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CONTENT

PSYCHOSOCIAL BURDEN OF CAREGIVERS OF CHILDREN AND ADOLESCENTS WITH MENTAL ILLNESS RECEIVING TREATMENT IN HOSPITALS IN KANO STATE

Murtala, Hassan Hassan RN, RM, BNSc, MSc (N)¹ Garba, Saleh Ngaski RN, Ph.D, FWACN² Amadu, Lawal MBBS, PGDM, FWACPH³ Balarabe, Fatima RN, RM, BNSc, MSc (N)² Isa, Abubakar RN, RPHN, BSc, M.Ed² __1

STIGMATIZATION, DISCRIMINATION AND ACCEPTANCE OF HIV AND AIDS MANAGEMENT STRATEGIES BY SERO-POSITIVE PATIENTS IN AKWA IBOM STATE

Grace Enomfon Akpan (PhD)¹ Rosemary Ebong (Ph.D)² __14

SOLID WASTE MANAGEMENT PRACTICES AMONG HOUSEHOLDS IN BAUCHI STATE

Abubakar Ahmed¹ & A.I. Hassan Ph.D² __28

PHYSICAL ACTIVITY LEVELS OF PREGNANT WOMEN IN NSUKKA LOCAL GOVERNMENT AREA

Perpetua Chinyere, Ofili (Ph.D) __39

APPRAISAL OF THE ROLE OF SCHOOL HEALTH SERVICES IN PROMOTING EFFECTIVE PARTICIPATION OF STUDENTS IN ACADEMIC ACTIVITIES

Akerele, Stephen Segun¹ & Ikhioya, Grace Olohiomeru (Ph.D)² __52

OPTIMIZING WELLNESS AMONG UNDERGRADUATES IN NIGERIAN UNIVERSITIES THROUGH ADEQUATE SCHOOL HEALTH SERVICES

Agbonlahor N. Loveth¹ Osagiede F. Isoken² __61

KNOWLEDGE OF STRATEGIES FOR PREVENTING MALARIA AMONG PREGNANT WOMEN ATTENDING ANTENATAL CLINICS AT A TERTIARY HOSPITAL IN IMO STATE, NIGERIA

Veronica O. Charles-Unadike (PhD)¹ Kalu Mgbo Okeke² A. Ibhafidon (PhD)³ A.U. Ejifugha (PhD)⁴ N.M. Onuzulike, (PhD)⁵ __73

KNOWLEDGE OF THE RISKS OF VAGINAL DOUCHING AMONG
COMMERCIAL SEX WORKERS IN ILORIN SOUTH LOCAL
GOVERNMENT AREA OF KWARA STATE
Kafayah Adeola, Jidda¹ __296

PERCEPTION OF SEXUAL BEHAVIOURS AND ITS HEALTH
IMPLICATIONS AMONG ADOLESCENTS IN IKWERRE LOCAL
GOVERNMENT AREA OF RIVERS STATE.
Comfort E, Elechi PhD¹ Godday Obundah, Owhoji² __311

KNOWLEDGE AND ATTITUDES TOWARD FOOD SAFETY PRACTICES
AMONG COOKED FOOD VENDORS IN PUBLIC PRIMARY AND
SECONDARY SCHOOLS IN SAGBAMA LGA, BAYELSA, NIGERIA
Walker, Doubrapade Ph.D¹ __324

CARDIOVASCULAR REACTIVITY TO STRESS AND HYPERTENSION
AMONG SCHOOL TEACHERS IN NIGERIA: A BRIEF REVIEW
Jarailu Lawal Ajiya, PhD¹ Yakubu Muhammad Anas, PhD² Sani Namadi MSc³
Abdu Lawan MSc⁴ __341

TEACHING HOME MADE ORAL REHYDRATION SOLUTION FOR THE
REDUCTION OF CHOLERA THROUGH THE PROJECT METHOD
Festus Dafe, Onoharigho¹ __353

KNOWLEDGE OF HEPATITIS B VIRUS INFECTION AMONG
HEALTHCARE WORKERS IN KWARA STATE, NIGERIA
Abdulraheem, Adijat Mojisola Ph.D¹ Oguntunji Isaac, Opeyemi Ph.D² __363

