Risky Sexual Behaviours among Youths in Selected Communities in Obio-Akpor and Ikwerre Local Government Areas of Rivers State, Nigeria

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Authors' contributions

The authors designed, analyzed and interpreted and prepared the manuscript.

Original Research Article

ABSTRACT

Background: Youths are referred to as people of age group 15 to 24 years, and with significant physiological, psychological and social changes that place their lives at high risk. Risky sexual behaviour is the act of indulging in unprotected sexual intercourse through oral, anal and virginal sex, having multiple sexual partners, high risk and same sex partners. The aim of the study was to determine the risky sexual behaviour among youths in selected communities in Obio-Akpor and Ikwerre Local Government Areas of Rivers State, Nigeria.

Materials and Methods: This was a descriptive cross-sectional study among youths, 15–24 years in selected communities in Obi-Akpor and Ikwerre Local Government Areas of Rivers State, Nigeria. The sample size of 317 participants was recruited for this study. A multistage sampling method was used to select participants from Alakahia, Choba and Aluu communities. Inclusion criteria were males and females aged between 15 and 24 years, and must have lived in these Local Governments Areas for at least one year. The data was collected using a self-administered questionnaire. Data was analysed using SPSS version 20. A descriptive analysis, chi-square test were performed, and regression analysis was performed to establish the strength of association between the predictors and the variables, statistical significance was set at $p \leq 0.05$. Ethical

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clearance for the study was sought and obtained from the Research and Ethics Committee of the University of Port Harcourt, Nigeria and informed consent was obtained from the participants.

Results: A total of 317 participants took part in this study, 59.3% females and 40.7% males. The result revealed 54.3% of participants aged 20 to 24 years. It indicated 77.6% engaged in RSB while 22.4% were not engaged in risky sexual behaviour. There was a significant associated between being pregnant and RSB with (p=0.008), and 83.3% of respondents who were pregnant had had abortion. Mean age of 68.8% of the respondents at coitarche was 16.59±48. It showed a significant association between consumption of tobacco (p=0.000), being drunk (p=0.047), going to night clubs, visiting pornographic sites, watching pornographic videos and RSB.

Conclusion: This study concluded that RSB were; consumption of tobacco, alcohol intake, use of drug or substance before sexual intercourse, going to night clubs, visiting and watching pornographic sites and videos. The Government and community heads in Nigeria should make strict policies on consumption of tobacco, drugs and substance use, visiting pornographic sites and watching pornographic videos as this will help to reduce the negative influence on youths' sexuality.

1. INTRODUCTION

There is an increasing number of Youths in the world, with 1.2 billion youths aged 15-24 years globally and 226 million in Africa in 2015 [1]. Nigeria has a growing population of young people about 19.61% of the total population, with sexually active youths constituting an important proportion of the population [2]. Youths are referred to as people of age group of 15 to 24 years, and with significant physiological, psychological and social changes that place their lives at high risk. Youths who initiate sexual activity earlier get exposed to risks such as sexually transmitted diseases, HIV&AIDS unwanted pregnancy and unsafe abortion, at a time when their developmental status places them at a disadvantage in the management of these risks [3].

Risky sexual behaviour (RSB) is the act of indulging in unprotected sexual intercourse through oral, anal and virginal sex, having multiple sexual partners, high risk partners and same sex partners [4]. Risky sexual behaviour is any sexual activity that increases the risk of contracting HIV or other STIs or becoming pregnant. Risky sexual behaviour is the major factor in the rising rate of sexually transmitted infections (STIs) including HIV among youths. For most youths, there are many factors that influence the decision of initiation of sex and having a protected or an unprotected sex, such factors as poor access to correct sexual and reproductive health information and services. Many factors act as drivers to youth's sexual initiation and reasons for adopting a particular sexual behaviour. Risky sexual behaviours includes early sexual debut, unprotected sexual activity, inconsistent use of condoms, high risk partners (injection drug users), survival sex-(sex in exchange for money, drugs, food or shelter) or sex with a partner who has other partners or more than one partner at a time [5].

