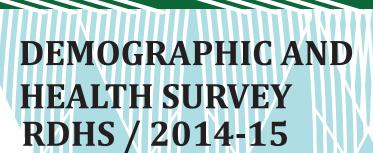
# The Republic of Rwanda







DISTRICT PROFILE CHART BOOK

**CITY OF KIGALI** 



# DEMOGRAPHIC AND HEALTH SURVEY RDHS 2014-15

# DISTRICT PROFILE CHART BOOK

**CITY OF KIGALI** 

September 2016

National Institute of Statistics of Rwanda
Ministry of Finance and Economic Planning
Ministry of Health
The DHS Program
ICF International







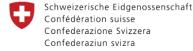












Swiss Agency for Development and Cooperation SDC







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Yusuf MURANGWA

Director General
National Institutes of Statisti

# **Table of Contents**

List of Figures	iii
List of tables	v
City of Kigali Map	vii
Introduction	1
Chapter 1: Household characteristics	3
1.1 Electricity coverage	3
1.2 Household durable good	3
1.3 Hand washing place observed	4
Chapter 2: Respondent characteristics	7
2.1 Education attainment	7
2.2 Net attendance rate	8
2.3 Birth registration of children under age 5	9
2.4 Children's orphanhood	10
2.5 Health insurance among adult women and men	11
2.6 Exposure to mass media	12
2.7. Current marital status	14
Chapter 3: Fertility determinants and fertility rates	17
3.1 Median age at first marriage	17
3.3 Median age at first birth	18
3.4 Teenage pregnancy and motherhood	19
3.5 Total fertility rate	19
Chapter 4: Family planning	21
4.1 Current use of contraception	21
4.2 Demand for family planning	21
4.3 Exposure to family planning messages	22
Chapter 5: Childhood mortality	25
Chapter 6: Maternal health	27
6.1 Antenatal care	27
6.2 Mothers whose last hirth was protected against peopletal tetapus	27

# RDHS District Chart book – City of Kigali

6.3: Place of delivery	28
6.4: Assistance during delivery	29
6.5: Postnatal checkups	30
Chapter 7: Child health	31
7.1 Prevalence of Acute Respiratory infection (ARI)	31
7.2 Prevalence of fever	31
7.3 Prevalence of Diarrhea	32
7.4: Anemia among children	33
Chapter 8: Nutrition among children and women	35
8.1 Nutritional status of children under five years	35
8.2 Breastfeeding status	36
8.4 Prevalence of anemia among women	37
Chapter 9: Malaria	39
9.1 Use of Insecticide -Treated Nets (ITNs)	39
9.3 Prevalence of Malaria among children	40
9.4 Prevalence of malaria among women	41
Chapter 10: HIV Attitude and Knowledge	43
10.1 Complete knowledge of HIV prevention methods	43
10.3. Accepting attitudes toward those living with HIV/AIDS	44
10.4. Multiple sexual partners	45
10.5 Payment of sex	46
10.6. Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms	47
10.7 Practice of Circumcision	48
10.8 HIV prevalence among adult	49
10.9. HIV prevalence among cohabiting couples	50
Chapter 11: Women empowerment	51
11.1 Control over women's cash earnings and relative magnitude of women's cash earnings	51
11.2 Control over men's cash earnings	53
11.3 Women's participation in decision-making	55
11.4 Attitude toward wife beating	57
Annex: New tables that are not included in the RDHS Main Report, Appendix D	59

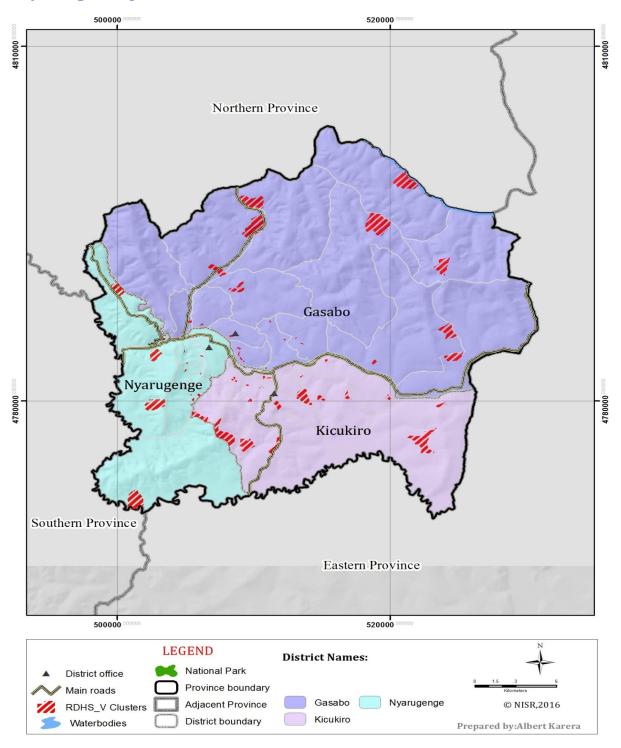
# **List of Figures**

Figure 1: Percentage of households with electricity coverage	3
Figure 2: Percentage of households with durable goods	4
Figure 3: Percentage of household where hand washing place were observed	5
Figure 4:Percent distribution of de facto Female household population age 6 and over in the City of Kigali by the highest education level attained	
Figure 5: Percent distribution of de facto Male household population age 6 and over in.	8
Figure 6: Net Attendance Rate in Primary school	9
Figure 7: Net Attendance Rate in Secondary school	9
Figure 8: Percentage of de jure children under age 5 whose births are registered wit civil authorities1	
Figure 9: Percentage of de jure children under age 18 with one or both parents dead1	1
Figure 10: Percentage of de jure household members with Health insurance1	2
Figure 11: Percentage of women age 15-49 who are exposed to specific media on weekly basis1	
Figure 12: Percentage of men age 15-49 who are exposed to specific media on a week basis1	-
Figure 13: Percentage distribution of women 15-49 by current marital status1	4
Figure 14: Percentage distribution of men 15-49 by current marital status1	.5
Figure 15: Median age at first marriage for women age 25- 49 and men age 30-591	7
Figure 16: Median number of months since preceding birth (birth interval)1	8
Figure 17: Median age at first birth among women age 25-491	8
Figure 18: Percentage of women age 15-19 who have begun childbearing1	9
Figure 19: Wanted and observed total fertility rates for women age 15-492	20
Figure 20: Percentage of currently married women age 15-49, using contraception2	21
Figure 21 Percentage of total demand for family planning among currently marrie women age 15-492	
Figure 22: Percentage of women age 15-49 who heard or saw a family planning messages, by type of channel2	
Figure 23: Percentage of men age 15-49 who heard or saw a family planning message by type of channel2	
Figure 24: Farly childhood mortality rates1	26

Figure 25:	provider227
Figure 26:	Percentage of mothers 15-49 whose last birth was protected against neonatal tetanus3
Figure 27:	Percentage of mothers 15-49 delivered in a health facility29
Figure 28:	Percentage of mothers assisted by a skilled provider during delivered29
Figure 29:	Percentage of women/ newborn who received postnatal checkup in the first two days after birth30
Figure 30:	Prevalence of ARI among children under five years31
Figure 31:	Prevalence of fever among children under five years32
Figure 32:	Prevalence of Diarrhea among children under five years32
Figure 33:	Percentage of children age 6-59 months classified as having anemia4 (hemoglobin <11.0 g/dl)33
Figure 34:	Percentage of children under five years by Nutritional status36
Figure 35:	Median duration of exclusively breastfed children under age 536
Figure 36:	Percentage distribution of women age 15-49 by nutrition status37
Figure 37:	Prevalence of anemia among women age 15-4938
Figure 38:	Percentage of de facto household's population who slept under an ITN the night before the survey39
Figure 39:	Percentage of children under age 5 who slept under an ITN the night before the survey40
Figure 40:	Prevalence of malaria among children under five years40
Figure 41:	Prevalence of malaria among women age 15-4941
Figure 42:	Percentage of respondent with complete knowledge of HIV prevention methods43
Figure 43:	Percentage of women and men age 15-49 with comprehensive knowledge on HIV44
Figure 44:	Percentage women and men 15-49 accepting attitudes towards those living with HIV/AIDS45
Figure 45:	Percentage of women and men who had sexual intercourse with more than one partners in the past 12 months46
Figure 46:	Percentage of men 15-49 who paid for sex

Figure 47: Prevalence of sexually transmitted infections (STIs) and STI symptoms in last 12 months
Figure 48: Percentage of men age 15-49 who are circumcised49
Figure 49: HIV prevalence among women and men age 15-4949
Figure 50: HIV prevalence among cohabiting couples50
Figure 51: Percentage distribution of person who decides how the wife's cash earnings are used
Figure 52: Percentage distribution of currently married women age 15-49 according to their cash earning in comparison to their husbands'53
Figure 53: Percentage distribution of currently married women 15-49 according to their report on who decide how the men cash earnings are used54
Figure 54: Percentage distribution of currently married men 15-49 according to their report on who decide how the men cash earnings are used55
Figure 55: Percentage of currently married women age 15-49, participating in decision making according to the types of decisions
Figure 56: Percentage of currently married women 15-49 according to the participation in decision making
Figure 57: Percentage of currently married women and men age 15-49 who agree with attitude toward wife beating is justified58
List of tables
Table 1: Percentage of households with electricity by district59
Table 2: Percentage of households with durable goods by district60
Table 3: Percentage of household's members with health insurance by district61
Table 4: Percentage of household's female population according to the highest level of education attained by district62
Table 5: Percentage of household's male population according to the highest level of education attained by district63

# City of Kigali Map



### Introduction

The National Institute of statistics of Rwanda in collaboration with the worldwide Demographic and Health Surveys Program implemented the 2014-15 Rwanda Demographic and Health Survey (RDHS) to collect data for monitoring progress on health programs and policies in Rwanda.

The key indicators and the main report have been produced and published at national level; this document is elaborated in order to disseminate RDHS\_2014-15 results at decentralized level.

As for the main report, the chart book gives information on demographic and health indicators such as family planning, maternal mortality, infant and child mortality, nutrition status of mothers and children, antenatal care, delivery care and childhood diseases. In addition, the survey was designed to measure the prevalence of anemia and malaria among women and children, and to measure the prevalence of HIV infection in Rwanda.

The target groups in this survey were women age 15-49 and men age 15-59 who were randomly selected from households across the country. Information about under age 5 children was also collected, including the weight and height of the children.

Through this document, each province will be able to trace the level attended in health care and other health related indicators through different charts that are produced. This document will also help in the design and implementation of District Development Plan (DDP).

The National Institute of Statistics of Rwanda is pleased to invite District planners and other users to play an active role in using this valuable information to contribute to a better quality of life for the Rwandan population.

# **Chapter 1: Household characteristics**

The Rwanda Demographic Health Survey (RDHS\_2014-15) collected household information. This chapter presents some of the indicators that were selected, namely; access to electricity, possession of selected durable goods, availability of hand washing place to evaluate the socioeconomic and living conditions of the household in the Districts of The City of Kigali.

# 1.1 Electricity coverage

Figure 1 shows that 71 percent of households in the City of Kigali have access to electricity compared to 23 percent at the national level. The results show that the majority of all households in all districts of the City of Kigali possess electricity: this percentage is 83 percent in Kicukiro District, followed by Nyarugenge District with 76 percent and Gasabo District with 62 percent.