PREVALENCE OF ROAD TRAFFIC ACCIDENT IN DOGUWA LOCAL
GOVERNMENT AREA, KANO STATE, NORTHWESTERN NIGERIA
Abdullahi Dahiru¹ M.A. Suleiman PhD² Saadatu Ibrahim Yelwa³
Salisu Muhammad Jella⁴ __371

KNOWLEDGE OF THE HEALTH EFFECTS OF THE APPLICATION OF
CALCIUM CARBIDE ON FRUITS AMONG FRUIT SELLERS IN JIGAWA
STATE
Ka'abu Mu'azu Ph.D.¹ Hamisu Dodo² Usman Abdullahi³ __388

KNOWLEDGE OF THE RISKS OF VAGINAL DOUCHING AMONG COMMERCIAL SEX WORKERS IN ILORIN SOUTH LOCAL GOVERNMENT AREA OF KWARA STATE

Kafayah Adeola, Jidda¹

Abstract

Many women insist and continue to douche for many reasons such as hygiene, contraception, vagina tightening and religious cleansing. This study examined the knowledge of the risks of vaginal douching among Commercial Sex Workers (CSWs) in Ilorin South LGA of Kwara State. A descriptive research design of the survey type was used. The population for the study comprised all CSWs totaling fifty-nine (59) residing in a brothel on Coca-Cola road, Ilorin. All 59 CSWs were purposively selected and used in the study. A validated structured questionnaire with a reliability coefficient of 0.76 was used. Data collected were analyzed using descriptive statistics of frequency counts, percentage and inferential statistics of chi-square. The findings revealed that CSWs in Ilorin South Local Government area of Kwara State do not have adequate knowledge of the risks of vaginal douching. There were no significant differences in the knowledge of the risks of vaginal douching based on ethnicity and level of education, however years of experience caused significant difference in the knowledge of the risks of vaginal douching among the respondents. Based on the findings, it was recommended that reproductive health education should be intensified to dispel the myths and misconceptions of vaginal douching. Commercial Sex Workers should be educated on other means of contraception as well as various ways of taking care of the vagina.

Key Words: Douching, Vagina, Commercial Sex Workers, knowledge, Risks.

Introduction

Vaginal douching usually refers to vaginal irrigation or the rinsing of the vagina. The United States Department of Health and Human Services (2017)

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explained that vaginal douching is the washing or cleaning out of the inside of the vagina with water or other mixtures of fluids. Martino and Vermund (2006) also described vaginal douching as having any type of intentional introduction of liquid solution inside the vagina using the hand, water jet or a pumping instrument. Douching has been differentiated from the normal washing of the outside of the vagina during a bath or shower, which does not extend to cleaning out the inside of the vagina.

The vagina is a self-cleaning organ. According to Oyeyemi (2016), a healthy vagina has a combination of good and harmful bacteria, the balance of which helps to maintain an acidic environment. The acidic environment protects the vagina from infections or irritation. This is why many health-care professionals state that douching is dangerous, as it interferes with both the vagina's normal self-cleaning and with the natural bacterial culture of the vagina, and it might spread or introduce infections. Gautam, Divya and Geeta, (2014) posited that vaginal douching has been practiced by women in different times and cultures but the reasons have remained the same, that is, to clean menstrual blood, feel hygienic, avoid pregnancy, stop vaginal itching or tighten vagina. Commercial and noncommercial products have been used by women for the purpose of douching. Besides water and vinegar, other douching materials include cotton wool, lemon juice, cloth, herbs, powder, roots, salt, disinfectant, oil, sugar, baking soda, ice and toothpaste.

Ekpeyong, Daniel and Akpan (2014) affirmed that the practice of vaginal douching has gained popularity despite numerous adverse health effects and public health efforts have been insufficient to educate women about the risks for adverse health effects. Guzel, Kuyumcuoglu and Celik, (2011) opined that factors that contribute to a woman's decision to douche her vagina include the influence of individuals' mothers, friends, and relatives. Some people consider vaginal douching as a religious duty (to be able to pray) to purify their bodies after menses or sexual intercourse (Farhan, Moharram & Shaabn, 2011). Among the groups of women mostly affected by the practice of vaginal douching are Commercial Sex Workers (CSWs) who according to the World Health Organization (WHO) (2002), are women who receive money or goods in exchange for sexual services, and who consciously define those activities as income generating even if they do not consider sex work as their occupation.

