 373pp
- Rwebangira, M. K. (1996). *The Legal Status of Women and Poverty in Tanzania*. Research Report No.100. Motala Grafiska, Motala, Sweden. 29pp.
- Sokolowska, J and Tysza, T. (1995). Perception and acceptance of technological and environmental Risks: Why are poor countries less concerned? *Risk Analysis* 15(6): 733 – 743.
- Stensson, E. (2008). *The social stratification of albinos in Tanzania: A case study from Babati*. Thesis for award of Bachelor degree at Södertörn University College. Institution of School of Life Sciences 15 ECTS. Development and International Cooperation. Stockholm County, Sweden. 32pp.
- Tanner, R. (2010). Ideology and the killing of albinos in Tanzania: A study in cultural relativities. *Anthropologist* 12(4): 229 – 236.

- The Citizen (2010). Peter Ash: A Beacon for Tanzanian albinos. [<http://www.thecitizen.co.tz/sunday-citizen/38-soundliving/2080-peter-ash-a-beacon-for-tanzanian-albinos.html>] site visited on 10/3/2011.
- Thuku (2011). Myths, discrimination, and the call for special rights for persons with albinism in Sub-Saharan Africa. [[http://www.underthesamesun.com/sites/default/files/MYTHS.Final\\_.pdf](http://www.underthesamesun.com/sites/default/files/MYTHS.Final_.pdf)] site visited on 17/9/2010.
- UN News Centre (2008). UNICEF calls for crackdown on albino murders in Tanzania. [<http://www.un.org/apps/news/story.asp?NewsID=29409&Cr=albinoo&Cr1>] site visited on 26/5/2012.
- Under The Same Sun (2014). Reported Attacks of Persons with Albinism– Most Recent Attacks Included.[<http://www.underthesamesun.com/sites/default/files/Attacks%20of%20PWA%20-%20extended%20version.pdf>] Site visited on 30/09/2014
- Under The Same Sun (2012). Children with Albinism in Africa: Murder mutilation and violence. A report on Tanzania with parallel references to other parts of Sub-Saharan Africa. [<http://www.underthesamesun.com/sites/default/files/UTSS%20report%20to%20UN%20-%20REPORT0.pdf>] site visited on 15/1/2012.
- UNESCO (2000). The EFA 2000 assessment. Country reports, Tanzania mainland. [[http://www.unesco.org/education/wef/countryreports/tanzania/rapport\\_2\\_2\\_2.html](http://www.unesco.org/education/wef/countryreports/tanzania/rapport_2_2_2.html)] site visited on 10/1/2010.
- Wijzen, F. J. S, & R. E. S. Tanner. 2000. Seeking a Good Life: Religion and Society in Usukuma, Tanzania 1945–1995. Pauline Publications Africa, Nairobi, Kenya. 158pp
- Wilkinson, B. (1998). Elimination of prejudice against Albino children in Africa. [<http://gbgm-umc.org/africa/zimbabwe/albino.html>] site visited on 16/3/2010.

-- 0 --

### **AJASE!!!**

*"Speedy publication service, Online archives, Paperless, web-based peer review system, Open access policy, Indexing in world known citation databases, Global circulation, Broad international readership and authorship, Online submission system, Minimum publication charge"*





# Asian Journal of Applied Science and Engineering

(Multidisciplinary peer reviewed international journal)

ISSN: 2305-915X (print); 2307-9584 (Online)  
ICV 5.20; SJIF 2.607; UIF 2.0476

## Open Access Philosophy



Under **Open Access Philosophy**, AJASE will not charge for the access of its journals. This will ensure that a large percentage of students, scholars, researchers and practitioners will be able to benefit from the research published through ABC journals. Moreover, this process will also enable authors' papers to receive a higher ranking. A greater number of people being able to access and consequently refer to papers will mean a **higher citations** and **Impact Factor** for ABC journals. Following are advantages of Open Access Philosophy:

1. The full text of all issues of AJASE is freely available to anyone, online.
2. Your research work will be indexed and abstracted in the internationally reputed databases and search engines immediately after publication.
3. Open Access increases the number of downloads, page views, citations etc. increasing the rate of dissemination of your research work manifold.
4. It is inferred from past researches that the papers published under "**Open Access Philosophy**" are four times more likely to be cited than the papers published under "**Non-Open Access Philosophy**"

