
**SOCIO-CULTURAL DETERMINANTS OF PALM WINE
CONSUMPTION AMONG RURAL HOUSEHOLDS IN ENUGU
STATE, NIGERIA**

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ABSTRACT

The study examined socio-cultural determinants of palm wine consumption among rural households' in Enugu State, Nigeria. Specifically, it ascertained the socio economic characteristics of rural households in the area, determined the quantity and expenditure on palm wine consumed by the rural households for socio cultural purposes, and ascertained the socio cultural and economic values of palm wine among rural households. Multi -stage, purposive and simple random sampling techniques were used in selecting one hundred and eighty rural households used for the study. Data were obtained with the use of structured questionnaire and analyzed using descriptive statistics such as percentages, means, etc as well as Multiple regression inferential statistics. Findings of the study showed that male headed households (59.9%) were actively engaged in socio cultural uses of palm wine. Also, rural households were in their active age (46 years), majority (61.1%) of the rural households were married while 97.7% of the respondents had formal education. Monthly grand mean of 1011.87 litres of palm wine were consumed mounting to grand mean expenditure of ₦7409.5k. Furthermore, the regression coefficients of palm wine being used for being used for land related transactions (4.918), entertaining guests (-2.277), eyes treatment (-3.840), and being used for cultural festivals (-1.862) were all significantly related to rural households' engagement in palm wine consumption at 5% alpha level. The study therefore rejected the null hypothesis and concluded that the afore mentioned significant explanatory variables were indeed the key socio cultural determinants of rural households' levels of engagement in consumption of palm wine in the study area. It is thus recommended that research organizations should seek ways of adding value to the palm wine produce for diversified uses, increased revenue and longevity of produced to the rural households.

Keywords: *Rural Households, Determinants, Socio-cultural, Palm wine*

INTRODUCTION

Palm wine is an alcoholic beverage obtained from sap of various species of oil palm trees. (*Elaies guinensis*) or from Raffia Palm (*Raffia vinifera*) which belongs to the family of Palmae. Raffia palm is originated from Gambis through the Guinea forest zone of West Africa to Cameron, Gabon, Congo and down to Angola. It is cultivated in Nigeria and outside African countries

(Mann and Wendle, 2009). These alcoholic beverages are capable of producing wine. Palm wine plays a vital role in the economic and social life of the people such as: Palm wine is used for marriage ceremony, palm wine is used to stimulate breast milk for lactating mothers, treat conjunctivitis and the yeast in the wine helps to promote the eyes sight and also serves as a sedative (Obahiagbon and Osagie 2007, cited in Mbuagbaw and Noorduyn, 2012). Palm wine is used in community festivity like new yam festival, naming ceremony, funerals and meetings (Dalibard, 2012). Traditionally, Palm wine has also been used to enhance men's potency due to yeast cell concentrates. It is also used for leavening of dough and used in African medicine particularly in the treatment of measles and malaria (Onwuka, 2011). In consideration of the high potentials of palm wine in enhancing the livelihoods of rural households, it is expedient therefore to analyze the rural households' engagement in socio cultural uses of palm wine in Enugu State, Nigeria. Palm wine occupies strategic position in the traditional menu as it is ceremonially consumed among friends, as well as used for entertaining specially guests at home and social events. It is also used for fulfilling several traditional and customary rights during burials, marriages, festivals, and title taking ceremonies. Rural people consume palm wine because they strongly believe that it also help in infertility treatment. But despite these beliefs, level of consumption of palm wine among rural households in the State has not yet been empirically established. It is therefore, needful to provide such information through a study.

