

Human  
immunodeficiency  
virus testing nursing  
essay



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Laboratory testing is an important part of health care investments of a country. Each day, several hundred tests are carried out both in private and public laboratory using various biological specimens such as blood, urine, stool, body fluids and so on.

The importance of laboratory tests is as follows:

Allow the screening of a disease at an earlier stage and can hence save lives.

They are effective tool for monitoring a patient condition and allow doctors to know whether the given treatments are functioning well.

Most of the requested laboratory tests are prescribed by medical practitioners and it is important to properly collect the specimen at the right time so as to ensure reliability of test and to reduce false negative results.

However, a work done by Lewin group in 2009 found out that there is substantial evidence to prove that medical practitioners often fail to prescribe the appropriate laboratory tests to screen for, diagnose, and monitor patient health conditions, including those tests recommended in clinical guidelines. For example, in one of his work in 2005, Hollander found out that routine screening for sexually transmitted diseases (STDs) in sexually active women, although recommended is uncommon at hospital-based clinics. This can bring serious consequences on the health of people especially if laboratory tests that could have detected a disease at an advanced stage are underused.

Women form an important part of our population and therefore it is necessary to provide them with quality health services so that they remain in

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good health. Among the health services provided, laboratory testing is one of the crucial tools for monitoring their health. Society benefits from women who can participate in family, workforce and community life and also such investments can be even beneficial for the health and development of the next generation (Chavkin et al. 2010).

According to a report of World Health Organization (WHO) 2009, though sexuality and reproduction are central to women's health, they can also pose serious health risks associated with sex and reproduction which may result in a significant burden of mortality and disability in women. Some example of poor reproductive health outcomes are: Complications of pregnancy and childbirth whereby 99% of all maternal deaths occur in developing countries (WHO 2009), approximately 498. 9 million curable sexually transmitted diseases (STDs) occur each year (WHO 2012) and if left untreated they can have serious health consequences and even affect a woman future reproductive plans. Another global health problem is the increase in the number of mortality and incidence of women -related cancers such as breast and cervical. These two cancers are even striking women at a younger age, mainly during their reproductive years. For example, 425, 000 women died of breast cancer in 2010 and in developing countries 68, 000 of those were in their reproductive years and on the other hand, cervical cancer killed 200, 000 women in developing countries (Institute for Health Metrics and Evaluation, 2011).

Hence, through this study we are going to focus mainly on those laboratory tests used to monitor women's reproductive health. This is because as mentioned above women are exposed to serious health challenges during <https://assignbuster.com/human-immunodeficiency-virus-testing-nursing-essay/>

their reproductive years and it is unacceptable to accept such a high number of women sufferings due to ill-health despite the fact that we do have simple and very effective laboratory tests.

To our best of knowledge, no studies have been done to find out the common laboratory tests prescribed by medical practitioners for women health in Mauritius. It is indeed of paramount importance to unveil these laboratory tests used for monitoring women health as inadequate use of certain laboratory tests can have serious impact on women's health.

### **Objectives of this study are:**

To find out the highly recommended pattern of tests prescribed by doctors to monitor women's reproductive health in Mauritius.

To assess the opinions of medical doctors for the introduction of additional laboratory tests as prenatal genetic test during antenatal screening.

To find out if any important laboratory tests remained underutilised by doctors for health screening.

To assess how useful medical practitioners find the existing laboratory tests for screening women-related cancers such as breast and cervical cancers.

## **RESULTS AND DATA ANALYSIS**

Mostly qualitative information was obtained in this survey. The data has been summaries in tables and figures for a better overview of the participants' details. Pie chart and bat-chart were also used to analyze some of the questions of the survey. For the analysis of statistical significance,

Pearson correlation test were applied from SPSS, version 20.0.  $p < 0.05$  was considered as statistical significance at 95% confidence interval. To rate the importance of a particular test during antenatal care, options like "very important" were treated as "important" while "not very important" were treated as "not important".

