SOCIO-ECONOMIC IMPLICATION OF KHAT CONSUMPTION ON THE HOUSEHOLD ECONOMY

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Abstract

This study applied exploratory-descriptive design, to determine the implication of Khat consumption on the household economy. The study was guided by both structural functionalism and conflict theories. The target population were families whose members consume Khat of which a sample of 350 respondents was obtained using snowball technique. Structured questionnaires were administered and analysed quantitatively and focus group discussions were thematically analyzed through narrative and verbatim. The study found that Khat consumption was widely accepted by all age groups and that the number of days Khat was consumed, the variety of Khat consumed, highest level of education attained by the consumer, employment status and income had negative effects on the household economy. There was a significant association between household economy and marital status (p = 0.006) as well as employment status (p < 0.0001). Khat regulation was preferred as well as community sensitization on the implication of Khat consumption.

Keywords: Conflict Theory; Multiple Linear Regression; Snow Ball Sampling; Structural Functionalism.

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1. Introduction

Since the beginning of time, all the documented societies have had mind altering drugs. These include stimulants and narcotics for drinking, smoking or chewing. The socio-cultural values and norms had what was acceptable and what was regulated. One of these mood and mind altering drug is Khat (Catha edulis). Khat is an ever green plant grown by grafting and cultivated as a bush or small trees [1]. It is a hardy crop which grows in arid areas up to ten meters tall under normal circumstances and grows up to five meters in non-equatorial regions. Khat has traditionally acquired cultural significance due to its association with traditional rites and customs such as marriage proposals, wedding celebrations, reconciliation processes and social gatherings, with
group consumption predating the communal drinking of coffee in social contexts. *Khat* plant is mainly found in Ethiopia, Kenya, Somalia, Sudan, Madagascar, and South Africa and is also found in a lesser scale in Turkistan and Afghanistan [2]. While the medical implications of *Khat* consumption has been discussed to a fairly good extent, the socio-economic implications of its consumption has not been distinctly studied, particularly in communities with unique socio-economic identities such as those living in urban areas in sub-Saharan Africa. *Khat* chewing has a deep rooted socio-cultural tradition, its pleasure inducing and stimulation effects seem to have a strong influence on the economy of the communities who indulge in it [3]. In Ethiopia, alcohol use after *Khat* chewing has also adversely affected the socio-economic and health status of consumers [4]. But in the paradox, Ethiopia is earning a lot of foreign income with a tradeoff of socio-economic ills. In Ethiopia, 28.47% of *Khat* producers earned an average annual income of about 500 USD per month, while 5.49% of producers earned an average income of more than 3000 USD per year per household [4].

Since households are the main sector for the consumption in an economy, their activities are very much required to enhance economic development. Households also act as a saver of which their savings are considered as one of the main sources of capital formation in an economy. Thus the ban of *Khat* use in Europe, more especially Britain, has elicited mixed reactions among producers and consumers, with Britain claiming that the use of *Khat* is associated with family breakdown, mental health issues, socio-economic disadvantage and social disorder with special reference to Somali immigrants [5].

**Structural Functionalism and Conflict Theories in *Khat* Consumption**

Theories which have been put forward to explain substance abuse are found in diverse disciplines from genetic, neurobiology to Freudian psychoanalysis and Marxism. However, structural-functionalism and conflict theory offer a broader explanation based on immediate environment of family, household economy and social influences, particularly, during the vulnerable period of adolescence when risk-taking and sensational-seeking may be important impulses. Cultural and socio-economic factors are the key to understanding the conditions under which drug use is more likely to occur, the influence of formal and informal social controls and offer the most useful framework for analysis [6]. This study adopted both structural functionalism and conflict theories based on the assumption that household economy should be functional and stable. This stable system is characterized by household consensus, whereby the majority of the members show a common set of values, belief and behavioral expectation. According to this perspective, a household is composed of inter related parts each of which serves a function and contributes to the overall stability and solidarity of the society. Structural functionalism sees socio-economic structure and the organization of the society as more important than the individual [7].