Palm wine is linked with high content of amino acid, potassium, zinc and iron and vitamins (Carousel, 2015). It is often added to various herbal medicines or products and is said to be a nourishing drink which promotes lactation and improves eyesight due to its yeast content (Agriculture and Consumer protection, 2014). These features add promotional advantages to palm wine in locations where the produce occupies a strategic position in the socio-cultural and economic lives among rural households. Again and unfortunately, no known empirically studies have been carried out to document the socio-cultural and economic relevance of this important domestic product among rural households in Enugu State, Nigeria. Specifically, the study aim to ascertain the socio- economic characteristics of the rural households', determine the quantity and expenditure on palm wine consumed by the rural households' for socio-cultural purposes, as well as ascertain the socio cultural and economic determinants of palm wine consumptions among rural households.

METHODOLOGY

The study was conducted in Enugu State, Nigeria. Enugu state is one of the 36 states in Nigeria, located at the South East geopolitical zone of the country. The State has seventeen local government areas (LGAs) and is divided into six Agricultural Zones namely; Awgu, Agbani, Enugu, Nsukka, Enugu Ezike and Udi Agricultural Zones. Crop and livestock farming is the major occupation of people in the State. The State is popularly known for its original palm wine, cocoyam, okpa, (*Barbara nut*). The study adopted a multistage sampling procedure in selecting 180 rural households. Stage one involved purposive selection of two agricultural zones in the State on the basis of their prominence in palm wine consumption. They were Udi and Agbani Agricultural zones. Next stage involved the selection of two extension blocks from each of the Agricultural zones using simple random sampling technique. They were Udi and Ezeagu blocks from Udi Agricultural zone as well as Nkanu East and Nkanu West blocks under Agbani Agricultural Zone. Stage three involved simple random sampling of two circles from each of the sampled blocks giving a total of eight circles and a purposive selection of Nara circle in Nkanu West due to its prominence in palm wine enterprises. In all the sampled circles included obinagu, umuaga, umuabi, obinofandiagu, UmajiMgbagbu-owa, Agbani, Akpugo,

Ugbawaka and Nara. Finally, stage four involved random sampling of twenty palm wine consuming rural households' from each of the selected circles giving a sample size of 180 rural households' for the study. Data for the study were collected by use of questionnaires and analyzed using both descriptive statistics such as percentage, mean, etc as well as inferential statistics of the multiple regression model. A null hypothesis that which stated that there is no significant relationship between selected socio economic characteristics of rural households' socio cultural use of palm wine and their level of palm wine consumption in Enugu State, Nigeria was tested at 5% level using multiple regression, which are expressed implicitly as:

$$Y = F(X_1, X_2, X_3, X_4, \dots, X_n + e_i)$$

Where,

Y = level of engagement in palm wine consumption (measured as mean scores of respondents' rating of their level of engagement in palm wine consumption)

X(s) = selected socio cultural uses of palm wine (independent variables)

X₁ = Peace making/conflict resolution (mean scores of responses on 4-point rating)

X₂ = cultural festivals (mean scores of responses on 4-point rating)

X₃ = Welcoming/Entertaining Guest (mean scores of responses on 4 point rating)

X₄ = Burial rites and funerals (mean scores of responses on 4-point rating)

X₅ = Child Naming Ceremony (mean scores of responses on 4-point rating)

X₆ = land related transactions (mean scores of responses on 4-point rating)

X₇ = Inducing lactation (mean scores of responses on 4-point rating)

X₈ = Treatment of sexual related issues (mean scores of responses on 4-point rating)

X₉ = Treatment of Malaria/measles (mean scores of responses on 4-point rating)

X₈ = Household employment (mean scores of responses on 4-point rating)

e_i = Error term.