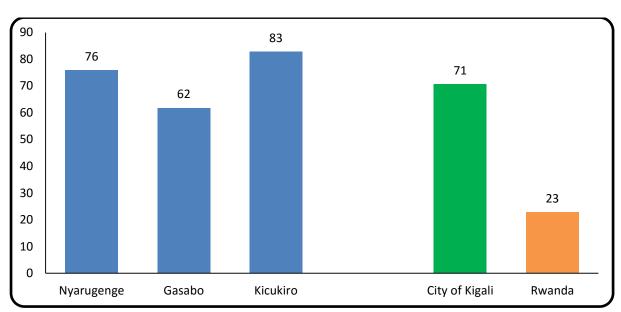


Figure 1: Percentage of households with electricity coverage

Source: RDHS, 2014-15

# 1.2 Household durable good

Figure 2 shows that Mobile telephone (86 percent) is the most owned households good in the City of Kigali as compared to 60 percent at the national level. The percentage of Mobile telephones possession is high in all districts of the City of Kigali: Kicukiro District (90 percent), Nyarugenge District (89 percent) and Gasabo District (83 percent).)

The second most common household asset is Radio owned by 68 percent of households in the City of Kigali as compared to 55 percent at the national level. The proportion of households owning a radio is high in Kicukiro District (73 percent). Variations in ownership of radio do not vary too much between Nyarugenge District (67 percent) and Gasabo District (65 percent).

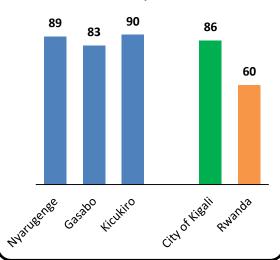
Thirty-nine percent of households own a television in the City of Kigali compared to 10 percent at national level. Kicukiro District has the highest percentage in ownership of Television (53 percent) followed by Nyarugenge District and finally by Gasabo Districts with 38 percent and 33 percent, respectively.

Fourteen percent of households in the City of Kigali have computer compared to 3 percent at the national level. Ownership of computer is highest in Kicukiro (22 percent) followed by Gasabo (11 percent) and Nyarugenge (9 percent).

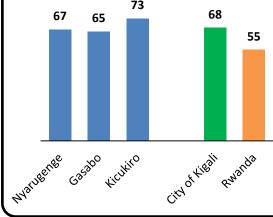
Radio

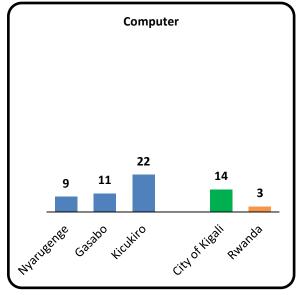
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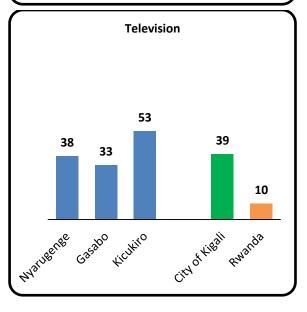
Figure 2: Percentage of households with durable goods



Mobile phone







Source: RDHS, 2014-15

# 1.3 Hand washing place observed

Washing hands with water and soap before eating, while preparing food, and after leaving the toilet is a simple, inexpensive, and good practice that protects against many diseases. During the survey, the interviewers asked each household if there was a place

used for hand washing, and, if so, they asked if they could observe the place to see if water and soap or some other hand cleansing means was available.

Figure 3 shows that 17 percent of households had a place for hand washing in the City of Kigali and this percentage is 12 percent at the national level. The percentage of households with place used for hand washing is high in Kicukiro District (32 percent) while it is low in Gasabo (14 percent) and very low in Nyarugenge (6 percent).

32

17

14

6

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

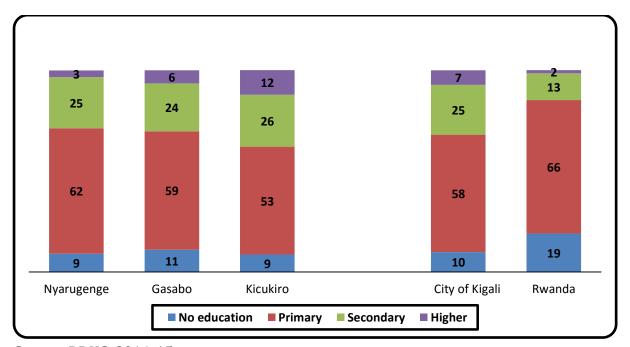
Figure 3: Percentage of household where hand washing place were observed

# **Chapter 2: Respondent characteristics**

# 2.1 Education attainment

Figure 4 and Figure 5 show the distribution of female and male respondents by highest level of education attained, and by districts of the City of Kigali. The proportion of men who attained primary school is slightly higher than that of women in the City of Kigali (61 percent and 58 percent, respectively), compared to 71 percent and 66 percent, respectively at national level. At secondary education level, it reverses: the proportion is slightly higher among women (25 percent) than among men (22 percent). This proportion varies from 26 percent in Kicukiro to 24 Percent in Gasabo for women and from 24 percent in Kicukiro and Nyarugenge to 20 percent in Gasabo for men. The proportion of women who attained high school is highest in Kicukiro (12 percent) and lowest in Nyarugenge (3 percent). The proportion of men who attained high school is 13 percent in Kicukiro, 10 percent in Gasabo and 5 percent in Nyarugenge.

Figure 4: Percent distribution of de facto Female household population age 6 and over in the City of Kigali by the highest education level attained



10 10 13 13 24 20 22 24 71 62 65 61 57 13 8 7 City of Kigali Nyarugenge Gasabo Kicukiro Rwanda ■ No education Higher Primary Secondary

Figure 5: Percent distribution of de facto Male household population age 6 and over in the City of Kigali by the highest education level attained

#### 2.2 Net attendance rate

Figure 6 and figure 7 describe net attendance rate among children in schooling age (7-12 in primary and 13-18 in secondary).

Figure 6 shows that the net attendance rate in primary school is almost universal in the City of Kigali (92 percent) for both male and female and it is almost the same at the national level (91 percent for male and 92 for female). Variation among districts of the City of Kigali among females is from 95 percent in Nyarugenge to 89 percent in Kicukiro District and from 95 percent in Kicukiro and Nyarugenge Districts to 89 percent in Gasabo District among males.

Figure 7 describes net attendance rate among children in secondary school. The net attendance rate in the City of Kigali at this level of education is estimated at 33 percent among males and 29 percent among females compared to 27 percent and 32 percent for males and females respectively at the national level. The percentage at the district level is 32 percent in Gasabo district followed by Kicukiro District (28 percent) and Nyarugenge District (26 percent) among women, and 36 percent in Gasabo district, 32 percent in Kicukiro District and 28 percent in Nyarugenge district among males.

95 95 95 92 92 92 92 91 89 89 Nyarugenge Gasabo Kicukiro City of Kigali Rwanda ■ Male ■ Female

Figure 6: Net Attendance Rate in Primary school

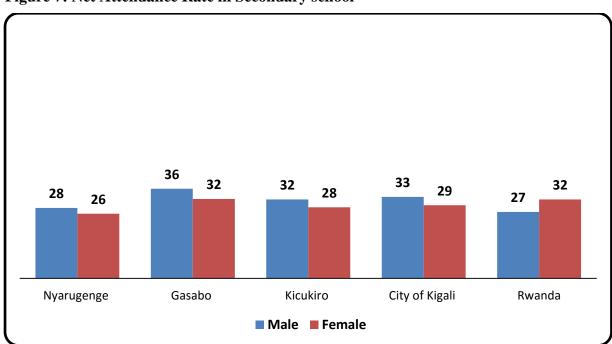


Figure 7: Net Attendance Rate in Secondary school

Source: RDHS, 2014-15

# 2.3 Birth registration of children under age 5

Registering a child's birth with civil authorities establishes the child's legal family ties and his or her right to a name and nationality prior to the age of majority. It confers on the child the right to be recognized by his or her parents and the right to state protection if his or her rights are abused by parents. It gives the child access to social assistance through the parents, including health insurance, and establishes family lineage. Registration is therefore an essential formality. Registration of a child with civil

authorities, if performed correctly, also provides a reliable source of socio demographic statistics. For this reason, the survey asked, for all children age 0 to 4 in each household, whether the child had a birth certificate or whether the child's birth had been registered with the civil authorities.

Figure 8 shows that 59 percent of children have been registered with the civil authorities in the City of Kigali compared to 56 percent at the national level. The percentage is high in Kicukiro (69 Percent), moderate in Gasabo and Nyarugenge districts (57 Percent each).

57 57 56 56 Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 8: Percentage of de jure children under age 5 whose births are registered with civil authorities

Source: RDHS, 2014-15

# 2.4 Children's orphanhood

Because the family is the primary safety net for children, any strategy aimed at protecting children must place a high priority on strengthening the family's capacity to care for children. It is therefore essential to identify orphaned children and to determine whether those who have one or both parents alive are living with either or both surviving parents.

Overall, 8 percent of children under age 18 in the City of Kigali have lost one or both parents compared to 9 percent at the National level. This percentage is almost the same in all districts of the City of Kigali: Kicukiro (9 percent), Gasabo and Nyarugenge (8 percent, each).

8 8 8 8 9 Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 9: Percentage of de jure children under age 18 with one or both parents dead

# 2.5 Health insurance among adult women and men

Information on health insurance coverage was collected during the survey. The percentage of household's members with health insurance coverage is shown in figure 10.

Seventy- one percent of the population is covered by any health insurance in the City of Kigali, the same percentage as of National level. This percentage is high among respondents in Kicukiro District (77 percent) and low in Nyarugenge District (64 percent).

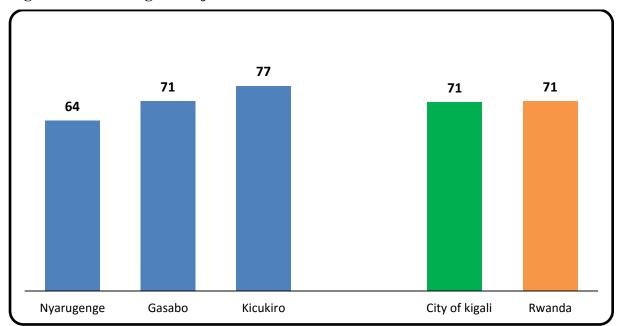


Figure 10: Percentage of de jure household members with Health insurance

## 2.6 Exposure to mass media

Data on the exposure of women and men to mass media are especially important to the development of education programs and the dissemination of all types of information, particularly information about health and family planning. Figure 11 and 12 present data on the exposure of women and men to mass media (print or broadcast). It should be stated at the outset that it is not necessary for a household to own a radio or television or to buy a newspaper to have access to these media, because many people listen to the radio or watch television at the homes of friends and neighbors.

Figures 11 and 12 show that, in the City of Kigali, Radio is the most common form of media exposure: 81 percent of women and 90 percent of men report listening to the radio at least once a week. At the District level this percentage is high in all Districts for both sexes: From 82 percent in Kicukiro to 78 percent in Nyarugenge among women. Among men, listening to the radio is from 92 percent in Gasabo to 85 percent in Kicukiro. Men watch television more frequently than women: 65 percent of men and 52 percent of women watch television at least once a week. Only 38 percent of men and 10 women report reading a newspaper at least once a week. The proportions of women and men who are exposed to media across all districts of the City of kigali follow almost the same pattern.