### 3. 1. Representation of data:-

#### **Table 1. Demographic details of the participants with respect to gender**

Characteristics

Male (n= 18, 60%)

n (%)

Female (n= 12,

40%)

n (%)

Total (n= 30)

n (%)

Age groups (years)

**25-30**

**31-40**

**41-50**

**> 50**

4 (22. 2)

10 (55. 6)

0 (0. 0)

4 (22. 2)

5 (41. 7)

5 (41. 7)

2 (16. 7)

0 (0. 0)

9 (30. 0)

15 (50. 0)

2 (6. 7)

4 (13. 3)

Grade

## **Registered medical officers (RMO)**

### **Specialist**

#### **Others**

13 (72. 2)

2 (11. 1)

3 (16. 7)

9 (75. 0)

1 (8. 3)

2 (16. 7)

22 (73. 3)

3 (10. 0)

5 (16. 7)

Mode of practice

#### **Public**

#### **Private**

#### **Both**

15 (83. 3)

3 (16. 7)

0 (0. 0)

10 (83. 3)

2 (16. 7)

0 (0. 0)

25 (83. 3)

5 (16. 7)

0 (0. 0)

Working experience (years)

**1-5**

**6-10**

**> 10**

9 (50. 0)

5 (27. 8)

4 (22. 2)

7 (58. 3)

3 (25. 0)

2 (16. 7)

16 (53. 3)

8 (26. 70)



6 (20. 0)

Among the study population, majority (n= 18) were males and the rest were females participants. They were categorized into 4 age groups which were: 25-30 years, 31-40 years, 41-50 years and > 50 years old. It was found out that 50 % (n= 15) were the highest percentage of participants lying between 31-40 years old while 6. 7% (n= 2) lie between 41-50 years old. 30% (n= 9) of them lied between 20-30 years old while 4% (n= 13. 3) of them were > 50 years old. Most of the respondents were RMO with a percentage of 73. 3 % (n= 22) and only 10 % (n= 3) of specialist has been able to participate in this survey while 16. 7% (n= 5) of the participants were in the group of 'others'. It was found out that 83. 3% (n= 25) were working in public health care while 5% (n= 16. 7) were working in private health care. None of the participants were working in both private and public healthcare. Moreover, it was observed in the data analysis that most of the participants had a working experience of 1-5 years old whereas a minority had an experience of > 10 years.

## **Table2. The importance of a particular laboratory test required for antenatal care by the 30 participants.**

Laboratory tests

Important

n %

Not important

n %

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Neutral

n %

### **Pregnancy test**

21 (70. 0)

5 (16. 6)

4 (13. 3)

### **Full blood count (FBC)**

30 (100. 0)

0 (0. 0)

0 (0. 0)

### **Hemoglobin**

30 (100. 0)

0 (0. 0)

0 (0. 0)

### **Oral glucose tolerance test (OGTT)**

26 (86. 7)

2 (6. 7)

2 (6. 7)

## **ABO blood group and rhesus typing**

30 (100. 0)

0 (0. 0)

0 (0. 0)

## **Syphilis and Gonorrhoea**

29 (96. 7)

0 (0. 0)

1 (3. 3)

## **Chlamydia testing**

21 (70. 0)

3 (10. 0)

6 (20. 0)

## **Toxoplasmosis testing**

27 (90. 0)

0 (0. 0)

3 (10. 0)

## **Rubella testing**

26 (86. 7)

0 (0. 0)

4 (13. 3)

## **Cytomegalovirus testing**

21 (86. 7)

1 (3. 3)

8 (26. 7)

## **Herpes testing**

22 (73. 4)

3 (10. 0)

5 (16. 7)

## **Hepatitis B and C testing**

23 (76. 7)

0 (0. 0)

4 (13. 3)

## **Human immunodeficiency virus (HIV) testing**

29 (96. 6)

0 (0. 0)

1 (3. 3)

## **Urine culture for pyelonephritis**

16 (53. 3)

