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Relationship Between Tight Pants Use and The Incidence of Flour Albus Pathology in Women of Childbearing Age

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Abstract

Women who have not had a marital relationship, vaginal discharge can also occur, but the cause of leucorrhoea can occur because of using tight pants, wearing a towel together, and the lack of maintaining the cleanliness of the vaginal area. This study aims to determine the association of the vulva higiene with vulvovaginal candidiasis on fertile age in Public Health Center (PHC) Cipayung districts. This study aim to know the relationship of the use of tight pants with the incident flour albus pathology in women of childbearing age at the PHC Cipayung. The analytic study method with study design was cross sectional approach and chi square test would be used. The research using purposive sampling by through 36 women of childbearing. This data used is primary data. The result showed that there is a significant association between tight pants use with flour albus pathology incidence in women of childbearing age at the PHC Cipayung (P-value = 0.009; α = 0.05). There is a relationship between vulva hygiene and vulvovaginal candidiasis at Cipayung PHC due to lack of vaginal hygiene on woman of childbearing age, which increased the incidence of candidiasis.

Keywords: Tight Pants; Flour Albus Pathology;Public Health Center Cipayung;Women

INTRODUCTION

Leucorrhoea (fluor albus) is the secretion or discharge from the vagina. These secretions can vary in consistency, color and odor (Nikmah and Widyasih, 2018). Leucorrhoea can be interpreted as a kind of mucus that comes out too much, the color is white like thick sago and slightly yellowish, if the slim or mucus is not too much, it does not matter (Kusmiran, 2012). In conditions normal, vaginal discharge looks clear, cloudy white or yellowish when dry on clothes1. This secretion is non-irritant, does not interfere, has no blood, and has a pH of 3.5-4.5 (Titisari and Permatasari, 2017). Normal vaginal flora includes *Corinebacterium,Bacteroides,Peptostreptococcus, Gardnerella, Mobiluncuc, Mycoplasma* and *Candida* spp. An environment with acidic pH provides the protective function produced by *Lactobacillus doderlin* (Kumalasari and Andhyantoro, 2012). Generally women who suffer from leucorrhoea secrete too much and cause an unpleasant odor. This is caused due to inflammation and infection of the vaginal canal. In women, vaginal discharge is a natural thing from the body as a lubricant and defense from various infections (Nikmah and Widyasih, 2018).

In Indonesia, around 90% of women have the potential to experience vaginal discharge because the country of Indonesia is a tropical climate, so the fungus is easy to develop which results in many cases of vaginal discharge (Mayasari *et al.,* 2015). Symptoms of vaginal discharge are also experienced by unmarried women or young women aged 15-24 years, which is around 31.8%. The number of women in the world who have experienced vaginal discharge 75%, while European women who experience vaginal discharge by 25%. In Indonesia as many as 75% of women have experienced vaginal discharge at least once in their lives and 45% of them can experience vaginal discharge twice or more (Nikmah and Widyasih, 2018). This is because Indonesia is a tropical region so that makes the body become more moist and sweaty. As a result, bacteria easily develop and cause unpleasant odors, especially in the folds of the body such as the armpits and folds of genital organs in women (Paryono and Nugraheni, 2016). Pathological leucorrhoea can strike women from young age, healthy reproductive age and old age and do not know the level of education, economics, and socio-culture, although this case is more common in women with low educational and socioeconomic levels, young women whose age is under 20 years counted still in the process of growth. Indeed they have got menstruation (menstruation), but actually it does not mean the reproductive organs are 100% mature. Whereas for adult women over 35 years of age, the condition of their reproductive organs is inversely proportional to those under 20 years of age at which women begin to experience an aging process (Katharini *et al.,* 2009). In pathological leucorrhoea the discharge that comes out contains a lot of leukocytes. Signs of pathological leucorrhoea include liquid that comes out very thick and discolored, pungent odor, excessive amount and causes itching, pain and pain and heat when urinating. Factors that cause pathological vaginal discharge include foreign bodies in the vagina, vaginal infections caused by germs, fungi, viruses and parasites as well as tumors, cancer and genital malignancy also can cause vaginal discharge (Kursani *et al.,* 2014).