Figure 11: Percentage of women age 15-49 who are exposed to specific media on a weekly basis

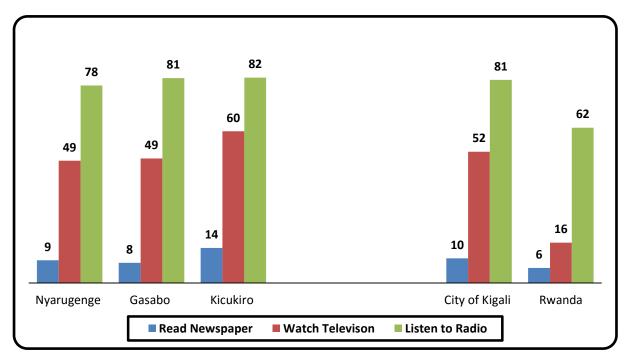
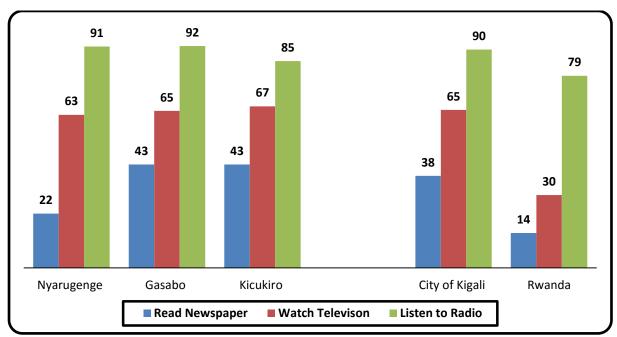


Figure 12: Percentage of men age 15-49 who are exposed to specific media on a weekly basis



### 2.7. Current marital status

In the figures 13 and 14 displayed below, the term *married* refers to men and women bound together legally, while *living together* refers to couples cohabiting in informal unions. People are considered *never married* if they have never been married or lived together with a partner. *Ever-married* people include those who are currently married as well as those who are living with a partner, widowed, separated, or divorced.

Figure 13 and 14 show the distribution of women and men by marital status, according to age at the time of the survey in the City of Kigali. Overall 44 percent of women age 15-49 have never been married compared to 54 percent of men age 15-49 in the City of Kigali. The percentage of women and men age 15-49 that have never been married is high in Kicukiro for both sexes (51 percent and 57 percent respectively) and almost the same in Gasabo (49 percent for women and 50 percent for men) and Nyarugenge (53 percent for women and 52 percent for men). Overall 47 percent of women and 45 percent of men interviewed in the City of Kigali were in a union (Married or living in union). This proportion varies from 51 percent in Gasabo to 40 percent in Kicukiro for women and from 50 percent in Gasabo to 43 percent in Kicukiro for men. The City of Kigali count 3 Percent of women that are widowed, 4 percent divorced and 2 percent separated. Among men this proportion is 1 percent (widowed, divorced and separated together).

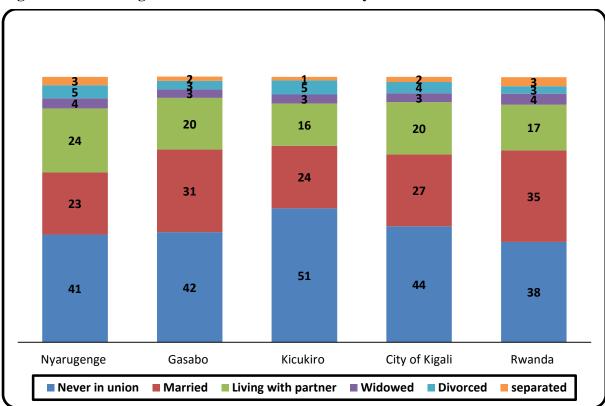
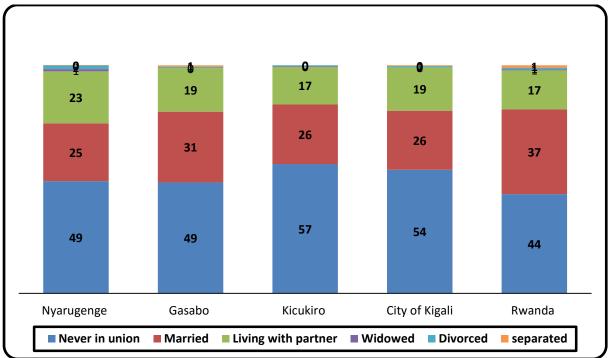


Figure 13: Percentage distribution of women 15-49 by current marital status

Figure 14: Percentage distribution of men 15-49 by current marital status



# **Chapter 3: Fertility determinants and fertility rates**

This chapter analyzes the fertility data gathered in the 2014-15 RDHS, presents data on age at first birth and birth intervals, as well as the teenage fertility.

# 3.1 Median age at first marriage

Figure 15 shows the median age at first union among women age 25-49 and men age 30-59. The median age at first marriage is 23.7 years and 28.5 years among women and men respectively in the City of Kigali compared to 21.9 years versus 25.4 years for women and men at the national level.

The data show that variations by district are not remarkable: among women, Nyarugenge have the earliest age at first union (23 years), followed by Gasabo (23.7 years), and then the Kicukiro district with 24.4 years at first marriage. Among men, Gasabo has the earliest age at first union (28 years), while Kicukiro have the latest (29.4 years).

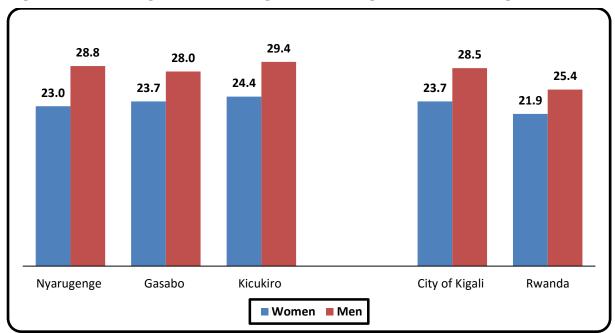


Figure 15: Median age at first marriage for women age 25-49 and men age 30-59

Source: RDHS, 2014-15

### 3.2 Birth interval

Birth intervals, or the length of time between two successive live births, are important not only because they influence the health status of both mother and child but also because they play a role in fertility analysis and in the design of reproductive health programs. Short birth intervals (less than 24 months) are considered harmful to the health and nutritional status of children and increase their risk of premature death.

The median interval between births is 38.9 months in the City of Kigali compared to 38.5 at the national level. By District, the birth interval is 41.6 months in Kicukiro, 40.5 in Nyarugenge and 37.0 months in Gasabo.

41.6

40.5

37.0

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 16: Median number of months since preceding birth (birth interval)

Source: RDHS, 2014-15

# 3.3 Median age at first birth

Figure 17 shows median age at first birth according to age of women by District. Women age 25-49 in the City of Kigali (23.5 years) have a lower median age as compared to 22.7 at national level. At districts level, the median age at first birth is 23.9 years in Kicukiro, 23.6 years in Gasabo and 22.9 years in Nyarugenge.

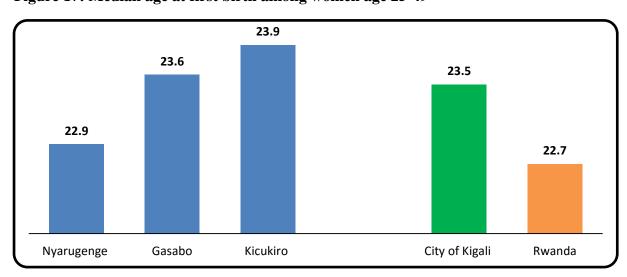


Figure 17: Median age at first birth among women age 25-49

# 3.4 Teenage pregnancy and motherhood

Figure 18 shows the percentage of young women age 15-19 who have begun child bearing in their teenage age. Ten percent of young women between age 15 and age 19 in the City of Kigali and 7 percent at the national level have already began childbearing. At district level, the percentage of women age 15-19 who have begun childbearing is 7 percent in Kicukiro district, 9 percent in Nyarugenge district and 13 percent in Gasabo district.

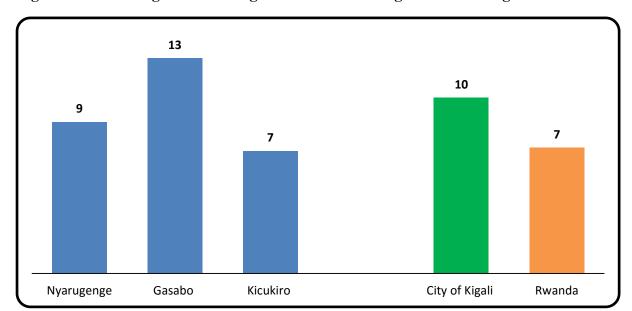


Figure 18: Percentage of women age 15-19 who have begun childbearing

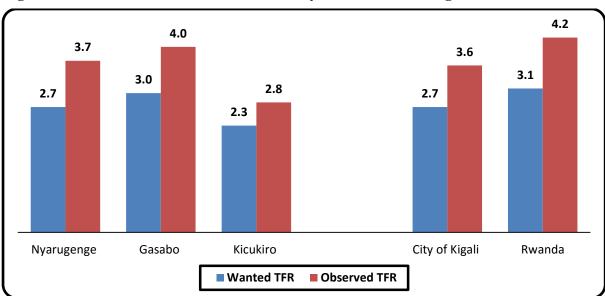
Source: RDHS, 2014-15

### 3.5 Total fertility rate

Figure 19 compares the total wanted fertility rate (TWFR) with the current total fertility rate (TFR) for the five years preceding the survey. Calculation of the TWFR is the same as for the TFR, except that unwanted births are omitted. If all unwanted births were not considered, the TWFR for women age 15-49 in the City of Kigali would be 2.7 children compared to 3.1 children at the national level.

The TFR in City of Kigali is 3.6, a level lower than that of national level equal to 4.2. At district level, the TFR is lowest in Nyarugenge district (2.7 children) and highest in Gasabo district (4 children). Considering the gap between wanted and TFR, it is seen that there is a gap of 0.9 children in the City of Kigali. At district level the highest gap is observed in Gasabo and Nyarugenge districts (1 child for each district) and the lowest in Kicukiro (0.5).

Figure 19: Wanted and observed total fertility rates for women age 15-49



# **Chapter 4: Family planning**

This section presents information on the prevalence of current contraceptive use among women age 15-49 at the time of the survey. Level of current use of contraceptives is one of the indicators most frequently used to assess the success of family planning program activities and one of the determinants of fertility. This section focuses on the current use and the level of demand of family planning as well as the access to information related to family planning, in the City of Kigali.

# 4.1 Current use of contraception

Figure 20 shows that 55 percent of married women age 15-49 in the City of Kigali are currently using any family planning method, among them 50 percent are using any modern method, and 5 percent are using any traditional method, compare with 53 percent for any method and 48 percent for any modern method at national level. Women who are currently using contraceptive method are high in Gasabo District (57 percent) and Nyarugenge District (56 percent) and low in Kicukiro District (48 percent) with the majority of women using any modern method and the minority using the traditional methods.

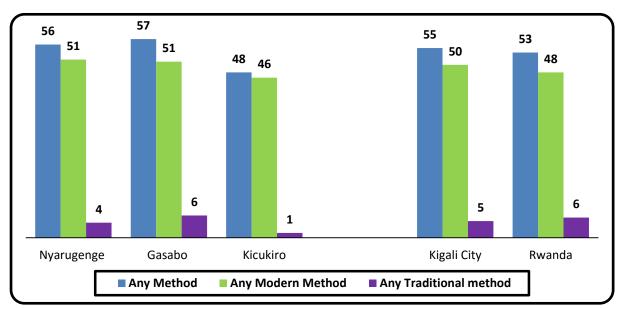


Figure 20: Percentage of currently married women age 15-49, using contraception

Source: RDHS, 2014-15

# 4.2 Demand for family planning

Figure 21 describes the total demand for family planning among currently married women in the City of Kigali and it is the same as at it is at the national level (72 percent, each). At the District level, the total demand for family planning is relatively high in all districts: 75 percent in Nyarugenge, 73 percent in Gasabo and 67 percent in Kicukiro.

