Induced abortion, contraception and unmet need for family planning among African immigrants in Italy

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Legislation and abortion in Italy

Induced abortion is always been a priority issue among immigrant population in Italy. The Italian legislation states that women are eligible to request an abortion for health, economic or social reasons, including the circumstances under which conception occurred. Abortions are performed free-of-charge in public hospitals or in private structures authorized by the regional health authorities. The law allows termination in the second trimester of the pregnancy only in case of risk for woman' life or if the fetus carries genetic or other serious malformations. Although the law only permits pregnancy termination to women aged over 18, it also includes provisions for younger women. Subsequent to the legalization of abortion in Italy in May 1978, abortion rates among Italian women rose reaching a peak of 17,2 abortions per 1.000 women of reproductive age in 1982 (234.801 cases) and then steadily declined to 9,8 per 1,000 in 1993. Last data available show that the number of cases in 2009 are less than half of 1982 (116.933) and the abortion rate is constantly decreasing. The actual level of abortion rate is 8,7 per 1.000 in 2008 and 8,3 per 1.000 in 2009, one of the lowest among developed countries. However such a general decrease, due to a sharp decline of induced abortion among nationals, hides an opposite trend for foreign women, that actually account for 33% of the total number of abortions while they are only 11,3% of resident population. Without the contribution of foreign women the abortion rate among Italian women would be therefore even lower: 7,1 per 1.000 in 2005, being the last data available (Ministero della Salute, 2010).

Aims of the study

This study includes two aims. The first is to estimate the gross abortion rate for African immigrant women settled in the Italian region of Lombardy from 2005 to 2009. A correct quantification of such a phenomenon is nevertheless difficult in the Italian context. Data about the number of legal abortions in Italy are available and reliable, but the actual reference population size is unknown. Official data on foreign population include people with a regular status of residence (women with a *permits to stay* or citizens of a European Union country) or women recorded voluntarily to the register office, but exclude irregular and over stayers. An estimation of the total foreign population including irregular and over stayers and the detail for gender and nationality isn't available at national level. However it turns possible at regional level. This restriction does not cause a loss of representativeness, being the Italian region of Lombardy the most important migration pole in Italy where 25% of the total national number of migrants lives. The analysis of data for foreign population in this region allows an accurate overview of the situation of sexual reproductive health of migrants in Italy, as previous studies at national level pointed out that migrants living in Lombardy do not really differ in their main characteristics from those settled in other Italian regions.
The second goal pursued is to highlight different patterns of induced abortion and possible subsequent relapses within African women in emigration, and to draw some differences with non-African immigrant population. The estimation of Unmet Need for family planning and use of contraception among African migrants was also an important point in the analysis of migrants' sexual reproductive health.

Data and methods

Data on voluntary abortions in Lombardy come from the Italian Registry on Induced Abortion. Data are routinely collected using an individual and anonymous form ("Istat D.12") compiled by the doctor that makes the operation. These records contain information about socio-demographic and reproductive history of each woman and about the pregnancy (such as gestational age, presence of fetus malformations and others).
Data on the foreign population living in Lombardy are routinely produced by the Regional Observatory for Integration and Multiethnicity of Lombardy. These estimations are based on an annual survey of 8.000 face-to-face interviews carried out on the base of Centre Sampling statistical procedure. The sampling method is based on a set of information about a number of aggregation centers regularly visited by the target population of immigrants. This sampling scheme

allows weighing the original biased sample in order to provide a consistent estimate of the overall migrants' population characteristics. The actual performance of this method has been empirically tested over the last decade in Italy (Blangiardo et al., 2011). Data on annual events – abortions – and on the amount of population at reproductive ages allow the correct quantification of abortions prevalence among different nationalities. Moreover, factorial analysis was performed afterwards to identify different patterns of abortion and a logistic regression was used to analyze cases of relapse.