RESULTS AND DISCUSSION

The results in Table 1 show that majority of the respondents were are male (59.9%) and (40.1%) were women. This agrees with the findings of (Adakaren, 2017) which revealed that men relished drinking of palm wine and were occasionally seen having drinking session in bars. The mean age of the rural households were 46 years. This means that the rural households were independent and responsible of their business. Ezeonyia, (2017) reporting on economics of marketing maize products in Enugu state, indicated that middle age marketers can accomplish the tedious task of processing maize into different products. The result shows that majority of the respondents (67.7%) were married while (17.2%) of them are widow and (18.8%) were single. This result implies that married people in most of the rural households are actively engaged in socio cultural consumption of palm wine such as traditional marriage, naming ceremony Odomenlam, (2019) Onubuogu and Onyeneke, (2013) and Onubuogu *et al.*, (2013) found out that married farmers tend to have easy access to production variables such land and large family size which are traditionally owned and provided by households head to compliment family labour to enhance production, reduce the cost of hired labour and resource use efficiency of household farmers. The mean household size of the rural households 'in the Enugu State, was 6 persons. This agrees with the result findings of Obetta, (2012), which stated that large family size is an obvious advantage in terms of labour supply. The results show that, (28.8%) of the rural households' had primary education, (45.6%) had secondary education while (23.3%) had post- secondary education. This implies that majority of the rural households had their secondary school education. Education is vital for the expansion and management of

any business organization (Kim and Wade, 2005). The higher the literacy level of an individual, the more skilled the individual is and the more effective is his managerial abilities

Table 1: Distribution of respondents according to their socioeconomic characteristics in the study area

| Variable | Frequency | Percentage | Mean |
|----------------------------------|-----------|------------|--------------|
| Sex | | | |
| Male | 106 | 59.9 | |
| female | 74 | 40.1 | |
| Age (years) | | | |
| <u>> 30</u> | 28 | 15.5 | |
| 31-40 | 54 | 30.0 | |
| 41-50 | 52 | 28.89 | |
| 51-60 | 40 | 22.2 | |
| Above 60 | 06 | 3.33 | 45.57 |
| Marital status | | | |
| married | 113 | 62.7 | |
| widowed | 31 | 17.2 | |
| divorce | 2 | 1.1 | |
| single | 34 | 18.8 | |
| Household size | | | |
| <5 | 106 | 58.89 | |
| 6-10 | 65 | 36 | |
| >10 | 9 | 5 | 6 persons/hh |
| Educational qualification | | | |
| No formal school | 4 | 2.3 | |
| Primary school | 52 | 28.8 | |
| Secondary school | 82 | 45.6 | |
| Post-secondary school | 42 | 23.3 | |

Source: Field data, 2021

Estimated Quantity and Expenditure of Palm Wine consumed by Rural Households for Socio-Cultural Purposes

The results in figure 1 showed that rural households utilized 38.01 litres of oil palm wine (OPW) per month with a mean expenditure of ₦9383.06k per month for socio cultural purposes. The result also showed the mean quantity of raphia palm wine (RPW) utilized by rural households per month as 1985.74 litres with a mean expenditure of ₦5436.00. The result revealed that 1011.87 litres was the grand mean quantity for both OPW and RPW utilized by rural households in the study area. Redwood *et al.*, (2012) asserted that wine produced in many rural communities is a perishable commodity which needs to be consumed or it spoils. The people in Enugu state produce and consume palm wine in large quantities. In Enugu Ezike, consumption of alcohol particularly palm wine by members of the community is therefore generally seen as normal.