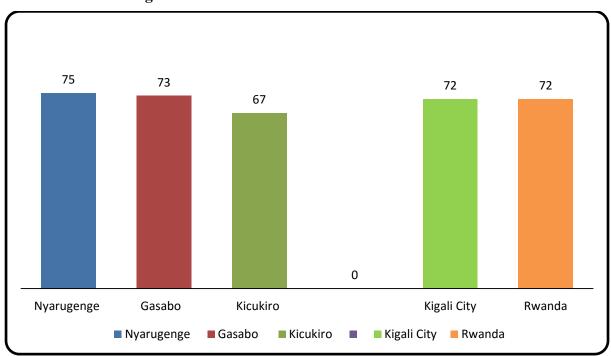


Figure 21 Percentage of total demand for family planning among currently married women age 15-49

# 4.3 Exposure to family planning messages

The mass media play an important role in communicating messages about family planning. Data on levels of exposure to radio, television, and printed materials are important for program managers and planners to effectively target population subgroups for information, education, and communication campaigns. To assess the effectiveness of family planning information disseminated through various media, respondents were asked if they had been exposed to family planning messages on the radio, on television, and in print (newspapers and magazines) in the few months preceding the survey.

Figure 22 and Figure 23 show that radio is the most widely accessed source of family planning messages in City of Kigali with 54 percent of women and 69 percent of men age 15-49 having heard a family planning message on the radio in the past few months, as compared to 52 percent of women and 64 percent of men at the nation level. Twenty percent of women and Twenty one percent of men reported having seen a family planning message on television; while 9 percent of women and 15 percent of men reported having seen a family planning message from or in a newspaper/magazine in the City of Kigali.

It is also important to note that, 42 percent of women and 29 percent of men in City of Kigali have not been exposed to any family planning messages in any of the three specified media sources. These proportions are almost the same as at the national level (47 percent for women and 34 percent for men).

Figure 22: Percentage of women age 15-49 who heard or saw a family planning messages, by type of channel

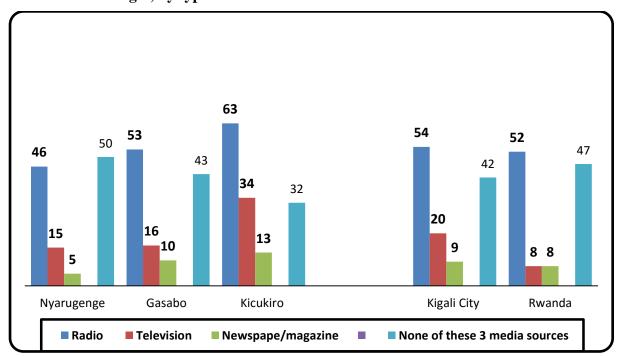
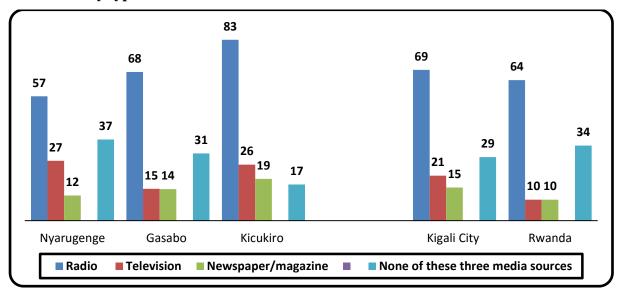


Figure 23: Percentage of men age 15-49 who heard or saw a family planning messages, by type of channel



## **Chapter 5: Childhood mortality**

The data used to compute the childhood mortality rates presented in this chapter were derived from the birth history of the Woman's interviewed. Each woman age 15-49 was asked whether she had ever given birth, and, if she had, she was asked to report the number of sons and daughters who live with her, the number who live elsewhere, and the number who have died. In addition, she was asked to provide a detailed birth history of her children in chronological order starting with the first child. Women were asked whether a birth was single or multiple, the sex of the child, the date of birth, survival status, age of the child on the date of the interview if alive, and, if not alive, the age at death of each live birth.

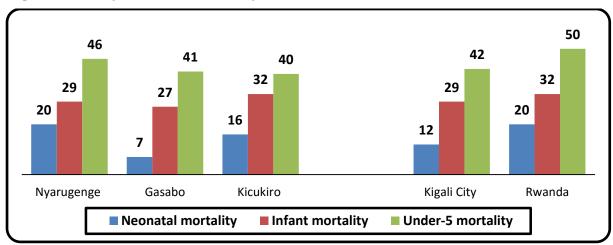
Selected childhood mortality rates are defined as follows:

- **Neonatal mortality:** the probability of dying within the first month of life
- **Infant mortality:** the probability of dying between birth and the first birthday
- **Under-5 mortality:** the probability of dying between birth and the fifth birthday

All rates are expressed as deaths per 1,000 live births with the exception of child mortality, which is expressed as deaths per 1,000 children surviving to their first birthday.

Figure 24 presents neonatal, infant, and under-5 mortality rates for five-year periods preceding the survey to get sufficient observations because deaths are rare events. In the City of Kigali, Neonatal mortality in the most recent period is 12 deaths per 1,000 live births compared to 20 deaths per 1,000 live births at national level. Twenty- nine of every 1,000 babies born in City of Kigali do not survive to their first birthday compared to 32 deaths per 1,000 at the National level. The Under-5 mortality in City of Kigali is 42 deaths per 1,000 live births compared to 50 deaths per 1,000 live births at the national level. By district Nyarugenge has the highest U5MR of 46 deaths per 1000 live births and Kicukiro has the lowest rate of 40 deaths out of 1,000 live births for the five years preceding the survey.

Figure 24: Early childhood mortality rates<sup>1</sup>



**Note:** These rates<sup>1</sup> computed as probabilities of dying within fixed period are expressed as deaths per 1,000 live births.

# **Chapter 6: Maternal health**

#### 6.1 Antenatal care

Monitoring of pregnant women through antenatal care visits helps to reduce risks and complications during pregnancy, delivery, and the postpartum periods. The 2014-15 RDHS asked women who had had a live birth in the five years preceding the survey whether they had received antenatal care (ANC). Figure 21 shows the percentage of women who had consulted any skill health provider during the pregnancy for their most recent birth.

Nearly all mothers (99 percent) in the City of Kigali received at least one antenatal care from skilled provider for their most recent live birth in the five years preceding the survey. This percentage is the same as it is at national level. Universal ANC from skilled personnel is almost the same in the districts of the City of Kigali: 99 percent in Kicukiro and Gasabo and 98 percent in Nyarugenge.

98 99 99 99

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 25: Percentage of Women age 15-49 who received antenatal care from a skilled provider<sup>2</sup>

Source: RDHS, 2014-15

**Note**: A skilled provider<sup>2</sup> includes; medical doctor, midwife, medical assistant and nurse.

#### 6.2 Mothers whose last birth was protected against neonatal tetanus

Neonatal tetanus is a major cause of death among newborns in developing countries. Tetanus toxoid injections given to the mother during pregnancy protect both mother and child against this disease. Figure 26 shows that in the City of Kigali the percentage

of mothers whose last birth was protected against tetanus is 84 percent; this means that 16 percent of pregnant women were not protected against tetanus, and at the national level it is 18 percent of pregnant women who were not protected against tetanus. According to the districts, the proportion of mothers whose last birth was protect against tetanus is highest in Kicukiro (89 percent) followed by Gasabo district (86 percent), and lowest in Nyarugenge (76 percent).

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 26: Percentage of mothers 15-49 whose last birth was protected against neonatal tetanus<sup>3</sup>

Source: RDHS, 2014-15

<u>Note</u>: Neonatal Tetanus<sup>3</sup> Includes mothers with two injections during the pregnancy of their last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

#### **6.3: Place of delivery**

Since every pregnancy may be subject to complications, women are advised to deliver their babies in a health facility so that they access emergency services if needed during labor, delivery, and post-delivery. Figure 27 shows that in the City of Kigali 94 percent of births in the five years before the survey were delivered at a health facility, compared with 91 percent at the national level. At the District level, the percentage of deliver in a health facility is almost the same: in Kicukiro and Gasabo Districts (95 percent, each) and 92 percent in Nyarugenge District.

92 95 95 94 91

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 27: Percentage of mothers 15-49 delivered in a health facility

#### **6.4:** Assistance during delivery

To avoid the risk of complications and maternal deaths, women should be assisted during delivery by personnel who have received training in childbirth and who are able, if needed, to diagnose, treat, and refer complications on time. Figure 28 presents the percentage of mothers provided with assistance during the delivery by a health skilled provider. The results show that 95 percent were assisted by a skilled health provider in the City of Kigali, and it is 91 percent at national level. This percentage is almost the same in all Districts: 96 percent in Gasabo, 95 percent in Kicukiro and 92 percent in Nyarugenge.

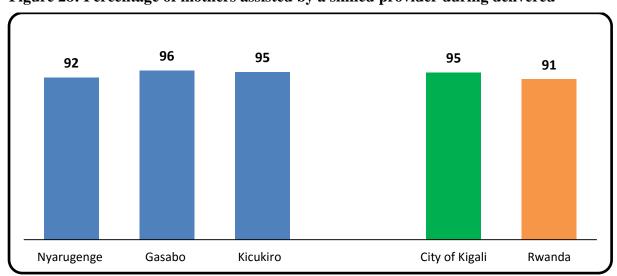


Figure 28: Percentage of mothers assisted by a skilled provider during delivered

#### 6.5: Postnatal checkups

Figure 29 describes the post natal checkups among women and newborn. In the City of Kigali 47 percent of women had a postnatal checkup in the first two days after delivery, compared to 43 percent at the national level. The proportion of women who received a postnatal checkup is less than 50 percent in all Districts of the City of Kigali: Nyarugenge District (49 percent) Gasabo District (46 percent) and Nyarugenge District (45 percent). Overall, in the City of Kigali, 10 percent of newborns received postnatal care in the first two days after birth, compared to 19 percent at national level. The proportion is higher in Kicukiro (28 percent) and followed by Nyarugenge District (8 percent) and then by Gasabo District (4 percent).

49 47 46 45 43 28 19 10 8 Kicukiro City of Kigali Rwanda Gasabo Nyarugenge Women ■ Newborn

Figure 29: Percentage of women/ newborn who received postnatal checkup in the first two days after birth

## **Chapter 7: Child health**

To assess the prevalence of these infections, mothers were asked if their children under age 5 had been ill with a cough during the two weeks preceding the survey and, if so, whether the cough had been accompanied by short, rapid breathing. It should be borne in mind that these data are subjective (i.e., based on the mother's perception of illness) and not validated by a medical examination.

#### 7.1 Prevalence of Acute Respiratory infection (ARI)

Acute respiratory infections (ARIs), particularly pneumonia, constitute one of the main causes of child deaths in developing countries. Figure 30 shows that 4 percent of children under age 5 in the City of Kigali had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey, compared to 6 percent at the national level.

Results according to Districts of the City of Kigali show the highest prevalence of ARIs in Nyarugenge (9 percent), followed by Gasabo (4 percent) and then by Kicukiro (1 percent).