Risky sexual behaviour among youths in Nigeria has exposed them to the problem of unintended pregnancy, STI and HIV [5]. Studies have revealed that most unintended pregnancies among youths are caused by inconsistent and incorrect condom use which has led to unsafe abortion. Nigeria reports a yearly abortion rate of 25per 1000 women. About 32% of the cases of unsafe abortions among youths were in southern part of the country [6]. Risky sexual behaviour among youths has been attributed to the unacceptable rate of STI and HIV documented. Predictors of risky sexual behaviours are factors responsible for the risky sexual behaviours [7]. Based on this background, this study sought to determine the risky sexual behaviours among youths in selected communities in Obio-Akpor and Ikwerre local government areas of Rivers State, Nigeria. It is geared towards recommending appropriate interventions to address the underlying factors influencing risky sexual behaviours among youths.

2. MATERIALS AND METHODS

2.1 Study Area

This study was carried out in Obio-Akpor and Ikwerre Local Government Areas of Rivers State, Nigeria. Obio-Akpor is a local government area in the metropolis of Port Harcourt in Rivers State. The local government area covers 260 km^2 and at the 2006 Census held a population of

464,789. Its postal code or ZIP code is 500102. It is located between latitudes 4°45'N and 4°60'N and longitudes 6°50'E and 8°00'E. It consists of 17 electoral wards administered by the Obio-Akpor Local Government Council [8]. The selected communities are Alakahia, Choba in Obio-Akpor Local Government Area, and Aluu in Ikwerre Local Government Area. Most of the inhabitants of these communities are young people (youths), both indigenes and non-indigenes. An assumed age range of the young people in the community spans from 13 to 35 years of age. Social activities have been on the increase in Alakahia, Choba and Aluu communities. Ikwere was included in this study due increasing rate of social events and incidence of sexual violence among youths in Ikwerre Local Government Area. Thus, both Local government areas are neighbouring Local governments with similar socio-demographic characteristics.

2.2 Study Design

It was a descriptive cross-sectional study. The study population was youths, 15 – 24 years of age [9], who reside in Obi-Akpor and Ikwerre Local Government Areas. The inclusion criteria were; males and females aged between 15 and 24 years, and must have lived in Obio-Akpor and Ikwerre Local Government Areas for at least one year, while unmarried youths aged 15-24 years that were pregnant during this research were excluded. This was intended to reduce bias responses due to perceived stigmatisation of unplanned pregnancy among young female in African communities.

2.3 Sample Size Determination

Sample size was obtained using the descriptive studies sample size determination formula with the following assumptions; proportion of 25.3% obtained from a study by Wikipedia [2]. Using 5% margin of error at 95% confidence interval; after considering 10% non-response rate, the sample size used was 317.

2.4 Sampling Method

Multi-stage sampling method was used in this study. The first stage was selection of 2 communities out of fifty seven communities in Obio/Akpor Local Government Area and 1 community out of eighteen communities in Ikwerre Local Government Area by simple random sampling method of balloting. The

selected communities were Alakahia and Choba with 4 villages each in Obio/Akpor Local Government Area and Aluu with 9 villages in Ikwerre. The second stage selection of 2 villages each in Alakahia and Choba, and 4 villages from Aluu community by simple random sampling method of balloting. The third stage involved the identification of households with youth in each of the 8 selected villages. In fourth stage a proportionate allocation of the sample of 317 to the 8 villages was done. The fifth stage involved selection of the allocated sub- sample of youths by simple random sampling methods of balloting from each of the 8 villages using the identified households with youths as sampling frame for each of the villages. In households with more than one youth, the oldest youth was selected. This was to ensure that not more than one youth was selected from a household. Finally, in the sixth stage selected youths in the indentified households were thereafter approached and those who gave consent were administered with the questionnaire. It was a self-administered questionnaire adapted from Hafsa [10].

2.5 Validation of Study Instrument

Prior to data collection, a pre-test of the questionnaire was conducted on a sample of 30 participants in Rumosi, a neighbouring community with similar demographics characteristics using three research assistants to validate the questionnaire as well as ensure that they understood the questionnaire and can administer it properly to the participants. This sample size of 30 was the recommended minimum to uncover common problems that might be associated with questionnaires for quantitative surveys [11].

