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Association of *Paraga* Consumption and Dietary Lifestyle on Nutritional Status of Commercial Drivers in Ibadan Municipality of Oyo State, Nigeria

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Abstract: The use of herbal products is increasing in trend globally, with over 75% of the world population using them. In Nigeria, these drinks are popular in many neighbourhoods and sold by vendors in motor parks where commercial drivers have access to them. Though they may have some beneficial effects, they are not completely harmless. This study was carried out to assess the association of *Paraga* (herbal mixture) consumption and dietary lifestyle on the nutritional status of commercial motor drivers in Ibadan municipality. This descriptive cross-sectional study was carried out among four hundred and twenty-two (422) commercial drivers randomly selected from the five local government areas that make up Ibadan municipality. A structured questionnaire was used to collect data from the respondents. Descriptive statistics and Chi square test were carried out on the data obtained at 5% level of significance. There was a high prevalence of *Paraga* consumption among the respondents. There was inadequate nutrient intake among the respondents for most nutrients considered. The nutritional status measurement of the respondents revealed that 4.5% were underweight, 59.6% had normal weight, 26.8% were overweight, while 9.1% were obese. There was no significant association between *Paraga* consumption and nutritional status of respondents ($p > 0.05$). However, a significant association was observed between dietary lifestyle pattern and nutritional status of respondents ($p < 0.05$). It is therefore important that commercial drivers be given regular and constant nutrition education during their meetings to help improve their dietary lifestyle. Also, the concerned government agencies/officials should assist in reducing *Paraga* consumption by helping to reduce alcohol availability at motor parks, and by educational measures to reduce its demand and consumption.

Key words: Paraga consumption, dietary pattern, nutritional status, commercial motor drivers.

1. Introduction

Medicinal plants have been of great importance to the healthcare needs of individuals and their communities. The use of herbal preparations made from medicinal plants is widespread in developing countries. In local communities where medical care is not so easily accessible due, in part, to lack of healthcare facilities and the high cost of orthodox treatment, recourse to traditional medicine offers the only hope of staying healthy and alive [1, 2].

An estimated 80% of the developing world population utilize traditional methods of healing which include herbal remedies [3]. In Nigeria, more than 70% of the population depend on traditional remedies for the initial treatment of diseases and injuries [4, 5]. These herbs are prepared as a mixture of different types of herbs with mostly alcohol or water.

One of the most common herbal preparations being sold among the Yorubas of the South-west Nigeria is *Paraga*, which has been defined by Oshodi and Aina [6] as “a mixture of unrefined or poorly refined alcohol and herbs which is periodically ingested, as a form of self-medication against certain illnesses”. It is one of the most popular forms in which herbal medicines are dispensed on the street [7] and it is commonly sold by vendors in motor parks where commercial drivers have easy access to them.

Alcohol is a narcotic, an agent that reduces sensation and consciousness, and a central nervous

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system depressant [8]. Hazardous use of alcohol is a public health problem which accounts for about 4.0% of global disease burden [9]. Also, the World Health Organization has reported a link between drivers' hazardous use of alcohol and road traffic accidents in Nigeria [10]. Alcohol and alcoholic beverage consumption, and cigarette smoking have been found to interfere with nutrient intake, utilization and bioavailability, changing body weight, and basal metabolic rate. The trend of high consumption of alcohol and smoking is common among most road transport workers, as most of them are teenagers and young adults [8].

Commercial drivers (truck, bus and taxi drivers) are reported to be at risk for negative health outcomes due to the unpredictable nature of their profession which expose them to long work hours (up to 14 hours per day), excessive noise, prolonged sitting and unhealthy lifestyles. As a consequence, commercial drivers are at higher risk of adverse health outcomes such as psychological and psychiatric disorders, as well as detriments resulting from disrupted biological cycles, musculoskeletal disorders, cancer and other respiratory morbidities, cardiovascular disease, risk-laden substance use and sexual practices [11]. Also, unhealthy lifestyles such as tobacco use, physical inactivity, and poor diet are very common among commercial drivers.