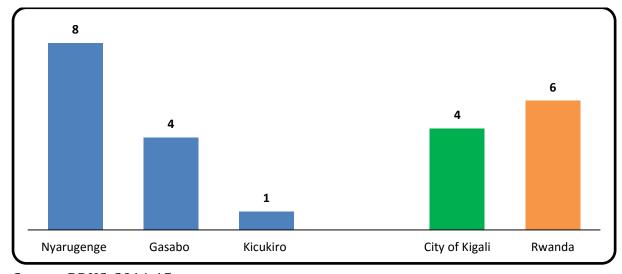


Figure 30: Prevalence of ARI among children under five years

Source: RDHS, 2014-15

## 7.2 Prevalence of fever

Fever is the primary symptom of many illnesses such as ARI, malaria and measles among others, which cause numerous deaths in developing countries. For this reason, mothers were asked whether their children had suffered from a fever during the two weeks preceding the survey. Figure 31 shows that, during this time period, 16 percent of children had a fever in the City of Kigali compared to 19 percent at the national level. Under-five children in Nyarugenge District (25 percent) are most likely to have had a fever than children in Gasabo (15 percent) and in Kicukiro Districts (11 percent).

25

15

11

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 31: Prevalence of fever among children under five years

#### 7.3 Prevalence of Diarrhea

Figure 32 shows that, according to mothers' reports, 8 percent of children had diarrhea in the two weeks preceding the survey in the City of Kigali compared to 12 percent at national level. The prevalence of diarrhea is especially high among children in Nyarugenge District (13 percent), followed by Gasabo District (7 percent) and Kicukiro (5 percent).

Note that diarrhea prevalence has a positive relationship between the ages at which children begin to be weaned and consume foods other than breast milk.

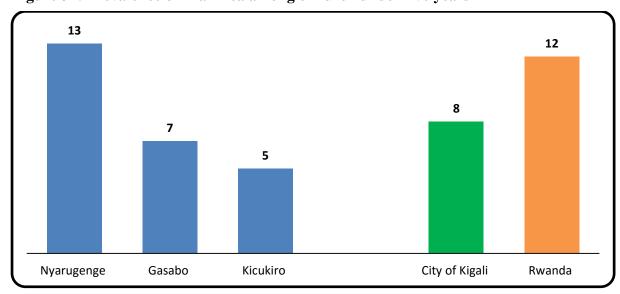


Figure 32: Prevalence of Diarrhea among children under five years

## 7.4: Anemia among children

Anemia is a condition characterized by a reduction in red blood cell volume and a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. Figure 33 presents anemia prevalence for children age 6-59 months. Children with hemoglobin level less than 11.0 g/dl are anemic. Overall, 31 percent and 37 percent of children age 6-59 months in City of Kigali and in Rwanda respectively have anaemia. By District, children in Nyarugenge are least likely to be anemic (28 percent) while children in Kicukiro (36 percent) are most likely to be anemic; the percentage of children with anemia is 30 percent in Gasabo District.

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 33: Percentage of children age 6-59 months classified as having anemia<sup>4</sup> (hemoglobin <11.0 g/dl)

Source: RDHS, 2014-15

**Note:** The three levels of anemia<sup>4</sup>: Mild: hemoglobin concentration of 10.0-10.9 g/dl; Moderate: hemoglobin concentration of 7.0-9.9 g/dl, and severe anemia of hemoglobin concentration below 7.0g/dl)

## **Chapter 8: Nutrition among children and women**

Nutritional status is the result of complex interactions between food consumption and the overall status of health and care practices. Numerous socioeconomic and cultural factors influence decisions on patterns of feeding and nutritional status. Adequate nutrition is critical to child growth, health, and development, especially during the period from conception to age 2. During this period, children who do not receive adequate nutrition can be susceptible to growth faltering, micronutrient deficiencies, and common childhood illnesses such as diarrhea and acute respiratory infections (ARIs). Among women, malnutrition can result in reduced productivity, an increased susceptibility to infections, slow recovery from illness, and a heightened risk of adverse pregnancy outcomes. A woman, who has poor nutritional status, as indicated by a low body mass index (BMI), short stature, anemia, or other micronutrient deficiencies, has a greater risk of obstructed labor, of having a baby with a low birth weight, of producing lower quality breast milk, of mortality due to postpartum hemorrhage, and of morbidity for both herself and her baby.

#### 8.1 Nutritional status of children under five years

Nutritional status of children under age 5 is an important measure of children's health and growth. The anthropometric data on height and weight collected in the 2014-15 RDHS permit the measurement and evaluation of the nutritional status of young children in Rwanda.

Figure 34 shows that, at City of Kigali level, 23 percent of children under age 5 are stunted (too short for their age), while this percentage is 38 percent at the national level. Variation in children's nutritional status by district is quite evident, with stunting being highest in Nyarugenge (29 percent), followed by Gasabo (22 percent) and lowest in Kicukiro (17 percent).

Two percent of children under age 5 are wasted (too thin for their height) in the City of Kigali, same level as at national level. The wasting prevalence is almost the same in all Districts: 3 percent in Gasabo, 2 percent in Kicukiro and Nyarugenge (each).

Five percent of children under age 5 in the City of Kigali are underweight (low weightfor-age) compared to 9 percent of children under age 5 at national level. Variation in underweight children by district shows that Nyarugenge has the highest percentage of children who are underweight (7 percent) followed by Gasabo (6 percent) and Kicukiro (2 percent).

38 29 23 22 **17** 9 7 6 5 3 2 2 2 2 2 Nyarugenge Gasabo Kicukiro Kigali City Rwanda **■** Weight for age Stunting Wasting

Figure 34: Percentage of children under five years by Nutritional status

#### **8.2 Breastfeeding status**

The median duration of exclusive breastfeeding in the City of Kigali is 5.1 months while it is 5.4 months at the national level. Children in Gasabo and Nyarugenge districts are exclusively breastfed for 5.3 months and 5.2 months respectively, whereas children in Kicukiro are breastfed for 4.3 months. Estimates of breastfeeding duration are based on current status data, that is, the proportion of children born in the three years preceding the survey who were being exclusively breastfed at the time of the survey and from mothers' declaration.

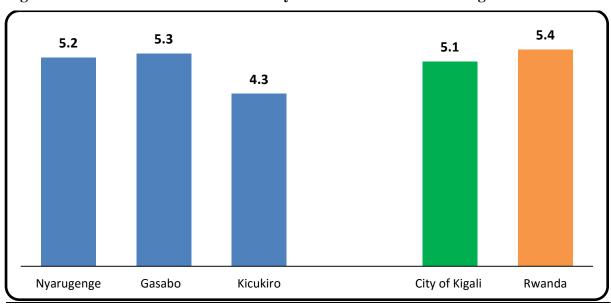


Figure 35: Median duration of exclusively breastfed children under age 5

# 8.3 Nutritional status among women

Figure 36 presents the nutritional status and the proportions of women falling into two high-risk categories of nutritional status. In the City of Kigali, 5 percent of women are considered to be thin (BMI below 18.5), as compared to 7 percent at the national level. This proportion is much high in Kicukiro (8 percent), followed by Nyarugenge (6 percent) and low in Gasabo District (4 Percent). Thirty-four percent of women are overweight or obese in the City of Kigali as compared to 21 percent at the national level. At district level, the percentage tends to be the same in all the districts: Kicukiro and Gasabo (35 percent, each) and 31 percent in Nyarugenge. Variation in normal standards by district shows that the percentage is the highest in Nyarugenge with 63 percent followed by Gasabo with 62 percent and lowest in Kicukiro with 57 percent.

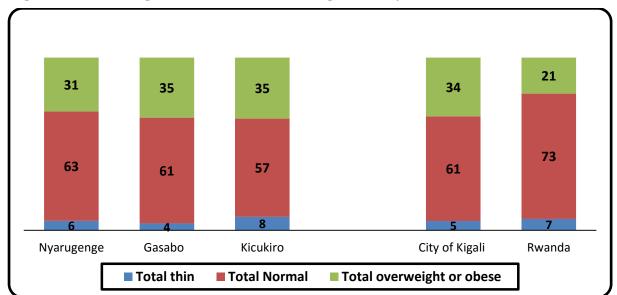


Figure 36: Percentage distribution of women age 15-49 by nutrition status

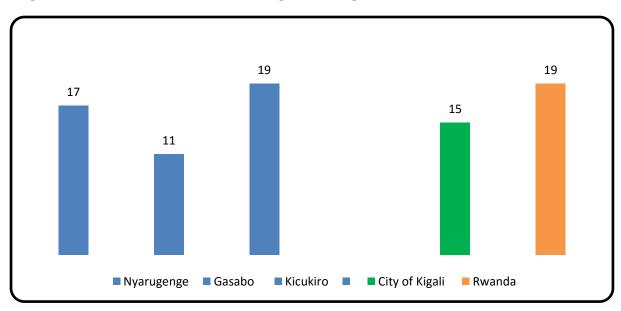
Source: RDHS, 2014-15

#### 8.4 Prevalence of anemia among women

Figure 37 presents anemia prevalence among women age 15-49 based on hemoglobin levels. Raw measured values of hemoglobin were obtained using the HemoCue instrument and adjusted for altitude and smoking status.

The data show that anemia is less prevalent among women than children (figure 37); 15 percent of women in the City of Kigali have some level of anemia, as compared with 19 percent of women in Rwanda. The great majority of women with anemia are in Kicukiro (19 percent) and Nyarugenge (17 percent, and the low prevalence is in Gasabo district with 11 percent of anemic women age 15-49.

Figure 37: Prevalence of anemia among women age 15-49



# **Chapter 9: Malaria**

Malaria has been a major cause of morbidity and mortality in Rwanda for several years, with periodic epidemics in high-altitude areas. This section presents the 2014-15 RDHS household-level findings on use of mosquito nets, and malaria prevalence particularly among children under age 5.

#### 9.1 Use of Insecticide -Treated Nets (ITNs)

Figure 38 shows that 75 percent of the households population in the City of Kigali slept under Insecticide-treated net (ITN) the night before the survey, while 61 percent slept under an ITN at the national level. The proportion of the population that slept under an ITN the night before the survey is almost the same in all districts: 76 percent in Gasabo District, 74 percent in Kicukiro and 73 percent in Nyarugenge District.

73 76 74 75
61
Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 38: Percentage of de facto household's population who slept under an ITN the night before the survey

Source: RDHS, 2014-15

#### 9.2 Use of ITNs among children

Children under age 5 are most vulnerable to severe complications of malarial infection due to their reduced immunity.

Figure 39 shows the use of mosquito nets by children under age 5. Eighty-one percent of children under age 5 slept under a mosquito net the night before the survey in the City of Kigali as compared to 68 percent in Rwanda. The percentage of children who slept under any ITN is high in Kicukiro District (84 percent), followed by Gasabo (82 percent) and low in Nyarugenge District (79 Percent).

79 82 84 81 68

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 39: Percentage of children under age 5 who slept under an ITN the night before the survey

## 9.3 Prevalence of Malaria among children

Figure 40 shows the results of the microscopic diagnostic test (blood smear) among children who were tested. In the City of Kigali, the prevalence of malaria among children ages 6 to 59 months is almost null, compared to 2 percent at the national level.

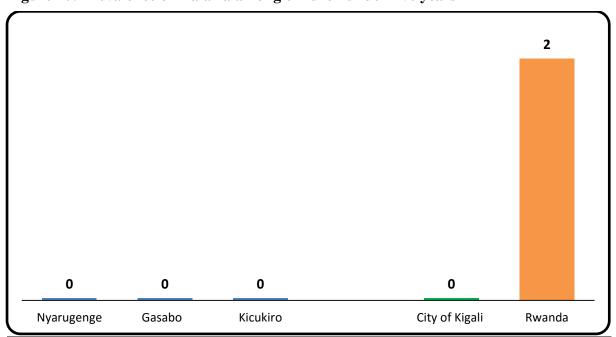


Figure 40: Prevalence of malaria among children under five years

# 9.4 Prevalence of malaria among women

Women are less likely to be infected with malaria than children from the figure presented above. In the City of Kigali, only 0.1 percent of women have malaria compared to 0. 6 percent at National level (figure 41). The prevalence of women with malaria is under 1 percent in district.