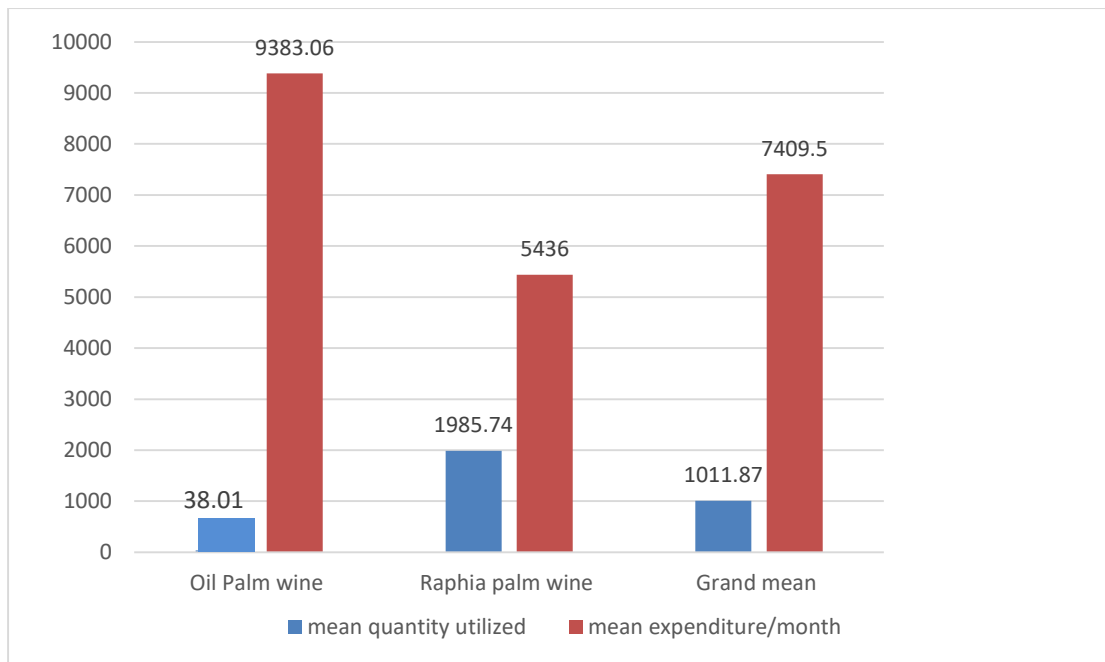


Figure 1: Mean monthly Estimate of Quantity and Expenditure of Palm wine Utilized by Rural Households in the study area. Source: Field data, 2021

Socio-Cultural and Economic Uses of Palm Wine

The results in Table 2 revealed that palm wine has high socio cultural and economic values to the people of Enugu, State. All the variables considered, indicated mean scores above 3.0 showing that palm wine use of high value to the rural households in the study area. Palm wine is highly valued for peace making/conflict resolution (\bar{x} =3.91), welcoming and entertaining guests (\bar{x} =3.87), funeral rites/ceremonies(\bar{x} =3.876), household employment (\bar{x} =3.82) and cultural festival celebrations (\bar{x} =3.79). other use of palm wine that of high socio-cultural values included child naming ceremonies (\bar{x} =3.72), land related transactions (\bar{x} =3.75), treatment of measles (\bar{x} =3.64) as well as treatment of sexually transmitted diseases (\bar{x} =3.36).The result implies that the economic and socio cultural uses of palm wine cannot be over emphasized in the study area.

This finding agrees with Dumbili, (2013) that palm wine are consumed greatly during rituals, marriage ceremonies, burials and funerals. During such occasions, palm wine and hot drinks are specifically used in pouring libations, offering prayers and heralding such events. Among the most commonly consumed alcoholic beverages are; palm wine-fermented from the sap of oil palm tree, beer, burukutu-ferment. This finding agrees with Nwagu *et al.*, (2017), that pregnant and nursing mothers are given palm wine as therapy for preventing prolonged labour and production of breast milk.

Table 2: Distribution of Respondents According to Socio-Cultural and Economic Uses of Palm wine in the study Area

