Factors Contributing to Irregular Attendance in Prevention of Mother to Child Transmission of HIV services

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FACULTY DISCLOSURE

Faculty	Marie Claire Uwamahoro RN,BSN,MSN, PhD©
Conflict of interest	None
Employer	University of Rwanda, College of Medicine and Health Sciences
Sponsorship	University of Rwanda trough Swedish International Development
	Cooperation Agency (SIDA)

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Conflict of interest	None				
Employer	University of Rwanda, College of Medicine and Health Sciences				
Sponsorship	None				



SESSION GOAL

 The presentation aims to share the key findings of the study done on the "Factors Contributing to Irregular Attendance in Prevention of Mother to Child Transmission of HIV services"



SESSION OBJECTIVES

- At the end of this session, participants will be able to:
- To identify the prevalence rate of women with irregular attendance in PMTCT services
- To identify factors (personal, interpersonal, institutional) contributing to irregular attendance in PMTCT services



BACKGROUND

- Mother-to-child transmission (MTCT) of HIV remains a major public health problem
- MTCT continues to account for a substantial proportion of new HIV infections among young children
 - (Deressa et al., 2014; Gourlay et al., 2013).
- The global estimates showed that 150,000 children were newly infected with HIV in 2015
- Most of them were from developing countries with more than 90% found in sub-Sahara African countries
 - (WHO, 2015).

BACKGROUND

- In 2016, mother to child HIV transmission rate at 18 months in Rwanda was 1.76%
 - (Rwanda Center for Disease Control and Prevention, 2017).
- Prevention of Mother to Child Transmission (PMTCT) services has been put in place worldwide
 - (Balira et al., 2015; WHO, 2015).
- The PMTCT services in Rwanda are free of charge



BACKGROUND

- The package is available at primary level of health care system and it involves:
 - Provider-initiated HIV testing and counselling during antenatal care visits and labor wards
 - Provision of antiretroviral drugs
 - prophylaxis or lifelong antiretroviral therapy to HIV positive women and their infants
 - (MOH, 2012).



THE PROBLEM STATEMENT

- The main challenge that PMTCT services face at Kinyinya health center, is the irregular attendance of women in the program.
- The anecdotal observation of four consecutive months (September-December 2015) showed that an estimate of 20% of women were irregular in PMTCT services at Kinyinya Health Center.



OBJECTIVES

Main objective

 To assess the factors contributing to irregular attendance in prevention of mother-to-child HIV transmission services by PMTCT users.

Specific Objectives

- To assess the prevalence rate of women with irregular attendance in PMTCT services
- To identify factors (personal, interpersonal, institutional) contributing to irregular attendance in PMTCT services



RESEARCH QUESTIONS

- What is the prevalence rate of attendance in PMTCT services at health center?
- What are the personal, interpersonal and factors contributing to irregular attendance in PMTCT services by mothers?



METHODOLOGY

- The study was conducted at Kinyinya Health Center, a primary public health care center located in Kigali city, Rwanda, from April 2016 to May 2016.
- A quantitative cross-sectional descriptive design was used.
- Using simple random sampling strategy and prevalence formula to calculate the sample, 62 women out of 110 were recruited.
- Data were collected using a validated self-administered questionnaire.





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METHODOLOGY

- Ethical approval was granted by the Institutional Review Board of University of Rwanda; College of Medicine and Health Sciences.
- The dependent variable was regularity in PMTC services.
 - (yes or no)
- Using SPSS (version 21) a cross-tabulation and a chi-square test (p value of <0.05) were used to describe factors related to irregular attendance.



Results:

Socio-demographic characteristics

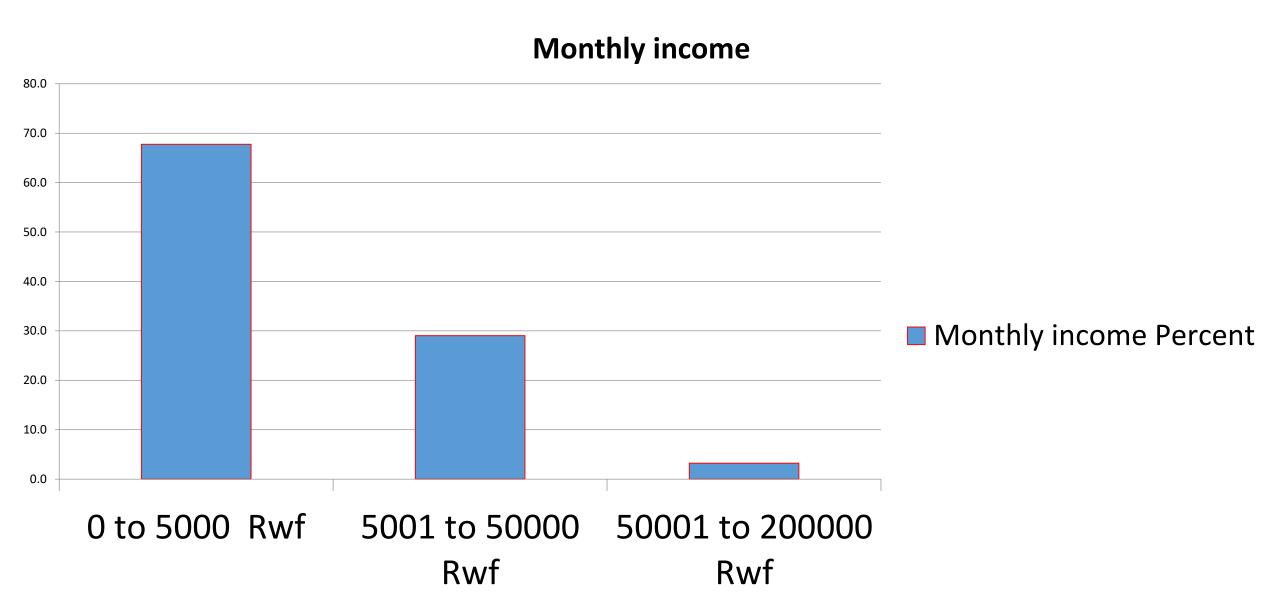


TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Variable	Category	Frequency	Percent	Variable	Category	Frequency	Percent
Age	15-25 years 26-35 years 36-45 years >45 years	2029130	32.3 46.8 21.0 0	Education level	None Primary Secondary Tertiary	17 33 12 0	27.4 53.2 19.4 0
Marital status	Married Single Divorced Widow	53423	85.56.53.24.8	Religion Employment status	Catholic Protestant Islam Student Small trade	18 42 2 1 28	29 67.8 3.2 1.6 45.2



Figure 1: Income of participants



Sociodemographic Characteristics

- Almost a half (46.8%) of the participants' ages ranged between 26-35 years.
- The majority of participants 53 (85%) were married and more than a half (53.2%) of the participants completed primary education.
- In reference to the participants religious preference the largest majority (67.8%) were protestants,
- More than half (53%) were female lead households.
- Most of participants had low monthly income with 68% (Figure 1)

Figure 2: Attendance rate of participants in PMTCT services (n=62).

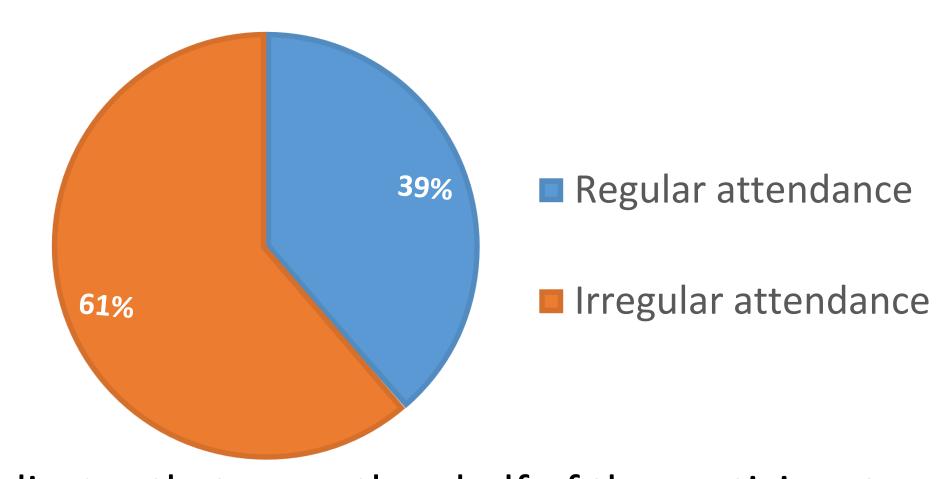


Figure 2, indicates that more than half of the participants (61.3%) irregularly attended PMTCT services.

Individual factors with attendance in PMTCT services



15-25 years

26-35 years

36-45 years

Married

Divorced

Widowed

Single

None

Primary

Tertiary

Secondary

Monthly income

0 to 5000 Rwf

Marital status

Level of Education

P-VALUE

ATTENDANCE IN PMTCT SERVICES						
Regular attendance	Irregular attendance					
N (%)	N (%)					
8 (33.3%)	12 (31.6%)					
12(50.0%)	17(44.7%)					
4(16.7%)	9(23.7%)					
(85.5%)	11(28.9%)					
1(4.2%)	3(7.9%)					
1(4.2%)	1(2.6%)					

Table 2. Individual factors with attendance in PMTCT services

0.800

0.287

<0.001*

<0.001*

13(34.2%) 23(60.4%)