Due to the nature of their job, CSWs frequently engage in vaginal douching as a way of preserving and caring for the vagina as well as a way of preventing pregnancy (for contraceptive purpose) and for sexual enhancement (vagina tightening and stimulation). The practice of vaginal douching is not limited to CSWs, Ajayi and Afolabi (2016) posited that many women engage in vaginal douching, claiming that douching makes them feel cleaner, eliminates odour and protects them against infection. This was reiterated by Fonck, Kaul, Keli, Bwayo, Ngugi, Moses & Temmerman (2001), who reported that the insertion of various substances into the vagina are perceived by women to enhance sexual pleasure as well as treat vaginal discharge in many areas of sub-Saharan Africa.

Vaginal douching can cause an overgrowth of the harmful bacteria which can lead to yeast infection or Bacterial Vaginosis (BV). This is because the normal, healthy microbes are flushed out and the pH of the vagina is temporarily changed. If there is already an underlying infection, douching can push the bacteria causing the infection up into the uterus, fallopian tubes and ovaries which can lead to Pelvic Inflammatory Diseases (Inoue, Tomasini & Rufini, 2014). According to the Centre for Disease Control and Prevention (CDC, 2015), vaginal douching can lead to many reproductive health problems such as infertility, vaginal infections and Sexually Transmitted Infection (STIs). Cottrel (2010) associated vaginal douching with a number of health problems such as cervical cancer, Pelvic Inflammatory Diseases (PID), endometritis and increased risk of Sexually Transmitted Infections (STIs). Vaginal douching is also implicated in a wide variety of dangers such as adverse pregnancy outcomes including ectopic pregnancy, low birth weight, preterm labour, preterm birth and chorioamnionitis; and serious gynaecologic outcomes. These negative health risks have been shown to be exacerbated by an increased frequency of vaginal douching (Ekpeyong et al., 2014), as the case may be with CSWs. Commercial Sex Workers practice frequent douching; this poses a serious challenge to their health, as there are generally no public health programmes to educate sex workers on the adverse risks of vaginal douching (Misra & Trabert, 2007).

Inoue et al. (2014) opined that the reason douching affects fertility is that women who douche usually are unaware that they have an infection or STI because the constant douching covers up the symptoms. Odor,

discharge, and itching are all signs of infection that are successfully covered up by the act of douching. Many STIs cause infertility, so ignoring them will only make attempts at conception futile. Vaginal douching can make it harder to get pregnant and cause problems during pregnancy such as having a higher risk of ectopic pregnancy or higher risk of early childbirth (preterm birth). It is thus best to allow the vagina clean itself naturally by making mucous. The mucous washes away blood, semen and vaginal discharge (Misra & Trabert, 2007).

Oyeyemi (2016) posited that the more a woman douches, the greater the risk of having an ectopic pregnancy. Kimberly (2017) also explained that women who douche regularly are more likely to experience early childbirth, miscarriage, and other pregnancy complications such as an ectopic and may have a difficult time getting pregnant. Pelvic Inflammatory Disease (PID) is another important reproductive health hazard that is more common among women who practice vaginal douching, as evidenced in most studies showing an association between douching and PID. According to van de Wijgert, Morrison, Salata and Padian (2006), vaginal douching practices have been reported to cause undesirable pro-inflammatory effects which may alter the vaginal microbiome, decreasing protective lactobacilli. Also, Chandra, Martinez, Mosher and Jones (2005) in their review of the National Survey of Family Growth in the United States, reported that women who douched in the past twelve (12) months had higher prevalence of PID treatment than those who did not douche. Ness (2009) reported that women with symptoms of PID who have douched recently are nearly twice as likely as those who have not practiced douching to have an upper genital tract disease. Commercial douche boxes also contain warnings about the association between douching and PID. The CDC (2015) BV fact sheet revealed that the bacteria that cause BV can sometimes infect the uterus and fallopian tubes resulting in PID, which can then lead to infertility and/or damage the fallopian tubes with an increased risk for ectopic pregnancy.

