

Epidemiological Profile of Drugs Use Habits among Pregnant Women in Yaoundé Cameroon: The Case of Alcohol and Tobacco

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Abstract

Introduction: Drug use by pregnant women is becoming a major public health concern. These habits, which was much more prevalent in Western countries is gradually becoming a call for concern in developing nations. However, the fetal risk resulting from exposure to these drugs, whether at regular or irregular exposure is becoming common among our health facilities. In order to better apprehend their impact and picture an occurrence profile, an access was conducted among female drug users; alcohol and tobacco in three health care facilities in the city of Yaoundé; Hôpital des Sœurs Mvog-Beti, CASS de Nkoldongo, Hôpital des Sœurs Mont Calvaire.

Methods: This was a cross-sectional study conducted over a period of four months, from 03 February to 30 May 2015 in health facilities with PMI's. The age range considered was 21 to 45 years. Sampling was consecutive, including all pregnant women who met the inclusion criteria. After an explanation of the study objectives to the participants in their language of interest so as to get their consent, a pre tested survey form was used to obtain information on questions related to drugs (tobacco and alcohol) usage and some independent variables like age, school level, occupation, knowledge about the risks of alcohol and tobacco consumption. The study was conducted in strict compliance with ethics and medical confidentiality. The data collected were then analysis using a Graph pad prism.

Results: A total of 161 pregnant women were recruited; the 21-25 age groups were the majority: 56 participants. The most represented occupation, housewives 64 (40.0%); the most represented level of education was secondary; 96 (60.0%), 56 (35.0%) reported drinking during pregnancy. The age group between 26-30 years was the group in which alcohol consumption was the highest; 46.2%, secretaries and nurses were the professions most addicted to alcohol consumption, with a percentage of 100.0% each, followed by seamstresses 50.0% and housewives 43.0%. 50.0% of women in the secondary class consumed alcohol, compared to those at the higher and primary levels with a representation of 28.6% and 21.4% respectively. And from their knowledge on their motivations to keep on with the habit of alcohol consumption; 42.9% consume alcohol for pleasure; 28.6% as been dependent and 14.3% consumed drugs a learn habit so as to support the anxiety in pregnancy. With regard to the harmful effect of drugs to foetal health, it was revealed that of the 161 participants in the study; (128) 80.0%, knew that alcohol and tobacco are harmful to the health of the mother and the child compared to (32) 20.0% who were unaware of the impact of their consequences.

Conclusion: The limited knowledge on the consumption of alcohol with regard to the unjustified motivation were revealing keys for policy makers to readdress the policies on prenatal care, educative health/obstetrics talks specially in health facilities involved in prenatal care through the ministry of public health.

Keywords: Alcohol; Tobacco; Pregnant women; Consumption; Prenatal

Introduction

The use of drug is an old major public health problem. For several years, scientists and health care professionals and more specifically policy makers have undertaken various actions to reduce drug use among the general population. However, the prevalence of drug use by pregnant women still remains a major concern according to the world health organization (WHO).

Moreover, the influence of alcohol consumption during pregnancy on offspring has received widespread research attention since early reports that prenatal alcohol exposure can have devastating and persistent consequences [1,2]. Alcohol passes freely across the placenta and enters the foetal circulatory system Waltman et al. due to low activity of alcohol dehydrogenase to metabolize the alcohol, the foetus is compromised in its ability to eliminate alcohol, which can persist in amniotic fluid by Brien et al. Foetal alcohol syndrome (FAS) is the most widely known outcome of heavy drinking during pregnancy, but despite the health educative talks on the harm caused by drugs during pregnancy and their effect on unborn children, several women are

still involved in these harmful habits during the prenatal phase [3]. Numerous research and studies have established the various outcome that heavy drug consumption (alcohol, and tobacco), or even moderate daily consumption of alcohol, with episodic drunkenness during pregnancy are likely to cause, such as; serious and irreversible damage to the foetus, growth retardation, premature delivery as well as mental disorders, poor brain development, reproductive, hormonal and immunological imbalance [4]. Considering this public health concern, very few studies have been conducted in Cameroon, to address this issue on the prevalence of alcohol and tobacco consumption habits but

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rarely with regard to pregnant women, this study however would be a step-up contribution to the knowledge on the epidemiological profile of alcohol and tobacco use within pregnant women in a developing country like Cameroon.