Smoking, alcohol consumption and unhealthy diet tend to cluster and are all major modifiable contributors to the burden of chronic disease [12]. Tobacco consumers have a higher consumption of alcoholic beverages [13, 14] and a lower intake of vegetable and fruit [15].

In Nigeria, not much work has been done or reported on the effect of *Paraga* consumption and dietary lifestyle of commercial drivers on their nutritional status. *Paraga* use is believed to be common among drivers, but little information is documented on its use. Information and studies on perceived social benefits and effect of cigarette and alcoholic drinks on nutritional status of drivers in Oyo State and in Nigeria as a whole is minimal and scanty. This study was therefore designed to assess the association between *Paraga* consumption and dietary lifestyle on the nutritional status of commercial drivers in Ibadan Municipality of Oyo State, Nigeria.

2. Methodology

The study was descriptive cross-sectional in design. The five urban local government areas constituting Ibadan municipality LGAs (Ibadan North, Ibadan North-East, Ibadan North-West, Ibadan South-East and Ibadan South-West) were selected for the study. They were stratified into wards, one ward randomly selected, and major operational motor park(s) in each ward was also selected randomly. The respondents interviewed were selected using cluster sample technique. Due to the nature of the job as they are always on the move, it was difficult to meet a very large population of drivers at once in any motor park. A total of four hundred and twenty-two (422) respondents were recruited for the study based on sample size calculation using the formula (FAO [16]):

$$n=\frac{Z^2(p)(1-p)}{e^2}$$

where: n = sample size, Z = Z score value at 95% confidence interval which is = 1.96, p = prevalence at 50%, and e = precision at 0.05.

A pre-tested, interviewer-administered questionnaire containing different variables such as respondents' personal data, lifestyle pattern and history, feeding pattern, 24-hour dietary recall, anthropometry and WHO methodology for drug survey was used for data collection. Data were analyzed using descriptive statistics and Chi square test, 24-hour dietary recall was analyzed for nutrient adequacy using total dietary assessment (TDA) software, and the level of significance was set at $p < 0.05$. Ethical clearance was obtained from the ethical committee of University of Ibadan and University College Hospital (UI/UCH) Institutional Ethical Review Board. Permission and

written consent were obtained from the unit Chairman in the selected motor parks and study participants respectively.

3. Results

3.1 Socio-Demographic and Socio-Economic Characteristics of Respondents

Tables 1 and 2 show the socio-demographic and socio-economic characteristics of the respondents. The respondents' age fell within the range 17 and 58 years, with the median age of 35-40 years (22.4%). Most (89.5%) of the respondents were Yoruba, 35.1% had primary level of education, 17.2% had junior secondary school level certificate, 24.3% completed secondary school education, while 23.4% had other levels of education, and 80.0% were married (Table 1). More than half (54.7%) were taxi drivers, 34.7% were bus drivers while 10.6% were bus conductors. Most (97.1%) of the respondents earned money on daily basis and 94.1% of them earned more than fifty thousand naira (₦50,000) per year on the average. Few (16.5%) reportedly earned less than one thousand naira per day while 48.4% earned between one thousand and two thousand naira per day. Less than one-quarter (23.3%) earned between two and three thousand naira per day, while 11.8% earned four thousand and above per day (Table 2).

3.2 Lifestyle Pattern of the Respondents

Tables 3 and 4 illustrate the lifestyle pattern of respondents. In Table 3, majority (60.9%) of the respondents reportedly worked for more than 10 hours, 37.2% worked between 6 and 10 hours, while only 1.9% worked for 4 hours per day. About three-quarters

Table 1 Socio-demographic and socio-economic characteristics of respondents.

