

Original Research Article

## Bio-Psychosocial Determinants of Aphrodisiacs use among men in the Sagnarigu Municipality

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### ABSTRACT

Healthy marital home and a sense of masculinity are built upon sexually potent men. The use of Aphrodisiacs use has been the means with which men build healthy homes and proof of masculinity. This study was designed to assess the bio-psychosocial motivating factors that determine aphrodisiac use. The research employed a quantitative study approach. About 378 respondents were sampled for the study. A structured questionnaire was designed on the subject and focus group discussion organized. Statistical Package for the Social Sciences (SPSS) software version 20 was used to analyze the data. The prevalence of aphrodisiac use is 66.4%. The age of respondents has no relation to the use of aphrodisiac. However, the faith, marital status, ageing, diseases and small size of the male organ, peer pressure, aphrodisiac as means of maintaining multiple sexual partners, and satisfying women sexually at a confidence level of 0.05 have a significant relation to the use of aphrodisiac. Decrease in sex quality without drugs and tachycardia has been significant. Aphrodisiac use is among the youth and it decreases as one age. Aphrodisiac use is driven by bio-psychosocial factors. About 80.4% of aphrodisiac users do not notify their partners. Aphrodisiac users gained complete satisfaction after using it and 59.8% subscribed to the fact that local aphrodisiac (Muhili) works best. Sex education in senior high schools and beyond should include aphrodisiac to bring to light the health implications of its use. Further studies should be conducted into the active pharmacological ingredient of the local aphrodisiac (Muhili) and its posology.

**Keywords:** Aphrodisiac, Bio-Psychosocial, Determinants, Men, Sagnarigu

### BACKGROUND

Reproductive vitality is a priority of both men and women in every cultural and moral setting in the Ghanaian society. Ensuring sexual potency in both men and women involves the use of aphrodisiacs. A man's inability to gain a sustained erection that could permit him to have sexual intercourse is sexual dysfunction. The launch of the earliest remedy to erectile problems sildenafil (Viagra) since 1990 attracted public awareness and serious marketing on the media and at the market places. <sup>[1]</sup> Aphrodisiac refers to any edible

substances or medicine that arouses sexual drives induces venereal pleasures and improves sexual drive and performance. <sup>[2]</sup> Every human has tried to improve their sexual encounters with a series of chemical substances. Culture has been a rich source of history when it comes to aphrodisiac from natural sources including plants, animals and as well as synthetic materials to alter their sexual patterns. <sup>[3]</sup> A quite number of plants have proven a powerful aphrodisiac by increasing the desire for sex, increase libidinal energy, increase sexual

vitality and help improve the intensity of lovemaking. [2]

The traditional belief that life is a cushion on the sense love is not farfetched from reality. The concept of a deep feeling of affection as paramount of creation and continuity of human is not just automatic idea. [4] The talk of male vitality has been the subject of discussion since the beginning of humanity and a lot of men sought to the use of various substances to seduce sexual desire in decades. Many adverts have been put up by practitioners of traditional medicine and herbalist on various media including television, radio, newspapers and internet and still cannot establish or demonstrate the safety profile of those preparations to their potential customers. Two indigenous preparations Mwanaapeluke (MWN) and Mutimba vula (MTV) were intensively studied for their pharmacologically active ingredient and its impacts of the sexual behaviour of male rats. [5,4]

Aphrodisiacs are preparations which improve sexual potency and enable a better male and female reproductive organ functioning. [6,7] The search for ideal aphrodisiacs substances including pill, powder, lotion or food guaranteed to improve sexual occurrences. The quest for a solution or medical advice that can help to improve sexual potency cure male impotence has been a challenge throughout history. It has been a long-time goal in history for man to achieve true 'manhood' irrespective of whether western civilization, Eastern, indigenous, religious and moral perspective. [7,6]

Aphrodisiacs or sex enhancers can also be categorized based on their impacts when taken into the system. The psychological effects of aphrodisiacs can improve sexual drive and gratification via mood-stimulating or hallucinogenic features. [6] Physiologically, aphrodisiac enhance erection via hormonal alteration, increased circulatory flow, and features of smooth muscle-relaxation. [6] Globally, herbal drugs had captured drug market in