Epidemiological evidence suggests widespread heterogeneity in douching practice among ethnic groups with regards to the frequency, techniques and fluid used (Misra, Trabert & Artherly-Trim, 2006). According to Lichtenstein and Nansel (2001), cultural beliefs form a compelling reason for vaginal douching. Douching behaviour is more common among blacks of African

descent, most likely because some cultural beliefs and practices in Africa accept and encourage it. This was reiterated by Branch, Woodruff, Mitro and Zota (2015), who posited that a greater proportion of black women than white and Mexican American women reported frequent use of vaginal douches. The ethnic disparities in vaginal douching was corroborated by Luo, Xu, Wang and Wang (2015) who reported differences in knowledge of the risks associated with vaginal douching based on ethnicity among Female Sex Workers (FSWs) in Yunnan Province of China. The FSWs of the Han province had inadequate knowledge of the risks than those in the Zhong province. Several authors have suggested that vaginal douching is most practiced by women who are unmarried, less educated, with lower income or with higher number of sexual partners (Ekpeyong et al., 2014).

Luo et al. (2015) reported adequate knowledge of risks of vaginal douching among Female Sex Workers (FSWs) who had higher level of education hence they were reported to douche less frequently than those with lower level of education. Wang, Xiaoming, Stanton, Yang, Fang, Dong, Zhou, Liu and Liang (2005) on the other hand, reported disparities in knowledge of the risks associated with douching among Chinese commercial sex workers based on the number of years the sex workers had spent on the job. The Chinese FSWs who had longer years of experience were found to douche more often (Wang, et. al., 2005)

Myths and misconceptions associated with vaginal douching increase the odds of douching among women who douche. CSWs have multiple sexual partners which make them susceptible to infections and STIs. They thus view vaginal douching as a way of keeping their vaginas clean and hygienic in order to remain in business and enjoy good health. They also practice douching to complement contraceptive procedures. Verbal extraction from some CSWs in Ilorin South Local Government of Kwara State, also revealed that they douche for sexual reasons. Some of the herbal mixtures used by them cause the vaginal to be 'excited' and prepared for 'sex'. However, the frequency with which they carry out these douching activities become worrisome. They may be unaware of the risks vaginal douching poses to their reproductive health and therefore continue to practice it. Some of the CSWs also revealed their intention to leave the sex trade and get married in the future. This then becomes a concern because their reproductive system may

have undergone much damage before the future they finally decide to leave the trade and get married. It thus becomes imperative to find out the knowledge CSWs have on the risks of vaginal douching.

Research Questions

1. Do Commercial Sex Workers in Ilorin South Local Government have adequate knowledge of vaginal douching?

Research Hypotheses

The following research hypotheses were formulated for the study:

- H₀₁: There is no significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government, Kwara State based on ethnicity
- H₀₂: There is no significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government, Kwara State based on level of education
- H₀₃: There is no significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government, Kwara State based on years of experience

Methodology

The research design of the survey type was adopted for this study. The population comprised all Commercial Sex Workers residing in a brothel on Coca-Cola road in Ilorin south Local Government area of Kwara State, totaling fifty-nine (59). All 59 CSWs were selected through a purposive sampling technique and used in the study. A structured questionnaire developed by the researcher was used to elicit information from the respondents. The first psychometric property considered in this study was validity. Content validity was confirmed by a panel of experts in related fields of study. The second psychometric property considered was the reliability of the instrument. The reliability was ascertained using the test re-test method. A reliability coefficient of 0.76 was obtained using Pearson Product Moment Correlation (PPMC). Verbal consent of the respondents was sought before administration. Data collected were analysed using descriptive statistics of frequency counts and percentage and inferential statistic of chi-square at 0.05 alpha level.

Results

Research Question:

Do commercial sex workers in Ilorin South Local Government of Kwara State have adequate knowledge of vaginal douching?

Sex workers' responses were subjected to percentage analysis. Given that the questionnaire items contained 15 items structured in a two-response-type of 'Yes' (2) and 'No' (1), commercial sex workers whose scores fell within the score range 15 - 22 and 23 - 30 were categorized as having inadequate and adequate knowledge of the risks of vaginal douching respectively. The statistics of respondents' scores are summarized and presented in Table 1.

Table 1: Commercial Sex Workers' Knowledge of Vaginal Douching in Ilorin South L.G.A., Kwara State, Nigeria

Knowledge	Score Range	Frequency	Percentage
Adequate	23 - 30	17	28.8
Inadequate	15 - 22	42	71.2
Total		59	100.0

As revealed in Table 1, out of 59 (100.0%) commercial sex workers sampled for this study, 17 (28.8%) of them had adequate knowledge of vaginal douching while 42 (71.2%) were of inadequate knowledge. Thus, majority of commercial sex workers in Ilorin South Local Government Area do not have adequate knowledge of risks of vaginal douching.