Characteristics	N	%
Age		
17-22	24	7.6
23-28	44	13.9
29-34	62	19.6
35-40	71	22.4
41-46	41	12.9
47-52	37	11.7
53-58	38	11.9
Total	317	100.0
Ethnic group		
Yoruba	377	89.5
Hausa	11	2.6
Igbo	14	3.3
Ukwani	2	0.5
Edo	4	1.0
Ibibio	13	3.1
Total	421	100.0
Marital status		
Married	337	80.0
Single	84	20.0
Total	421	100.0
Level of education		
Pry education	147	35.1
JSCE	72	17.2
SSCE	102	24.3
Others	98	23.4
Total	419	100.0

Table 2 Socio-economic characteristics of respondents.

Characteristics	N	%
Main type of work		
Taxi driver	227	54.7
Bus driver	144	34.7
Conductor	44	10.6
Total	415	100.0
Methods of earning income		
On hourly basis	8	1.9
Daily	403	97.1
Weekly	2	0.5
Monthly	2	0.5
Total	415	100.0
Average earning per year		
< ₦5,000	2	0.5
₦5,000-₦10,000	4	1.0
₦20,000-₦30,000	14	3.6
> ₦50,000	375	94.9
Total	395	100.0
Average income per day		
< ₦1,000	67	16.5
₦1,000-₦2,000	197	48.4
₦2,000-₦3,000	95	23.3
₦4,000-₦5,000	26	6.4
> ₦5,000	22	5.4
Total	407	100.0

Table 3 Lifestyle pattern of respondents.

Characteristics	N	%
Working hours per day		
4 hrs	8	1.9
6 hrs	27	6.4
8 hrs	29	6.9
10 hrs	100	23.9
Others	255	60.9
Total	419	100.0
Current tobacco and tobacco products use		
Yes	89	25.3
No	263	74.7
Total	352	100.0
Age at first cigarette use		
I have never smoked cigarettes	169	57.9
8 years old or younger	5	1.7
between 12 or 15 years old	42	14.4
16 years old or older	76	26.0
Total	292	100.0
Number of cigarettes smoking days in the past 30 days		
0-7 days	276	81.4
8 or 15 days	26	7.7
16 to 22 days	10	2.9

Table 3 to be continued

23 to 29 days	7	2.1
all 30 days	20	5.9
Total	339	100.0
Number of days of tobacco products use in the last 30 days		
0-7 days	303	88.9
8 or 15 days	6	1.8
16 to 22 days	12	3.5
23 to 29 days	6	1.8
All 30 days	14	4.0
Total	341	100.0

Table 4 Lifestyle pattern of respondents (contd.).

Characteristics	N	%
Ever consumed a drink that contains alcohol		
Yes	211	55.9
No	146	44.1
Total	357	100.0
Age at first alcohol consumption		
Never had a drink of alcohol other than few sips	89	30.8
8 year old or younger	6	2.1
Between 9 to 15 years	68	23.5
16 years and older	126	43.6
Total	289	100.0
Times gotten drunk with alcohol		
0 times	271	77.7
0-2 times	50	14.3
3 times and above	28	8.0
Total	349	100.0
Number of days of any form of physical activities in the last 30 days		
0-7 days	120	35.5
8 or 15 days	32	9.5
16 to 22 days	53	15.7
23 to 29 days	7	2.1
All 30 days	126	37.2
Total	338	100.0

(74.7%) of the respondents mentioned non-current use of tobacco and product while 25.3% indicated current usage. More than half (57.9%) of respondents reportedly never used cigarette, few (1.7%) first used cigarette at age 8 years and below, 14.4%, and 26.0% first used cigarette between 12 and 15 years, and 16 years and above respectively. Majority (81.4%) reportedly smoked cigarette for only seven days a month, 7.7% for 8 to 15 days, 2.9% for between 16 and 22 days, while 5.9% smoked for the whole 30 days prior to the study. Also, 88.9% reportedly made use of tobacco products for less than seven days a month, while 1.8%, 3.5%, 1.8%, and 4.0% used tobacco products for 8 to 15, 16 to 22, 23 to 29 or 30 days of a month respectively.