Data on unmet need for family planning come from a representative survey about sexual and reproductive health carried out in Lombardy in 2010. 2.011 women of age 15-49 of which 1.020 African were interviewed and the quota sampling was based on Regional Observatory on Migration estimates. As one of the aims was the estimation of some features about migrants from Africa – i.e. female genital cutting - some nationalities had a higher sampling fraction. The 2.011 women interviewed represented 4,9‰ of the target population estimated at 1 July 2010, but this level was higher for Somalia (212,7‰), Eritrea (98,7‰) and Ethiopia (92,1‰). A procedure of data weighting followed the gathering of data. Every interview had a weight inversely proportional to the ratio, distinct by country, between national sample size by age and the general female population by age and nationality. The final weight was the result of three partial multiplier systems. The questionnaire followed the suggested standard for estimation of unmet need as defined by DHS to enable further comparisons with home countries[1].

African migration in Italy and voluntary abortion among African women

Italy is an important destination for African migrants: about 1 out of 5 African citizens living in the European Union is settled in Italy. At the beginning of 2011 there were about 4.570.000 foreign nationals[2] resident in Italy that amount to 7.1% of the country's population. Even if Italy is a country with a long history of emigration and short experiences of immigration, starting from the beginning of the '90, when massive immigration began, African nationals have always been an important component among immigrants. Only recently the raise of migration from Eastern Europe lowered their relative importance: citizens from Africa accounted for 30% at the end of 1990, but their proportion lowered to 25% at the beginning of 2010.

The most recent data from ISMU Foundation estimated the presence in Italy of approximately 1.284.000 African citizens at the beginning of 2010, 69,5% of them coming from Northern Africa. African were particularly represented among irregular stayers (41%) with higher incidence in the two subpopulations (18% among sub-Saharan Africans and 12,9% among Northern Africans) than those estimated for Asian (11,9%), non EU Europeans (9,6%) and Latin American nationals (9,2%). Lombardy is currently the most important pole of migration for African migration in Italy: 30% of all Africans live in this region with particular concentrations for some nationalities, as like as Egyptians that live in Lombardy in 7 cases out of 10.

Estimation of African immigrant present in Italy at 1.1.2010

	Total population present	*% of population legally present*	*Resident Population*	*%of African nationals among all foreigners*	*% of African nationals among all foreign residents*	*% of African nationals among all among irregular stayers*
Africa	**1.284.178**	**85,5**	**931.793**	**25,1**	**23,2**	**41,0**
Northern Africa	*892.044*	*87,1*	*646.624*	*17,4*	*16,1*	*25,5*
Sub Saharan Africa	*392.134*	*82,0*	*285.169*	*7,7*	*7,1*	*15,5*
All foreigners	**5.119.593**	**91,1**	**4.020.896**	**100,0**	**100,0**	**100**

Source: Authors' elaboration on Ismu estimations (2011 revision)

African migration flows have followed for a long time the traditional male breadwinner pattern — male-dominated, long-term, and long-distance. The unbalanced distribution of gender (59,5% among resident are males, 146 males to 100 females) is typical of Senegal migrants (310 male to 100 female) and Egyptians (228 male to 100 female) among the most important nationalities. Nevertheless recent years have witnessed an overall 'feminization' of migration from Africa that involved also Italy: while once considered as an action achievable by male workers looking for a job,

[1] The concept of unmet need was first introduced in the 1960s, when researchers began to demonstrate and measure the discordance between women's desire to limit their births and their actual use of contraception (Mauldin, 1965). The definition and the algorithm to assess unmet developed within the DHS program – considered the standard measure of unmet need – was used in this analysis (Westoff & Bankole, 1995).

[2] Only foreigners from high pressure emigration countries are included in the estimation. Nationals from USA, Canada, Australia, Japan, Israel and former EU15 are excluded.

migration increasingly occurs as an event in the lives of women. However the main migration model among African women in Italy is still family oriented and involves female migrants from Northern Africa (Morocco, Tunisia, and Egypt) but is leading also among Senegalese, Ghanaian and Ivorian. Women from those countries have less access to labor market in emigration a fact that leads to higher fertility levels compared to other foreign women and a lower diffusion of transnational families. As a matter of fact these women typically have most of their children in Italy or migrate with them by means of family reunion.

