



# Frequency and Causes of Vaginal Hemorrhage outside Pregnancy in Women of Reproductive Age at Bonzola Hospital, Mbuji-Mayi, DRC

Kaya Tompa Brigitte<sup>1\*</sup>, Ciamala Mukendi Paul<sup>1</sup>, Nzembu Kabwasa Peter<sup>1</sup>, Kanyiki Katala Moses<sup>2</sup>, Ntumba Mukendi Kennedy<sup>1</sup>, Jean Mukendi Mukendi Rene<sup>1</sup>, Kolela Kolela Alain<sup>1</sup>, Ilunga Bimpa Cedric<sup>1</sup>, Cibangu Muana Wamuenyi Franck<sup>1</sup>, Kaseka Ciswaka Jeanne<sup>1</sup>, Amuli Jiwe Jean-Pierre<sup>3</sup>

<sup>1</sup>Department of Nursing Education and Administration, Nursing Section, Mbuji-Mayi Higher Institute of Medical Technology, Mbuji-Mayi, Democratic Republic of the Congo

<sup>2</sup>Department of Epidemiology, Community Health Section, Higher Institute of Medical Technology, Mbuji-Mayi, Democratic Republic of Congo

<sup>3</sup>Department of Nursing Education and Administration, Nursing Section, Higher Institute of Medical Technology, Kinshasa, Democratic Republic of Congo

Email: \*kayabrigitte3@gmail.com

**How to cite this paper:** Brigitte, K.T., Paul, C.M., Peter, N.K., Moses, K.K., Kennedy, N.M., Rene, J.M.M., Alain, K.K., Cedric, I.B., Franck, C.M.W., Jeanne, K.C. and Jean-Pierre, A.J. (2018) Frequency and Causes of Vaginal Hemorrhage outside Pregnancy in Women of Reproductive Age at Bonzola Hospital, Mbuji-Mayi, DRC. *Open Access Library Journal*, 5: e4940. <https://doi.org/10.4236/oalib.1104940>

**Received:** September 25, 2018

**Accepted:** October 28, 2018

**Published:** October 31, 2018

Copyright © 2018 by authors and Open Access Library Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

Vaginal haemorrhages outside pregnancy in women of childbearing age are a major public health problem in both developed and developing countries. The purpose of this study was to determine the frequency and causes of vaginal haemorrhage outside pregnancy. This is a descriptive study conducted in the city of Mbuji-Mayi at Bonzola General Hospital, registered from 01 to 31 December 2017; the data were collected transversally. The following observations were made during the study period; 174 women of childbearing age were registered. After analyzing the data, the incidence of vaginal haemorrhage in women of childbearing age was 15.8% and the main causes were: cervical cancer: 32.7% and uterine myoma 22.5%.

## Subject Areas

Nursing

## Keywords

Frequency, Causes, Haemorrhages, Vaginal, Mbuji-Mayi

## 1. Introduction

The Gyneco-Obstetrics service receives in its consultations women who come

with different reasons in accordance with the different pathologies of which they suffer. Among the reasons, there are vaginal discharges that represent common and spectacular symptoms in women in full evolution and in full procreative activity [1].

However, vaginal hemorrhage is a model of obstetric emergency involving multidisciplinary care. It is most often a complication that will occur unpredictably and brutally, whose diagnosis can sometimes be difficult. These haemorrhages must be reminiscent of the search for the cause and rapid care because every time a woman dies in maternity, it is almost one in two cases of hemorrhage [2].

In France, in studies showing a significant association between uterine hemorrhage and advanced maternal age, it is impossible to know if this is due to a direct link between the two, or if it is simply due to the lack of other risk factors related to age, reflecting the limitations of the adjustment technique. However, advanced maternal age remains a common risk factor for hemostasis hysterectomy in this context [3].

Also in France, a survey conducted by Royer, A., on uterine hemorrhages outside pregnancy, reveals that the frequency was 12.7% and the most common causes of vaginal hemorrhage were: cervical cancer uterine 30%, tumors of the uterine body: 27% and tumors of the ovaries: 10% [4].

In Africa more particularly in Mali, a study on the genital haemorrhages in the gynecology obstetrics department of the hospital of Bamako, concludes that the haemorrhage constitutes the first reason for evacuation. These hemorrhages had etiologies: cervical cancer 22%, uterine myoma 14.4% and fibroma 7% [5].