The central idea of functional analysis is that; society is a whole unit that work together of which a household is viewed as a kind of living organism that must work together in harmony [7]. When all parts of society fail to fulfill their functions, the society is in a pathological state. Talcott Parsons (1940-1970) used the societal functions to refer to the beneficial consequences of peoples actions that help keep a group (society, family or social system) in equilibrium while dysfunctions are consequences that undermine the equilibrium of a system. The family and the household at large serves six essential functions namely economic production; socialization of children; care for the sick and aged; recreation; sexual control and reproduction of which if disturbed will course...
disintegration of the unit [8]. Since family life has various weakening issues to the ties that bind it together like financial matters, abdication of role playing and responsibilities reduce the family motivation to struggle together against hardships. The negative implications upon the family as a result of behavior change is what Merton referred to as latent function [9]. *Khat* consumption is not only limited to the consumer’s body but the consumer’s family and breaks down household ties when the head of the unit consumes it alone with the reality that *Khat* renders household economy bankrupt [10]. *Khat* is not only un-sensual commodity but also a serious entity that impacts on household budget and it is prevalently a male habit of which in Djibouti and Yemen male household head constitute the major consumers and are the key determinants of household economy [11]. The budget for house-hold head in Somalia had an adverse socio-economic bearing on the various needs of house-hold including education leading to household conflict hindering familial development [12]. The house-hold is harmed because of neglect, dissipation of the house-hold income and inappropriate behavior by which in many cases lead to conflicts more especially where the spouse consumes *Khat* there exist the likelihood of separation or divorce due to neglect and irresponsibility towards essential requirement of the family [13].

2. Research Design and Data Analysis

This study applied exploratory and survey research design. Exploratory study design was found to be appropriate since there were very few earlier comprehensive studies to refer to. The study targeted the entire *Khat* consumers’ households in Kamukunji constituency an urban settlement in Nairobi, the capital city of Kenya. The study also involved focused group discussions (FGD) made up of ward administrators, elders, religious leaders, women and youth representatives. This study applied purposive-snow ball sampling technique since there was no well-constructed sampling frame. The sample was distributed proportionately into the five wards of Kamukunji constituency. The ward with high population based on 2009 national census had a bigger portion in the sample of which Pumwani ward had 17% of the population, Eastleigh North 20.41%, Eastleigh South 31.26%, Airbase 20.36% and California 10.24%. To explore the effects of *Khat* consumption on consumer household economy, the explanatory variables included; frequency of *Khat* consumption, duration of *Khat* consumption, type of *Khat* consumed and demographic profile of the *Khat* consumers. To measure household economy, the survey included questions on; management of household resources, work productivity, absenteeism from work, social relationship, nature of household ties, level of child nurturing and ability to manage household budget. Questions were on Likert scale of which responses were summed up and the average computed to obtain a score indicator of family household economy. Multiple linear regression analyses parameters were computed to establish the relationship between Khat consumption and consumer household economy. Qualitative data were analyzed through the process of coding where common themes were identified and examined in relation to the context, meaning and circumstances. Similarities and differences about the compiled codes were clustered together to create categories. Conceptual saturation was reached when no new category emerged. Theoretical memos were written throughout the coding process. Credibility of the data was established through persistent observation, peer briefing and number checks.
3. Results and Discussions

3.1. Descriptive Statistics

Out of the 350 questionnaires administered to the Khat consumers, 314 were returned. This translated to 89.7% response rate. 35.8% of the respondents were females while 64.2% were males. Thus Male Khat users had a strong identification with Khat use, while females were more ambivalent. This observation was supported by the focus group discussion which reported that: “Khat chewing is dominated by males of all ages in Kamukunji, they chew as they engage in discussions on business and other issues. When females are chewing Khat especially Muslims, they do it in secrecy to avoid exposure since it is against the prescribed moral values”.

