




Knowlegde, Attitude and Practice of Vaginal Douching in Non-Medical Undergraduates in a South Eastern Nigerian University

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Abstract

Background: Vaginal douching is the process of intravaginal cleansing with a liquid solution. It is a harmful practice performed by millions of women all over the world with little knowledge about its harmful effect on their reproductive and overall health. Vaginal douching changes the microflora of the vagina thereby predisposing the individual to vaginal infections and its complications. **Aim:** This study was aimed to determine the knowledge attitude and practice of vaginal douching in non-medical undergraduates of Ebonyi State University Abakaliki. **Methodology:** This was a cross-sectional study using self-administered questionnaire. The sociodemographic factors of the respondents alongside their knowledge, attitude and practice of vaginal douching were assessed. The results were analyzed using the Epi info version 7. The level of significance was set at $p < 0.05$. **Results:** The prevalence of vaginal douching obtained was 52%. Forty-eight percent of them were introduced to vaginal douching by their mother. 66.4% of them were sexually active. Forty-seven respondents (54.2%) of them have been involved in vaginal douching. One hundred and thirty-three respondents (49.1%) have had vaginal symptoms in the past. The presence of vaginal symptoms occurred in 71% of the respondents that are douching. While these vaginal symptoms occurred in 29% of the respondents that are not douching. **Conclusion:** The study showed high prevalence practice of vaginal douching with its attendance sequale. Therefore, Health enlighten programs should be advocated and laws prohibiting the sale of douching products should be instituted.

Keywords: Vaginal Douching, knowledge, attitude, practice.

Introduction

Vaginal douching is the process of intravaginal cleansing with a liquid solution ^[1]. It's practice dates back to 3000 years ago, but it was not until 1902 that the practice gained widespread acceptance and popularity when Joseph Greer opined that every part of the body should be as clean as the face, in his book on female hygiene ^[1]. Today, the practice has gained overwhelming worldwide acceptance,

with over 25% of women estimated to be douching regularly and nearly 73% douching at some point in their lives ^[2]. Douching after intercourse is estimated to reduce the chances of conception by only 15-25%. In some cases douching may force the ejaculate further into the vagina, thereby increasing the chance of pregnancy ^[2-4]. 32% of women in the United States reported vaginal douching within the previous year ^[6]. The estimated lifetime prevalence of vaginal

douching among African American women varies markedly across studies ranging from 56%-69% [5].

Good vaginal health is maintained by making sure you are in good general health. With onset of puberty, glycogen is produced in the vagina, this is acted on by Lactobacillus spp to produce lactic acids this makes the vaginal environment acidic maintaining the normal vaginal PH of 4. 5. The effects of the normal flora is critical in achieving good vaginal health. The lactobacillus species are thought to maintain vaginal health through competitive exclusion of other harmful microbes. These substances provide the chemical barrier to invasion of microorganism. Mucus produced by the cervical glands washes away blood, semen, and vaginal discharge [7-9].

Douching disrupts this natural defense mechanism thereby predisposing the women to infections. There are several ways by which douching may contribute to disease. Douching may remove the normal vaginal flora, permitting the overgrowth of pathogens. It may also provide a pressurized fluid vehicle for pathogen transport, helping lower genital infections ascend through the cervix into the uterus, fallopian tubes, or abdominal cavity. Douching around the time of ovulation, when the cervical os gapes open and the mucus thins in response to the changing serum estrogen level, has been associated with a higher risk of ascending infection [5,8]. Moreover, douching in the immediate postcoital period may be particularly risky because the douching solution may propel and facilitate the entry of pathogens from the upper vagina into the endocervical canal [15,16]. It is best to allow the vagina clean itself naturally by it's

transudate fluid and mucus secreted from the cervix [7-9]. It is against this background that this study was done.

Methodology

This was a cross-sectional study conducted by use of pretested self-administered questionnaire. The questionnaires were pretested for clarity, assessment of length of time of administration, comprehension and other attributes. The pre testing was done to the undergraduate non-medical students of Federal University Ndufu Ikwo Ebonyi State. The questionnaire assessed the socio-demographic data of the participant and their Knowledge, Attitude and practice of vaginal douching. Informed consent was obtained from the respondents before the questionnaires were administered. Female non-medical undergraduates of Ebonyi State University Abakaliki who consented for this study were selected. Simple random sample technique was adopted in the selection process. The sample size was obtained using Fishers 1998 Formula for sample size determination giving a total sample size of 278.