Methods

This descriptive prospective and transversal study was carried out from February 3 to May 30, 2015 in three (03) health care facilities which are the; 'Hôpital des Sœurs Mont Calvaire', the Centre d'animation social et sanitaire (CASS) of Nkoldongo and the Hôpital des Sœurs of Mvog-beti in Yaounde. The choices of the hospitals were made with focus on the peripheral levels of the public health pyramid spectrum of Cameroon which is the district health service levels (tertiary); at this level, 03 private health service unites with PMI's within the different health district service were chosen following a randomized sampling. Prior to start of the study and following lay down administrative procedures; the research protocol was approved by the Douala University institutional ethic committee and also by the public health delegation for the center region, Yaoundé. For the pregnant women who came for prenatal consultation within the study period, and who fulfilled the inclusion criteria for the study, a writing informed consent based on their language of choice (English or French) was read to them for those who could not read it out and for those who could read, a copy was handed over to them explaining to them the purpose of the study. Once their consent were given, a pre tested survey form was handed to the participants to fill, after which it was collected for onward analysis with Graph Pad prism and the results expressed on a frequency tables and figures.

Results

Characteristics of the study population

For the total of 161 pregnant women involved in the study, the mean age for the study population was 27.7 ± 5.8 years. Table 1 show the demographic picture of the study population, from which it is observed that The age group most represented was 21-25 years; 35.0%, followed by 26-30 years; 32.5%; the group least represented was 41-45 years; 5%; housewives were the majority occupation, 40%, followed by students 13.8%, traders and teachers at 12.5% and 10.0% respectively.

Table 2 further show the frequency distribution of alcohol and tobacco consumption by women during pregnancy, from which it is observed that (56) 35.0% of pregnant women from the 161 participant consumed alcohol while no woman was recorded to consumed tobacco during prenatal.

More also, to reflect the demographic profile of the participant recorded in Table 2, Table 3 and Figures 1 and 2 was also established to revealed the variables vis-a-vis alcohol (drugs) consumption during pregnancy.

Table 3 and Figures 1 and 2 revealed that; the 15-20 age groups did not drink alcohol: The 21-25 age groups consumed less alcohol compared to other older pregnant women.

The results seem to show that alcohol consumption in our study population increases with age up to 100% in the older age group which is the 41 to 45 age group, and when the consumption were expressed base on profession; all the nurses and secretaries that is 100% were alcohol consumers, these was followed by seamstresses and housewives respectively at 50.0% and 43.8%. Students and teachers came in with 33.3% and 25.0%; the other occupations involved in the study did not consume alcohol. From the 56 drugs users during pregnancy, Table 4

Age Profile		
Age group	N	N%
15-20	16	10
21-25	56	35
26-30	52	32.5
31-35	16	10
36-40	12	7.5
41-45	8	5
Academic Profile		
	N	N%
Primary	16	10
Secondary	96	60
Post secondary	48	30
Professional Profile		
	N	N%
Housewife	64	40
Student	22	13.8
Trader	20	12.5
Teacher	16	10
Secretary	8	5
Seamstress	8	5
Nurse	4	2.5
Custom declarant	4	2.5
Hair dresser	4	2.5
N: Frequency ; N%: Frequency in percentages		

Table 1: Demographic profile of sample population.