Moreover, in Cameroon, the maternal mortality rate due to hemorrhage in 2004 reached a rate of 6.4%, whereas it was at 4.7% in 1997, despite the efforts made to implement it. Health policies in relation to the Millennium Development Goals include the reduction of maternal mortality [6].

In the Democratic Republic of Congo Kinshasa, studies carried out at university clinics have shown that genital hemorrhage is the leading cause of death with 34.7% followed by pre-eclampsia/eclampsia with 28.2% followed by infection with 23.9%. The age group of 40 to 45 years is the most involved in maternal death with 35% of cases [7].

According to a study conducted by the School of Public Health of the University of Kinshasa at the request of the National Program for Reproductive Health (PNSR), in three provinces: the Province of Kinshasa, Bandundu and Bas-Rhin. Congo 65% of providers cited shock as the main sign of vaginal hemorrhage [8].

In our Province, more specifically in the city of Mbujimayi, we have observed a high frequency of bleeds outside pregnancy which represent a high morbidity and/or a considerable mortality rate in our hospitals, as in a study carried out on the frequency and etiology of menorrhagia in women of childbearing age at the Dipumba General Hospital was 22.5% and the main causes of vaginal hemorrhage are: cervical cancer with 30%, ovarian tumors 21% [9].

## 2. Materials and Methods

We performed a retrospective cross-sectional descriptive study in women of childbearing age who experienced vaginal haemorrhage outside pregnancy. The study was spread over a 12-month period from January 1 to December 31, 2017.

Our target population is 174 women with vaginal haemorrhage outside pregnancy who visited Bonzola General Hospital in 2017. Our sampling is comprehensive.

A registration grid was used to collect the study data. The descriptive analysis was carried out by calculating the proportions for the variables, we retained the following parameters: socio-demographic characteristics: (age, level of study, marital status, parity), causes. This study was approved by the Ethics Committee, all information collected from the subjects of the study was and will remain confidential. Likewise, the names of the participants will remain confidential and will not be mentioned in the presentation of the results or associated with the results in any way whatsoever.

## 3. Results

**Table 1** shows that the frequency of vaginal haemorrhage in women of childbearing age is 15.8%.

**Table 2** indicates that it is the age group 37 and over that holds the top at 39.6%. Regarding the level of study it is the secondary level which is more represented 41.5%. Note that 26% of common-law women hold the lead and the large multiparas are the majority with 33.5%.

**Table 3** shows that the main causes of vaginal haemorrhage in women of childbearing age are: cervical cancer 32.7% and uterine myoma 22.5%.

## 4. Discussion

Indeed, the results of our studies have shown that the frequency of vaginal haemorrhage outside pregnancy in women of childbearing age in Mbuji mayi is 15.8%. The frequency in this study is lower than that observed in our country 34.7% in 2010 in Kinshasa, [7], and 22.5% in 2000 in Mbuji mayi, [9], it is greater than 6.4% in Cameroon in 2009 and 12.7% in France [4].

Looking at **Table 2**, we find that it is the age group 37 and over that holds the top at 39.6%. These results go hand in hand with those of Kinshasa in 2010, [7] which also shows that it is the age group ranging from 40 to 45 years. Regarding

**Table 1.** Frequency of vaginal haemorrhage outside pregnancy in women of childbearing age.

Frequency	Effective	Percentage
Haemorrhage on pregnancy	933	84.2
Hemorrhage outside pregnancy	174	15.8
Total	1107	100

**Table 2.** Sociodemographic characteristics of women of childbearing age performing vaginal haemorrhage outside pregnancy.

Characteristics	Effective = 174	Percentage
<b>Age/years</b>		
15 - 25	46	26.5
26 - 36	59	33.9
37 and more	69	39.6
<b>Level</b>		
Without	37	21.3
Primary	39	22.4
Secondary	72	41.5
University	26	14.8
<b>Marital status</b>		
Singles	25	14.3
Married	43	24.7
Divorced	39	22.4
Widows	21	12.2
Free union	46	26.4
<b>Parity</b>		
Nulliparous	28	16
Primipare	42	24.1
Multiparous	46	26.4
Great multipar	58	33.5

**Table 3.** Distribution of cases according to the causes of vaginal haemorrhage outside pregnancy.

Causes	Effective	Percentage
Cervical cancer	57	32.7
Uterine myoma	39	22.5
Ovarian cyst	34	19.5
Vaginal tumor	25	14.4
Tumor of the ovary	19	10.9
Total	174	100

the level of study it is the secondary level which is more represented 41.5%. This is explained by the fact that in the developing world 2/3 of girls who go to secondary school drop out during the year for poverty, family constraints or marriage [10].