Women’s opposition to Khat use originated from its use in special rooms (fadhiga) away from home and they refrain in accordance to the societal values [1], [3], [4]. 45.1% of the Khat consumers interviewed were aged 21-30, 27.8% were aged 31-40 and 14.3% were aged 10-20. Those who were aged 41-50 were 10% and 2.8% were aged above 50 years. This indicated that majority (87.2%) of the Khat consumers were aged between 21 and 50. This is the age when people are through with schooling and are empowered financially. In this age bracket, they are excited, exposed and would like to fit in the society. They stabilize at age 40 and the number of consumers’ decline as they retire from active social participation and Khat consumption [14]. These results were in agreement with results from a study conducted in Ethiopia where adults in the age group 45–49 years were 3.6 times more likely to chew Khat as compared to persons of aged 15–19 years [15]. The main factor contributing to Khat consumption by the youth is the ease of availability [16]. In this study, 14.3% of Khat consumers were of age 10-20 which is regarded professionally as a worrying phenomenon since it may hamper the progress of the region’s future generation. Most of the Khat consumers had their highest education level being secondary school (39.4%) followed by primary school’s graduates (24.78%). Khat consumers with non-formal education were 8.66% while 8.96% had university education. These findings were supported by qualitative results where the Focus group discussions reported that:

“In Kamukunji, Constituency, most people don’t go to tertiary institutions and higher levels of learning making secondary school leavers to constitute the bulk of the adults in the area. These people are not exposed and have limited ways of socialization and spending their leisure time. University graduates are professionals and have alternative ways of spending their free time and understands the consequences of Khat consumption. People who consume Khat are looked down up on”

Similar results found out that Khat consumption led to school dropout and there were low levels of education among Khat consumers [17] [18]. In this study, the distribution of respondents by their marital status indicated that 40.3% were single and 44.5% were married. The divorced, separated and widowed were partly 14.9%. These findings implied that consumption of Khat was a practice widely accepted among families in this region. The high percent of single persons can be explained by the fact that they do not have lot of responsibilities thus they have ample time to engage in Khat consumption. At the same time, they had less expenses, had peer influence and the feeling of togetherness. Married persons were associated with people who had settled and stabilized. The married being the highest in Khat consumption implies that the habit may constitute
spouse conflict and destabilization of the family unit. The divorced, separated and widowed had withdrawn from the society due to their previous marital experience. The highest percent of Khat consumers (37.91 %) were self-employed followed by 30.75% who were not employed. The least were students at 5.67% and temporary workers at 13.43%. The people who were permanently employed accounted for 12.24%. The highest percentage among not employed and self-employed can be explained due to freedom and time availability with minimal restriction which is associated with the self-employed and not employed persons. The unemployed were more likely to be using Khat than those employed [19].

23.3% of the Khat consumers earned less than 2,000 Kenya shillings per month while 23% earned more than 20,000. The survey reported that the number of Khat consumers were on average evenly distributed across the different income levels. As high income levels could have encouraged males to chew Khat, poverty related problems could also have contributed to the numbers with low income levels to chew Khat. Never the less, the results indicated that 42.1% of the respondent earn between Kenya shillings 5000 and 20000 revealing that the higher the income the higher the consumption of the Khat. For the lower age, this had some economic implication in that young people spent much of their income in Khat making them not to marry at early age. Furthermore, due to availability of different Khat variety at different prices the issue of earning more or less did not deter Khat consumers from purchasing. To assess the views towards Khat consumption, 51.6% of the respondents had a positive view as compared to 47.2% who had a negative view These views were different from Focus group discussions who linked Khat with no benefits and would never recommend people to take but one Key informant reported that:

“Khat is good for fun specifically to men but not for women due to family obligation”