Drugs consuming attitude during pregnancy		N	N%
Alcohol	Consumers	56	35
	Non-consumers	104	65
Tobacco	Consumers	0	0
	Non-consumers	161	100
N: Frequency ; N%: Frequency in percentages			

Table 2: Frequency distribution of alcohol and tobacco consumption by women during pregnancy.

was used to expressed and better apprehend why the women kept this habit during their pregnancy; the motivations of these participant show that 42.9% of the respondents said they consumed alcohol for pleasure, followed by those who did so by habits acquired (dependent) at 28.6%, and finally those who consume it without any motivation but rather as an anxiety suppressant during pregnancy (Table 5).

Another important point of our study was to access the quantitative perception on health educative knowledge on the harmful effects of alcohol and tobacco consumption by women during pregnancy to their health and that of their unborn babies. (128) 80.0% of women reported being informed about the harmful effects of alcohol and tobacco on the health of the mother and their unborn child, compared to (32) 20% of the sample population who reported being ignorant about any link drugs (alcohols and tobacco) may have on the health of their unborn babies and themselves as mothers.

Discussion

From the population size of 161 participants, a 35.0 % rate was observed as alcohol consumers, this results were found similar to that of Yao et al. who found 37.8% of alcohol in a sample of 834 pregnant women used alcohol during pregnancy [5,6]. The 41-45 age groups

Age Profile			
Age group	N	Ni	Ni%
15-20	16	0	-
21-25	56	12	21.4
26-30	52	24	46.2
31-35	16	8	50
36-40	12	4	33.3
41-45	8	8	100
Academic Profile			
Primary	N	Ni	Ni%
	16	12	21.4
Secondary	96	28	50
Post secondary	48	16	28.6
Professional Profile			
Housewife	N	Ni	Ni per profession (%)
	64	28	43.8
Student	22	4	18.2
Trader	20	4	20
Teacher	16	4	25
Secretary	8	8	100
Seamstress	8	4	50
Nurse	4	4	100
Custom declarant	4	0	-
Hair dresser	4	0	-

N: Frequency; Ni: Drugs consumers; Ni%: Frequency in percentages

Table 3: Drugs consumption and age group, occupation and level of education.

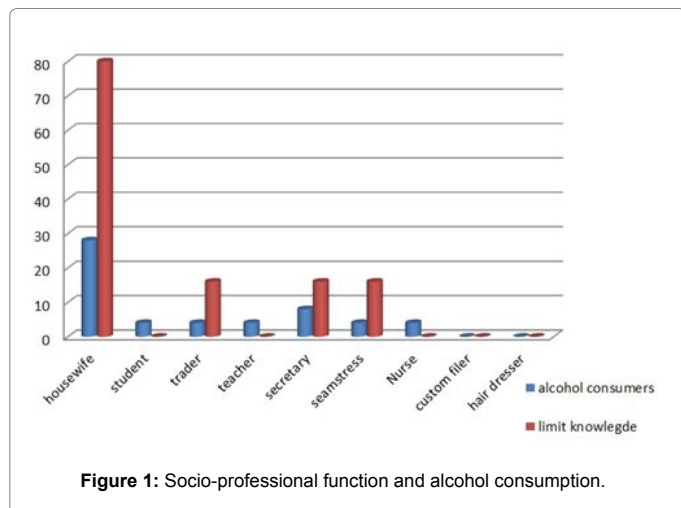


Figure 1: Socio-professional function and alcohol consumption.

was the one where alcohol consumption recorded the highest of 100% this has been explained by the stress and life challenges face by most women and also the lack of information about the risks of this lifestyle habit [1,2]. However, these results were supported by a similar data from the French health education committee in 2002, indeed it reports that 1.5% of women aged 20 to 24 have a daily consumption of at least 3 glasses (200 ml) against 6% of women aged 35 to 44 years [7]. The consumption of alcohol by certain professional was also a point of interest in our findings, it was revealed by the survey forms that among the consumers, secretaries and nurses top the list, then the Seamstresses and housewives follow with 50% and 43% respectively; this is as a result of their occupations which is often victims of psychological aggression