5 (16. 7)

14 (46. 7)

### **Triple/ quadruple test (triple/quad test)**

13 (43. 3)

5 (16. 7)

12 (40. 0)

### **Blood coagulation test**

19 (63. 3)

4 (13. 3)

7 (23. 3)

### **Urine test for proteinuria**

28 ( 93. 3)

0 (0. 0)

2 (6. 7)

### **Papanicolaou test (Pap test)**

7 (23. 3)

13 (43. 3)

10 (33. 3)

## **Group B Streptococcus (GBS) screening test**

11 (36. 6)

7 (23. 3)

12 (40. 0)

## **Genetic testing**

16 (53. 40

3 (10. 0)

11 (36. 7)

From the table, it is shown that numerous laboratory tests are needed to monitor the health of pregnant women during pregnancy. For each of the above mentioned tests in the table, more than 50% of the participants agreed that they were important except for 3 laboratory tests which got a response rate of <50%. They were triple/quad test (43. 3%), Pap's test (23. 3%) and group B streptococcus screening test (36. 6%). Some of the medical practitioners found certain of the above mentioned laboratory tests as unimportant for antenatal care. For example, Pap test was the test with the highest percentage of participants (43. 3%) to find it as a least important test for antenatal care. Moreover, there were some of the medical practitioners had some sort of uncertainty about the importance of each of the above mentioned tests except for 3 tests which are FBC, Hemoglobin test and ABO blood group and rhesus typing. For these 3 laboratory tests

respectively, all the participants (n= 30) agreed that were important for antenatal care.

### **Table3. Opinions of medical practitioners on gestational diabetes mellitus (GDM) with respect to gender**

GDM in pregnant women

Male (n= 18)

n %

Female (n= 12)

n %

Total (n= 30)

n %

Complications during pregnancy

No complications during pregnancy

Not sure if GDM cause complications

18 (100. 0)

0 (0. 0)

0 (0. 0)

12 (100. 0)

0 (0. 0)

0 (0. 0)

30(100. 0)

0 (0. 0)

0 (0. 0)

Screening for GDM necessary

Screening for GDM not necessary

Not sure about screening for GDM

17 (94. 4)

1 (5. 6)

0 (0. 0)

12 (100. 0)

0 (0. 0)

0 (0. 0)

29 (96. 7)

1 (3. 3)

0 (0. 0)



2 hr OGTT with 75g glucose load is the test used

2 hr OGTT with 75g glucose load is not the test used.

Not sure about the test used

18 (100.0)

0 (0.0)

0 (0.0)

12 (100.0)

0 (0.0)

0 (0.0)

30 (100.0)

0 (0.0)

0 (0.0)

GDM -risk factor for type 2 diabetes

GDM- not a risk factor for type 2 diabetes

Not sure about the risk factor

15 (83.3)

0 (0.0)

3 (16. 7)

9 (75. 0)

2 (16. 7)

1 (8. 3)

24 (80. 0)

2 (6. 7)

4 (13. 3)

Women with GDM need (HbA1c) test annually

Women with GDM don't need HbA1c annually

Not sure about the HbA1c test

12 (66. 7)

5 (27. 8)

1(5. 6)

9 (75. 0)

0 (0. 0)

3 (25. 0)

21 (70. 0)

5 (16. 7)

4 (13. 3)

Note: Glycosylated hemoglobin test is known as HbA1c test

All the participants (n= 30) agreed that GDM can cause complications during pregnancy. That was why 94. 4 % (n= 17) of the male medical practitioners and 100. 0% (n= 12%) of the female medical practitioners agreed that it was important to screen all pregnant women for GDM. Only 56% (n= 1) of the male participants did not found it necessary to screen pregnant women for GDM. 100% of the participants (n= 30) agreed that 2 hr OGTT with 75 G of glucose load was the recommended test to screen for GDM. Moreover, 83. 35 (n= 15) of the male participants while 75. 0% (n= 9) agreed that GDM was a risk factor for type 2 diabetes. That was why 70. 0 % (n= 21) of the participants found it essential that all women with a history of GDM need to have a follow-up test HbA1c annually. Only 16. 7 5 (n= 5) of the participants did not agree that those women need to have a follow-test HbA1c while the rest (n= 4) were unsure about the need of a follow-up test HbA1c for women with a history of GDM.