Hypotheses Testing

All hypotheses postulated were tested using inferential statistics of chi-square at 0.05 alpha level.

Hypothesis One:

There is no significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government Area of Kwara State based on ethnicity

Table 2: Chi-Square Statistics Showing the Difference in the Knowledge of Risks of Vaginal Douching among Commercial Sex Workers in Ilorin South Local Government Area of Kwara State Based on ethnicity

Ethnicity		Knowledge of Vaginal Douching			df	χ^2 -cal	Sig	Remark
		Adequate	Inadequate	Total				
Yoruba	Count	4	7	11	2	0.385*	0.83	H ₀₁ Retained
	Expected	3.2	7.8	11.0				
Hausa	Count	2	5	7				
	Expected	2.0	5.0	7.0				
Igbo	Count	11	30	41				
	Expected	11.8	29.2	41.0				
Total		17	42	59				

*Insignificance at $p > 0.05$

Table 2 reveals that the χ^2 -value 0.385 was obtained with a p-value 0.83 when computed at 0.05 alpha level. Since the p-value 0.83 is greater than 0.05 alpha level, the null hypothesis one is not rejected. This implies that there was no statistically significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government, Kwara State based on ethnicity ($\chi^2_{(2)} = 0.385$; $p > 0.05$).

Hypothesis Two:

There is no significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government Area of Kwara State based on level of education

Table 3: Chi-Square Statistics Showing the Difference in the Knowledge of Risks of Vaginal Douching among Commercial Sex Workers in Ilorin South Local Government Area of Kwara State Based on Level of Education

Level of Education		Knowledge of Vaginal Douching			df	χ^2 -cal	Sig	Remark
		Adequate	Inadequate	Total				
No Formal Education	Count	2	4	6	2	1.120*	0.57	H ₀₂ Retained
	Expected	1.7	4.3	6.0				
Pri/Sec Education	Count	8	26	34				
	Expected	9.8	24.2	34.0				
Higher Education	Count	7	12	19				
	Expected	5.5	13.5	19.0				
Total		17	42	59				

*Insignificance at $p > 0.05$

Table 3 reveals that the χ^2 -value 1.120 was obtained with a p-value 0.57 when computed at 0.05 alpha level. Since the p-value 0.57 is greater than 0.05 alpha level, the null hypothesis two is rejected. This implies that there was no statistically significant difference in the knowledge of risks of vaginal douching among commercial sex workers in Ilorin South Local Government, Kwara State based on level of education ($\chi^2_{(2)} = 1.120$; $p > 0.05$).

Hypothesis Three:

There is no significant difference in the knowledge of risks of vaginal douching between experienced and less-experienced commercial sex workers in Ilorin South Local Government Area of Kwara State based on years of experience

Table 4: Chi-Square Statistics Showing the Difference in the Knowledge of Risks of Vaginal Douching between Experienced and Less-Experienced Commercial Sex Workers in Ilorin South Local Government Area of Kwara State Based on Level of Education

Sex Working Experience		Knowledge of Vaginal Douching			df	χ -cal	Sig	Remark
		Adequate	Inadequate	Total				
Experienced (Above 5years)	Count	14	22	36	1	4.570*	0.03	H ₀ , Rejected
	Expected	10.4	25.6	36.0				
Less- Experienced (below 5years)	Count	3	20	23				
	Expected	6.6	16.4	23.0				
Total		17	42	59				

*significance at $p < 0.05$

Table 4 reveals that the χ^2 -value 4.570 was obtained with a p-value 0.03 when computed at 0.05 alpha level. Since the p-value 0.03 is less than 0.05 alpha level, the null hypothesis three is rejected. This implies that there was statistically significant difference in the knowledge of risks of vaginal douching between experienced and less-experienced commercial sex workers in Ilorin South Local Government, Kwara State ($\chi^2_{(1)} = 4.570$; $p < 0.05$). Hence, experienced commercial sex workers were discovered to have adequate knowledge of risks of vaginal douching than the less experienced.