0.3

O.1

O D

Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 41: Prevalence of malaria among women age 15-49

## **Chapter 10: HIV Attitude and Knowledge**

HIV infection is a major public health concern at national level, where it is among cause of mortality with negative social and economic consequences that affect people and the country. The following section will discuss the knowledge, attitudes and HIV prevalence.

#### 10.1 Complete knowledge of HIV prevention methods

Figure 42 presents the percentage with complete knowledge of HIV and AIDS prevention methods among women and men age 15-49, by districts of the City of Kigali. Ninety percent of women and 94 percent of men are aware that the risk of contracting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other partners and that using condoms can prevent transmission of the AIDS virus in the City of Kigali compared to 83 percent of women and 88 percent of men who have knowledge of both HIV prevention methods at the national level. Men are more likely to have complete knowledge than women in City of Kigali except in Nyarugenge district where the situation reverses.

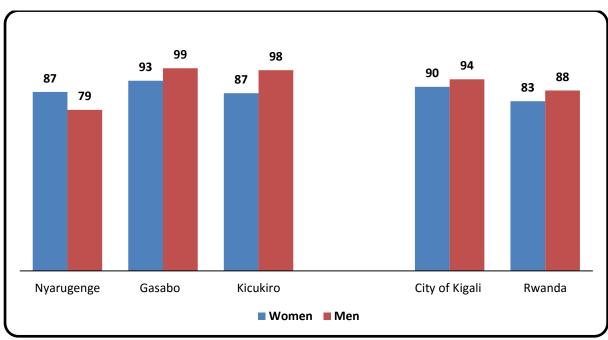


Figure 42: Percentage of respondent with complete knowledge of HIV prevention methods

Source: RDHS, 2014-15

#### 10.2 Comprehensive knowledge about HIV transmission

The 2014-15 RDHS included questions on common misconceptions about transmission of AIDS and HIV. Respondents were asked whether they think it is possible for a healthy-looking person to have the AIDS virus and whether a person can contract the AIDS virus from mosquito bites, by supernatural means, or by sharing food with a person who has AIDS.

The results in figure 43 indicate that some Rwandan adults lack accurate knowledge about the ways in which HIV can and cannot be transmitted. Nevertheless, in City of Kigali 82 percent of women age 15-49 and 85 percent of men in the same age have comprehensive knowledge about HIV/AIDS; that is: a healthy-looking person can have the AIDS virus and are aware that the virus cannot be transmitted by supernatural means or by sharing food with a person who has AIDS or by a mosquito bite. The comprehensive knowledge is more observed in Gasabo district in both sexes (93 percent for men and 88 percent for women) and in Kicukiro district (91 percent for men and 82 for women), and it is less observed in Nyarugenge district (64 percent for men and 70 percent for women).

93 91 88 85 82 82 70 69 67 64 Nyarugenge Gasabo Kicukiro City of Kigali Rwanda ■ Women ■ Men

Figure 43: Percentage of women and men age 15-49 with comprehensive knowledge on HIV

Source: RDHS, 2014-15

#### 10.3. Accepting attitudes toward those living with HIV/AIDS

Widespread stigma and discrimination toward those living with HIV can adversely affect both people's willingness to be tested for HIV and their adherence to antiretroviral therapy. Thus, reduction of stigma and discrimination against people living with AIDS is an important indicator of the success of programs aimed at preventing and controlling infection.

Four questions were asked to describe acceptance attitude on people living with AIDS. These questions were: their willingness to buy fresh vegetables from an infected shopkeeper, to let others know of an infected family member, and to take care of relatives who have AIDS in their own household. They were also asked whether an HIV-positive female teacher who is not sick should be allowed to continue teaching. Figure 44 show the percentages of women and men who express all those four positive attitudes toward people with HIV, in the districts of the City of Kigali.

Figure 44 shows that 47 percent of all women and 74 percent of men confirmed to accept all four mentioned above attitudes in the City of Kigali as compare to 50 of women and 63 percent of men at national level. Accepting all four attitudes among women is high in Kicukiro (58 percent), and low in Nyarugenge (46 percent) and Gasabo (42 percent). Among men, this percentage is high in Kicukiro (79 percent) and Gasabo (73 percent), and low in Nyarugenge (67 percent).

**79** 73 74 67 63 58 50 47 46 42 Kicukiro City of Kigali Nyarugenge Gasabo Rwanda ■ Women ■ Men

Figure 44: Percentage women and men 15-49 accepting attitudes towards those living with HIV/AIDS

Source: RDHS, 2014-15

#### 10.4. Multiple sexual partners

Given that most HIV infections are contracted through heterosexual contact, information on sexual behavior is important in designing and monitoring intervention programs to control the spread of the disease. Given that questions about sexual activity are sensitive, it is important to remember when interpreting the results in this section that respondents' answers are likely subject to at least some reporting bias.

Figure 45 show the percentages of women and men age 15-49 who had sexual intercourse with more than one partner in the 12 months before the survey. Seven percent of men and 2 percent of women in City of Kigali had two or more sexual partners during the 12 months preceding the survey as compared to 5 percent of men and 1 percent of women at the national level. Men living in Nyarugenge (10 percent) and those in Gasabo (7 percent) are more likely to have had multiple partners over the past 12 months while they are 3 percent in Kicukiro District. The proportion of women have had multiple partners over the past 12 months is the same in all Districts of the City of Kigali (2 percent, each).

10 7 7 5 3 2 2 2 2 1 Gasabo Kicukiro City of Kigali Rwanda Nyarugenge ■ Women ■ Men

Figure 45: Percentage of women and men who had sexual intercourse with more than one partners in the past 12 months

#### 10.5 Payment of sex

Male respondents in the 2014-15 RDHS who had had sex in the 12 months before the survey were asked whether they had ever paid anyone in exchange for sex and whether they had done so in the past 12 months.

The results in figure 46 shows that 13 percent of men age 15-49 in the City of Kigali compared to 7 percent at national level have ever paid for sexual intercourse, but 5 percent in the City of Kigali compared to 2 percent at national level had done so in the 12 months before the survey. Men who are living in Nyarugenge district (21 percent) are most likely to have ever paid for sexual intercourse and Kicukiro district is the least likely to have ever paid for sexual intercourse (1percent). When considering the last 12 months prior the survey, the percentage is 5 percent in Nyarugenge, 4 percent in Gasabo and 3 percent in Kicukiro.

21 13 7 5 5 3 3 2 1 City of Kigali Nyarugenge Gasabo **Kicukiro** Rwanda ■ Paid in the past 12 months Ever paid

Figure 46: Percentage of men 15-49 who paid for sex

10.6. Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Figure 47 shows the self-reported prevalence of STIs and STI symptoms among women and men age 15-49 that have ever had sexual intercourse. In the City of Kigali, 13 percent of women and 4 percent of men had either an STI or symptoms of an STI in the 12 months preceding the survey, as compared to 15 percent of women and 5 percent of men at the national level. At district level, STI and STIs symptoms among women is 20 percent in Nyarugenge, 12 percent in Gasabo and 10 percent in Kicukiro. Among men, 7 percent in Nyarugenge, 3 percent in Kicukiro and Gasabo ( each) had either an STI or symptoms of an STI in the 12 months preceding the survey.

20 15 13 12 10 7 5 4 3 3 Nyarugenge Gasabo Kicukiro City of Kigali Rwanda Men Women

Figure 47: Prevalence of sexually transmitted infections (STIs) and STI symptoms in last 12 months

#### **10.7 Practice of Circumcision**

Studies have shown that male circumcision, who involves the removal of the foreskin of the penis, is associated with lower susceptibility to transmission of STIs, including HIV. Consequently, WHO recommends male circumcision as an HIV prevention methods In the City of Kigali, a half of men (50 percent) age 15-49 have been circumcised and at national level 30 percent of men are circumcised (Figure 48). By district, the proportion of men who are circumcised is high in Kicukiro and Nyarugenge districts (53 percent and 50 percent, respectively) and low in Gasabo District (47 percent).

50
47
30
Nyarugenge Gasabo Kicukiro City of Kigali Rwanda

Figure 48: Percentage of men age 15-49 who are circumcised

# 10.8 HIV prevalence among adult

Overall, HIV prevalence in City of Kigali is 8.0 percent among women and 4.4 percent among men as compared to 3.6 percent and 2.2 percent among women and men respectively at the national level. HIV prevalence is higher among women in Nyarugenge District (9.0 percent) and Kicukiro District (8.1 percent) and low in Gasabo district (7.4 percent). Among men, the prevalence is high in Nyarugenge district (6.0 percent), and low in Kicukiro (4.9 percent) and Gasabo District (4.4 percent).

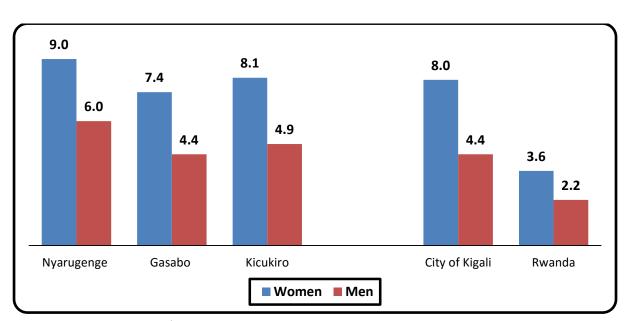


Figure 49: HIV prevalence among women and men age 15-49

# 10.9. HIV prevalence among cohabiting couples

Figure 50 shows HIV prevalence among couples in the districts of the City of Kigali. The percentage of couples in which both partners are HIV positive is 4.6 in the City of Kigali as compared to 2.1 percent at the national level. The percentage of couples in which both partners are HIV positive is high in Nyarugenge District and Gasabo District (5.5 percent and 5.2 percent, respectively) whereas it is low in Kicukiro (2.1 percent). The percentage of couples in which the male partner is infected and female partner is not is 3.2 in the City of Kigali, where it is high in Nyarugenge District (5.3 percent) and Kicukiro District (4.7 percent), and low in Gasabo District (1.6 percent). The percentage of couples in which women partners is HIV positive is high in Kicukiro (6.3 percent) and Nyarugenge (5.6 percent), and low in Gasabo (4.4 percent).

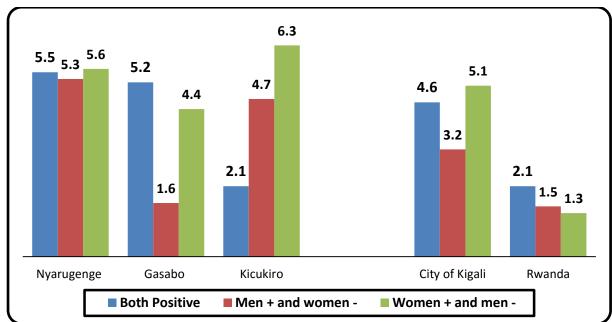


Figure 50: HIV prevalence among cohabiting couples

## **Chapter 11: Women empowerment**

Women empowerment is an important factor in development, poverty reduction, and improvements in the standard of living. This chapter presents information on factors that affect the status of women in society: control over cash earnings, earnings relative to those of their husband, and participation in decision-making.

# 11.1 Control over women's cash earnings and relative magnitude of women's cash earnings

To assess women's autonomy, currently married women who earned cash for their work in the 12 months preceding the survey were asked who usually decides how their earnings are spent. Women who earned cash for their work were also asked the relative magnitude of their earnings compared with those of their husband. This information is an indicator of women's control over their own earnings, as it is expected that employment and earnings are more likely to empower women if women themselves control their own earnings and perceive them as significant relative to those of their husband.