### **Prenatal genetic testing:-**

#### **Figure 1: The opinions of doctors on the disadvantages of prenatal genetic testing**

Earlier, 53. 4% (n= 16) of the medical practitioners found prenatal genetic testing important for antenatal care. However, prenatal genetic testing does have its disadvantages as shown from the figure 1. From the figure, it is shown that the majority of the participants (76. 7%) agreed that it is a test

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that increases risk of miscarriages in pregnant women, 16.7% disagreed with this and 6.7% were unsure about the miscarriages caused by prenatal genetic testing. 60% of the participants agreed that it is not possible to detect every possible condition in a fetus with prenatal genetic testing, 13.3% disagree with this and 26.7% were unsure. When the participants were asked whether prenatal genetic testing is more costly than the triple/quad test, 50% were found to agree with this, 3.3% disagree with this statement and 46.7% were unsure about it.

### **Figure 2 showing which among the two prenatal tests the doctor preferred the most as part of routine antenatal care.**

From the figure, it is shown that most of the medical practitioners (66.7%) preferred triple/quad test a part of antenatal care compared to 43.3% who preferred prenatal genetic testing. However there were also some of the participants who disapprove of both prenatal tests as part of antenatal care while some were unsure about their use as part of antenatal care.

### **Figure 3: The percentage views of doctors in offering prenatal genetic test only in cases of abnormal result of triple/quad test**

From the figure, it is shown that majority of the participants (n= 63%) agreed with the statement that prenatal genetic testing should be offered only to pregnant women having an abnormal result of triple/quad test. 20% of the participants disagree with this statement and 17% were unsure about it.

**Pap test:-****Table 4 showing the views of medical practitioners about Pap's test**

Agree

n %

Don't agree

n %

Not sure

n %

Pap's test is an important tool for early detection of cervical cancer.

30 (100.0)

0 (0.0)

0 (0.0)

Pap's test should be used mostly to screen young women since they are more at risks.

23 (76.7)

7 (23.3)

0 (0.0)

All of the participants (n= 30) considered Pap's test as an important tool for early detection of cervical cancer in women. Moreover, 76. 7 % (n= 23) of the medical practitioners agreed that Pap's test should be mostly used to screened young women since they are more at risks. Only 23. 3% (n= 7) disagree that it should be mostly used to screen young women.

#### **Figure 4: The views of medical practitioners on the need of Pap test in (Human Papilloma Virus) HPV vaccinated women.**

From the figure, it is shown that 51. 7 % of the participants found it necessary for HPV vaccinated women to have a Pap test. 8. 3% of medical practitioners agreed that HPV vaccinated women don't need a pap test while 40% of them were unsure about the need of a Pap test in HPV vaccinated women.

#### **Laboratory methods for breast cancer diagnosis:-**

#### **Figure 5: Differing opinions of doctors on the best method for accurate diagnosis of breast cancer**

The bar chart shows that various methods are available for diagnosis of breast cancer and it is thus important to select the one which give accurate results. From the bar chart, it was found that there were differing opinions among medical practitioners in selecting the most ideal method for accurate diagnosis of breast cancer. Core needle Biopsy (CNB) was the method that got the highest percentage of participants finding it as the most ideal method for accurate detection of breast cancer. 10% of the participants found blood tumor marker test as the ideal method while 13. 3% were not sure about which laboratory method was most ideal for effective diagnosis of

breast cancer. On the other hand, equal percentages of medical practitioners (20%) found both (Fine Needle aspiration Cytology) FNAC and FNAC-CNB as the ideal method respectively.