In Table 4, 55.9% of the respondents have ever consumed an alcoholic drink, 30.8% had ever had a sip, 23.5% started consuming alcoholic drink between ages 9 and 15 years, while 43.6% started at age 16 years and above. Majority (77.7%) of the respondents reported never gotten drunk with alcohol, 14.3% got drunk within 2 times, while 8.0% got drunk for 3 or

more times. More than one-third (35.5%) of respondents engaged in physical activity for 7 days, 9.5% for 8-15 days, 15.7% for 16-22 days, while 37.3% engaged in physical activities throughout the 30 days preceding the study.

3.3 Beliefs and Practices of Respondents on Paraga Consumption

Of the 351 respondents (100%) who responded to interview on *Paraga* consumption, a total of 199 (56.7%) confirmed to have taken *Paraga* while 43.3% of them claimed never to have taken the alcoholic herbal mixture before (Table 5). About forty-five percent (45.2%) of these respondents reportedly have not taken the herbal mixture in the past one year, 49.7% have not taken it in the last 30 days preceding the study, while 22.2%, 20.8%, and 7.3% took it for 1-5 days, 6-19 days and 20 or more days in the month preceding the study respectively. About two-third (65.2%) of the respondents took *Paraga* once daily, 18.7% took it 2 times/day, while 7.0% took it 3 to 5 times/day. Many (39.9%) of the respondents took *Paraga* any time of the day, 19.2% took it before work, 25.4% took it during work, while 15.5% took it after work.

Of the 199 of respondents who reportedly consume *Paraga* (Table 5), 173 of them responded to place of consumption of *Paraga* (Table 6). Of these 173 (100%) respondents, 37.0% usually get and consume *Paraga* in the motor park, 28.2% did consume it at home, 15.0% each consumed it at beer parlour and Butakeria, while a total of 4.8% consumed it elsewhere. Many (22.8%) of the respondents reportedly consumed *Paraga* for mental alertness, 18.8% consumed it for purpose of having energy, while 43.7% consumed it for treatment of illneses, 7.1% took it to ward off coldness, 4.1% consumed it because of its taste while 3.5% consumed it because others are doing so (Table 6).

Table 5 Beliefs and practices of respondents regarding *Paraga* consumption.

Characteristics	N	%
Ever taken *Paraga*		
No	152	43.3
Yes	199	56.7
Total	351	100.0
Paraga intake in the past 1 year		
No	151	45.2
Yes	183	54.8
Total	334	100.0
Paraga intake in the last 30 days		
No	170	49.7
Yes (1-5 days)	76	22.2
Yes (6-19 days)	71	20.8
Yes (20 or more days)	25	7.3
Total	342	100.0
Paraga intake in the last 7 days		
No	201	58.4
Yes (1-7 days)	33	9.6
Yes (1-5 days)	16	4.7
Yes (2-3 days)	52	15.1
Yes (once a week)	42	12.2
Total	344	100.0
Paraga intake per day		
> 5 times/day	17	9.1
5-3 times/day	13	7.0

Table 5 to be continued

2 times/day	35	18.7
Once/day	122	65.2
Total	187	100.0
Time of *Paraga* consumption		
In the morning before work	37	19.2
In the afternoon during work	49	25.4
In the evening after work	30	15.5
Any time of the day	77	39.9
Total	193	100.0

Table 6 Beliefs and practices of respondents regarding *Paraga* consumption.