Discussion of Findings

The findings from this study revealed that CSWs in Ilorin South Local Government of Kwara State had no adequate knowledge of the risks of vaginal douching. Out of the respondents sampled, 71.2% had inadequate knowledge of the risks associated with vaginal douching such as infertility, ectopic pregnancy, Sexually Transmitted Infections (STIs) and Pelvic Inflammatory Diseases (PID). This finding was affirmed by the study of Ekpeyong et al. (2014) among douchers and non-douchers, where it was shown that 79.8% of douchers lacked knowledge about the adverse health risks associated with vaginal douching.

Another finding from this study showed that there was no significant difference in the knowledge of the risks of vaginal douching among CSWs in Ilorin south Local Government Area of Kwara State based on ethnicity. This is in contrast with the findings of authors who reported ethnic disparities in the knowledge of risks associated with vaginal douching based on ethnicity. Branch et al. (2015) in their study of Vaginal douching and racial/ethnic disparities in phthalates exposures among reproductive-aged women revealed inter-ethnic disparities in knowledge of the risks associated with vaginal douching. A greater proportion of black women than white and Mexican American women reported frequent use of vaginal douches, feminine spray, feminine powder, and wipes/towelettes due to inadequate knowledge of the risk associated this practice. Luo et al. (2015) also reported differences in knowledge of the risks associated with vaginal douching based on ethnicity among Female Sex Workers (FSWs) in Yunnan Province of China. The FSWs of the Han province had inadequate knowledge of the risks than those in the Zhoun province.

Findings from this study also indicated that no significant difference existed in the knowledge of the risks of vaginal douching among CSWs in Ilorin South Local Government Area of Kwara State based on level of education. However, Martino and Vermund (2006), in their review of the risks or benefits of vaginal douching on the health of American women, reported that Independently of race, level of education causes differences in douching frequency. They found that women with less than a high school education douche more frequently than others because of inadequate knowledge its risks. The study by Luo et al. (2015) among Female Sex Workers in Yunnan Province of China also

revealed that Female Sex Workers with higher level of education had adequate knowledge of the risks associated with vaginal douching. Significant difference existed in the knowledge of the risks of vaginal douching among CSWs in Ilorin South Local Government based on years of experience. This finding was corroborated by the work of Wang et al. (2005) among Chinese commercial sex workers, where it was revealed that duration of years spent as a sex worker caused significant difference in the knowledge of risks associated with vaginal douching. However, the present showed that CSWs who had longer years of experience had adequate knowledge of the risks associated with vaginal douching while the study of Wang et al. (2005) reported that commercial sex workers with longer years of experience had inadequate knowledge of the risks associated with vaginal douching. Wang et al (2005) reported frequent douching practices among sex workers who had spent longer years on the job because they lacked knowledge of the risks associated with vaginal douching.

Conclusion.

Based on the findings, the following conclusions were reached:

1. CSWs in Ilorin South Local Government Area of Kwara State did not have adequate knowledge of the risks of vaginal douching
2. Ethnicity did not cause significant differences in the knowledge of the risks of vaginal douching among CSWs in Ilorin South Local Government Area of Kwara State
3. Level of education did not cause significant differences in the knowledge of the risks of vaginal douching among CSWs in Ilorin South Local Government Area of Kwara State
4. Years of experience caused significant differences in the knowledge of risks of vaginal douching among CSWs in Ilorin South Local Government Area of Kwara State

Recommendations

In view of the findings from this study, the following recommendations were made:

1. Reproductive health education should be intensified to dispel myths and misconceptions of vaginal douching among CSWs by

- communicating clear messages to CSWs to improve their knowledge on the associated risks of vaginal douching on the reproductive system.
2. Health Educators should discourage CSWs from douching and provide healthy alternatives for contraception and other ways of caring for the vagina through health educational activities such as outreaches, campaigns and health talks. The educational activities will enable them have adequate knowledge of the risks of vaginal douching such as ectopic pregnancy and other pregnancy complications
 3. Given the commonness of douching and related misconceptions among CSW, future studies and interventions should be carried out to prevent risks associated with vaginal douching.
 4. Women organizations/ Non-Governmental Organizations (NGOs) should organize prevention programmes targeting female sex workers and should incorporate components about the adverse health outcomes associated with vaginal douching.

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