Analysis of Data

The data obtained was entered into the computer. EPI info version 7 was used for the analysis of the data. The test of significance was determined and the P-value of less than 0. 05 was taken to be statistically significant.

Results

Table I: Socio –Demographic characteristics of the respondents.

	Frequency	Percentage
Age (Yrs)		
15 – 19	40	14. 81
20 – 24	103	38. 15
25 – 29	80	29. 63
30-34	17	6. 30
35-39	11	4. 07
40 above	19	7. 04
Total	270	100
Total	270	100
Marital status		
Single	151	55. 93
Married	94	34. 81
Separated	22	8. 15
Divorce	3	1. 11
Total	270	100
Religion/ denomination		
Catholic	80	29. 63
Anglican	54	20. 00
Pentecostal	92	34. 07
Islam	34	12. 59
Traditionalist	5	1. 85
Others	5	1. 85
Total	270	100
Years of study		
100	42	15. 56
200	76	28. 15
300	83	30. 74
400	48	17. 78
500	13	4. 81
600	8	2. 96
Total	270	100
Out-side campus	147	56. 54

Hostel	113	43.46
Total	270	100

Table I presents the socio-demographic variables of the respondents, ages 20-24 recorded the highest with 103 (38.15%), while ages 35-39 (4.07%), was the least, the average age is 26years

Similarly, the marital status shows that majority of the students' sampled were single 151(56.93%), and only 3 students (1.11%) responded to have divorced. This shows a mean of 67.50 ± SD 68.08.

The religion's analysis shows that the greater percentage were Christians 226 (84.44%) predominantly orthodox, Islam 34 (8.15%) while traditionalists and others recorded 5 (1.11%) only respectively. This shows a mean of 92.00 ± SD 36.98.

The distribution of the years of study shows that the greater percentage of the undergraduate students are in 300 level, 83 (30.74%). The mean of 45.00 ± SD 31.04 was obtained. On the area of residency, 147 (56.54%) stays outside the school compound while 113 (43.46%) stays in the hostel. Mean score 130.00 ± SD 24.04 was recorded.

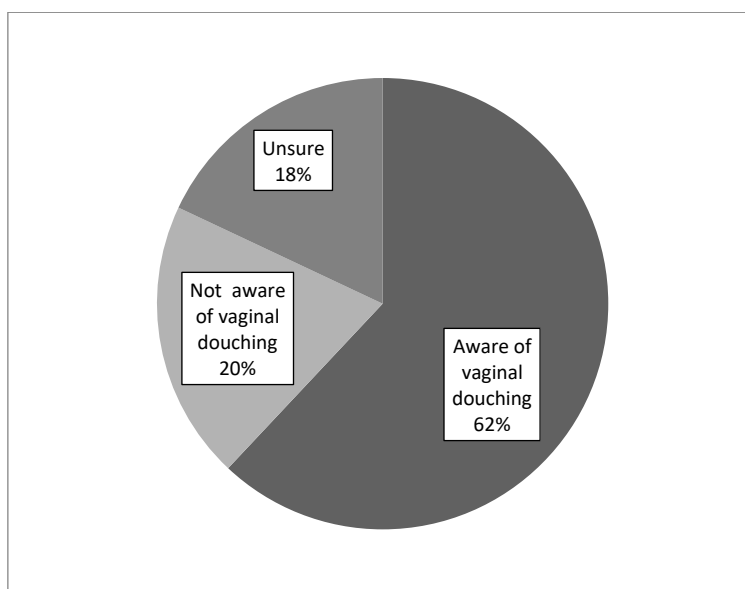


Figure 1: Knowledge of vaginal douching among non-medical undergraduate students in EBSU

Figure 1 shows the knowledge of vaginal douching amongst respondents -62% of the respondents are aware of vaginal douching, 20% of the respondents have not heard about it and 18% of the are not sure if they know about it.