The second model of migration from Africa to Italy is less dependent on male flows. Women usually migrate on their own, as happens for migrants from Nigeria, Mauritius, Cape Verde and some former Italian colonies like Ethiopia, Somalia and Eritrea. These communities, that in some cases remain overwhelmingly female - as with Cape Verdeans – and in others started networks that subsequently involve also male migrants, still maintain a clear connotation that makes them similar to other female labor-oriented flows like those from Philippines, Latin America or Eastern Europe. As enlightened from the results of this analysis, these female communities share with female African community most of the criticality related to abortion and health.

African foreign residents in Italy at 1.1.2011

		Males	*Females*	*Total*	*male ratio*	*% on total foreigners*	*% on total foreigners from Africa*
1	Morocco	254.906	197.518	452.424	129	9,9	45,9
2	Tunisia	67.435	38.856	106.291	174	2,3	10,8
3	Egypt	62.840	27.525	90.365	228	2,0	9,2
4	Senegal	61.242	19.747	80.989	310	1,8	8,2
5	Nigeria	24.549	29.064	53.613	84	1,2	5,4
6	Ghana	26.943	19.947	46.890	135	1,0	4,8
7	Algeria	16.819	9.116	25.935	184	0,6	2,6
8	Ivory Coast	12.510	10.155	22.665	123	0,5	2,3
9	Eritrea	7.570	5.798	13.368	131	0,3	1,4
10	Burkina Faso	8.403	4.648	13.051	181	0,3	1,3
11	Cameroon	5.459	4.865	10.324	112	0,2	1,0
12	Mauritius	4.280	4.991	9.271	86	0,2	0,9
13	Ethiopia	3.392	5.201	8.593	65	0,2	0,9
14	Somalia	4.834	3.278	8.112	147	0,2	0,8
15	Cape Verde	1.331	3.270	4.601	41	0,1	0,5
	Other nationalities	23.115	16.864	39.979	137	0,9	4,1

Source: Authors' elaboration on Istat data

The presence of these two migration models is found to be directly related to levels and patterns of abortion, a link that is also found for non-African women. The linkage with levels of general fertility also plays an important role. The analysis of abortion ratio enables to define the relative importance of fertility and abortion within every nationality.

The role of Northern African women, and the same can be said for Senegal and Burkina Faso- in Italy is mainly related to family care-giving and childbearing. They usually migrate when economic conditions are suitable to support a family and their migration is not aimed to labor market participation. This is clearly a safer condition compared to that of first migrants. For the latter childbearing can be a hard-reach choice in the first phases of migration and they are therefore more exposed to the risk of abortion in case of contraceptive failure. Data confirms that in groups where sex composition is female-dominated and female are usually first migrant, the fertility rate is lower and abortion is relatively more common[3]. For Nigeria and other nationalities like Ivory Coast or Cameroon data on abortion ratio show the existence of more than 1 abortion every 2 births[4]. High levels of abortion rate are also found among women from Nigeria, Ethiopia, Cameroon and Cape Verde. In reverse, as a consequence of the wide diffusion of family migration

[3] It is important to underline that a lower gross fertility rate recorded in Italy does not imply also a lower final fertility compared to non-migrant northern Africans women. It simply underlines a lower propensity for these women to give birth in emigration contexts.

[4] As 43% of female from Somalia, Eritrea and Ethiopia have also Italian citizenship, analyzing official data about these nationalities means losing part of the events (abortion or birth) because nearly half of the population is coded as "Italian". If we make the hypothesis that, for a selection process, Italian-Somalis, Italian-Eritreans or Italian-Ethiopians (that are recorded as Italian) could be more represented within the childbearing women and to a lesser extent within the women hospitalized for abortion, it can be easily understood that such a high rate could be partially biased by a statistical effect. As a further consequence we have a strong underestimation for these nationalities in the general fertility rate as naturalized women are included in the estimation of women of age 15-49 but their births are coded as from Italian women. The proportion of naturalized women is less than 10% for the other African nationalities.

the propensity to give birth in Italy among Northern African nationals, estimated thru the gross fertility rate, is noticeably higher than that observed among other nationalities and is undoubtedly the preeminent phenomenon compared with abortion. Particularly moderate values of abortion ratios and abortion rates are found for Egyptians and Algerians, but those levels are nevertheless higher than those found for Italian women.