Leucorrhoea is influenced by several factors, namely stress, weight, diabetes and contraceptive use. In addition, using underwear that does not absorb sweat and using tight pants can trigger vaginal discharge because the vaginal area will be more moist so that germs can breed

more easily. The most common symptom found in patients with vaginal discharge is vaginal itching. This is influenced by several factors including how to hack from back to front, using tight pants, and using wet tissue to clean the vagina (Kursani *et al.*, 2014). The use of underwear that does not absorb sweat fungus thrives in warm and humid conditions. Underwear made of nylon does not absorb sweat, which causes moisture (Setiani *et al.*, 2015). The mixture of sweat and secretion of the natural vagina itself begins to accumulate, making the groin feel hot and moist. This situation is a suitable place for the growth of fungus candida and other harmful bacteria (Kristiana *et al.*, 2012). Pathological albus fluid is often caused by infection, one of which is Bacteria Vaginosis (BV) is the most common cause (40-50% of cases infected with the vagina), Vulvovaginal Candidiasis (VC) is caused by the fungus Candida species, 80-90% by *Candida albicans*, Trichomoniasis (TM) caused by Trichomoniasis vaginalis, the incidence is around 5-20% of cases of vaginal infection (Pety, 2016).

Transmission can occur through sexual contact. Fluor albus can also be caused by irritation, neoplasms / malignancies, foreign bodies, radiation, and fissures (Sariyati, 2014). Pathological fluor albus that continues to persist will disrupt the function of female reproductive organs, especially in parts of the ovary which can cause infertility (Mayasari *et al.*, 2015). Fluor albus is very disturbing for women both in daily life and relationships with husbands (Kusmiran, 2012). Discomfort, work inconvenience, low self-esteem, anxiety about the possibility of cancer, publication or stories of neighbors or friends from the office about the effects of fluor albus this causes a small percentage of women to ask for help from a doctor but some are trying to find a cure with traditional medicine such as washing with betel water and drinking herbal medicine (Zubier and Farida, 2010). This research aims to determine the relationship of the use of tight pants with the incidence of pathological flour albus in women of childbearing age at the Cipayung subdistrict health center.

METHOD

This type of research is quantitative by using a cross-sectional research design to see the relationship between the independent variable and the dependent variable which aims to analyze the relationship between the use of tight pants and the incidence of fluor albus pathology (Notoadmojo, 2012). This research was conducted based on the ethical clearance of a recommendation letter from the East Jakarta Health Office with letter number 2534 / 089.51 from January to December 2018 in the Public Health Center Cipayung, East Jakarta with a sample population of women of childbearing age-aged 15-45 years.

When researchers conducted a preliminary study at the Public Health Center Cipayung in East Jakarta, there were 268 cases of fluor albus in 2017 including 82 pathological flour albus and 186 physiological flour albus on average in women of childbearing age. In the last 3 months there were 125 cases of albus flour including 46 pathological flour albus and 79 physiological fluor albus. During the author's practice of midwifery practice and I in the KIS poly room, the authors conducted interviews to examine patients who experienced vaginal discharge in 1 day there were 7 cases of fluor albus on average using tight pants.

This research was conducted using a sampling technique that is a purposive sampling of 36 women of childbearing age. The research variable, namely the use of tight pants made from jeans for more than 6 hours in one day, was sourced from the results of a questionnaire on mothers who performed examinations in the

clinical room, pathology flour albus data obtained from laboratory results. Data analysis uses SPSS for windows program, univariate analysis is used to describe the distribution and frequency of variables, bivariate analysis to see the relationship between Chi-Square test variables.

RESULT AND DISCUSSION

The description of using tight pants and occurrence pathogenic albus flour

The use of tight pants can be seen based on the results of filling out the questionnaire by respondents. The frequency distribution of the use of tight pants is shown in Table 1. The results of univariate analysis show the frequency distribution of the use of tight pants, of the 36 respondents who used tight pants as many as 29 people (80.6%).

Table 1. Distribution frequency of tight pants use in women childbearing age at The District Health Center Cipayung, East Jakarta

Tight Pants Use	Frequency	Percentage (%)
Yes	29	80,6
No	7	19,4
Total	36	100

Flour albus pathology seen from the results of laboratory tests. The frequency distribution of pathology flour albus events in women of childbearing age is shown in Table 2. The results of univariate analysis from Table 2 show that of the 36 respondents who experienced flour albus pathology as many as 23 people (63.9%).

Table 2. Distribution frequency of incidence flour albus pathology in women childbearing age at The District Health Center Cipayung, East Jakarta

Flour Albus Pathology	Frequency	Percentage (%)
Positive	23	63,9
Negative	13	36,1
Total	36	100

Bivariate Analysis

The requirements fulfilled in the bivariate analysis were all variables related to the p value <0.05 were included which were then analyzed including the variables of tights and flour albus pathology to see whether the two variables are related.