| Variables | Often | Sometimes | Rarely | Never | Mean | Remarks |
|---------------------------------------|------------|-----------|-----------|-----------|-------------|-------------|
| Peacemaking/conflict resolution | 165 (92) | 14 (7.8) | 1 (0.6) | 0 (0.0) | 3.91 | High |
| Cultural festivals celebrations | 146 (81.0) | 31 (17.2) | 3 (1.7) | 0 (0.0) | 3.79 | High |
| Welcoming /entertaining guests | 156 (86.0) | 23 (12.8) | 1 (0.6) | 0 (0.0) | 3.86 | High |
| Funeral rites/ceremony | 157 (87.2) | 22 (12.0) | 1 (0.6) | 0 (0.0) | 3.87 | High |
| Child naming ceremony | 139 (77) | 33 (18.0) | 5 (2.8) | 2 (1.1) | 3.72 | High |
| Land transaction | 148 (82.0) | 21 (11.6) | 7 (3.8) | 4(2.2) | 3.75 | High |
| Inducing milk letdown/lactation | 106 (58.8) | 31 (17.0) | 18 (10.0) | 25 (13.8) | 3.22 | High |
| Treating sexually transmitted disease | 128 (71.0) | 23 (12.7) | 9 (9.8) | 20(11.0) | 3.36 | High |
| Treating malaria/measles | 145 (80.5) | 14 (7.7) | 11 (6.0) | 10 (5.6) | 3.64 | High |
| Household employment | 157 (87.0) | 15 (8.0) | 6 (3.3) | 2 (1.1) | 3.82 | High |
| Grand mean | | | | | 3.26 | High |

Source: Field data, 2021. Mean score below 2.50 is low, mean score above 2.55 is high

The Result of hypothesis testing of relationship between the respondents perceived socio cultural uses of palm wine and their levels of engagement in utilization of palm wine in the study area was presented in Table .3. The Double log model was chosen as the lead equation in the test of significant relationship since it has the highest adjusted R2 the number of significant variable and the Fratio. The F-value (5.629) was significant at $P < 0.01$ while the R² value was 0.242 which implies that 24% of the total variation in the dependent variable was accounted for by the explanatory variables.

The regression coefficient of being used for cultural festivals (-1.862) was negative and significantly at 10%, implying that a direct inverse relationship exist between cultural festivals and level of engagement in consumption of palm wine in the study area. The result conforms contrary to the researchers' *apriori* expectation because palm wine is so much used in any kind of festivity in the community like new yam festival, naming ceremony, Igwe coronation, and meetings. 'Nkwuelu' which literally translate as up-wine is a type of palm wine and most popular of the traditional palm wine among rural communities in Enugu state which is predominantly used during cultural festivals. Traditionally, palm wine is deeply rooted in West Africa culture and tradition and this is the most frequently consumed beverage (Dalibard, 2012). In summary, cultural festival will be incomplete without palm wine in Enugu state, Nigeria.

The regression coefficient of being used for entertaining the guests (-2.277) was negative and significantly at 5% level of significance, implying that a direct inverse relationship exist between entertaining of guest and levels of engagement in palm wine consumption in the study area. This shows that an increase in the entertaining of guests will lead to a corresponding decrease in their levels of engagement in consumption of palm wine in the study area. These also do not conform to the researchers' *apriori* expectation because palm wine is used extensively to entertain guests in Igbo land especially in Enugu State, Nigeria. Culturally, African literature is rife with passage describe the production and consumption of palm wine. Chinua Achebe's book, "Things fall Apart" portrays palm wine as the main drink for entertaining guests (Achebe, 1962) cited in Mbulagbaw and Noorduyn, (2012). Offering palm wine to another person is a long symbol of hospitality and is significant in both business and personal relationships (Francis, 2012). The regression coefficient of being used for burial rites and funerals (2.101) was

positively related and statistically significant at 5% level of probability. This result shows that there is a direct positive relationship between burial rites and funerals and level of palm wine consumption in the study area. This result conforms to a priori expectation of researchers that palm wine is used for burial rites and funerals in Enugu state, Nigeria. During the field work, the research observed that when someone died, the kindred will contribute palm wine and raffia palm wine to the deceased family as a means to support them. The researcher further observed that, palm wine is a compulsory levy for male headed households during burial Mosla *et.al.*, (1996) cited in Mbuagbaw and Noorduyn (2012), stated that, palm wine is enjoyed at birth celebrations, burial rites and funeral and plays an integral role during traditional marriage ceremonies. The regression coefficient of being used for land related transactions (4.918) was positively related and statistically significant at 1% level of probability. This result shows that a direct relationship exist between land related transactions and their levels of engagement in palm wine consumption in the study area. This implies that an increase in the transaction and relates transactions of the rural households will lead to a corresponding increase in the level of engagement in palm wine consumption in the Enugu State, Nigeria. From the field survey, the research noted that palm wine is used in land related transactions, especially where there is an exchange of land between two or more families in the study area. The regression coefficient of being used for eyes treatment (-3.840) was negatively related and statistically significant at 1% level of probability. This implies that there is a direct negative relationship between eyes treatment and level of engagement in consumption of palm wine in the study area. This result implies that an increase in eye treatment will lead to a corresponding decrease in level of engagement in consumption of palm wine. This result do not conforms to a priori expectation of the researchers that palm wine improve eye sight.