Online &  
Print Version  
Both

## Peer Review Policy



**Paperless, web-based peer review system, professional and helpful suggestions from reviewers.** Articles in this journal have undergone a rigorous blind peer review system, based on initial editor screening and involving in-country and international refereeing, ensures that articles meet the highest standards of quality. Most ABC journals have ISSN with **IMPACT FACTORS**. It facilitates our scholars, researchers, scientists, professors, corporates, governmental research agencies, librarians etc., in a more positive way in their research proceedings.

## Faster Turnaround Time

Many journals take many months, even years to publish research. By the time papers are published, often they become outdated. AJASE publishes papers in the shortest possible time, without compromising on quality. This will ensure that the latest research is published, allowing readers to gain maximum benefit. We provide feedback instantaneously and furnish details of the outcome within about 5 - 6 working days of submission of your research paper. This enables research scholars to use their time effectively on the actual research rather than on the follow ups.

## Strong International network & Collaboration

We have exposure to wide range of industries across geographies and worldwide connect through international colleagues and thereby the recognition. We work in collaboration with extremely creditable companies, academic institutions, reputed publication units, government bodies and research firms. By publishing with us, you join ABC Global Research Community of 50,000 scientists / researchers.

For Details- go through the link: [www.ajase.weebly.com](http://www.ajase.weebly.com)



- Off Pantai Dalam, Kuala Lumpur, **Malaysia**
- Road # 4, Shyamoli, Dhaka-1207, **Bangladesh**
- 3900 Woodhue Place, Alexandria, VA 22309, **USA**

[www.abcreorg.weebly.com](http://www.abcreorg.weebly.com) / [www.abcjournals.net](http://www.abcjournals.net)

**Asian Business Consortium (ABC)** is a multi-disciplinary research, training, publishing, digital library supporting and service house. Though founded in 2010 as the Business and Computing organization of Asia, it was reconstituted as the ABC in 2011. It has been working for creating and nurturing talents in USA, Malaysia and Bangladesh since its inception. The objectives of consortium are solely centered round the welfare and humane attitude of the founders who enthusiastically took up this noble cause and materialized it with a view to promote research and educational activities for the encouragement of scholars to develop their knowledge, to publish their analysis oriented scientific researches in international Journals, books, the task of organizing workshops, seminars, conferences, training, personality development programs and allied services.

In addition to research activities, ABC provides a good number of scholarships to the poor and meritorious students at various levels of education throughout the world. It plays an important role in the field of research by funding research projects and publishing the research papers. This consortium will unquestionably become the mouth-piece of the dark horses and unacknowledged scholar whose endowed and commendable contributions shall be provided an outlet keeping in mind the greater good of the larger society of the world.

ABC runs the following international referred journals for creating a platform to share the thoughts of professionals, scholars and academicians throughout the world.

#### **ABC Publications (ABC Journals)**

- Asian Accounting and Auditing Advancement (4A Journal)
- Asian Business Review (ABR)
- Asian Journal of Applied Sciences and Engineering (AJASE)
- Global Disclosure of Economics and Business (GDEB)
- ABC Journal of Advanced Research (ABC-JAR)
- International Journal of Reciprocal Symmetry and Theoretical Physics (IJRSTP)
- American Journal of Trade and Policy (AJTP)
- Asian Journal of Humanity, Art and Literature (AJHAL)
- Malaysian Journal of Medical and Biological Research (MJMBR)
- Asia Pacific Journal of Energy and Environment (APJEE)
- Engineering International (EI)
- ABC Research Alert (Online)

Each journal home page provides specific information for potential authors and subscribers. Open access policy, the quick review process, rich editorial boards and quality publications have already made ABC Journals unique. **ABC Journals** are published under the direct supervisions of renowned academicians of the world.

Collaboration in Conference: ABC considers high-quality conference papers for publication. Please contact us for detailed information.

Collaboration in Publishing: If you like to start writing a book, propose a new journal or advertise in ABC journals, please feel free to contact us.