America, Iran and many other countries for addiction treatment, sexual performance enhancing, weight gain and weight loss purposes under the impression that herbal drugs are natural, safe and without any effects. [8]

Erectile problems and male reproductive disabilities are among all-time explored areas in local medicine. Majority of natural products, mostly plant-based, have been claimed to treat erectile dysfunction and related male sexual problems. These sex enhancing substances have a number of effects on a male sexual pattern. [9] Food and Drug Administration of the United States, adulterated supplements were reported to be 572 from 2007-2014 of which 41.6% were sex-enhancing substances. [10] Currently, herbal supplements used in the cure of erectile problems have gained tremendous popularity. It is anticipated that the reproductive health problem will rise to over 320 million globally in 2025. [11] This study investigated factors of aphrodisiac use and its health implications among men in Sagnarigu Municipal.

### **Conceptual framework**

Biological factors including ageing and disease lead to the reduction of sex drive. However, people improve their sex potency by resorting to aphrodisiacs be it herbal or orthodox. Social factors are key motivators to the increasing patronage of aphrodisiac use. The influence of friends can contribute to aphrodisiac usage since guys have a lot of influence on one another. The youth always want to practice what they hear and see and as such they attempt the use of aphrodisiac. Through adverts on radio, television and newspapers, people get to know aphrodisiac and jump into its usage. Psychological factors including sexual satisfaction, punishment tool, positive feedback from women and maintaining multiple sexual partners contribute to the increase of aphrodisiac use. Men always want their sexual partners to appreciate their efforts on bed hence they resort to aphrodisiac use. Most men will always want

to satisfy multiple sex partners to ensure fairness, especially where polygamy is practised. The interplay of biological, psychological and social factors contribute to the massive patronage of aphrodisiacs in the Ghanaian market leading to its health consequences as demonstrated in figure 1.

The use of aphrodisiac leads to health challenges including dizziness, headache, hypotension, restless to the unconsciousness, decrease in sex quality, priapism and in extreme case coma. [12] See figure 1.