For the length of time the respondents had been consuming Khat, 52.2% had consumed Khat for less than 5 years followed with 28.7% who reported to have consumed Khat for between 6-10 years and 7.5% between 11-15 years. These results shows that as the number of years of Khat consumption increases the percentage of the consumers’ decreased but those who had consumed for more than 20 years seemed to slightly increase. Cross classifying the respondent’s views on Khat and duration of Khat consumption, 51.6% viewed Khat consumption to be a good habit as compared to 47.2% who viewed the habit to be bad. For those who view Khat to be good, 51% had consumed Khat for less than 10 years thus with increase in years of Khat consumption, users tend to opt out of the habit. 52.2% of the respondents reported that Khat was good even though most had consumed Khat for less than 5 years. For those who had consumed Khat for more than 20 years 79.2% of them reported that Khat consumption was bad. For those who had consumed 1-5 years their responses were split in the middle as 85 of them said that it was good against 86 who reported Khat consumption to be a bad habit. Surprisingly, 76.4% of Khat consumers interviewed had intention of quitting as compared to 23.6%. The average number of days spent consuming Khat was 3.68 days a week with most of them consuming only two days a week and 17.6% consumed Khat on a daily basis. The preferred days were weekends for those who were engaged in active occupation. 50.7% of the respondents consume Khat 5-10 hours per day followed by 27.5% who spend 3-5 hours per day consuming Khat while 13.7 % spend more than 10 hours. To understand the time when Khat consumers go home, it was found that 47.7% of the married people went home before 10pm while 52.3% went home past 10 P.M. 43.7% of the respondents consumed Khat from dens and 26.6% from streets. 66% of the Khat consumers, consume in groups while
22.4% consumed alone. These results implied that most of the consumers were away from their families’ longer hours and for those who consumed during the day time, they were not engaged in constructive occupation. This also implied that the negative health effects associated with Khat consumption is widespread in this area. These results cut across marital status implying the uniqueness associated with Khat consumption as a social phenomenon in this area. These results further implied that married Khat consumers are mostly away from their family since Khat consumption is done in dens in the evening and throughout the night. The focus group discussions reported that:

“Many women complain that men have no time for them, Khat acts as a second wife. Married women keep on complaining on the absenteeism of their spouses”

70.4% of the respondents considered themselves as moderate consumers compared to 29.6% who considered themselves as heavy users. For married, 69.1% were moderate consumers while 30.9% were heavy consumers. These may have serious economic consequences on the marital life. The number of Khat consumers who had the intention of quitting were three times more than those who were comfortable with the habit. This implied that Khat consumers found the habit as having more negative consequences in their lives. To answer the question “Beside yourself, how many members of your household consume Khat?” 62.4% respondents said one, 15.8% said two, 10.7% said three the others (11.1%) reported four and above with a mean of 1.8 and median of 1. These results implied that in most Khat consuming families in Kamukunji, an average of two household members consume. To assess the extent to which Khat consumption can lead to addiction, 78.8% were in agreement while 21.2% did not believe that Khat can lead to addiction. These results corroborated with a study done in western Uganda, where 80% of Khat consumers preferred chewing Khat in the company of others and a typical Khat chewing session lasted for about four hours, from afternoon to early evening [20]. The main reasons of chewing Khat reported were making one active, reducing stress and stimulating the brain. 45.07% of the respondents reported to have had a good sleep, while 54.9%, their sleep was not normal of which some had short period sleep (25.64%), others stayed awake (11.34%) and others the sleep was bad (17.9%). Khat abuse can produce mild to moderate psychological dependency leading to sleep disturbances, memory impairment and under-recognition [21]. To find out if Khat consumption should be outlawed or regulated in Kenya, 84.2% of the males preferred regulation as compared to 15.8% who preferred outlawing. For females, 75% advocated for regulation as compared to 25% who preferred outlawing. The difference was significant (Chisquare = 4.4, p <0.001). Thus, the respondents view towards Khat legalization was gender dependent. The focus group discussions view towards Khat legalization were varied. Some supported legalization, of which they said:

“Regulation will help farmers who grow, we need proper policies to regulate and control the use. Khat was formally used by elderly people and guards to keep them alert especially long distance drivers, yes begin with regulation finally total ban,” while others, reported that:

“Rather than banning, people should be educated of the effect of mixing with karafuu, marijuana, sweets, sugar chewing gum and other drugs, chewing of Khat cannot affect anyone mentally or socially or emotionally” On the other hand, some advocated for total ban; “Ban make it illegal, yes so that young families may grow”
The variety of Khat mostly consumed was Muguka (73.73%) followed by Kiza (18.21%) and the least consumed was Kangeta and others (8.06%). Muguka was preferred across the board regardless to the level of income. From the FGD,

“Muguka had higher stimulants and its impact was felt immediately compared to other varieties.”