Characteristics	N	%
Usual place for *Paraga* consumption		
Here in the garage	64	37.0
Beer pallor	26	15.0
At home	49	28.2
Bukateria	26	15.0
Party	2	1.2
Meetings	2	1.2
In my vehicle	2	1.2
Friends place	2	1.2
Total	173	100.0
Reasons for taking *Paraga*		
To keep alert	45	22.8
To ward-off cold	14	7.1
For more energy	37	18.8
To be like others	7	3.5
Taste is enjoyable	8	4.1
To treat other illness	86	43.7
Total	197	100.0

3.4 Nutrient Intake of the Respondents

The energy (61.8%), fat (92.2%), carbohydrate (67.1%), vitamins A (70.6%), C (92.4%), B_6 (53.8%), and calcium (91.0%) intakes of most of the respondents were inadequate when compared with the recommended daily allowance (RDA) (Table 7). However, 35.3% and 46.7% of the respondents had adequate intake of energy and protein, while 37.9%, 44.1%, 39.1% and 80.8% had excess intake of vitamins B_1, B_2, B_3, and iron respectively when compared with the RDA of each micronutrient.

3.5 Nutritional Status of the Respondents

More than half (59.6%) of the respondents had normal weight (BMI < 25), 4.5% were underweight (BMI < 18.5), 26.8% were overweight (25 ≤ BMI < 30), while 9.1% were obese (Table 8).

3.6 Association between Dietary Lifestyle and Paraga Consumption of Respondents

There was no significant association between dietary lifestyle and *Paraga* consumption ($p > 0.05$). Table 9 shows that the number of days vegetable was taken has nothing to do with the rate of *Paraga* consumption, while Table 10 implies that the number of carbonated drinks taken had no association with the rate of *Paraga* consumption.

3.7 Association between Dietary Lifestyle Pattern and Nutritional Status of Respondents

In Table 11, there was significant association

Table 7 Nutrient intake of respondents (n = 422).

Nutrients	Inadequate (%)	Adequate (%)	Excess (%)	Total (%)
Energy	61.9	35.3	2.8	100
Protein	23.9	46.7	29.4	100
Fat	92.2	5.9	1.9	100
Carbohydrate	67.1	27.7	5.2	100
Vitamin A	70.6	1.7	27.7	100
Vitamin C	92.4	2.8	4.7	100
Vitamin B_1	34.8	27.3	37.9	100
Vitamin B_2	35.8	20.1	44.1	100
Vitamin B_3	27.0	33.9	39.1	100
Folate	45.3	29.9	24.9	100
Vitamin B_6	53.8	21.8	24.4	100
Calcium	91.0	1.4	7.6	100
Iron	4.7	14.5	80.8	100

Table 8 Nutritional status of respondents (n = 354).

Nutritional status	N	%
Underweight	16	4.5
Normal weight	211	59.6
Overweight	95	26.8
Obese	32	9.1
Total	354	100.0

Table 9 Association between dietary lifestyle and *Paraga* consumption of respondents.

No of times vegetable was taken in the last 30 days	Range of time *Paraga* is taken in the last 30 days			
	No	Yes (1-5 days)	Yes (6-19 days)	Yes (≥ 20 days)
None	24 (7%)	14 (4.1%)	8 (2.3%)	0 (0%)
< 1/day	86 (25.1%)	48 (14%)	39 (11.4%)	11 (3.2%)
2x/day	45 (13.2%)	13 (3.8%)	15 (4.4%)	12 (3.5%)
4x/day	8 (2.3%)	1 (0.3%)	4 (1.2%)	0 (0%)
≥ 6x/day	7 (2%)	0 (0%)	5 (1.5%)	2 (0.6%)
Total	170 (49.7%)	76 (22.2%)	71 (20.8%)	25 (7.3%)
X^2 = 0.077	p = 0.156	No significance		

Table 10 Association between dietary lifestyle and paraga consumption of respondents (contd.).