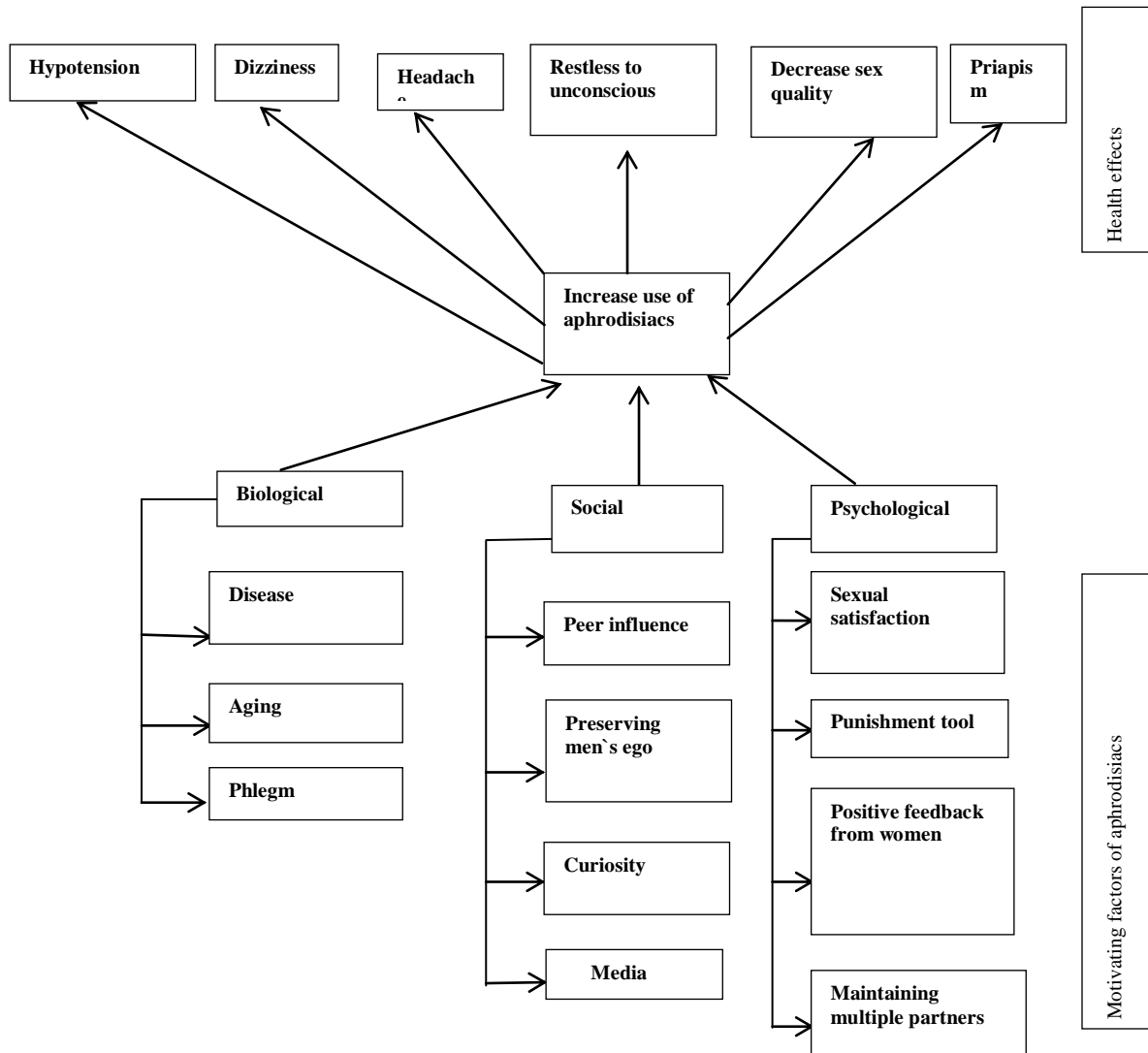


Figure 1; Motivating factors of aphrodisiacs use and its health implications

### Study design

The researcher employed quantitative research designed in the study. Mixed methods research is the approach that has a tendency to base knowledge claims on a practical level. Data were sequentially or simultaneously collected to have a better understating of scientific studies. [13] The study population comprised men who were

15 years and above whether married or single.

The sample size was determined using Cochran's (1977) formula;

$$N = \frac{t^2 \times p \times (1-p)}{m^2}$$

Where; N=sample size

t= standard normal distribution= 1.96

p= prevalence rate of aphrodisiac use according to (Danquah et al., 2011) =0.61

m= margin of error = 0.05

$$N = \frac{1.962 \times 0.61(1-0.61)}{0.0025}$$

$$N = 359.57$$

Approximate sample size = 360

Taking 5% of sample size for non-response rate = 5% of 360 = 18

The sample size (N) = 360 + 18

N = 378

Cluster sampling technique was employed in the study to select twenty (20) communities from the 79 communities. Purposive sampling technique was used to select people who are sexually active and the aged. Convenience sampling was then used to select participants for the study due to how sacred people have viewed the topic and a lot of possible respondents were objecting their participation in the study during the pretesting. Simple random sampling approach was used to select respondents. This sampling technique is a type of probability sampling in which every individual in a group is given an equal chance of being selected. A well-structured questionnaire was designed that included both open-ended and closed-ended questions on the topic. This enabled respondents to independently give their responses without any interference. Respondents were given envelopes those who literate to return the questionnaires when they complete responding to the questions and those who cannot read and write will be carefully guided to answer the questionnaire. The data were analyzed using the Statistical Package for the Social Sciences software version 20 (SPSS).

### Ethical consideration

Informed consent was sort from participants before they were enrolled in the study. Identity of the participant was kept unknown since no identity or name was written on the questionnaire. Privacy and confidentiality were ensured due to how sensitive nature of the questions.