Note that 26% of common-law women take the lead. This means that women in this category use or apply indigenous products to please their partners, which puts them at risk of developing cervical or vaginal cancer [11].

The large multiparous women make up the majority with 33.5%. This is also scientifically explained that beyond 40 years of age the woman must be examined regularly to exclude cervical cancer to which they are exposed, it also joins the idea found in France in 2014, the age Advanced maternal remains a common risk factor [3] [12].

The results in **Table 3** reveal that the main causes of vaginal haemorrhage outside pregnancy in women of childbearing age in Mbujimayi are: cervical cancer 32.7% and uterine myoma 22.5%. These results are similar to those of France in 1999, [4] and Mali in 2003 [5], those of and Mbujimayi in 2000 [9].

## 5. Conclusions

The frequency of vaginal haemorrhage outside pregnancy in women of childbearing age is a public health problem that deserves special attention. In order to determine the frequency and causes, the study led to the conclusion that the frequency is 15.8% and the main causes are cervical cancer 32.7% and uterine myoma with 22.5%.

The results of this analysis suggest that the frequency and causes of vaginal haemorrhage outside pregnancy in the city of Mbujimayi are comparable to those seen in other cities in the DRC and elsewhere.

However, another study is important to determine the epidemiological profile of women of reproductive age making vaginal bleeding in the city of Mbujimayi.

## Conflicts of Interest

The authors do not declare any conflict of interest.

## References

- [1] FIGO (2006) Prevention and Treatment of Vaginal Haemorrhage: New Approaches Targeting Environments with Limited Resources, Masson, Paris.
- [2] Doridot, V. and Audibert, F. (2000) Genital Hemorrhage of Women Outside Pregnancy AKOS. Encyclopedia Practical Medicine, 1-0680.
- [3] Bonnet, M.P. (2012) Postpartum Haemorrhage: Epidemiology and Evolution of Anesthetic Practices and Resuscitation in France. Doctoral Thesis, Pierre-Louis Doctoral School of Public Health, Paris, 20, 27, 28.
- [4] Royer, A. (1999) Uterine Hemorrhages Outside Pregnancy, France.
- [5] Keita, S. (2003) Study of Uterine Hemorrhages in the Gynecology-Obstetrics Department of Bamako Hospital.
- [6] Formulu, J.N., Ngassa, P.N., *et al.* (2009) Maternal Mortality at the Maternity Hospital of the Yaoundé University and Hospital Center, Vol. 10, Cameroon.
- [7] Sengelyi, M. (2010) Frequency and Causes of Genital Haemorrhage, University Clinics. RDC, Kinshasa.
- [8] PNSR (2012) Maternal Mortality: Prevention of Dangers in Case of Vaginal Haemorrhage. RDC, Kinshasa.
- [9] Ndaya, K. (2000) Determination of Frequency and Etiologies of Menorrhagia,

HGR/Dipumba, TFC: ISTM/Mbujimayi, inedit.

- [10] Anonymous, I. (2000) Schooling of the Girl: "All Girls at School" Geneva.
- [11] National College of French Gynecologists and Obstetricians (2006) Item 243: Genital Hemorrhage in Women. *National Conference of PU-PH in Gynecology-Obstetrics*, Masson, Issy-les-Moulineaux, 243-253.
- [12] Graesslin, O. and Derniaux, E. (2008) Functional Uterine Hemorrhages or Idiopathic Menorrhagia: Medical Treatment: Modalities, Effectiveness, Complications. *Journal of Obstetric Gynecology and Biology of Reproduction*, **37**, 384-397.  
[https://doi.org/10.1016/S0368-2315\(08\)74779-3](https://doi.org/10.1016/S0368-2315(08)74779-3)