The students douche for various reasons, as shown in table IV. Predominantly, daily bathing process constitutes the highest percentage, 115(42.2%), and after sexual exposure were 55 (20.3%) as shown in the table.

Table II: Source Knowledge of Vaginal Douching

	Frequency	Percentage
Mother	131	48.3
Aunty	93	23.2
Pastor/ Imam	16	5.9
Others	30	11.1
Total	270	100

Table II - Major source of knowledge is the mothers 131 (48.3%), while only 16(5.9%) were to introduced to the practice by pastor/ Imam.

Table III: Knowledge Of adverse health effect / conditions of vaginal douching.

Variables	Frequency	Percentage
Yes on knowing adverse health conditions of vaginal douching	82	30.4
Not knowing the adverse health conditions of vaginal douching	188	69.6

Table IV: Reasons for Vaginal Douching

Reasons for vaginal douching	Frequency	Percentage
Daily bathing process	115	42.2
After sexual exposure	55	20.3
After menses	45	16.6
As a contraception	20	7.4
To reduce smelling and itching	33	12.2
Done prior to prayers	24	8.9

Table III assesses the knowledge of the students on the adverse health effect and conditions of vaginal douching. Surprisingly, only 65 (24.0%) are aware of adverse health effects of vagina douching, with 155 (55.4%) not being aware that vaginal douching have any adverse health effects.

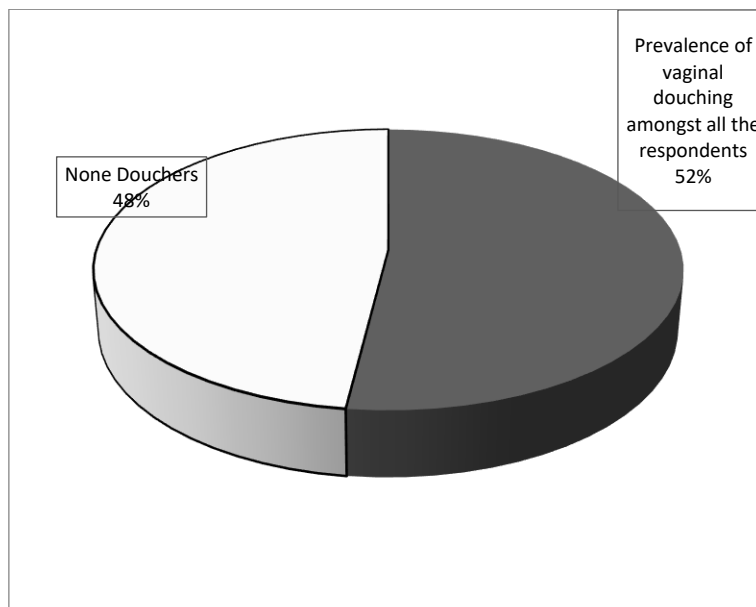


Figure 2: Prevalence of douching/non douching among the respondents

Figure 2 shows a 52% prevalence of vaginal douching in the general population.

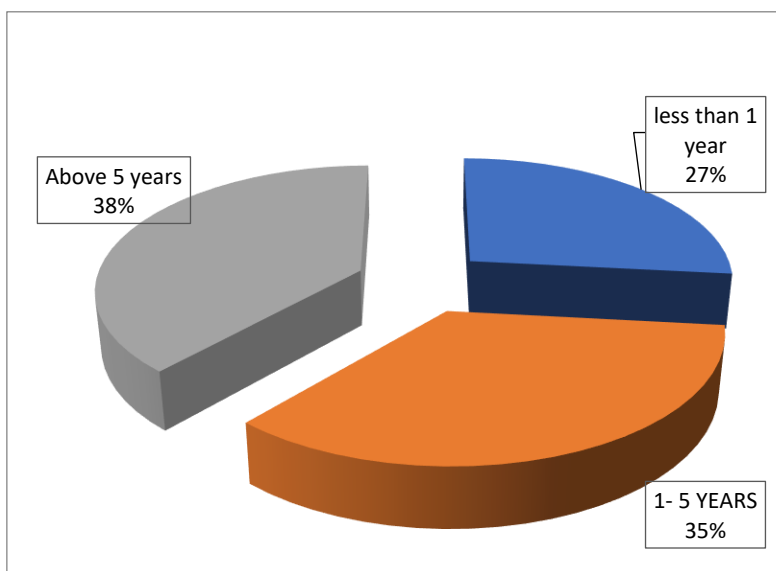


Figure 3: Duration of Vaginal Douching among douchers

Figure 3, a pie chart clearly shows the duration that the students have been on the practice, 38 percent have been on the practice between 1- 5 years, while the least was 27% which is less than 1 year.