1(2.6%)

0(0.0%)

32(84.2%)

2(5.3%)

5001 to 50000 Rwf 12(50.0%) 6(15.8%) 50001 to 200000 Rwf 2(8.3%) 0(0.0%)

2(8.3%)

4(16.7%)

9(37.5%)

11(45.8%)

10(41.7%)

0(0.0%)



- Table 2 indicates that the level of education and monthly income were associated with irregular attendance in PMTCT services (P-value < 0.001).
- By age, most of the women (44.7%) who attended irregularly were in the age range of 26-35 years. However, the age of the participant was not found significantly associated with attendance irregularity in PMTCT (p-value = 0.800).
- Regarding the marital status women who were married illegally were highly scored with 57.9% of irregular attendance but there was no association between marital status of the participants and irregular attendance in PMTCT (P-value = 0.287).

Interpersonal factors associated with irregular attendance in PMTCT services.



Figure 3: Husband attitude towards PMTCT

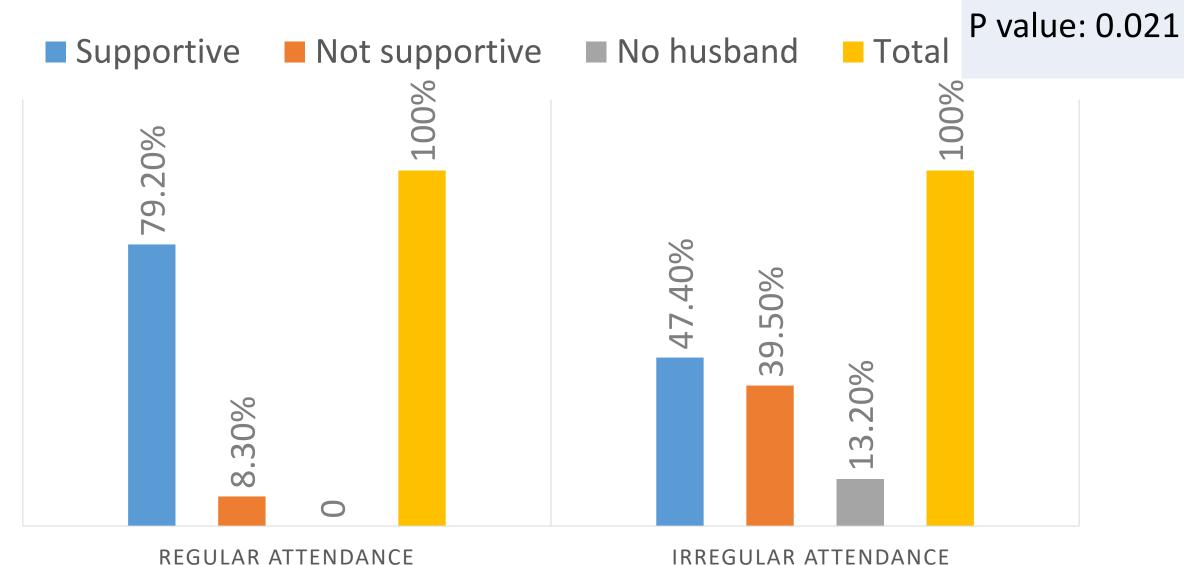
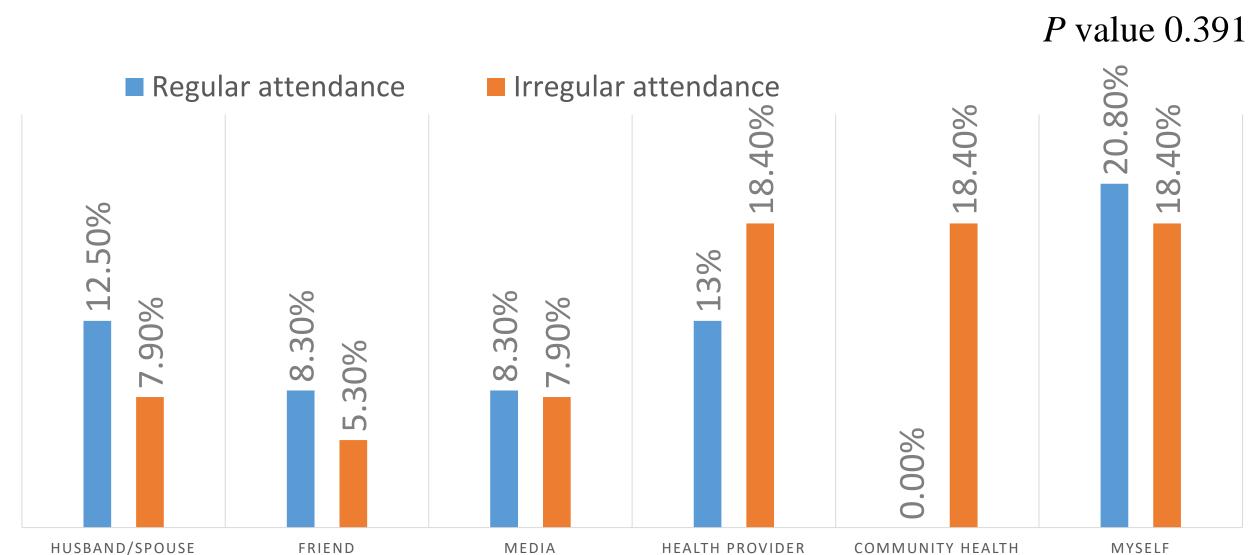