Figure 51 shows the percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey, by the person who decides how the cash earnings are used and by the relative magnitude of women's earnings compared with those of their husbands, according to background characteristics.

Nineteen percent of women in the City of Kigali and 20 percent of women at national level mainly decide for themselves how their earnings are used, whereas 73 percent in City of Kigali and 68 percent of women at national level say that they make joint decisions with their husbands. Seven percent of women in the City of Kigali compared to 12 percent at the national level reported that decisions regarding how their earnings are spent are made mainly by their husbands. The percentage of women who mainly decide themselves how their earnings are spent is highest in Nyarugenge (24 percent), followed by Gasabo (19 percent) and lowest in Kicukiro (16 percent). Nine percent of women in Gasabo, 7 percent in Kicukiro and 5 percent in Nyarugenge reported that their husbands mainly decide how to spend their earnings.

9 7 12 72 **73 72 77** 68 24 19 19 20 16 Nyarugenge Gasabo Kicukiro City of Kigali Rwanda ■ Mainly wife Both ■ Mainly huband

Figure 51: Percentage distribution of person who decides how the wife's cash earnings are used

Figure 52 shows the woman's earnings relative to their husbands' earnings during the 12 months preceding the survey. Seventy percent of women in the City of Kigali report that they earn less than their husband, 13 percent report that they earn more than their husband, and 16 percent earn about the same as their husband. The proportion of women who earn less than their husband at the national level is estimated at 65 percent, whereas 10 percent report earning more than their husband, and 23 percent report earning about the same as their husband. Women in Kicukiro (26 percent) are most likely to report that they earn the same as their husband and also those in Kicukiro and Nyarugenge are most likely to earn more than their husband (19 percent and 16 percent, respectively).

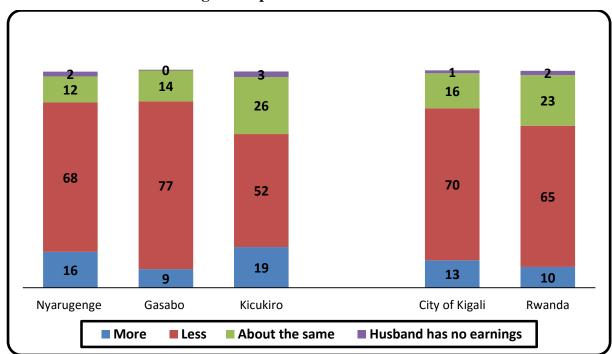


Figure 52: Percentage distribution of currently married women age 15-49 according to their cash earning in comparison to their husbands'

#### 11.2 Control over men's cash earnings

Figure 53 and 54 shows the percent distributions of currently married men age 15-49 who receive cash earnings and currently married women age 15-49 whose husbands receive cash earnings by the person who decides how men's cash earnings are used, according to background characteristics.

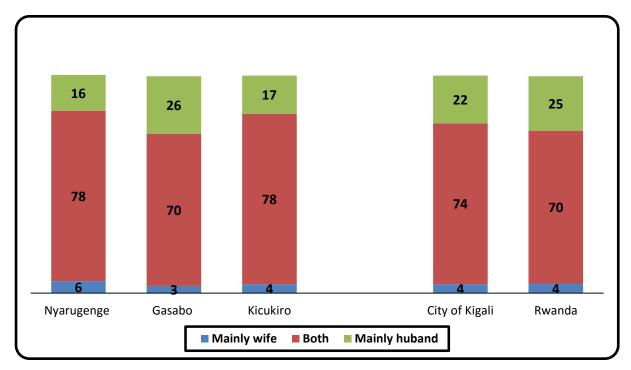
Nineteen percent of men in the City of Kigali, the same percentage at national level, report that they mainly decide how their cash earnings are used. Eighty percent in the City of Kigali compared to 78 percent at the national level state that they make these decisions jointly with their wife, and 1 percent state that these decisions are made mainly by their wives in the City of Kigali, compared to 2 percent at national level. Men in Kicukiro and Nyarugenge (21 percent each) are more likely to be the main decision-makers regarding their own earnings than men in Gasabo (17 percent).

In general, women's reports on who makes decisions about how their husband's earnings are spent are comparable to men's reports. Twenty-two percent of women in the City of Kigali whose husbands have cash earnings report that their husband mainly decides how his cash earnings are used, a figure slightly higher than the 19 percent reported by men themselves. Seventy-four percent of women report that decisions are made jointly, as compared with 80 percent of men, and 4 percent of women report that they mainly decide how to use their husband's earnings compared to 1 percent who declared that it is the wife who make decision. Twenty-six percent of women in Gasabo (Figure 53), whose husbands have cash earnings report that their husband mainly

decides how his cash earnings are used compared to 17 percent in Kicukiro and 16 percent in Nyarugenge.

At the national level 25 percent of women in whose husbands have cash earnings report that their husband mainly decides how his cash earnings are used, a figure slightly higher than the 19 percent reported by men themselves .

Figure 53: Percentage distribution of currently married women 15-49 according to their report on who decide how the men cash earnings are used



17 19 19 21 21 83 **78** 78 80 77 Gasabo **Kicukiro** City of Kigali Rwanda Nyarugenge Mainly wife Both ■ Mainly huband

Figure 54: Percentage distribution of currently married men 15-49 according to their report on who decide how the men cash earnings are used

## 11.3 Women's participation in decision-making

The ability of women to make decisions that affect their personal circumstances is essential for their empowerment and serves as an important factor in national development. To assess women's decision-making autonomy, the 2014-15 RDHS collected information on married women's participation in three types of decisions: their own health care, major household purchases, and visits to family, relatives, or friends.

Figure 55 shows that in the City of Kigali, eighty-nine percent of currently married women age 15-49 say they make decisions about their own health care either by themselves or jointly with their husbands and other eighty-nine percent of currently married women age 15-49 said they participate in decisions about visits to their own family or relatives. Seventy-nine percent of women said they participate in decisions about major household purchases.

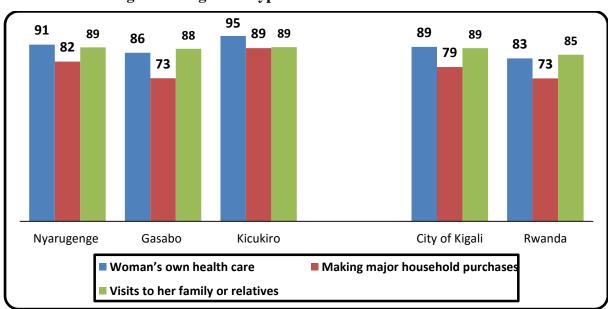


Figure 55: Percentage of currently married women age 15-49, participating in decision making according to the types of decisions

Figure 56 shows how women's participation in decision-making varies by districts of the City of Kigali. Seventy-one percent of married women in the City of Kigali report taking part in all three decisions, while 3 percent of women have no say in any of the three decisions, as compared to 65 percent of married women at national level who report taking part in all three decision, while 7 percent of women have no say in any of the three decisions.

By district, it is 82 percent of married women in Kicukiro, 75 percent of married women in Nyarugenge and 65 percent of married women in Gasabo that say they participate in all three decisions compared to married women in other districts. In addition, married women age 15-49 in Gasabo (4 percent), 3 percent in Nyarugenge and 2 percent in Kicukiro have no say in any of the three decision.

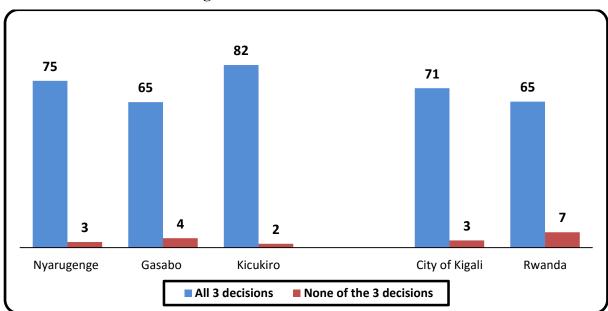


Figure 56: Percentage of currently married women 15-49 according to the participation in decision making

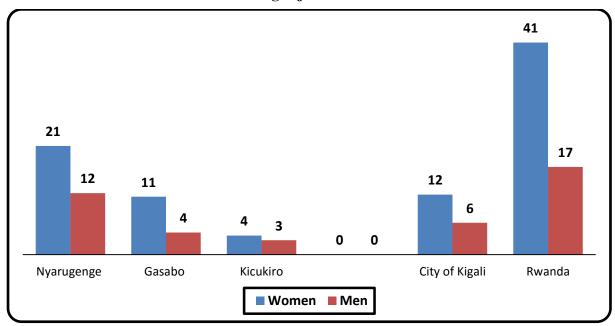
#### 11.4 Attitude toward wife beating

The 2014-15 RDHS collected information on the degree of acceptance of wife beating by asking all women and men whether they believe that a husband is justified in beating his wife in five situations: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, and if she refuses to have sexual intercourse with him.

Figure 57 shows the percentages of women and men who feel that wife beating is justified for at least one of the specified reasons. Agreement of a high proportion of respondents that wife beating is acceptable is an indication that they generally accept the right of a man to control his wife's behavior even by means of violence.

Figure 57 shows that 12 percent of women in City of Kigali and 41 percent at national level believe that wife beating is justified for at least one of the specified reasons. Men are least likely to agree that a man is justified in beating his wife for at least one reason in City of Kigali and at national (6 percent and 17 percent, respectively). Women and men in Nyarugenge (21 percent and 12 percent, respectively) are more likely to agree that wife beating is justified for at least one reasons.

Figure 57: Percentage of currently married women and men age 15-49 who agree with attitude toward wife beating is justified



Annex: New tables that are not included in the RDHS Main Report, Appendix D

Table 1: Percentage of households with electricity by district

	Has electricity							
District/Province	No	Yes	Missing		Total			
	%	%	%	Number	%			
Nyarugenge	24	75.9	0	374	100			
Gasabo	38.2	61.8	0	742	100			
Kicukiro	17.2	82.8	0	380	100			
Kigali	29.3	70.7	0	1496	100			
Nyanza	92.8	7.2	0	401	100			
Gisagara	96.4	3.3	0.3	403	100			
Nyaruguru	95.7	4.3	0	291	100			
Huye	78.1	21.9	0	407	100			
Nyamagabe	91.7	8.3	0	378	100			
Ruhango	89.1	10.9	0	416	100			
Muhanga	86.8	13.2	0	385	100			
Kamonyi	85.2	14.8	0	422	100			
South	89.2	10.8	0	3103	100			
Karongi	83.1	16.6	0.3	391	100			
Rutsiro	94.3	5.7	0	352	100			
Rubavu	69.2	30.8	0	457	100			
Nyabihu	93.3	6.7	0	319	100			
Ngororero	84.4	15.6	0	419	100			
Rusizi	66.1	33.9	0	438	100			
Nyamasheke	79.9	19.8	0.3	413	100			
West	80.5	19.5	0.1	2789	100			
Rulindo	86.7	13.3	0	379	100			
Gakenke	84.2	15.7	0.2	408	100			
Musanze	74.1	25.7	0.2	457	100			
Burera	87.9	12.1	0	384	100			
Gicumbi	87.2	12.8	0	463	100			
North	83.8	16.2	0.1	2090	100			
Rwamagana	71.9	28.1	0	409	100			
Nyagatare	80	20	0	605	100			
Gatsibo	80.4	19.6	0	568	100			
Kayonza	85.9	14.1	0	401	100			
Kirehe	84.3	15.7	0	385	100			
Ngoma	84.6	15.4	0	439	100			
Bugesera	76.7	23.3	0	414	100			
EAST	80.5	19.5	0	3221	100			
Rwanda	77.1	22.8	0	12699	100			