The wide diffusion of abortion clearly shows a situation of vulnerability and risk for women health. High levels of voluntary abortion are indeed related to economic difficulties: within Sub-Saharan African women hospitalized for abortion those unemployed at the moment of the operation are nearly twice as much represented (30,9%) than in the total population of Sub-Saharan African women (17,1%) and the same happens within Northern African (19,1% vs. 9,5%). Another factor of vulnerability for Africans is related to marital status: pregnancies of unmarried, widowed or divorced women are clearly at higher risk of being voluntary terminated.

Gross fertility rate and abortion ratio per 1000 live birth by nationality and broad group of citizenship. Lombardy 2008, 2009

		General fertility rate in Italy		Abortion ratio	
		2008	*2009*	**2008**	**2009**
Eastern Europe		**48,9**	**49,0**	**414**	**360**
Asia		**71,1**	**68,7**	**331**	**298**
Northern Africa		**114,5**	**113,3**	**135**	**122**
	Algeria	*112,0*	*110,7*	*77*	*58*
	Egypt	*154,4*	*126,4*	*38*	*32*
	Morocco	*104,2*	*111,6*	*177*	*158*
	Tunisia	105,8	97,8	*161*	*149*
Sub-Saharan Africa		**74,3**	**74,9**	**446**	**422**
	Cape Verde	46,7	24,7	*636*	*1236*
	Cote d'Ivoire	65,6	77,1	*594*	*514*
	Burkina Faso	*84,0*	*117,9*	*276*	*280*
	Cameroon	*69,2*	*58,3*	*776*	*902*
	Ghana	*67,2*	*59,3*	*315*	*305*
	Nigeria	*96,4*	*92,3*	*597*	*656*
	Mauritius	*30,6*	*29,4*	*405*	*655*
	*Somalia**	*14,7**	*14,7**	*1000**	*111**
	*Ethiopia**	*45,1**	*41,3**	*925**	*1111**
	*Eritrea**	*24,9**	*16,1**	*1044**	*1139**
	Senegal	*115,1*	*124,8*	*233*	*176*
Latin America		**52,3**	**52,2**	**710**	**617**
Total foreign from developing countries		**67,1**	**70,7**	**363**	**301**

Source: Authors' elaboration on Istat D12 and Cedap microdata 2008-2009

Abortion rate per 1000 women of age 15-49 by nationality and broad groups of citizenship. Lombardy 2005-2009

Abortion rate	*2005*	*2006*	*2007*	*2008*	*2009*
Italian nationals	**5,8**	**5,7**	**5,5**	**5,1**	**4,9**
Eastern Europe	**35,4**	**29,8**	**26,2**	**20,3**	**17,6**
Asia	**27,3**	**25,6**	**22,1**	**23,5**	**20,5**
Nord Africa	**18,6**	**19,0**	**16,0**	**15,4**	**13,8**
Algeria	*8,2*	*12,0*	*2,5*	*8,8*	*6,5*
Egypt	*5,7*	*6,0*	*5,0*	*5,9*	*4,1*
Morocco	*22,4*	*22,3*	*20,0*	*18,4*	*17,6*
Tunisia	*25,5*	*27,1*	*17,7*	*17,0*	*14,5*
Sub-Saharan Africa	**46,1**	**36,9**	**38,4**	**33,1**	**31,6**
Burkina Faso	*35,3*	*22,4*	*34,0*	*23,3*	*33,3*
Cape Verde	*68,2*	*43,0*	*29,7*	*29,7*	*31,8*
Cameroon	*97,1*	*50,0*	*69,2*	*52,0*	*51,1*
Cote d'Ivoire	*52,3*	*52,6*	*51,6*	*39,0*	*39,7*
*Eritrea**	*6,2*	*12,3*	*26,0*	*26,1*	*18,2*
*Ethiopia**	*92,2*	*67,4*	*71,8*	*41,1*	*45,5*
Ghana	*33,2*	*29,2*	*29,0*	*21,1*	*18,1*
Mauritius	*31,9*	*22,7*	*13,2*	*12,4*	*19,2*
Nigeria	*77,3*	*49,3*	*54,2*	*57,6*	*60,5*
*Somalia**	*11,7*	*10,0*	*7,1*	*14,3*	*1,7*
Senegal	*35,9*	*35,7*	*31,3*	*26,9*	*21,9*
Latin America	**49,7**	**43,4**	**38,7**	**37,2**	**32,2**
Total foreigners from developing countries	**35,8**	**31,4**	**27,9**	**24,5**	**21,3**
Lombardy	**9,3**	**9,1**	**8,9**	**..**	**..**