Table V: Presence of Symptoms of vaginal infections amongst the respondent

Vaginal symptoms	Students that do not douche	%	Students that douche	%	Total (%)	Difference	X ²	P value	Significant /or not
Itching	29	37.2	75	39.06	104(76.3)	-45	12.45	0.004	Significant
Vaginal discharge	36	46.2	97	50.52	133(96.7)	-65	17.84	0.000	Significant
Pains during intercourse	13	16.6	20	10.42	33(27.02)	-7	0.000	1.000	Not significant
Total	78	100	196	100					

Table V presents the symptoms of vaginal douching, over 50 percent of those who douche has experienced vaginal discharge. This table clearly shows the percentage in vaginal symptoms among those who douche and those who are involved in the practice. Vaginal itching and discharge are the major symptoms.

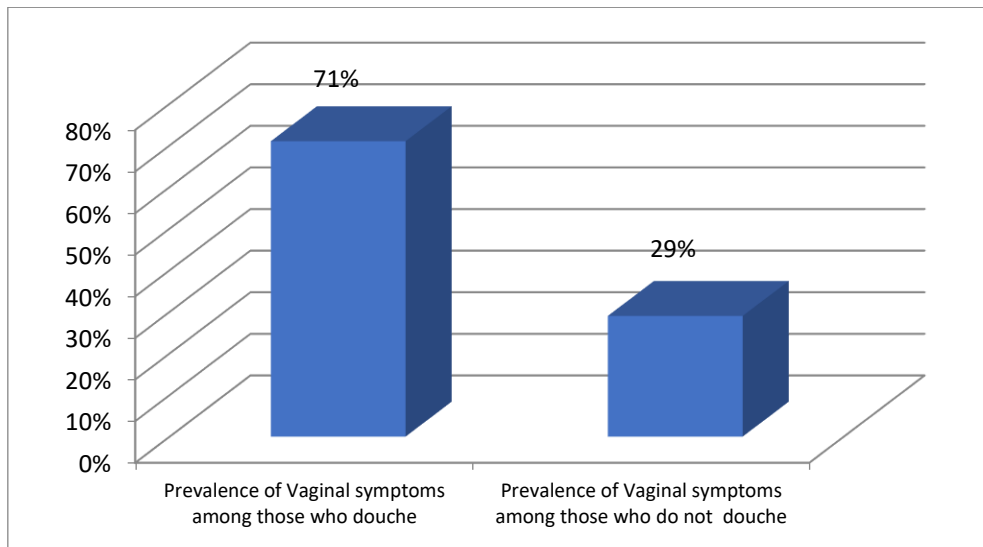


Figure 4: Prevalence of vaginal symptoms between those who douche and those who does not douche.

Figure IV shows a 71 % prevalence of vaginal symptoms for those who practice vaginal douching.

Table VI: Willingness to stop vaginal douching

Variables	Frequency	Percentage
Willingness to stop		
Would never stop	78	28.8
Could stop any time there is need	40	14.8
If advised by a health professional	152	56.1
	270	100

Table VI shows the willingness and perception to stop vaginal douching. The mean is 90.00 ± SD 56.96 on willingness and 54.00 ± SD 27.72 on perception.

Greater percentage 56.1% (152) shows willingness to stop if advised by health professionals

Table VII: Presumed Effect of vaginal douching on the respondents that douche due to vaginal symptoms

Variables	Frequency	Percentage
Douching reduce the intensity of the symptoms	127	47.04
Douching increased the intensity of the symptoms	85	31.48
Douching had no effect on them	58	21.48

Table VII shows the presumed effect of vaginal douching for vaginal symptoms on the respondents.