2.6 Data Collection/Procedure

Youths who fall into the inclusion criteria and gave consent were administered with the questionnaire and the questionnaires were retrieved. All retrieved questionnaires were checked for adequacy of responses by the participants. Each questionnaire was numbered, so that it would be easily referred to in case any error occurs during entering the data. The data was entered into the Statistical Package for Social Science (SPSS) version 20 software as numeric codes. Statistical Package for Social Science (SPSS) version 20 was used for all the analysis in this study. The socio-demographic and other questions from the objectives were changed to numeric codes to enable easy and

accurate statistical analysis. Some variables were categorised to allow for bivariate analysis, an example is age. The responses of the participants formed the data for this study.

Descriptive analysis was performed to determine the proportion of respondents engaged in risky behaviours. Bivariate analysis was done between lifestyle and predictors of risky sexual behaviours. The bivariate analysis performed was the chi-square test of independence. Chi-square test analysis was carried out to test for association between two categorical variables and to determine the level of statistical significance between the variables associated. Regression analysis was performed to establish the strength of association between the predictors and the variables, and statistical significance was set at p ≤ 0.05.

2.7 Ethical Considerations

Ethical clearance for the study was sought and obtained from the Research and Ethics Committee of the University of Port Harcourt. Informed consent was obtained from the participants, and also consent was gotten from the parents and guardians of the participants who were below 18 years of age.

3. RESULTS

Table 1 shows that more of the respondents are in the age of 20-24 years with 54.3% while those that fall into the age of 15-20 years is 47.5%. It revealed that 40.7% are males and 59.3% are females. The marital status of the respondents indicated that most of the respondents were single with 97.5%, 1.9% married, 0.9% separated and 0.9% are widow/widower.

Table 2 shows that 16.4% of the respondents consumed tobacco while 83.6% do not consume tobacco and 88.5% out of the 52 respondents consume cigarette and 11.5% consume snuff. They were 46.4% who consume alcohol and 53.8% who do not consume alcohol, showing large number of the respondents consume alcohol than tobacco.

The table also showed that most those who consume alcohol 63.3% consume Beer, 31 21.1% consume Gin, 3.8% consume whisky, 1.4% consume vodka, 2.8% consume all of the alcohol mentioned and 49.0% consume one to two bottles of alcohol, 37.4% consume three to four bottles and 13.6% consume five to six

bottles of alcohol a day. Among those respondents who consume alcohol, 81.0% said they had been drunk. It also showed that 51.4% of the total respondents had been in night club and watched pornographic videos, while 52.3% had visited pornographic sites.

Table 3 shows that 68.8% of the total respondents have had sexual intercourse before 32.2% have not had sexual intercourse. The table indicated that 30.6% <15 years at coitarche, 28.4% were 15-17 years at coitarche, 38.2% were 18-21years at coitarche, while 1.8% were 22-25years at coitarche and the mean age at coitarche was 16.59±48 years. Among the 218 respondents who had sexual intercourse, 85.3% of them had vaginal intercourse, 12.4% and 2.8% had anal intercourse as their coitarche, but only 28.0% used condom while 72.0% did not use condom at coitarche.

Table 1. Distribution of age, gender, marital status of respondents

Variables	Frequency (n=317)	Percent (%)
Age (years)		
15-19	145	47.3
20-24	172	54.3
Mean Age	21.05±2.50	
Gender		
Male	128	40.4
Female	189	59.6
Marital status		
Single	309	97.5
Married	6	1.9
Separated	1	0.9
Widow/widower	1	0.9

Table 4 shows that 40.1% of the respondents who did not use condom reported that they were unaware of condom use, 28.7% did not use condom because it was not available, while 31.2% was due to derive pleasure of the sexual intercourse. The result showed that 13.3% of the participants smoked and 21.6% took alcohol before coitarche while 86.7% and 78.4% did not smoke and take alcohol respectively. Among respondents who consumed alcohol before their sexual intercourse, 51.1% were drunk or tipsy before coitarche, while 48.9% were not drunk or tipsy before coitarche. It also revealed that 11.5% took drug or substance before coitarche and 68.0% of them took Tramadol while 32.0% took codeine but 88.5% did not take drug or substance before coitarche.