To assess the additives used together with Khat, 41.79% combined Khat with chewing gum, 32.84% consumed with peanuts, 13.73% used with cigarettes. The other additives used were bhang, sugar, coffee and beer. While the specifics of gum-as-diet-aid are still murky, white sugar-sweetened gum is bad for the teeth but according to the American Dental Association, chewing sugarless gum stimulates saliva flow, which reduces plaque and helps prevent cavities [2]. Artificial sweeteners commonly found in chewing gum have adverse gastrointestinal symptoms, including diarrhea. While peanuts have healthy fats, there's still some saturated fat in them. Over consumption of peanuts increases blood phosphorus levels, causing bones to grow in the wrong places. Peanuts allergy causes side effects like hives and facial swelling. Smoking badly affects lungs leading to coughs, colds, wheezing and asthma. Smoking can also cause fatal diseases such as pneumonia, emphysema and lung cancer [2]. These results were supported by FGDs who said that:

“All chewers use something, so apart from expenses from Khat there is an extra cost. It becomes also expensive to treat and manage the side effects related to Khat Consumption which include tooth decay and mouth swelling. Other additives used are ginger, candles wax, mosquitoes coil, and bhang”

51.04% of the respondents use additives as stimulants, 32.24% use additives as sweeteners and 15.82% use additives to add flavor. Stimulants increases activity in the central nervous system, they are pleasurable, invigorating and have sympathomimetic effects. Depending on the drug, stimulants can be smoked, ingested orally, snorted or injected. Stimulant effects can range from short-term energy boosts to long-term brain changes and (or) organ system injury. The harm may be long-lasting in extreme cases, but any amount of stimulant abuse can cause damage to the user. Stimulants leads to addiction especially when Khat consumers take it chronically for a prolonged period of time. Those who abuse Khat often take it for recreation purposes, to produce a feeling of calm, feel happier and talkative, as a weight loss agent that suppresses the appetite, to stay awake and improve alertness and to improve academic performance for students [2]. The FGDs cited the economic effects of Khat consumption on the individual and the family unit as:

“It drains the family savings and resources leading to in ability to save, its sustainability is costly, eventually leads to dependency. Khat consumers have minimal family time, spending on Khat overlooks other prioritized needs, for addicts it leads to poverty where people spend more time chewing Khat rather than working. Mothers neglect children, Khat reduces appetitive & desire for food affecting health. But the positive part of it is that it is a source of income to some families involved in Khat faming and Khat trade.”

To test the null hypothesis that there is no difference between married status in terms of their likelihood of quitting Khat consumption versus the alternative hypothesis that there is a difference in married status and intention to quit consumption, the survey produced no evidence of any
difference in marital status in terms of their likelihood of quitting Khat consumption (P=0.899, chi square = 0.889, df = 8). Thus, the difference was due to chance.

Table 1: Regression model predicting household economy

| Model | Coefficients | t   | P  |
|-------|--------------|-----|----|
|       | 𝛽            | Std. Error |     |    |
| (Constant) | 2.453       | .287 | 8.545 | .000 |
| How many days did you take Khat last week? | -.019 | .021 | -911 | .363 |
| What is the average number of hours you spend consuming Khat? | .005 | .012 | .367 | .714 |
| For how long have you been consuming Khat? | .039 | .042 | .913 | .362 |
| What variety of Khat is chewed mostly in your household? | -.002 | .065 | -0.33 | .974 |
| GENDER | .086 | .092 | .937 | .349 |
| AGE | .035 | .052 | .671 | .502 |
| MARITAL STATUS | .087 | .047 | 1.846 | .006 |
| Highest level of education completed | -.011 | .035 | -3.10 | .757 |
| Employment status | -.122 | .032 | 3.786 | .000 |
| Approximate monthly income in Kenya Shillings | -.005 | .042 | -1.16 | .908 |

3.2. Statistical Inference and Model Summary

The explanatory variables which had a negative effect on household economy were; number of days Khat was consumed (𝛽 = −0.19), variety of khat consumed (𝛽 = −0.02), level of education (𝛽 = −0.011), employment status (𝛽 = −0.122) and monthly income (𝛽 = −0.05). The factors which had positive effect on household economy were number of hours spent on Khat per day (𝛽 = 0.05), number of years one has been using Khat (𝛽 = 0.039), gender (𝛽 = 0.086), age (𝛽 = 0.035), and marital status (𝛽 = 0.087). The overall relationship was significant (p= 0.025) as indicated in Table 2.