## RESULTS

### Socio-demographic characteristics

From the results, 15-25 years were 23.8%; 26-35 were 21.1%; whereas 66 years and above were 12.5%. From the study, 62.5% were Muslims, whereas Christians were 26.5%. Again, 56.5% were married, while 43.5% were single. With regards to the occupational status of respondents, 17% were artisans, self-employed were 31%, civil servants were 27.7% and 24.4% were unemployed. Additionally, 56% had tertiary education qualification, 21.1% had Senior High education, and 12.5% acquired Junior High education. About 5.7% had a primary school and 4.8% have never been to school (See Table 1).

**Table 1: Socio-demographic features of the respondents**

Variable	Frequency (n=336)	Percentage (%)
<b>Age (years)</b>		
15-25	80	23.8
26-35	71	21.1
36-45	67	19.9
46-55	36	10.7
56-65	40	11.9
66+	42	12.5
<b>Religion</b>		
Muslim	210	62.5
Christian	89	26.5
Traditionalist	16	4.8
Pagan	21	6.3
<b>Marital status</b>		
Single	146	43.5
Married	190	56.5
<b>Occupation</b>		
Artisan	57	17.0
Self-employed	104	31.0
Civil servant	93	27.7
Unemployed	82	24.4
<b>Educational level</b>		
Never being to school	16	4.8
Primary	19	5.7
Junior High School	42	12.5
Senior High School	71	21.1
Tertiary	188	56.0

Source: Field survey 2019

### Demographic characteristics and use of aphrodisiac

Analysis of demographic characteristics and usage showed that 65% of people within 15-25 of this age category were aphrodisiac users and 35% were non-aphrodisiac users, 68% of respondents within the age of 26-35 were aphrodisiac users and 31% of this age group were non-aphrodisiac users, 73.1% of respondents within 36-45 were aphrodisiac users and 26.9% were non-aphrodisiac users, 58.3% of the respondents thin 46-55 were

aphrodisiac users and 41.7% were not using aphrodisiac, 70% of the respondents within 56-65 were aphrodisiac users and 30% of the respondents were non-aphrodisiac users and 57.1% of the respondents above 66 years have reported using aphrodisiac and 42.9% were non-aphrodisiac users. The number of respondents who use aphrodisiac is 223 hence the prevalence rate of aphrodisiac use is 66.4%. The findings indicate that the age of respondents has no relation to the use of sex enhancement drugs

( $p=0.47$ ,  $\chi^2=4.54$ ). On the contrary, the faith of the respondents has a significant relation to the use of sex enhancement drugs ( $p=0.02$ ,  $\chi^2=9.84$ ). Marital status of the respondents also has a significant relation to the use of sex enhancement drug ( $p=0.01$ ,  $\chi^2=6.69$ ). Type of occupation and educational level have an insignificant relation to the use of aphrodisiac as ( $p=0.99$ ,  $\chi^2=0.19$ ) and ( $p=0.68$ ,  $\chi^2=2.33$ ) for occupational level and educational status respectively (table 2).

**Table 2: Background characteristics of respondents**

Variable	N	Yes (223)	No (113)	Test Statistics
<b>AGE (YEARS)</b>				
15-25	80	52(65%)	28(35%)	$\chi^2=4.54, P=0.47$
26-35	71	49(69%)	22(31%)	
36-45	67	49(73.1%)	18(26.9%)	
46-55	36	21(58.3%)	15 (41.7%)	
56-65	40	28(70%)	12(30%)	
66+	42	24(57.1%)	18(42.9%)	
<b>Religion</b>				
Christian	89	58(66.2%)	31(34.8%)	$\chi^2=9.84, p=0.02$
Muslim	210	146(69.5%)	64(30.5%)	
Traditionalist	16	5(31.2%)	11(68.8%)	
Pagan	21	14(66.7%)	7 (33.3%)	
<b>Marital status</b>				
Single	146	108 (74%)	38 (26%)	$\chi^2= 6.69, p=0.01$
Married	190	115 (60.5%)	75(39.5%)	
<b>Occupation</b>				
Artisan	57	38(66.7%)	19(33.3%)	$\chi^2=0.19, p=0.99$
Self employed	104	69(66.3%)	35(33.7%)	
Civil servant	93	63(67.7%)	30(32.3%)	
Unemployed	82	53(64.6%)	29(35.4%)	
<b>Education</b>				
Never being to school	15	11(73.3%)	4(26.7%)	$\chi^2=2.33, p=0.68$
Primary	18	12(66.7%)	6(33.3%)	
Junior High	42	24(57.1%)	18(42.9%)	
Senior High	73	51(69.9%)	22(30.1%)	
Tertiary	188	125(66.5%)	63 (33.5%)	