Source: Authors' elaboration on Istat D12 and Regional Observatory for Integration and Multi-ethnicity

Prevalence of some characteristics of interest within general population and women hospitalized for abortion Lombardy 2008-2009

		Northern Africa	Sub-Saharan Africa
Unemployed women (%)	*within women hospitalized for abortion*	19,1	30,9
	within women aged 15-49 present in Lombardy	9,5	17,1
Currently not married(%)	*within women hospitalized for abortion*	46,4	61,7
	within women aged 15-49 present in Lombardy	23,8	39,3
University Graduated (%)	*within women hospitalized for abortion*	4,7	2,3
	within women aged 15-49 present in Lombardy	16,7	8,3
With primary education or less (%)	*within women hospitalized for abortion*	20,9	23,2
	within women aged 15-49 present in Lombardy	13,9	14,3

Source: Authors' elaboration on Istat D12 and Regional Observatory for Integration and Multi-ethnicity

Education is also a variable of interest as skilled women are at a lower risk of requiring an abortion since it acts as a factor of protection.

Unmet need for contraception plays a crucial role in being at risk of having an unwanted pregnancy. Such a dimension is particularly of interest in emigration, as no data currently exist for international migrants. The prevalence of contraception among African migrant women is considerably higher than levels in home countries, especially for sub-Saharan women: 63,7% uses a method of contraception and the level is lower for Northern African. A higher use of family planning devices in emigration than in home countries is clearly the result of a selection process of migrant women. A higher availability and diffusion of contraception in the emigration context can also contribute to raise prevalence. Also socialization can play a role, being Italy among the countries with lowest low levels of fertility.

The proportion of migrants who had ever used a tradition method never fell under 17% but the prevalence of modern methods is nevertheless elevated and reaches high proportion like 90% among Ethiopians and Nigerians. Is also quite evident the substitution of methods diffused at home countries (like injections) with those easily available in Italy like condom and pills. The diffusion of a method which is modern but not permanent like condom could concur to the explanation of the high number of contraceptive failures that lead to such a high number of abortions.

Unmet need is instead very low. The general level is around 3%, meaning that risk of abortion is not directly predicted by unmet need. The fact that the prevalence of African women with at least a prior abortion is higher among women without unmet need than among women with unmet need is not really a contradiction, as use of contraceptive before abortion is unknown. To this end, a research conducted in Italy in 2005 has underlined the role of high numbers of contraception failures among foreigners that requested an abortion (Spinelli et al., 2006).

Contraceptive prevalence and unmet need for contraception among African immigrants.

	Contraceptive prevalence		*Unmet need*	
	Home countries	Italy (2010)	Home countries	Italy (2010)
Cote d'Ivoire	15,0% (1999)	57,1%	27,7% (1999)	4,9%
Burkina Faso	13,8% (2003)	73,3%	28,2% (2003)	3,6%
Egypt	60,3% (2008)	59,0%	9,2% (2008)	4,1%
Ethiopia	14,7% (2005)	84,3%	33,8% (2005)	2,9%
Ghana	23,5% (2008)	82,7%	35,3% (2008)	1,1%
Morocco	63,0% (2004)	56,3%	10% (2004)	2,4%
Nigeria	14,6% (2008)	64,8%	20,2% (2008)	4,2%
Senegal	11,8% (2005)	53,1%	31,6% (2005)	1,6%
Somalia		56,6%		3,0%
Eritrea	8,0% (2002)	59,0%	27,0% (2002)	8,1%
North Africa		**57,1%**		**2,8%**
Sub-Saharan Africa		**63,7%**		**3,0%**
Total foreigners from developing countries		**64,0%**		**5,0%**