No of times carbonated drink was taken in the last 30 days	Range of time *Paraga* is taken in the last 30 days			
	No	Yes (1-5 days)	Yes (6-19 days)	Yes (≥ 20 days)
None	86 (25.2%)	35 (10.3%)	30 (8.8%)	16 (4.7%)
< 1/day	75 (22.0%)	38 (11.1%)	34 (10%)	9 (2.6%)
2x/day	3 (0.9%)	3 (0.9%)	4 (1.2%)	0 (0%)
4x/day	3 (0.9%)	0 (0%)	1 (0.3%)	0 (0%)
≥ 6x/day	2 (0.6%)	0 (0%)	2 (0%)	0 (0%)
Total	169 (49.6%)	76 (22.3%)	71 (20.8%)	25 (7.3%)
X^2 value = 0.007	p = 0.896	Remark = No significance		

Table 11 Association between dietary lifestyle pattern and nutritional status of respondents.

Dietary life style pattern	Nutritional status (BMI)			
Times food is eaten/day	Underweight	Normal weight	Over-weight	Obese
Once	0 (0%)	52 (17.4%)	36 (12.1%)	21 (7.1%)
Twice	9 (3.0%)	68 (22.8%)	30 (10.1%)	3 (1.0%)
Thrice	5 (1.7%)	50 (16.8%)	7 (2.3%)	5 (1.7%)
Other	2 (0.7%)	6 (2.0%)	4 (1.3%)	0 (0.0%)
Total	16 (5.4%)	176 (59.1%)	77 (25.8%)	29 (9.8%)
X^2=43.023	df = 12	p = 0.000	Remark = Significant	

Table 12 Association between *Paraga* consumption pattern and nutritional status of respondents.

Paraga consumption	Nutritional status (BMI)			
Times *Paraga* taken/day	Underweight	Normal weight	Overweight	Obese
> 5 times per day	2 (1.1%)	9 (4.8%)	4 (2.1%)	2 (1.1%)
5-3 times per day	1 (0.5%)	8 (4.3%)	4 (2.1%)	0 (.0%)
2 times per day	3 (1.6%)	22 (11.8%)	8 (4.3%)	2 (1.1%)
Once per day	2 (1.1%)	67 (35.8%)	37 (19.8%)	16 (8.6%)
Total	8 (4.3%)	106 (56.7%)	53 (28.3%)	20 (10.76%)
X^2=10.569	df = 12	p = 0.566	Remark = No significance	

between dietary lifestyle pattern and nutritional status of respondents ($p < 0.05$). About seventeen percent (17.4%) of the respondents that ate once a day were among those who were in the normal weight range, 12.1% fell into overweight range, while 7.1% of them were obese. Among respondents that ate twice a day 22.8% had normal weight, 10.1% were overweight, and 1.0% were obese; while 16.8%, 2.3%, and 1.7% of those who ate three times daily had normal weight, overeight and obese respectively. This implies that it is not the number of times food is taken in a day that determines nutritional status but the type of food that is taken at every point in time.

3.8 Association between Paraga Consumption Pattern and Nutritional Status of Respondents

There was no significant association between *Paraga* consumption and nutritional status of respondents (Table 12) ($p > 0.05$). Among those who took *Paraga* mixture more than five times daily, 4.8% had normal weight, 2.1% were overweight, 1.1% were obese while 1.1% of were underweight. For those who took it between three to five times a day 10.5% were underweight, 4.3% had normal weight, while 2.1% were overweight. Among those who took it 2 times/day 11.8% had normal weight, 4.3% overweight, 1.1% obese, while 1.6% were underweight; and for those who took it once daily 35.8% had normal weight, 19.8% were overweight, 8.6% were obese, and 1.1% were underweight.