Table 3. The relationship between tight pants use and the incidence of flour albus pathology in women of childbearing age at The District Health Center Cipayung, East Jakarta

Tight Pants Use	*Flour albus* pathology				Total		p *Value*
	Positive		Negative				
	n	%	n	%	n	%	
Yes	22	75,9	7	24,1	29	100	
No	1	14,3	6	85,7	7	100	0,009
Total	23	63,9	13	36,1	36	100	

Table 3 shows that the frequency distribution of women of childbearing age according to the use of tights and flour albus pathology of 29 people who used tight pants, as many as 22 people who experienced flour albus pathology (75.9%). Statistical test results showed a value of p <0.05. At α = 5%, it can be concluded that there is a relationship between the use of tight pants and the pathology of albus flour (p value = 0.009).

Statistical test results showed a significant relationship between the uses of tight pants with the pathology of flour albus in women of childbearing age at the Cipayung District Health Center in East Jakarta. This can be seen from the value of p = 0.009 (p <0.05). The results obtained from this study are in line with research conducted by Susilawati and Tinumbang (2015), that the factors associated with the incidence of pathological vaginal discharge are 49.2% who experience vaginal discharge due to incorrect vaginal cleaning movements. In addition, information was obtained that around 81.4% of respondents experienced pathological vaginal discharge due to the use of tight pants. Research conducted by Setiani *et al*. (2015) the relationship between the uses of vaginal cleaners with vaginal discharge, based on the results of interviews conducted by 5 respondents claimed to often use tight pants. Research conducted by Petty (2016) obtained the results of interviews conducted by 7 young women who have experienced vaginal discharge said they did not know the cause of vaginal discharge. Of the 7 people who have experienced vaginal discharge 3 of them said they often use vaginal cleaners, and all said they often wear tight jeans. When menstruation they change pads only twice a day.

This is consistent with the theory of leucorrhoea influenced by several factors, namely stress, weight, diabetes and contraceptive use (Persia *et al.,* 2015). Whereas pathological leucorrhea is vaginal discharge that arises from certain medical conditions with the most common cause being a parasitic, fungal, and bacterial infection. The amount of leucorrhea varies according to the menstrual cycle, the secretion is large, clear, and contains almost no leukocytes at the time of ovulation (Zubier, 2010).

In addition, using underwear that does not absorb sweat and using tight pants can trigger vaginal discharge because the vaginal area will become moister so that germs can multiply more easily (Persia *et al.,* 2015). This is in line with the study of Khuzaiah *et al.* (2015) who reported that the most common symptom found in patients with vaginal discharge was vaginal itching. This is influenced by several factors including how to hack from back to front, using tight pants, and using wet tissue to clean the vagina (Khuzaiah *et al.,* 2015). The use of underwear that does not absorb sweat fungus thrives in warm and humid conditions. Underwear made of nylon does not absorb sweat, which causes moisture. The mixture of sweat and natural secretions of the vagina itself begins to accumulate, thus making the groin feel hot and moist. This situation is a suitable place for the growth of fungus candida and other harmful bacteria. The use of tight trousers and tight pants can also cause vaginal discharge because it is a barrier to air around the genital area and is a sweat trap in the groin area. When wearing jeans combined with nylon pants underneath, the effect is very dangerous.

Underwear also determines the health of reproductive organs. The best material from cotton, because it can absorb sweat perfectly. Satin trousers and other synthetic materials actually cause sex organs to become hot and humid. Outerwear material also needs to be considered by a woman. The material of jeans has very tight pores, so it doesn't allow air to flow freely. Fabric skirts or trousers are more recommended, especially for women who are experiencing menstruation and fat. Blood that comes

out during menstruation causes the area around the vagina to be more moist than usual. For that it must also be considered more carefully than on a normal day. Ideally, the pads during menstruation are changed every bath and finish urinating even though this practice is difficult. It is recommended to replace the pads 4-5 times a day when menstrual blood is plentiful. If during the last menstrual days, simply replace the pads 3 times a day i.e. in the morning, evening and night.

Personal hygiene is self-care carried out to maintain health, both physically and psychologically (Rusdi *et al.,* 2008). Personal hygiene habits are one's self-care habits to maintain their health, and are influenced by values and skills. Fulfillment of personal hygiene is needed for individual comfort, safety, and health (Sariyati, 2014). The habit of doing good personal hygiene aims to improve health where the skin is the body's first line of defense against infection. Based on the percentage of respondents' answers on the personal hygiene habits questionnaire it can be concluded that the personal hygiene habits of students still tend to be bad (Setiani *et al.,* 2015). Someone said to have good personal hygiene or personal hygiene, if someone can maintain the cleanliness of his body which includes cleanliness of the skin, hands and nails, and genital hygiene (Sariyati, 2014). Getting used to washing hands first and cutting the nails when they begin to grow long is very important to prevent the transfer of bacteria and fungi from the hands to sensitive female organs. The correct way to clean the female organs is from front to back, so that the bacterium from the anus does not enter the vagina. This is balanced with the use of clean water that comes from running water instead of stagnant water that can be polluted by the surrounding environment (Rahman *et al.,* 2013).