Source: Field survey 2019

### Level of satisfaction of aphrodisiac use

Majority of the respondents 192(57.1%) get completely satisfied after using aphrodisiac, 93(27.7%) get highly satisfied, 36(10.7%) get moderately satisfied and 15(4.5) slightly satisfied or no significant erection at all. All the participants of the FGD subscribed to the fact they get satisfied after using the drug but respondent C said users of these drugs begins not to perform without drugs and even have tremors with time. 201(59.8%) subscribed to the fact that local aphrodisiac works best for them, the best aphrodisiac is the local one (Muhili) (respondent B, FGD). 112(33.3%) said orthodox aphrodisiac work

best, 4 (1.2%) said both works well for them and 19 (5.7%) said non-works for them (table 3).

**Table 3; Level of satisfaction of aphrodisiac use and potent aphrodisiac**

Level of satisfaction	Frequency	Percentage (%)
Completely satisfied	192	57.1
Highly satisfied	93	27.7
Moderately satisfied	36	10.7
Slightly satisfied	15	4.5
Best aphrodisiac		
	Yes	No
Orthodox	112	33.3
Herbal	201	59.8
Both	4	1.2
None	19	5.7
Total	336	100

Source: Field survey 2019

### Strength of the relationship between aphrodisiac use and biological factors

A binary logistic regression analysis was carried out to determine the biological motivating factors that influence the use of aphrodisiac among men in Sagnarigu Municipal. Phlegm, stress and other medications were insignificant (AOR=1.96, CI: 0.29 to 11.23), (AOR=1.14, CI: 0.56 to 7.07) and (AOR=8.70, CI: 0.54 to 1.56). However, ageing, diseases and small size of the male organ were significant at 0.05

confidence level (AOR=9.45, CI: 1.42 to 4.81), (AOR=4.57, CI: 0.25 to 0.94) and (AOR=8.57, CI: 1.41 to 5.66) respectively. This implies that people, who are ageing, are about Nine (9) times likely to use aphrodisiac than those who are not ageing. Those with diseases are about Five (5) times likely to use aphrodisiac than those without diseases. Those with a small penis are about Nine (9) times likely to use aphrodisiac than those who are having a normal size of the penis (table 4).

**Table 4; Binary regression of biological motivating factors and aphrodisiac use**

Variable	WALD	Sig.	Exp. (B)	95% C.I. for Exp(B)	
				Lower	Upper
Aging	9.451	.002	2.608	1.415	4.805
Diseases	4.574	.032	.487	.252	.942
Phlegm	1.956	.162	.601	.294	1.227
Small size male organ	8.568	.003	2.823	1.409	5.656
Stress	1.150	.283	1.997	.564	7.068
Drugs	.105	.746	.916	.540	1.555
Constant	8.697	.003	.100		

Source: Field survey 2019

### Social motivating factors of aphrodisiac use

A binary logistic regression analysis of the social motivating factors showed no significant relation of easy access of aphrodisiac, media, punishment tool, curiosity and fund and the use of aphrodisiac at 95% confidence level and 0.05 confidence interval. However, peer pressure and aphrodisiac as means of maintaining multiple sexual partners were

significant (AOR=3.77, CI: 0.99 to 6.49) and (AOR=3.96, CI: 1.01 to 4.18). I usually want to satisfy all my wives so the drug helps me to be fair. (Respondent D, FGD). It implies that people with multiple sexual partners are about Four (4) times likely to use aphrodisiac than those who are married to one wife. Those who are being influenced by friends are about four (4) times likely to use aphrodisiac than those who not influenced by friends (table 5).