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Table 2. Social/Lifestyle history of respondents

Variables	Frequency (n=317)	Percent (%)
Consumption of tobacco		
Yes	52	16.4
No	265	83.6
Type of tobacco consumed (n=52)		
Cigarette	46	88.5
Snuff	6	11.5
Quantity of tobacco consumed (sticks) daily (n=52)		
1-2	25	48.1
3-4	20	38.4
≥5	7	13.5
Consumption of alcohol		
Yes	147	46.4
No	170	53.6
Type of alcohol consumed(n=147)		
Beer	93	63.3
Vodka	2	1.4
Gin	31	21.1
Whisky	12	3.8
All	9	2.8
Quantity of alcohol consumed daily(n=147)		
1-2 units	72	49.0
3-4 units	55	37.4
5-6 units	20	13.6
Ever being drunk(n=147)		
Yes	119	81.0
Go to night clubs or have been in night club(n=317)		
Yes	163	51.4
No	154	48.6
Watch pornographic video (317)		
Yes	163	51.4
No	154	48.6
Visit pornographic sites (317)		
Yes	164	52.3
No	153	47.7

Table 3. Risky sexual behaviours

Variables	Frequency (n=218)	Percent (%)
Ever had sex		
Yes	218	68.8
No	99	31.2
Age at your first sexual intercourse (years) (n=217)		
<15	67	30.6
15-17	62	28.4
18-21	84	38.2
22-25	4	1.8
Mean Age	16.59±48	
Type of sexual intercourse(n=217)		
Oral	27	12.4
Vaginal	185	85.3
Anal	6	2.8
Used condom at first sexual intercourse		
Yes	61	28.0
No	157	72.0

Table 4. Risky sexual behaviours

Variables	Frequency (n=218)	Percent (%)
Reason for not using condom at coitarche (157)		
Unaware/ignorance	63	40.1
Not available	45	28.7
For pleasure	49	31.2
Smoked before sexual coitarche		
Yes	29	13.3
No	189	86.7
Consumed alcohol before coitarche		
Yes	47	21.6
No	171	78.4
Drunk or tipsy before coitarche (n=47)		
Yes	24	51.1
No	23	48.9
Took drug or substance before coitarche		
Yes	25	11.5
No	193	88.5
Type of drug or substance (n=25)		
Tramadol	17	68.0
Codeine	8	32.0

Table 5. Assessment of risky sexual behaviours

Variables	Frequency (n=216)	Percent (%)
Risky sexual behaviour		
Risky	168	77.6
None Risky	48	22.4

Table 5 shows that a total of sixteen questions were used to assess the practice of risky sexual behaviours, some of these questions includes; (Did you use condom during your first sexual intercourse?, Did you smoke before you had your first sexual intercourse?, Did you use condom during your last sexual intercourse?, Do you regularly use condom?, Do you usually smoke before sexual activity?, Are you usually drunk before sexual activity?, Have you ever taken any substance or drug before sexual activity?). Whether or not a respondent practiced risky sexual behaviour was determined by a score.

The variables assessed were transformed to scores, which gave a minimum score of 16 and a maximum score of 32. A score of 16-24 was classified as risky sexual behavior, while a score of 25-32 none risky sexual behaviours.

It showed that 77.6% of the respondents engaged in risky sexual behavior while 22.4% did not engage in risky sexual behavior.

Table 6 shows that age (p=0.235), gender (p=0.227), marital status (p=0.184), religion (p=0.847) and level of education (p=0.211) of the respondents were not significantly associated with the risky sexual behaviours but age with odd ratio 1.535 (0.755-3.122), religion with odd ratio1.174 (0.229-6.012) and level of education with odd ratio1.776 (0.715-4.412) have a stronger association with risky sexual behavior than marital status.

Table 7 shows that, there is a significant association between consumption of tobacco (p=0.000), ever being drunk (p=0.047) and risky sexual behaviours, while consumption of alcohol was not significantly associated with risky sexual behaviour. Thus, respondents who consumed of tobacco 9.200 (2.148-39.407) and those who have been drunk with odd ratio 2.114 (1.003-4.457) are more likely to engage in risky sexual behaviours.