### **Figure 6: Differing opinions of doctors on the use of CNB method as a substitute in case of an inadequate FNAC test.**

From the figure 5, it was found that the majority of males (88. 9%) and females (75%) found CNB useful as a second pathological method for diagnosis of breast cancer in case the initial FNAC test was inadequate. However, there were only some female participants (16. 7%) who disagree about using CNB as a second pathological method in case of an inadequate FNAC test and minorities of both genders respondent were unsure about the use of CNB as a second pathological method.

### **Table 5: The health impact, importance and inadequate use of Sexually transmitted diseases (STDs) testing and blood hormone tests respectively**

Agree

n %

Don't agree

n %

Not sure

n %

## **Impact of STDs**

Cause serious health complications in women.

29 (96. 7)

1 (3. 3)

0 (0. 0)

## **Importance of STDs tests**

Reduce disease and infertility associated with undiagnosed STDs.

27 (90. 0)

3 (10. 0)

0 (0. 0)

Make it difficult for asymptomatic STDs to spread out of control.

29 (96. 7)

1 (3. 3)

0 (0. 0)

## **Inadequate use of STDs**

Routine STD screening of sexually active women is uncommon at hospital-based clinics.

23 (76. 6)



7 (23. 3)

0 (0. 0)

### **Impact of hormonal disturbance**

Cause most of the gynecological disorders in women.

14 (46. 7)

11 (36. 7)

5 (16. 7)

### **Importance of hormone testing**

As an annual check-up to prevent disease.

13 (43. 3)

15 (50. 0)

2 (6. 7)

Test important as more young women are

developing hormonal disturbance due to various changes in their lifestyles

26 (86. 7)

1 (3. 3)

3 (10. 0)

## **Inadequate use of hormone tests**

Hormone testing remains underutilized tool by medical practitioners.

22 (73. 3)

7 (23. 3)

1 (3. 3)

Most of the participants (96. 7 %) agreed that STDs cause serious health complications in women. That was why 90% (n= 27) of the medical practitioners agreed that STDs testing is important to reduce disease and infertility associated with undiagnosed STDs while 96. 7 % (n= 29) confirmed that screening make it difficult for asymptomatic STDs to spread out of control. However, 76. 6% of the doctors didn't deny the fact that routine STDs screening of sexually active women is uncommon at hospital-based clinics.

From the table, it was found that 86. 7% of the participants agreed that hormone testing is important for young women as many of them are developing hormonal disturbance as a result of various changes in their lifestyles. That was why 14 of the participants (46. 7%) even agreed that most of the gynecological problems in women are as a result of hormonal disturbance compared to 11 of them (36. 7%) who disagree with this fact. However, there were more participants (50%) to disagree that hormone testing is an important annual check-up and disease-prevention program compared to only 43. 3% who found hormone testing particularly important.

Moreover, majority of the participants 73. 3% (n= 22) agreed that hormone testing remain an underutilized tool by many medical practitioners.

### 3. 2. Statistical significance:-

#### **Table 6: Correlation between choice of prenatal genetic test as routine antenatal care and gender of participants**

Gender of participants

Choice of Prenatal genetic testing as part of antenatal care

p-value

r-value

0. 341

-0. 180

When a Pearson correlation was carried out between choice of prenatal genetic test as part of antenatal care and gender of participants, an r value of -0. 180 was obtained and a p value of 0. 341. Since p value > 0. 05 it can deduce that there is no relationship between the two variables.

#### **Table 7: Correlation between the use of follow-up test HbA1c for women with history of GDM and gender of participants**

Gender of participants

Use of follow-up test HbA1c in women with history of GDM

p-value

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r-value

0. 690

0. 076

When a correlation between the use of follow-up test HbA1c in women with history of GDM and gender of participants was carried out, it was found that there is no relationship between the two variables as  $p > 0. 05$ .