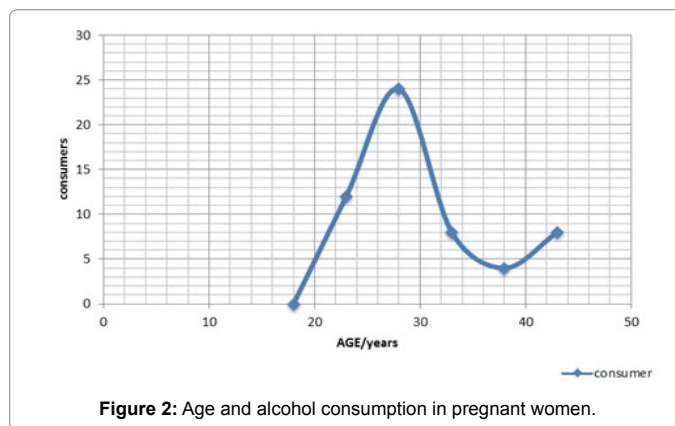


Figure 2: Age and alcohol consumption in pregnant women.

Motivation	Ni	Ni%
No major reason	8	14.3
For pleasure	24	42.9
Acquired habits	16	28.6
To suppress pregnancy anxiety	8	14.3

Ni: Drugs consumers; Ni%: Frequency in percentages

Table 4: Motivation profile of women who consume drugs during pregnancy.

Perception and knowledge on drugs effects during pregnancy	Response	Level of understanding	Ni	Ni%
			Yes	36
Informed	No	No mastery of drugs effects outcomes during pregnancy	92	57.50%
	No	-	32	20.00%

Ni: Drugs consumers; Ni%: Frequency in percentages

Table 5: Perception from consumers on the harmful effects of drug use during pregnancy.

and pressure [1], in addition the financial difficulties encountered by single motherhood's are more pulling force to consume drugs like alcohol. It should have ever be noted that the proportion of alcohol or drugs consumers might continue to increase in the nearest future among pregnant women especially with those among the working class, these results and option are close to those presented by the social marketing research institute in 2009 in Cameroon, which clearly shows that a series of factors favour alcohol and tobacco consumption during pregnancy such as: high cigarette consumption before pregnancy, smoking partner, low level of education, biological children already born, feeling ill, and lack of awareness of the harmful effects of alcohol and smoking on the unborn child [4]. Furthermore, women in the study with secondary education consumed more alcohol and those with primary education but high than those with tertiary education, with a representation of 28.57% and 21.42% respectively. These results are important for understanding the urgent demand to educate and communicate the importance of drinking patterns and drug usage. More so in this study it was revealed that many pregnant women have a vague knowledge on the risks related to drugs consumption and have no control over the real consequences of maintaining this habit of life during pregnancy. This overall limitation on the risk of drugs usage during pregnancy showed that women with tertiary education proficiency pay more attention to narcotics than women with secondary

and primary education proficiency [4], this could be explained from the alcohol consumption reported by these women, that revolve around pleasure for 43.0% of them of which 28.6% as been dependent to alcohol, these results join those of Yao et al. who found that 37.8% of women consumed alcohol during the period of their pregnancy and among them; 11.4% used it to their detriment. Understanding the stress and psychological factors through more researching on pregnant women and drugs consumption could go a long way help to reduce the prevalence of FAS and other birth defect in children and reduce the public health budget of any Country.

Conclusion

Our study, which aimed to determine the epidemiological profile of alcohol and tobacco consumption habits, showed that more women have a preference of consuming alcohol during pregnancy and not tobacco. The socio-professional situation of most women was the risk factor for the consumption of alcohol. Whereas pleasure and acquired pregnancy related drugs habits seem to be the key motivating factors in maintaining these habits of alcohol consumption during pregnancy. And the limited knowledge on the risks associated with drug consumption revealed an urgent need for policy makers to readdress

the policies on prenatal care, improve on educative health/obstetrics talks especially in health facilities involved in prenatal care through the ministry of public health.

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