Source: DHS statcompiler, Authors' elaboration from Irer Survey

Ever use of contraceptive among African immigrants in Italy

			Sterilization		*Other modern methods*				*Traditional methods*	
	Modern methods	*Traditional methods*	*Female*	*Male*	*Pills*	*IUD*	*injection*	*condom*	*Periodic abstinence*	*withdrawal*
Cote d'Ivoire	81,4	47,1	2,2		62,1	7,0	0,9	66,8	35,0	30,0
Burkina Faso	78,2	17,1			51,9	0,9	0,9	45,7	17,6	6,8
Egypt	70,2	15,2	1,4		60,5	40,4	7,0	23,0	13,5	16,1
Ethiopia	93,3	22,0			82,7	17,7	1,1	81,4	19,1	18,2
Ghana	70,7	24,5	6,6		40,3	17,0	3,2	52,2	27,8	6,4
Morocco	74,6	26,0	2,1		72,5	10,9	2,1	44,0	19,7	17,8
Nigeria	90,4	37,9	1,5		48,9	8,6	4,3	74,6	31,3	11,2
Senegal	56,4	33,9	2,8	0,9	56,0	6,5	0,9	20,4	25,8	23,1
Somalia	24,0	17,5	5,2		32,8	2,0	4,2	22,4	15,7	16,3
Eritrea	78,2	57,9	2,4	1,8	48,3	17,4	3,0	67,7	36,0	53,6

Source: Authors' elaboration from Irer Survey

Use of contraceptive among African immigrants in Italy and in Home Countries

Country of origin	*Main methods*	
	Home country	*Italy*
Burkina Faso	Pill, Injections	Pill, Condom
Cote d'Ivoire	Pill, Injections	Pill, Condom
Egypt	IUD, Pill	IUD, Pill
Eritrea	Injections, Pill	Pill, IUD
Ethiopia	Injections, Pill	Pill, Condom
Ghana	Injections, Pill	Pill, Condom
Morocco	Pill, IUD	Pill, IUD
Nigeria	Injections, Pill	Condom, Pill
Senegal	Pill, Injections	Pill
Somalia	Pill, withdrawal	Pill, Female Sterilization