### **Table 8: Correlation between the need of Pap test in HPV vaccinated women and grade of participants**

Grade of participants

The need of a Pap test in HPV-vaccinated women

p-value

r-value

0. 898

-0. 024

There is no relationship between the opinions of medical practitioners on the need of a pap test in HPV-vaccinated women and grade of participants as p value obtained  $> 0. 05$ .

### **Table 9: Correlation between best method for accurate diagnosing of breast cancer and grade of participants**

Grades of doctors

## Best method for accurate diagnosing of breast cancer

p-value

r-value

0. 536

0. 118

Choosing the best method for accurate diagnosing of breast cancer does not depend on the grades of the participants as when a Pearson correlation was carried out an r value of 0. 118 was obtained while p value > 0. 05 showing that there is no relationship between the two variables.

**Table 10: Correlation between poor STDs screening of sexually active women and gender of participants and between poor STDs screening of sexually active women and age of participants.**

Gender of participants

Age of participants

Poor STDs screening of sexually active women in hospital

p-value

r-value

0. 690

0. 076

0. 003

0. 531

There is no relationship between poor STDs screening of sexually active women and gender of participants, however it was found that poor STDs screening of sexually active women and age of participants correlate positively and strongly.

## **Discussion**

Out of the sample population of  $n = 30$ , 60% ( $n = 18$ ) were males and the rest were females. This shows that even though the survey was based mainly on women health issues, more males had participated in it compared to females. The majority of the participants (73.3%) was Registered Medical Officers (RMO) and was aged between 31-40 years old. They were mostly working in public healthcare and none were found to work in both public and private healthcare.

From table 2, it was shown that the medical practitioners found all the 20 mentioned tests important for antenatal care showing that numerous tests are needed to monitor the health of pregnant women in order to minimise health complications. Furthermore, among the 20 mentioned tests, 3 laboratory tests which were Full Blood Count (FBC), haemoglobin and ABO blood group-rhesus typing got all the participant ( $n = 30$ ) agreeing that they were important. In Mauritius too, those tests are highly used by medical practitioners for monitoring pregnant-women health. The haemoglobin test which can be a separate test or as part of an FBC test is particularly

important to screen for iron deficiency anaemia in pregnant women. This is <https://assignbuster.com/human-immunodeficiency-virus-testing-nursing-essay/>

because as mentioned by Bersamin et al. (2008), iron deficiency anaemia has been associated with adverse effects that can affect both the mother and fetus including increased perinatal complications, premature delivery and low birth weight. ABO blood group and Rhesus typing is particularly important to avoid haemolytic disease of newborn.

All the 30 medical practitioners agreed that gestational diabetes Mellitus (GDM) cause complications during pregnancy and that was why the majority of them (96. 7%) found it necessary to screen for GDM in pregnant women. All the participants (n= 30) found the 2hr Oral Glucose Tolerance Test (OGTT) with 75g glucose load as the recommended test to screen for GDM during pregnancy. This is consistent with the report on ' Gestational Diabetes Guideline' by the 2002-2011 group health Cooperative whereby it also recommend the 2 hr OGTT with 75g glucose load to screen for GDM in pregnant women. However, while the report further suggested the use of the follow-up test Glycosylated Hemoglobin (HbA1c) annually to monitor the health of all women with a history of GDM, only 70% of the participants agreed to this. The rest were either unsure (13. 3%) or they didn't find the use of the follow-up test HbA1c important (16. 7 %). Those who agreed about the use of the follow-up test HbA1c can be explained by the fact that they considered GDM as a risk factor for type 2 diabetes. On the contrary those participants who didn't consider GDM as a risk factor for the type 2 diabetes or were unsure about it; they were the one to disagree or were unsure about the use of HbA1c test as follow-up. It was found out that there is no relationship between using the follow-up test HbA1C in women with history of GDM and gender of participants ( $p > 0. 05$ ). It is to be noted that type 2

diabetes is quite a serious problem in Mauritius and already the government is spending quite a significant amount of the budget for the treatments of diabetic patients. Since most of the medical practitioners (80. 0%) agreed that GDM is a risk factor for type 2 diabetes, it is important that they make effective use of the HbA1c test especially to monitor the health of women with a previous history of GDM.