**Table 5; Binary regression of social motivating factors and aphrodisiac use**

Variable	WALD	Sig.	Exp (B)	95% C.I. for Exp(B)	
				Lower	Upper
Peer pressure	3.769	.052	2.537	.991	6.493
Easy access of aphrodisiacs	1.024	.312	1.413	.724	2.758
Multiple sex partners	3.961	.047	2.056	1.011	4.182
Media	.806	.369	.770	.435	1.362
Punishment	.004	.952	1.015	.624	1.651
curiosity	2.334	.127	1.460	.898	2.374
Fun	1.326	.250	1.383	.796	2.402
Constant	11.871	.001	.030		

Source: Field survey 2019

### Psychological motivating factors of aphrodisiac use

A binary logistic regression analysis of the psychological motivating factors showed no significant relation of maintaining men`s ego, sexual excitement, prolong sex, increase in sex duration and

when one is in a sad mood. However, the major psychological motivating factor that has shown significant relation is satisfying women sexually at confidence level 0.05 (AOR=10.91, CI: 0.17 to 0.63). People who use aphrodisiac to satisfy their wives are about Eleven (11) times likely to use

aphrodisiac than those who use it for other purposes. “Herr you know women, they discuss these issues and they share opinions as to how their husbands perform and if you

don’t do well you will be disgraced” (respondent C, FGD). I use aphrodisiac to prevent adultery; you need to handle your wife well (respondent D, FGD) (table 6).

**Table 6; Binary regression of psychological motivating factors and aphrodisiac use**

Variable	WALD	Sig.	Exp (B)	95% C.I. for Exp(B)	
				Lower	Upper
Ego	.964	.326	.449	.091	2.221
Satisfying	10.909	.001	.323	.165	.631
Sexual excitement	.274	.601	1.181	.633	2.205
Positive feedback	.004	.948	.963	.305	3.040
Prolong sex	1.158	.282	.472	.120	1.854
Increase in sex duration	.103	.748	1.286	.277	5.961
Sadness	.743	.389	1.237	.762	2.008
Constant	.987	.321	4.724		

Source: Field survey 2019

### Health implication of aphrodisiac use

A binary regression of the negative health implications of aphrodisiac and its usage showed no significant relation of headache, diarrhoea, nasal stuffiness, restless, priapism, dizziness, and hearing impairment and aphrodisiac use. However, the decrease in sex quality without drugs and tachycardia (increase in heartbeat) has been significant (AOR=4.35, CI: 1.08 to 11.84) and (AOR=5.89, CI: 1.34 to 16.08). It implies that people who use aphrodisiac are likely to experience a decrease in the quality of sex about four (4) times than those who do not use aphrodisiac.

Aphrodisiac users are likely to suffer from tachycardia and dizziness about Six (6) times than those who do not use aphrodisiac and these kinds of people are susceptible to a cardiovascular accident. Priapism is a common side effect but because is about privacy no one will know and I remember some time ago I was sent to the hospital to control my erection (Respondent, FGD). I usually have dizziness especially if I don’t eat. (Respondent H, FGD). Users of these drugs begin not to perform without drugs and even have tremors with time (respondent C, FGD) (table 7).

**Table 7; Health implications of aphrodisiac use**

Variable	WALD	Sig.	Exp. (B)	95% C.I. for Exp(B)	
				Lower	Upper
Headache	.001	.982	1.006	.602	1.682
Diarrhea	.003	.958	.980	.465	2.065
Nasal stuffiness	1.237	.266	.663	.322	1.367
Restless	.752	.386	.787	.458	1.352
Priapism	.792	.373	1.336	.706	2.531
Dizziness	.306	.580	.418	.019	9.216
Decrease in sex quality	4.348	.037	3.575	1.079	11.843
Tachycardia	5.887	.015	4.648	1.344	16.082
Hearing impairment	.332	.565	1.239	.598	2.568
Constant	3.503	.061	.029		