4. Discussion

Paraga consumption is common among commercial vehicle drivers operating in motor parks in Ibadan municipality. The result obtained in this study for lifetime use prevalence of *Paraga* by the respondents is higher than the 55.6% reported by Oluwadiya and Fatoye [7] and 51.6% recorded amongst secondary school students in Lagos by Oshodi and Aina [6]. The difference between lifetime and current usage prevalence is 11.0%. This is opposed to the findings of Oshodi and Aina (2007), who reported a less than 10.0% point difference between lifetime and current usage among secondary school students in Lagos. Similarly, Kadiri [17] in a study of *Paraga* usage in a community in Lagos showed that 60.0% of *Paraga* users were taking it on daily basis. The persistent use of *Paraga* might be

because the drivers were getting addicted to some of the constituents of the mixture; the most likely constituent being alcohol. Reasons such as “enjoyable taste”, “makes me to become more alert” and “makes me gain more energy” point to the presence of alcohol (which is a source of energy) in the mixture, and might be a manifestation of alcohol dependence by the drivers [18]. The consumption of alcohol coupled with smoking was common among the commercial drivers, as most of them were teenagers and young adults. This is in agreement with the findings of McPhillips et al. [19] who reported that cigarette smoking is a highly pervasive personal habit, with a strong appeal among teenagers and young adults.

Inadequate nutrient intake was observed among the respondents for most of the nutrients. The energy, fat and carbohydrate intakes of majority of respondents was inadequate when compared with the RDA. This corroborates the findings of Mustapha et al. [8] who found alcohol to significantly affect the intake of energy-giving nutrients. The inadequate intake may be due to the fact that large intake of alcohol has profound effects on reducing their appetite for nutritious foods because of the high-energy content of alcoholic beverages. However, the protein intake of most of the respondents was adequate. This is consistent with the studies of Ruf et al. [20] and Fawehinmi et al. [21], who found that there were increased intakes observed for animal products among participants who consumed high amount of alcohol. The respondents’ inadequate intake for most of the micronutrients observed in this study is in line with the study of Mustapha et al. [8] who reported low intake of micronutrients among road transport workers in Lagos. This may be due to the fact that large intake of alcohol suppresses hunger which reduces food intake and consequently, deprives the body of these essential nutrients.

The result on the nutritional status of the respondents is partially consistent with what was reported by Mustapha et al. [8]. Overweight and obesity result from a caloric imbalance between calories consumed and calories expended. In the USA, when comparing different occupations, obesity rates are highest among motor vehicle operators [22]. This is in line with the findings in this study, considering the level of drivers who are overweight and obese. Commercial drivers remain sedentary for extended periods during the day and have limited options for healthy meals. The combination of physical inactivity and poor diet contributes to the high levels of overweight and obesity among the commercial drivers, though the psychosocial environment may also contribute [23].

No significant association was found between *Paraga* consumption and nutritional status of the respondents. However, a significant association was observed between dietary lifestyle and nutritional status of the respondents. This indicates that it is not how often diet intake is in a day that determines nutritional status but the type of food and quality of diet that is taken at every point in time. This is in agreement with the work of Pauline et al. [24].

5. Conclusion

Commercial drivers operating in motor parks in Ibadan municipality have a high prevalence rate for *Paraga* usage as it is usually sold within their motor parks. Though no significant association was established between *Paraga* consumption and nutritional status of the respondents, a significant association was observed between dietary lifestyle and nutritional status of the respondents, which might have been contributed to by the presence of alcohol in the herbal mixture. It was evident from this study that alcohol and alcoholic beverage consumption interfered with energy and nutrients intake of the respondents. Therefore, alcohol and alcoholic beverage consumption should be of public health concern as its consumption over time may predispose the consumers to the development of chronic diseases such as obesity and all its attendant health challenges

later in life, as well as constituting one of the major causes of road accidents in the country.

6. Recommendations

Commercial drivers should be given regular and constant nutrition education during their meetings on the health hazards of *Paraga* and other alcoholic consumption to help them improve their dietary lifestyle, which will lead to attaining optimal nutritional status. Government officials and agencies as well as non-governmental agencies can assist in reducing *Paraga* consumption by helping to reduce alcohol availability and through educational measures to reduce its demands. Also, the government and other stakeholders should provide legislation against selling, purchasing, and drinking of narcotics such as cigarette and alcohol in public motor parks and do everything necessary to ensure compliance.

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