Source: Authors' elaboration from Irer Survey, DHS

Bringing it all together

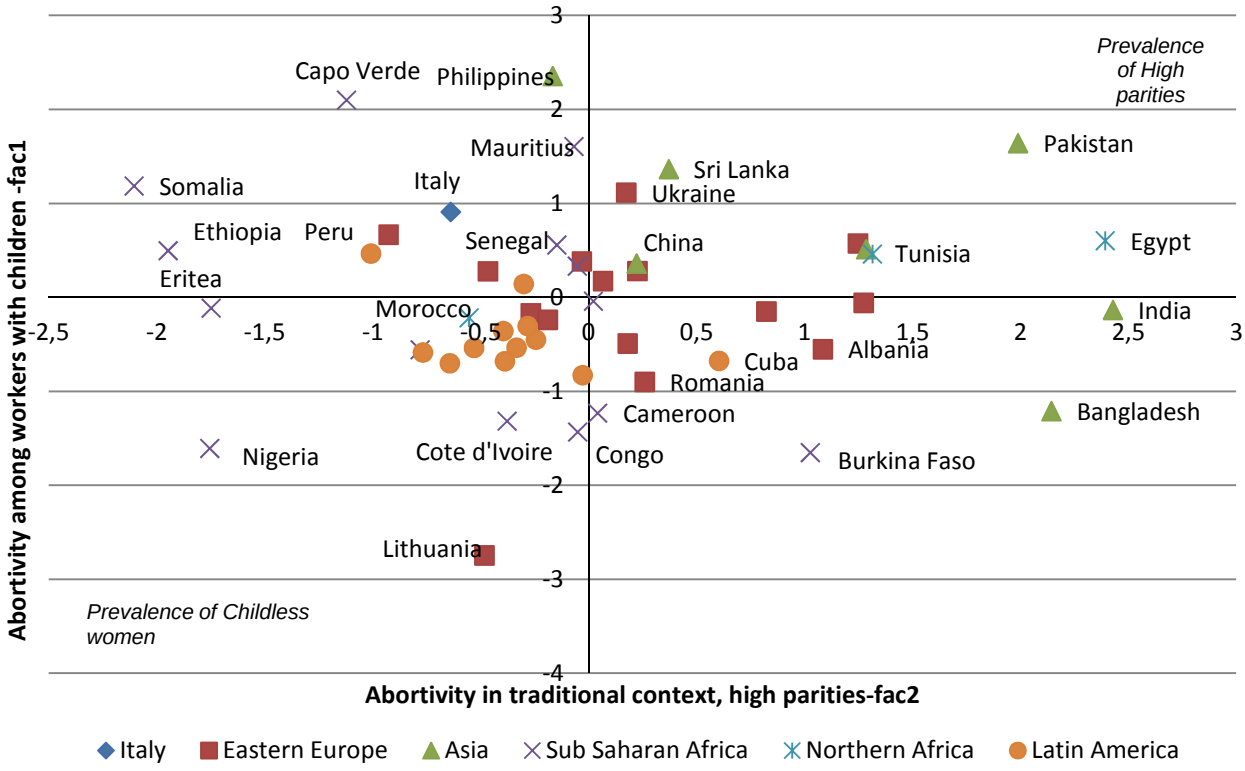
The analysis of abortion patterns of foreign women – and of Africans in particular – includes two main points.
The first tries to evaluate causes and contexts of abortion while the second had to do with repeated abortions. Those aspects have been synthetized by a factor analysis taking principal citizenship as statistical units[5]. This analysis leaded to the specification of typical schemes for some countries of origin and highlighted two different abortion patterns related to the characteristics of women who requested an abortion in the period 2008-2009 summarized by two different components.
The first typology identified is related to abortions requested by high-parity married women living in very traditional migration contexts, with a low level of participation to labor market. Such a scheme could be explained as a failure in contraception among women with more than 3 or 4 children whose need was to limit family size, most likely for economic reasons. It underlines the existence of an unmet need for contraception to stop childbearing or the use of unsafe methods. Women that fit this pattern have usually low levels of education and have no previous abortions. The second factor instead is still related to a familiar context but pertain to workers with a lower number of children, aged more than 30 and with higher education than those in the previous case. The unmet need for these women could be both aimed at spacing and limiting and abortion could be related to "conciliation" dilemma: works/families, remunerated work/care, professional life/ private life. The position of citizenships on the two axis allows the identification of the nationalities that best fits these models.
The first model applies best to women from Egypt, Tunisia and Burkina Faso – and from India, Pakistan and Bangladesh among non-Africans. The second is associated to some of the oldest female flows like Cape Verde, Mauritius or the former Italian colonies (Somalia, Ethiopia, Eritrea). Among non-African this model is typical of Philippines and Peruvians. Lowest scores in both factors pertain to unmarried childless women with a higher diffusion of non-traditional patterns in emigration which is the case of Nigerians.

[5] The first three factors extracted explain 79% of the total variance. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Rotated component matrix

	Components			
	1	2	3	
% unmarried	-0.892	-0.281		
% married	,887	,261		
% with junior high school (8 years) or less	,198			
% with no education	,415			
% housewives	,882			
% employed	-,746	,383		
% unemployed	-,500	-,563	,269	
Mean number of children ever born	,746	,281		
% with at least one child	,831	,266		
% with more than 2 children	,576	,239	-,107	
% childless	-,831	-,266		
Mean number of previous abortion		-,106	,988	
% with at least one abortion	-,198	-,130	,936	
% with more than 1 previous abortion			,975	
% aged less than 24	-,196	-,873		
% aged more than 30	,133	,967		
Mean age	,165	,959		

Factor scores for all countries



The third factor extracted in the analysis deal with repeated abortion. Among citizens belonging to the first pattern only Serbia, Montenegro and Macedonia (FYROM) that include a lot of people of Rom ethnicity have high number of relapses. For women from Egypt, Tunisia and Burkina Faso – and from the Indian Subcontinent among non-Africans - repeated abortions are rare, meaning a contraception failure that usually doesn't happen twice in a lifetime. On the contrary high levels of repeated abortions are found for women from Nigeria, Cameroon, Ghana and Cape Verde.