Table 3: Multiple regression analysis of relationship between respondents socio-cultural and economic uses of palm wine and level of engagement in palm wine consumption

| Variables | Linear | Semi log | Exponential | Double log |
|-------------------------------------|---------------------|-----------------------|----------------------|----------------------|
| constant | 0.682 (0.328) | 1.502 (2,913)*** | 5.407 (3.095)* | 1.688 (2.933)*** |
| Cultural festival | 0.137 (0.436) | -0.209 (-.546)*** | 0.924 (-1.169) | -0.484 (-1.862) |
| Welcoming and entertaining guests | 0.630 (1.195)** | -0.231 (-2.295)** | -2.238 (-2.234)** | 0.792 (-2.277)** |
| Burial rites/funerals | 0.297 (-0.722) | 0.170 (1.858) | 1.431 (1.555) | 0.637 (2.101)** |
| Land related transactions | 0.345 (-1.798)* | 0.5240 (4.488)*** | 1.550 (4.239)*** | 0.593 (4.918)*** |
| Inducing lactation | 0.191 (1.455) | -0.026 (-0.719) | -0.298 (-1.228) | -0.080 (-0.999) |
| Treatment of sexual relatd diseases | -0.118 (-0.698) | 0.014 (0.324) | 0.089 (0.297) | 0.025 (0.249) |
| Treatment of malaria/measles | 0.516 (2.470)*** | -0.054 (-1.075) | -0.554 (-1.581) | 0.164 (-1.423) |
| Eye treatment | 0.002 (2.131)*** | -0.001 (-2.939)*** | -0.332 (-3.988)** | 0.102 (-3.840)*** |
| R ² | 0.160 | 0.205 | 0.208 | 0.242 |
| Adjusted R ² | 0.074 | 0.160 | 0.163 | 0.199 |
| F-ratio | 1.875*** | 4.535*** | 4.620*** | 5.629*** |

Source: Computed from field study, 2021; + = lead equation, * significant at 10%, ** significant at 5% and *** significant at 1%; Figures in brackets () =t values

Palm wine is commonly thought to be a very nourishing drink which promotes lactation, treats conjunctivitis and improves eyesight Mbuagbaw and Noorduyn, (2012). In summary palm is often taken by the rural households, and it is a traditional method to cure and improve sight problem because it has natural yeast content. In consideration of the foregoing, the study therefore rejects the null hypothesis which stated that there was no significant relationship between respondents perceived selected socio-cultural uses of palm wine and their levels of engagement in consumption of palm wine in the study area at 5% alpha level and accept the alternative hypothesis.

CONCLUSION AND RECOMMENDATION

Palm wine holds high socio cultural and traditional values. As such, the economic and social cultural relevance of palm wine industry in Enugu State, Nigeria should not be overlooked. The study showed that palm wine being used for being used for land related transactions, entertaining guests, eyes treatment, and being used for cultural festivals were all significantly related to rural households engagement in palm wine consumption and therefore concluded that these afore mentioned significant explanatory variables were indeed the key socio cultural determinants of rural households' levels of engagement in consumption of palm wine in the study area. It thus recommended that research organizations should seek ways of adding value to the palm wine produce for diversified uses, increased revenue and longevity of produced to the rural households.

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