Table 8 shows a significant association between going to night clubs (p=0.012), visiting pornographic sites (P=0.001), watching pornographic videos (p=0.003) and risky sexual behaviours. Also, the result showed no significant association between having sex while watching pornographic videos (p=0.079) and risky sexual behaviours. Thus, respondents who went to night clubs with odd ratio 3.063 (1.579-5.942) are 3 times more likely to engage in risky sexual behaviours, while those who watch pornographic videos with 2.674 (1.377-5.195) are 2 times more likely to in engaged in risky sexual behaviours.

Table 6. Association between social demographic and risky sexual behaviours

Variables	Risky sexual behaviour x^2			df	(p-value)	Odd ratio (OR)
	Yes (n(%)	No(n(%)	Total			95% (CI)
Age (years)						
15-20	61(82.4%)	13(17.6%)	74(34.3%)	1	1.411	1.535
20-25	107(75.4%)	35(24.6%)	142(65.7%)		(0.235)	(0.755-3.122)
Total	168(77.8%)	48(22.2%)	216(100%)			
Gender						
Male	71(74.0%)	25(26.0%)	96(44.4%)	1	1.458	0.673
Female	97(80.8%)	23(19.2%)	120(55.6%)		(0.227)	(0.354-1.282)
Total	168(77.8%)	48(22.2%)	216(100%)			
Marital status						
Single	162(77.1%)	48(22.9%)	210(97.2%)	1	1.761	0.771
Married	6(3.6%)	0(0.00%)	6(2.6%)		(0.184)	(0.717-0.830)
Total	168(77.8%)	48(22.2%)	216(100%)			
Religion						
Christianity	162(77.9%)	46(22.1%)	208(96.3%)	1	0.037	1.174
Islam	`6(75.0%)	2(25.0%)	8(3.7%)		(0.847)	(0.229-6.012)
Total	168(77.8%)	48(22.2%)	216(100%)			
Highest level of education completed						
Below tertiary	151(79.1%)	40(20.9%)	191(88.4%)	1	1.564	1.776
Tertiary	17(68.0%)	8(32.0%)	25(11.6%)		(0.211)	(0.715-4.412)
Total	168(77.8%)	48(22.2%)	216(100%)			

Table 7. Association between social history and risky sexual behavior

Variables	Risky sexual behaviour x^2			Df	(p value)	Odd ratio (OR)
	Yes (n(%)	No(n(%)	Total			95% (CI)
Consumption of tobacco						
Yes	48(96.0%)	2(4.0%)	50(23.1%)	1	12.499	9.200
No	120(72.3)	46(27.7%)	166(76.9)		(0.000)*	(2.148-39.407)
Total	168(77.8%)	48(22.2%)	216(100%)			
Consumption of alcohol						
Yes	104(78.8%)	28(21.2%)	132(61.1%)	1	200	1.161
No	64(76.2%)	20(23.8%)	84(38.9%)		(0.654)	(0.604-2.230)
Total	168(77.8%)	48(22.2%)	216(100%)			
Ever being drunk						
Yes	94(81.7%)	21(18.3%)	115(68.5%)	1	3.956	2.114
No	36(67.9%)	17(32.1%)	53(31.5%)		(0.047)*	(1.003-4.457)
Total	130(77.4%)	38(22.6%)	168(100%)			

Table 8. Association between life styles and risky sexual behavior

Variables	Risky sexual behaviour x^2			Df	(p-value)	Odd ratio (OR)
	Yes (n(%)	No (n(%)	Total			95% (CI)
Going to night clubs						
Yes	123(82.6%)	26(17.4%)	149(69.0%)	1	6.330	2.313
No	45(67.2%)	22(32.8%)	67(31.0%)		(0.012)*	(1.192-4.486)
Total	168(77.8%)	48(22.2%)	216(100%)			
Visit pornographic sites						
Yes	124(84.4%)	23(15.3%)	147(68.1%)	1	11.513	3.063
No	44(63.8%)	25(36.2%)	69(31.9%)		(0.001)*	(1.579-5.942)
Total	168(77.8%)	48(22.2%)	216(100%)			
Watch pornographic videos						
Yes	125(83.3%)	25(16.7%)	150(69.4%)	1	8.766	2.674
No	44(65.2%)	23(34.8%)	66(30.6%)		(0.003)*	(1.377-5.195
Total	168(77.8%)	48(22.2%)	216(100%)			