Table 2: One-way ANOVA for the model predicting household economy

| Model | Sum of Squares | df | Mean Square | F   | Sig. |
|-------|----------------|----|-------------|-----|------|
| Regression | 11.439 | 10 | 1.144 | 2.082 | .025 |
| Residual | 176.896 | 322 | .549 |      |      |
| Total | 188.335 | 332 |          |      |      |

3.3. Summary

In this study it was found that male Khat users had a strong identification with Khat use, while females were more ambivalent. The highest percentage of Khat consumers had at least secondary education and were self-employed. High income levels could have encouraged males to chew Khat. Most of the respondents who were Khat consumers believed that Khat consumption had more positive significance as compared to Focus group discussions who linked Khat with no benefits. Slightly more than half of the respondents had taken Khat for less than five years.
Surprisingly, three quarters of Khat consumers interviewed had intention of quitting Khat consumption. Most of the Khat consumers in Kamukunji County consume Khat two days a week with most spending 5 to 10 hours per day consuming. Khat consumption is commonly done at night and in dens and partly in the streets with most of the consumers going home past 10 PM. Two thirds of the respondents considered themselves as moderate consumers compared to being heavy users. The survey produced no evidence of any difference in marital status in terms of their likelihood of quitting Khat consumption. Two-thirds of Khat consumers believed that Khat consumption can lead to addiction. Khat was consumed jointly with additives to act as stimulants, sweeteners and partly to add flavor. The commonly used additives were chewing gum, peanuts and cigarettes. The Survey response per gender reported that eight out of ten males preferred regulation as compared to 75% of the females who advocated for regulation while others preferred outlawing. Three out of ten Khat consumers surveyed earned between 2000-5000 Kenya shillings per month and those who earned above 20,000 were two in every ten consumers with the difference being significant. The study found a significant association between marital status and monthly income. The most preferred variety of Khat was Muguka which was accepted regardless to the consumers’ level of income. The explanatory variables which had a negative effect on household economy were: number of hours spent on Khat per day, number of years one has been consuming Khat, gender, age and marital status. There was significant association between income and marital status and that Khat consumption in Kamukunji Constituency did not differentiate the consumers’ level of income and marital status.

4. Conclusion and Recommendation

Khat has become the backbone of some region’s economy, providing the main source of income for farmers, as well as jobs for thousands of others employed in the value chain. Households earn more income from Khat cultivation and trade, despite of public health concerns regarding Khat addiction and growing international pressure to ban its distribution. There is need for effective policies to better manage the production, consumption and trade of Khat, and to create an enabling policy and institutional support. The ecological and economic merits need to be weighed with the health and other social downsides. The need for careful and farsighted thinking need emphasis by all concerned. As the Khat -based household and regional economy is dependent on Khat, banning Khat consumption will have a devastating impact on the livelihoods of many in this region.

Since majority of the respondents chewed Khat to pass time, this study therefore recommends that, the county government should partner with the Ministry of Sports, Culture and Arts to develop more sporting and recreational activities to occupy the individual members more especially the youth. This would help individuals to realize and develop their talents through initiatives like music and drama, athletics and other sports, gyms and other religious social forums to enhance their physical psychological and social wellbeing. Secondly, most of the Khat consumers had relatively low levels of education, therefore the government through the Ministry of Education and County government to organize sensitization forums to create awareness on socio-economic implication of Khat among the family. Thirdly, most of the Khat consumers were found to have some level of ignorance, thus information on the dangers associated with consumption of Khat and other related substances to be passed to the general public by the concerned institutions. Fourthly, Non-governmental organizations should team up with financial institutions to provide financial support on the development of recreational facilities and Khat traders should be sensitize on the
dangers of selling Khat to the under age. Finally, the Ministry of Health should partner with relevant stakeholders including; The National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) and social science professionals to strengthen the policy frameworks related to licensing of Khat trade, time to sell Khat, earliest age to start Khat consumption and cleanliness of Khat consuming dens. The county government should endeavor to regulate Khat consumption and trade rather than banning by providing license to all the Khat outlets since in turn they will end up getting tax revenue through established structures.

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