Figure 4: Who motivates your attendance in PMTC services



WORKER



- Figure 3 and 4 indicate that husband attitude was the only interpersonal factor associated with irregularity in PMTCT services (*P*-value = 0.021).
- A big number of participants were motivated by heath care providers to attend PMTCT services but it was not statistically significant



PMTCT attendance and Institutional factors

Table 3: PMTCT ATTENDANCE AND INSTITUTIONAL FACTORS

Table 5. I WITCH ATTEMPANCE AND INSTITUTIONAL FACTORS							
	Attendance						
INSTITUTIONAL FACTORS	Regular	Irregular	P value				
Waiting time before getting service.							
<30min	3(12.5%)	0(0.0%)	0.034*				
30min-60min	5(20.8%)	4(10.5%)					
More than 60 min	16(66.7%)	34(89.5%)					
Availability of health care provider on each day of							
visit.							
Yes	23(95.8%)	38(100%)	0.205				
No	1(4.2%)	0(0.0%)					
Relationship between clients and health care provider							
Bad	0(0.0%)	1(2.6%)	0.711				

Good

13(54.2%) 21(55.3%)



- Table 3 indicates that 89.5% of respondents with irregular attendance waited more than 60 minutes before getting PMTCT services. There was the significant relationship between waiting time and PMTCT attendance (*P*-Value = 0.034).
- According to the availability of health care provider on each day of the visit, both 95.8% of participants with regular attendance and 100% of those with irregular attendance responded that health care providers are available on each day of visit and there was no significant relationship, P-Value = 0.205.
- There was no association between rate of attendance and relationship between clients and health care providers, P-Value =0.711.



CONCLUSION

- This study establishes high prevalence rate of irregular attendance rate in PMTC services at Kinyinya Health Center.
- It was found that factors such as low level of education lack of husband support, income and long waiting time contribute to irregular attendance in PMTCT services by women at Kinyinya Health Center.

RECOMMENDATIONS

- Ministry of health/HIV-AIDS division
- Increase accessibility to PMTCT services, accelerating decentralization of services as well as increasing the number of trained healthcare providers at all levels of service delivery may be productive strategies to deal with irregular attendance in PMTCT services.
- Health center level
- Strengthening Health education about PMTCT together with increasing working days in PMTCT may result in reduced waiting time and greater coverage of PMTCT.
- Besides, home visits in PMTCT programs should be introduced to improve retention of vulnerable mother-child pairs

RECOMMENDATIONS

- Interpersonal and Community level
- Community engagement and encourage male involvement in PMTCT may improve husband/partner support.
- Utilizing trained and paid community health workers that conduct community outreach and home visits can also benefit continuity of care, follow-up care, and family involvement.
- It can as well help to combat some of the many barriers that women face in seeking care in PMTCT programs.
- Encourage women to attend schools. Other strategies include using parents' evening talk and PMTCT clubs.



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References

- Balira et al., 2015. Elimination of Mother-To-Child Transmission of HIV and Syphilis: A Dual Approach in the African Region to Improve Quality of Antenatal Care and Integrated Disease Control. Int J Gynaecol Obstet 130 Suppl 1, S27-S31
- Deressa et al., 2014. Utilization of PMTCT services and associated factors among pregnant women attending antenatal clinics in Addis Ababa, Ethiopia. BMC Pregnancy and Childbirth14:328 DOI: 10.1186/1471-2393-14-328
- Gourlay et al.,2013. Barriers and facilitating factors to the uptake of antiretroviral drugs for prevention of mother-to-child transmission of HIV in sub-Saharan Africa: a systematic review *J Int AIDS Soc.* 19;16:18588. doi: 10.7448/IAS.16.1.1858.
- Tsertsvadze, T. et al., 2008. PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV: THE GEORGIAN EXPERIENCE., Cent Eur J Public Health), 16 (3): 128–133
- World Health Organisation (WHO), 2015. Women's experiences in services for preventing the mother-to-child transmission of HIV: a literature review. Who; 2013. Available at: http://www.who.int/iris/handle/10665/90780.