Outcomes of this analysis are also useful to explain trends observed in levels of the gross abortion rate. The five-year' time observation reveals a general reduction in levels of abortion among migrants. The total number of operations requested declined by 8% while in the same time spell the number of immigrant women strongly rose (+54%). Such a clear reduction is also observed among African women and it is of particular intensity for nationalities where migrant women that came for working purposes outnumber those living in Italy for family reasons. For the latter variation in the

five year of analysis is limited. Such a fact can be easily explained on the basis of the two different abortion patterns. For nationalities where women are mainly family oriented migrant, the decision of abortion is taken at family level and it isn't related to incompatibility with work or with the initial settlement. Reduction of abortion rate among nationalities where most women are workers can be related to an increasing length of presence in Italy. As first migrant women turn to long term migrants their migratory project can change and become less and less compatible with maternity. Some studies on women's jobs in Lombardy show that women often begin with full time intensive works (like care of elderly people) that are incompatibles with childbearing. If they rarely success to get away from domestic work segregation, they usually manage to get better jobs in terms of spare time and wage. Improvement in working conditions, better knowledge of services and source of supply for contraception can be among reasons of abortion reduction in time among nationalities that fits this model.
Variation in abortion levels is instead reduced among proveniences characterized by family migration. This fact comes as no surprise as increasing migration seniority in itself has no direct effects in lowering the risks of abortion for this model.

Another point of interest is related to relapses, a phenomenon that is particularly diffused among foreign women compared to Italian and particularly related to some nationalities. A logistic regression performed among women that had an abortion in the years 2008-2009 showed clearly that this phenomenon is particularly serious for Africans among the population of women hospitalized for abortion. Controlling for marital status at last abortion a Nigerian women has an odds 4 times higher than an Italian to have a relapses and the value is 3,4 for a Cameroonian. Values higher than 2 are also found for Ivory Coast, Ethiopia and Mauritius.

Parameter of logistic regression, relapses among women hospitalized for induced abortion

		B	*St. Err*	*Wald*	*df*	*Sig.*	*Exp(B)*
	Intercept	-1,391	,023	3788,162	1	,000	
Reference: Italian women							
	Other non-African foreign	,767	,025	943,017	1	,000	2,152
	Tunisia	,432	,160	7,269	1	,007	1,541
	Senegal	,434	,138	9,926	1	,002	1,544
	Nigeria	1,407	,093	226,810	1	,000	4,084
	Mauritius	,850	,348	5,972	1	,015	2,341
	Morocco	,362	,068	28,504	1	,000	1,437
	Ghana	,587	,158	13,798	1	,000	1,799
	Ethiopia	,852	,227	14,121	1	,000	2,344
	Egypt	,275	,223	1,517	1	,218	1,316
	Cameroon	1,232	,220	31,393	1	,000	3,427
	Burkina Faso	,418	,303	1,906	1	,167	1,519
	Cote d'Ivoire	,859	,133	41,480	1	,000	2,360
	Other African nationals	1	0,113	26,656	1	0	1,79
Reference: married women							
	Unmarried	-,159	,025	40,874	1	,000	0,853
	Widowed/divorced	0	0,044	111,417	1	0	1,590

Nationalities where female migration is more diffused are therefore more subjected to abortion relapses. For Nigerian and to a lesser extent Cameroonian this can also be related to the high number of women victim of sexual exploitation (Farina, 2005).

Conclusions

Abortion is a decreasing phenomenon in Italy but the general data hide a greater diffusion among immigrants. If levels of abortion are higher than those among Italians for nearly all main nationalities the phenomenon shows modality extremely different for levels, trend and context, but is of particular concern for African women among all migrants. In particular gender roles in emigration proved to be a fundamental issue in shaping the phenomenon, pointing out a major exposition to the risk of abortion for workers and a persisting difficult in combining work and motherhood. Jobless, unmarried and low skilled women are much more represented among women hospitalized for abortion than in the general population, but financial straits are likely to be among the causes of abortion also for women whose migration was family oriented and not finalized to labor marked participation. Another important finding is that the trend is decreasing among those nationalities that are proved to be at major risk: this is probably related to increasing level of integration as long term migrant begin to be more numerous.

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