Discussion

Vaginal douching is the process of intravaginal cleansing with a liquid solution [1]. The prevalence of vaginal douching in this study is 52% which shows that vaginal douching is a common practice among young female adults. This is high and reflects a high rate of ignorance on vaginal douching. This is lower than the prevalence that was obtained in a similar study in University of Uyo where a prevalence of 79% was obtained [1]. The higher prevalence of vaginal douching in Uyo may be accounted for by the puberty initiation rites and marriage preparatory rites that are done by the Efik and The Ibibio tribes whose female children are amongst those admitted into University of Uyo. However the prevalence of vaginal douching in this study is significantly high when compared to the prevalence of 21% obtained amongst the white women in USA and prevalence of 50% obtained amongst the Afro- Americans [2]. Also, almost consistent with a prevalent rate of 58% obtained in Jamaica. This shows that the average prevalence rate of vaginal douching is >30% worldwide, and that vaginal douching practice is still widely practiced. The reason for the high prevalence in this study is closely linked to cultural belief and transfer of practices from one generation to another and lack of adequate awareness and health promotion by health workers and non-utilization or non-existence adolescent and

youth center in the University. Also, the environment where these studies were carried out was different.

This study shows that 48.3% of the respondents were introduced to the act of vaginal douching by their mother and 23% of the respondents were introduced to it by their aunty. This is similar to a finding obtained in Hausa-Fulani group in Nigeria and even in the Latino females in Italy [4]. This shows that the older women still have a big role to play in promotion of vaginal douching [7]. From this study, despite the fact that an awareness of 62% was obtained from the respondents, their knowledge of the adverse effects of vaginal douching is low (69.6%).

Evaluation of the practice of the respondents to vaginal douching showed that 42.2% of the respondents are involved in daily douching during bathing as a routine cleaning process, 20.3% of the respondents following sexual intercourse and 11.6% of the respondents douche after menses to cleanse their vagina from blood. This is similar to what was obtained in Uyo and in the Hausa-Fulani in Northern Nigeria where majority of them are involved in vaginal douching for general hygienic purposes [1,2], and consistent with what was found in a clinic based study in Jamaica [26]. However, this differs with reports obtained in North East Nigeria in a study

amongst commercial sex workers where majority of them used lime juice mainly for purpose of presumed contraception [17].

There is presence of vaginal symptoms in 71% of the respondents that are douching and 29% in those who were not douching. There was a significant difference in occurrence of itching and vaginal discharge, being more prevalent amongst the douchers when compared with non douchers. However there is no significant difference in perception of pain during intercourse in both arms. It was found that there is a positive correlation between vaginal douching and presence of vaginal symptoms. Findings were similar to that obtained in North–West Nigeria where a 42. 6% prevalence of vulvovaginal candidiasis [27] was recorded. However, whereas our study assessed for vaginal symptom, they specifically assessed for vulvovaginal candidiasis. Also our study was a field study why there's was a hospital based study [27].

In our study, 52. 4% of those who had abnormal vaginal symptoms admitted that they were screened and treated before the symptoms stopped. However a greater proportion of them felt clean following vaginal douching. Although they do not know the consequence of vaginal douching. The findings of this survey underscore the importance of health education to communicate a clear message to improve women's knowledge regarding the adverse health effects of Vaginal Douching. This will influence their attitude making them discontinue this unwholesome practice. We then concluded that this study showed high prevalence practice of vaginal douching with its attendance sequale. Therefore, Health enlighten programs should be advocated and laws prohibiting the sale of douching products should be instituted.

Informed Consent

A signed consent was obtained by the researcher and research assistants before recruitment of the participants into the study after appropriate counseling.

Ethical Considerations

Ethical clearance was obtained from the Hospital Research and Ethical Committee (HREC) of the Alex Ekwueme Federal University Teaching Hospital. This study was conducted in compliance with the ethical standards of our institution on human subjects as well as with the Helsinki Declaration.

Funding

The entire financial burdens were burn by the researchers.

Conflict of Interest

There was no conflict of interest.

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We acknowledged the University community who gave us the conducive environment

Data Availability

Data would be available upon reasonable request.

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