Keeping the vagina moisturizing is one way to prevent the formation of a good environment for the breeding of bacteria and fungi (Sariyati, 2014). This can be done by drying the vagina with a personal towel or soft tissue (Paryono and Nugraheni, 2016). The use of tissue in the vaginal area too often after urinating is very risky because it is the most sensitive area and is easily injured. Excessive use of tissue will make the vaginal area infected. The cleanliness of the toilet, although it may be trivial, but the toilet seat, especially in the women's toilet, is actually a place that contains lots of bacteria. In a sitting position on the toilet, the previous user may have carried bacteria or fungi, while the toilet cleaning process is only done 2 times a day. Lack of cleanliness of this toilet indirectly transmits bacteria from one woman to another (Paryono and Nugraheni, 2016).

The use of cotton underwear that can absorb sweat, is not tight, and often changes the underwear at least 2 times a day or immediately when feeling wet. In addition, regular shaving of pubic hair with private and sterile scissors can prevent the vagina from becoming too moist and prevent the buildup of bacteria, fungus, or parasites lodged in the pubic hair (Rahman *et al.,* 2013). The use of gauze that smells good and contains gel is not permitted because it can lead to irritation and even cancer of the female organs (Persia *et al.,* 2015). The selection of soft pads and replacement as often as possible every 4 hours is very helpful in preventing bacterial infections (Persia *et al.,* 2015). This is because blood is good place for nesting bacteria. However, the use of panty liners is not recommended during routine outside the menstrual cycle because it can cause irritation to the female organs (Khuzaiah *et al.,* 2015). The use of antiseptics in cleaning the female organs is not intended at all times because it can disrupt the pH balance and normal flora in the vagina (Zubier and Farida, 2010).

Women who give birth frequently are at risk of developing fluor albus, this is associated with labor trauma, hormonal changes and nutrition during

pregnancy. Postpartum infection and curettage can also be a risk source for chronic pelvic infections, other reproductive problems and infertility. In women who give birth more than 3 times (multiparity) has the potential to cause cervical cancer (Mayasari *et al.*, 2015).

Mood stress factor in women with higher education level is a distraction and is an indirect cause decreased body immune system. The job stressor experienced by these women will suppress the production of estrogen in the vagina, resulting in a decrease in female glycogen. An imbalance between estrogen and glycogen changes in the vaginal mucosa accompanied by a decrease in the body's immune system, especially the acquired immune system such as the vaginal cuboidal epithelium will cause weakness in the function of doderlien bacilli to convert glycogen to lactic acid so that there is a shift in the normal pH that causes vaginitis or other infections (Mayasari, 2015). An unhealthy diet with too much consumption of fast food or drinks that do not meet the intake of balanced nutrition can also lead to leucorrhea. A workload that is too heavy or a lack of balance between work activities and unbalanced resting activities will trigger stress. The stress that occurs will trigger stress hormones which have negative effects. In some women load stress that is too heavy will cause leucorrhea. Leucorrhoea in working women is caused by high levels of stress hormone production (Mayasari, 2015).

CONCLUSION

The prevalence of women of childbearing age who perform examinations in the clinical room the majority use tight pants 80.6% (22 respondents). The prevalence of pathological albus flour with more positive results compared with negative results 63.9% (23 respondents). There is a relationship between the uses of tight pants with the pathology of flour albus. This is evident from the results of the study the value of $p = 0.009$ ($p < 0.05$). The use of tight trousers and tight pants can also cause vaginal discharge because it is a barrier to air around the genital area and is a sweat trap in the groin area. When wearing jeans combined with nylon pants underneath, the effect is very dangerous. The writer recommended that women should not wear tight pants for ≥ 6 hours. If the women use tight pants, she should change underwear as often as possible so that air flows into the vaginal area and prevents moisture from forming. The writer also suggested that the women maintain personal hygiene properly and properly like washing the vaginal area properly. Moreover, these women should not use outerwear as often as possible which does not allow air to flow freely. The need for active participation from the community to utilize available health service facilities both for reproductive health, counseling. This is because government programs will not succeed if there is no active role from the community.

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