Source: Field survey 2019

## DISCUSSION

The findings indicate that the age of respondents has a relation to the use of aphrodisiac and it is in line with the findings of Yiana, Ziblim, & Margaret and Manortey, Mensah, & Acheampong. [14,15] However, educational status does not have relation to aphrodisiac use and it is in line with Yiana, Ziblim, & Margaret and

contrary to Manortey, Mensah, & Acheampong. [14,15] Marital status has an association with aphrodisiac use and is consistent with the findings of Yiana, Ziblim, & Margaret and Manortey, Mensah, & Acheampong. [14,15] The number of respondents who use aphrodisiac is 223 hence the prevalence rate of aphrodisiac use is 66.4%. a similar study conducted which

showed a prevalence rate of 5.6% and 61% respectively. [15,12] Ageing, diseases and small size of the male organ were significant at 0.05 confidence level and it is in line with the findings of Danquah et al. [12] Peer pressure has been found to have a significant relation to aphrodisiac use and it is in line with Bello, & Isah. [16] Maintaining multiple sexual partners has a significant association to aphrodisiac use and tie with the findings of Samuel, Asafo, & Edward, and Bourne et al. where the participant said this is the case when you visit madam A she wants sex and you have to give it to her right, right after that, madam B also calls you and would not want to but you have to, so yes these enhancers must come. [17,18] More over these has given more light to polygamy that is being practice by Muslims especially in this part of northern Ghana and has been seen that religious affiliation has a significant relation to aphrodisiac use ( $p=0.02$ ,  $\chi^2=9.84$ ) Media as a social motivating factor has not been significantly associated with aphrodisiac use. [19]

Majority of the respondents 192(57.1%) get completely satisfied after using aphrodisiac. [18] About 201 (59.8%) subscribed to the fact that local aphrodisiac works best for them. "The best aphrodisiac is the local one (Muhili)" (respondent B, FGD) and this tie in well with the findings of Srikanth, Ahmed, & Shehab. [11] Regression analysis showed a signification association between mixing aphrodisiac with other drugs and sexual satisfaction. Those who use aphrodisiac with other drugs are 72% more satisfied than those who use aphrodisiac alone. [20] "Herr you know women, they discuss these issues and they share opinions as to how their husbands perform and if you don't do well you will be disgraced" (respondent C, FGD). [18] Major psychological motivating factor that has shown significant relation is satisfying women sexually and it is tie with Bello, & Isah, as well as Bourne et al. [16,18] A decrease in sex quality has been significant which tie with Bourne et al. where they realized that while enjoying the good effects

of aphrodisiacs, a lot of people have the opinion that drugs were not assisting them to have close and emotionally touching sex that was sustained over the longer period. [18] "It can get a bit lonely after a while when it's just fucked and go, fuck and go, fuck and go. It's not as if anyone stays the night anymore, that's just the lay of the land these days." I usually have dizziness especially if I don't eat (respondent H, FGD). [21]

## CONCLUSION

There has not been significant relation with age of aphrodisiac use, however, the majority of the study participants 254 happened to be within the youthful age of 15-55years representing 75.5%. The use of aphrodisiac is high among the youth and it decreases gradually as they ages. Faith and marital status of the respondents have a significant association with aphrodisiac use. The prevalence rate of aphrodisiac use is 66.4%. About 80.4% of aphrodisiac users do not notify their partners. Aphrodisiac users gained complete satisfaction after using it and 59.8% subscribed to the fact that local aphrodisiac works best for them, the best aphrodisiac is the local one (Muhili). Biological motivating factors that have significant associations with aphrodisiac use are; ageing, diseases and small size of the male sex organ. Social motivating factors that have a significant association with aphrodisiac use are peer pressure and aphrodisiac as means of maintaining multiple sexual partners. Satisfying women sexually was the psychological motivating factor that has a significant relation to aphrodisiac use. A decrease in sex quality without drugs and tachycardia and tremors has been significant among the side effects of aphrodisiac. Priapism is a common side effect but because is about privacy no one will know.

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