4. DISCUSSION

A study by Robin et al. [12], showed that RSB significantly associated with use of alcohol/drug before sexual intercourse which is a risky sexual behaviour. This study showed non-significant association between consumption/use of alcohol and risky sexual behaviour. According to a study by Jackline [13] showed a significant association between substance use and first sexual intercourse (chi square=42.209; p=0.000), and the most substance used by both males and females were alcohol. Among these respondents, 17.5% was moderately intoxicated, and 77.8% was very intoxicated. The researcher indicated that women who consume drugs, the most frequently consumed drugs were marijuana (74.9%), cocaine (24.6%), and psychedelics (e.g., lysergic acid diethylamide [LSD], mushrooms; 16.8% and the resulted indicated that these were dependently associated with risky sexual behaviour. Similarly, there is a significant association between consumption of tobacco (P=0.000) and risky sexual behaviour, but there is no significant association between use of drug or substance before sexual intercourse and risky sexual behaviour as (60.2%) of the respondents took tramadol, (29.4%) took codeine, and (10.3%) took other substances.

According to a research titled "Socio-demographic factors as predictors of sexual behaviour of secondary school students in Lagos State, Nigeria" carried out by Olusoji [14]. The results showed a significant value for gender, age and sociological factors respectively (t = 6.753, P < 0.05), F (3, 2350) (79.930, P < 0.05) and F (4, 2394) (260.020 P < 0.05). Thus, there is no significant association value of age, gender in this study, but there is a significant association with sociological factors such as consumption of tobacco and being drunk at (P=0.000) and (0.047) respectively. Also, a study carried out by Hirbo and Addisu [15] found that risky sexual behaviours among youths were substance use before sexual intercourse, watching pornographic movie, age at sex doubt. Similarly, this study identified a significant association between going to night clubs, visiting pornographic sites with (p=0.001), and watching pornographic videos with (p=0.003), OR 2.313 (1.192-4.486), 3.063(1.579-5.942) and 2.674 (1.377-5.195) respectively. Another study by Fekadu and Alemayehu [16] showed that watching pornographic materials at age < 18 years (AOR [95% CI] = 24.13 [3.28, 177.80]) and without parental care (AOR [95% CI] =2.30 [1.35, 3.91])

were connected with early sexual initiation which are risky sexual behaviours among the respondents. Similarly, this study revealed that risky sexual behaviours among the youths were consumption of tobacco, use of drugs or substances, consumption of alcohol before sexual intercourse, acceptance of money, gift or favour in exchange of sexual intercourse with (p=0.016), and other reason for sexual activity (p=0.030) were all significantly associated with risky sexual behaviour. Thus, this indicated non-statistical significant association between engaging in sex while watching pornographic videos and risky sexual behaviours. Finally, this study showed that respondents who visited pornographic sites, and watched pornographic videos with OR 3.063(1.579-5.942) and 2.674 (1.377-5.195) respectively, were three and two times more likely to engaged in risky sexual behaviour than others.

5. LIMITATIONS

Due to the delay in getting ethical approval for the study, the planned data collection period of 8 weeks was cut short to just 6 weeks. Consequently, only 317 participants were recruited instead more participants. Some of the questions which seem to be confidential to the respondent were not answered, resulting in varying sum of responses in some variables.

6. CONCLUSIONS

Sequel to the findings of this study, the researchers conclude that risky sexual behaviours identified in this study among youths in these communities were consumption of tobacco, alcohol intake, use of drug or substance before sexual intercourse, going to night clubs, visiting pornographic sites, watching pornographic videos and having sexual intercourse when watching pornographic videos. This is of great concern, and if these lifestyles of youths in the studied communities are not moderated or checked, problems such as unintended pregnancy, induced abortion, STDs and HIV and AIDS associated with risky sexual behaviours may double in the nearest future.

The researcher further concludes that socio-demographics characteristics such as age and gender are possible contributors of risky sexual behaviours, while individual's life styles are the major risky sexual behaviours among youths dwelling in Alakahia, Choba and Aluu communities during this study.

CONSENT AND ETHICAL CONSIDERATIONS

Ethical clearance for the study was sought and obtained from the Research and Ethics Committee of the University of Port Harcourt. Informed written consent was obtained from the participants, and also consent was gotten from the parents and guardians of the participants who were below 18 years of age.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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