Table 2: Percentage of households with durable goods by district

			Mobile	
District	Radio	Television	Telephone	Computer
Nyarugenge	66.6	38.0	88.8	9.2
Gasabo	65.5	32.7	83.5	11.1
Kicukiro	73.2	53.2	89.9	22.4
City of Kigali	67.7	39.3	86.4	13.5
Nyanza	51.7	3.3	46.2	0.9
Gisagara	46.5	1.4	32.4	0.3
Nyaruguru	47.7	1.1	40.6	0.8
Huye	53.4	12.6	51.1	6.2
Nyamagabe	56.6	2.4	44.5	0.9
Ruhango	51.2	3.8	51.9	0.2
Muhanga	64.1	7.6	64.7	2.3
Kamonyi	59.0	8.0	66.7	2.5
South	53.9	5.2	50.2	1.8
Karongi	53.4	4.7	63.6	3.3
Rutsiro	52.2	1.8	48.1	0.5
Rubavu	43.7	13.3	60.3	4.8
Nyabihu	30.0	1.5	44.6	1.1
Ngororero	45.9	3.5	55.6	2.0
Rusizi	49.6	11.7	69.3	2.2
Nyamasheke	44.4	3.9	56.5	1.2
West	45.9	6.2	57.6	2.3
Rulindo	58.5	7.1	55.3	1.9
Gakenke	62.6	2.7	55.9	2.0
Musanze	59.4	8.9	66.1	3.2
Burera	55.0	3.7	53.9	1.5
Gicumbi	49.2	4.1	53.0	2.3
North	56.8	5.4	57.0	2.2
Rwamagana	56.5	8.9	70.2	1.5
Nyagatare	56.4	5.0	59.2	1.4
Gatsibo	53.7	4.1	53.8	0.4
Kayonza	61.1	7.0	63.2	2.1
Kirehe	54.5	3.1	60.3	0.8
Ngoma	51.3	6.5	53.3	2.4
Bugesera	51.0	6.9	66.9	1.4
East	54.9	5.8	60.5	1.4
Total	54.5	9.6	59.8	3.2

Table 3: Percentage of household's members with health insurance by district

	Covered by health insurance								
District/ Province	No	Yes	Don't know	Missing	Total				
	%	%	%	%	Count	%			
Nyarugenge	36.0	63.9	0.0	.2	1574	100.0			
Gasabo	28.7	71.2	0.0	.1	2918	100.0			
Kicukiro	22.9	76.9	.1	.1	1547	100.0			
City of	29.1	70.8	.0	.1	6038	100.0			
kigali									
Nyanza	43.1	56.8	.1	.1	1569	100.0			
Gisagara	31.0	68.8	.1	.1	1681	100.0			
Nyaruguru	44.1	55.6	.1	.3	1389	100.0			
Huye	20.9	78.9	0.0	.2	1711	100.0			
Nyamagabe	35.5	64.4	0.0	.1	1670	100.0			
Ruhango	32.7	67.1	0.0	.2	1695	100.0			
Muhanga	35.9	63.9	.1	.1	1557	100.0			
Kamonyi	15.0	84.9	.0	.1	1803	100.0			
South	31.7	68.1	.0	.1	13075	100.0			
Karongi	32.5	67.2	.1	.2	1666	100.0			
Rutsiro	30.9	68.9	.1	.1	1510	100.0			
Rubavu	45.5	54.3	.1	.1	2138	100.0			
Nyabihu	22.0	78.0	0.0	0.0	1313	100.0			
Ngororero	18.0	81.9	.1	0.0	1732	100.0			
Rusizi	27.7	71.9	.3	.1	2131	100.0			
Nyamasheke	34.9	64.8	.2	.1	1825	100.0			
West	30.9	68.8	.1	.1	12316	100.0			
Rulindo	31.4	68.5	0.0	.1	1462	100.0			
Gakenke	13.0	86.8	.1	.1	1603	100.0			
Musanze	21.1	78.8	0.0	.1	1968	100.0			
Burera	18.5	81.3	0.0	.1	1701	100.0			
Gicumbi	24.0	75.6	0.0	.4	1990	100.0			
North	21.5	78.3	.0	.2	8724	100.0			
Rwamagana	24.3	75.7	.1	0.0	1765	100.0			
Nyagatare	27.1	72.9	0.0	0.0	2525	100.0			
Gatsibo	27.1	72.8	.1	.1	2516	100.0			
Kayonza	24.7	75.2	0.0	.1	1718	100.0			
Kirehe	34.1	65.8	.1	.1	1575	100.0			
Ngoma	31.2	68.6	0.0	.2	1904	100.0			
Bugesera	27.1	72.7	.2	0.0	1687	100.0			
East	27.8	72.1	.0	.1	13690	100.0			
Rwanda	28.6	71.2	.1	.1	53844	100.0			

Table 4: Percentage of household's female population according to the highest level of education attained by district

	Highest educational level attained							
District/	No education, preschool	Primary	Secondary	Higher	Don't know	Missing	Total	
Province	%	%	%	%	%	%	Count	%
Nyarugenge	9.0	62.2	25.3	3.4	0.0	.1	668	100.0
Gasabo	11.0	58.7	23.7	6.5	0.0	.1	1202	100.0
Kicukiro	8.6	53.5	25.7	12.2	0.0	0.0	691	100.0
City of Kigali	9.8	58.2	24.7	7.2	0.0	.1	2562	100.0
Nyanza	20.0	72.3	6.9	.7	0.0	0.0	705	100.0
Gisagara	25.9	68.7	5.3	.1	0.0	0.0	779	100.0
Nyaruguru	24.7	62.8	12.3	.2	0.0	0.0	598	100.0
Huye	20.0	61.5	14.7	3.5	0.0	.3	766	100.0
Nyamagabe	23.7	63.8	11.9	.6	0.0	0.0	770	100.0
Ruhango	15.9	71.8	11.5	.6	0.0	.1	748	100.0
Muhanga	13.2	69.3	15.9	1.4	0.0	.3	701	100.0
Kamonyi	10.8	76.1	11.7	1.4	0.0	0.0	802	100.0
South	19.1	68.5	11.2	1.1	0.0	.1	5867	100.0
Karongi	17.2	65.0	16.7	1.1	0.0	0.0	732	100.0
Rutsiro	24.4	66.7	8.6	.2	0.0	0.0	664	100.0
Rubavu	21.8	62.2	13.4	2.6	0.0	0.0	898	100.0
Nyabihu	23.9	66.5	9.3	.3	0.0	0.0	585	100.0
Ngororero	25.3	61.8	11.4	1.5	0.0	0.0	777	100.0
Rusizi	17.5	66.0	15.7	.8	0.0	0.0	929	100.0
Nyamasheke	18.5	69.3	11.9	.3	0.0	0.0	800	100.0
West	21.0	65.2	12.7	1.0	0.0	0.0	5386	100.0
Rulindo	19.5	66.5	12.5	1.3	0.0	.1	647	100.0
Gakenke	16.5	68.2	14.7	.5	0.0	0.0	748	100.0
Musanze	18.4	62.3	18.3	1.0	0.0	0.0	941	100.0
Burera	21.4	68.8	9.4	.3	0.0	0.0	768	100.0
Gicumbi	21.0	66.0	12.0	1.0	0.0	0.0	867	100.0
North	19.4	66.2	13.6	.8	0.0	.0	3971	100.0
Rwamagana	13.7	72.1	13.0	1.1	0.0	0.0	792	100.0
Nyagatare	24.7	63.9	10.5	.9	0.0	0.0	1053	100.0
Gatsibo	24.3	66.9	8.6	.1	0.0	.1	1129	100.0
Kayonza	20.3	68.0	10.9	.9	0.0	0.0	748	100.0
Kirehe	21.1	70.7	7.6	.6	0.0	0.0	681	100.0
Ngoma	17.8	69.6	11.8	.9	0.0	0.0	802	100.0
Bugesera	20.5	67.1	11.6	.6	0.0	.1	717	100.0
East	20.7	68.0	10.5	.7	0.0	.0	5923	100.0
Total	19.0	66.1	13.2	1.6	0.0	.0	23709	100.0

Table 5: Percentage of household's male population according to the highest level of education attained by district

		Highest educational level attained (male)						
District/ Province	No education, preschool	Primary	Secondary	Higher	Don't know	Missing	Total	
	%	%	%	%	%	%	Count	%
Nyarugenge	5.9	64.8	23.6	5.4	0.0	.3	624	100.0
Gasabo	8.2	61.5	20.0	10.0	0.0	.2	1159	100.0
Kicukiro	6.2	56.6	23.8	13.4	0.0	0.0	631	100.0
City of Kigali	7.1	61.1	22.0	9.7	0.0	.2	2415	100.0
Nyanza	15.2	72.6	11.1	1.1	0.0	0.0	563	100.0
Gisagara	20.4	72.4	6.5	.8	0.0	0.0	577	100.0
Nyaruguru	19.6	68.9	10.2	1.1	0.0	.1	539	100.0
Huye	14.9	64.8	14.8	5.1	0.0	.4	676	100.0
Nyamagabe	16.0	70.4	12.1	1.5	0.0	0.0	653	100.0
Ruhango	11.7	78.2	8.3	1.5	0.0	.3	671	100.0
Muhanga	10.8	76.3	10.8	1.7	0.0	.3	599	100.0
Kamonyi	10.3	76.3	11.8	1.4	0.0	.2	706	100.0
South	14.6	72.6	10.8	1.8	0.0	.2	4986	100.0
Karongi	11.3	72.1	13.4	3.0	0.0	.1	680	100.0
Rutsiro	14.2	75.7	9.7	.4	0.0	0.0	558	100.0
Rubavu	19.3	58.1	18.7	4.0	0.0	0.0	832	100.0
Nyabihu	14.5	72.3	12.4	.8	0.0	0.0	492	100.0
Ngororero	18.7	70.6	9.5	1.1	0.0	.2	647	100.0
Rusizi	11.6	71.0	16.6	.8	0.0	0.0	812	100.0
Nyamasheke	15.7	71.3	10.9	1.8	0.0	.2	630	100.0
West	15.1	69.5	13.5	1.8	0.0	.1	4651	100.0
Rulindo	15.5	74.3	8.2	2.0	0.0	0.0	566	100.0
Gakenke	11.9	74.8	11.8	1.5	0.0	0.0	634	100.0
Musanze	11.1	69.1	16.9	2.9	0.0	0.0	736	100.0
Burera	9.8	79.1	9.6	1.4	0.0	.2	645	100.0
Gicumbi	15.3	70.6	12.8	1.4	0.0	0.0	803	100.0
North	12.7	73.3	12.1	1.8	0.0	.0	3383	100.0
Rwamagana	9.2	73.7	14.9	2.2	0.0	0.0	644	100.0
Nyagatare	16.0	72.6	10.5	.9	0.0	0.0	1001	100.0
Gatsibo	16.0	69.8	13.5	.5	0.0	.1	918	100.0
Kayonza	15.1	73.4	10.1	1.4	0.0	0.0	647	100.0
Kirehe	11.5	75.6	11.5	1.1	0.0	.2	602	100.0
Ngoma	14.2	72.0	11.3	2.5	0.0	0.0	740	100.0
Bugesera	12.7	72.3	13.3	1.7	0.0	0.0	652	100.0
East	13.9	72.6	12.1	1.4	0.0	.0	5205	100.0
Total	13.4	70.7	13.3	2.6	0.0	.1	20640	100.0