Prenatal testing such as the triple/quadruple (or triple/quad) test and prenatal genetic testing is not available in Mauritius. When the medical practitioners were asked if ever these tests were offered as part of antenatal care which one was their preference, the majority of them (66. 7%) chose the triple/quad test while only 43. 3 % chose prenatal genetic testing. Though prenatal genetic testing are diagnostics tests giving very accurate results, the low preference can be explained by the numerous disadvantages associated with it. According to the survey, most of the clinicians (76. 7%) agreed that prenatal genetic testing increases risk of miscarriages, the second next disadvantage was 60% of them agreed that it is not possible to detect every possible condition in a fetus with this test. Thirdly, 50% of the clinician found it more costly than the triple/quad test. As mentioned by a report ' the Australian Handbook for General Practitioners' (2007), the triple/quad test are not accurate tests as a high risk result does not necessarily means the presence of a birth defect. This explains why most of the practitioners (63%) agreed that prenatal genetic testing should only be offered in cases of abnormal result of triple/quad test and not to all pregnant women. This finding is consistent with what Hudson (2004) and Chitayat,



Langlois and Wilson (2011) mentioned that prenatal genetic testing should be performed only in case of an abnormal result of the triple/quad test.

During the survey it was found that the Papanicolaou test (Pap test) was considered as the least important test for antenatal care as the majority of then participants (46. 6%) considered it as unimportant. However, Pap test do have its importance in the life of a woman as all the medical practitioners (n= 30) agreed that Pap test is important for early detection of cervical cancer in women. Moreover, majority of the participants (76. 6%) considered Pap test especially important for young woman since they are more at risk of being infected with the HPV virus. Some of the possible reasons that can explain this low preference of the Pap test during pregnancy are:

If the speculum is inserted or removed with insufficient care, this can traumatize the vaginal tissue and cause pain (Obstetrics Clinical Guidelines Group, 2009).

Several women experience bleeding after a pap test and in pregnant women this can be a source of panic as they immediately link bleeding to miscarriage and other complications (Anon, 2012)

According to Dr Ramdaursingh (2009) who is the program manager of cervical screening program offered by the ministry of health in Mauritius, it is recommended for women to have a pap test even though they have been vaccinated with the Human Papilloma Virus (HPV) vaccine. This is because he mentioned that the HPV vaccine does not protect against all the types of HPV that cause cervical cancer. Our finding too supports his saying as most

of the participants (51. 7%) agreed that even HPV vaccinated women need a Pap test.

Breast cancer is the commonest female malignancy worldwide and the best outcome of management is achieved with early detection of small lumps via the use of diagnostic tools (Randa, Mohamed and Yahia, 2009). In the survey, it was found that numerous laboratory methods are available for diagnosis of breast cancer some of which are single tests while others can be used in combination. Thus, it is important to select those laboratory tests that give accurate results. It was found out that there is no relationship between choosing the best method for accurate diagnosing of breast cancer and grades of participants ( $p > 0. 05$ ). Most of the medical practitioners (36. 6%) found Core Needle Biopsy (CNB) as the most ideal method for accurate diagnosis of breast cancer. However, in Mauritius it is the Fine Needle Aspiration Cytology (FNAC) test which is used to detect for breast cancer and is mainly performed by pathologists. The reasons why FNAC test remains highly used in Mauritius is the same as that mentioned by Teck-Meng Tham et al. (2009) such as it is a reliable method, simple and quick, few complications and thus high patient acceptance. Like all tests FNAC do have its limitations and sometimes the initial FNAC can be inadequate for diagnosis as it cannot distinguish in-situ from invasive carcinoma. Hence during the study, it was found that a majority of males (88. 9%) a