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ORIGINAL ARTICLE

Non-therapeutic male circumcision performed on immigrant children from Africa in Spain

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Abstract
Objectives To study the frequency, characteristics, and complications of non-therapeutic male circumcision on immigrant children from Africa in Spain.
Methods This descriptive study focused on primary care consultations conducted at 21 Aragon health centres during 2010 and 2011. The data were gathered through interviewer-administered questionnaires to the parents of African children. Sociodemographic variables were studied, along with others related to the practice of circumcision.
Results 283 questionnaires were obtained. 98.93 % of the children had undergone or were planning to undergo circumcision. 68.2 % were circumcised. Circumcisions were most frequently performed during a vacation to the country of origin (67.04 %), especially so for the Maghreb population. The remaining circumcisions had been performed in Spain. Half of the circumcisions practiced in Spain were performed at home, and 84 % of these were performed on Gambian children.
Conclusions The current study demonstrates that, in Aragon, Spain, almost all immigrant children from Africa have been or will be circumcised and that a considerable proportion has been circumcised at home by unqualified individuals. Gambians are particularly at risk of performing unsafe circumcision.

Keywords Child · Child, preschool · Africa · Circumcision, male · Spain · Culture · Emigration and immigration

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Introduction

Circumcision is one of the most frequent surgical interventions in paediatrics (Dieth et al. 2008; Perera et al. 2010; Puig Solà et al. 2003). A review published by the World Health Organization (WHO) in 2007 calculated that 30 % of men in the world are circumcised. Of these, it is estimated that two-thirds are Muslim (WHO/UNAIDS 2007b). This practice is often motivated by therapeutic, prophylactic, religious, or social reasons (Mussell 2004; Perera et al. 2010; Rennie et al. 2007; Sahin et al. 2003), and it is nearly universal in Islam and Judaism (Morris et al. 2012; WHO/UNAIDS 2007b). In countries such as Canada and the USA, it is performed during the neonatal period as a preventative measure (Crawford 2002; Morris et al. 2012; Puig Solà et al. 2003). Additionally, circumcision is performed in aboriginal tribes in Australia, the Philippines, Korea, Turkey, and African villages for cultural reasons (Puig Solà et al. 2003; WHO/UNAIDS 2007b). Circumcision is performed on practically all children in northern and western Africa, while in southern Africa the prevalence is very low (Drain et al. 2006; Gnassingbe et al. 2009; WHO/UNAIDS 2007b). In the central and eastern regions of Africa, the prevalence is quite variable (Gasasira et al. 2012; Wilcken et al. 2010).

Circumcision has been associated with potentially beneficial effects in the prevention of various pathologies, such as paraphimosis and phimosis, urinary tract infections, and infections with papillomavirus and human immunodeficiency virus (HIV) (Auvert et al. 2005; Bailey et al. 2007; Puig Solà et al. 2003; Rennie et al. 2007; Alkaiyat and Weiss 2013). The source of these beneficial effects is not entirely clear, but a recent meta-analysis and many other studies have concluded that there is strong evidence that circumcision helps to prevent the acquisition of HIV amongst sub-Saharan African men (Alanis and Lucidi 2004; Auvert et al. 2005; Bailey et al. 2007; Gasasira et al. 2012; Mills et al. 2008; Perera et al. 2010; Weiss et al. 2006; Wilcken et al. 2010). In fact, in 2007, the WHO/Joint United Nations Programme on AIDS (UNAIDS) recommended adult male circumcision in communities with generalised HIV epidemics (Auvert et al. 2008; Gasasira et al. 2012; WHO/UNAIDS 2007a). Recently, the American Academy of Pediatrics (AAP) has stated that the procedure's benefits justify the access to this procedure for families who choose it (American Academy of Pediatrics. Task force on circumcision 2012a, b).

In recent years, Spain has experienced a significant increase in its immigrant population, (Berra et al. 2004; Carrasco-Garrido et al. 2007) particularly from countries where circumcision is performed for religious or cultural reasons. According to the municipal registry as per January 1, 2010, the foreign population in Aragon was 12.1 % out of the total (Zaragoza: Departamento de Salud y Consumo. Gobierno de Aragón 2011). Aragón is a region located in Northern Spain with a population of 1,347,095 inhabitants, of whom 675.121 people live in Zaragoza City, the main town of this region. 15 % of the Aragonese population lives in small towns. Most of the immigrant population is located in the urban areas. Aragón has a total of 119 health care centres and 169 paediatricians working in primary care.

The Spanish health system is a universal system, which, based on Organic Law 4/2000 of 11 January, ensures health care under equal conditions for all immigrants younger than 18 years of age. However, circumcision due to cultural or religious reasons is not included in Spain's public health system. This situation obligates families to resort to private health care to perform circumcision in Spain. However, not all immigrant families can afford the involved costs, as the majority of them have a low income level (Martínez López 2010). In recent years in Spain, some deaths have been reported due to complications caused by performing circumcision at home by unqualified individuals (EFE. Tarragona 2007; Agencias. Zaragoza 2008; Dominguez Valencia 2011).

Although this topic is frequently discussed in paediatric consultations and even though there is potential danger for these children, a bibliographic search of the main databases did not return any studies that reflect the frequency or the conditions under which male circumcision is performed in Spain. Additionally, few studies have been conducted in other countries with similar problems (Abbott and Shahriar 2007; Paranthaman et al. 2011). To better understand this reality, the present study was conducted with the following objectives:

- To determine the frequency of the practice of circumcision amongst immigrant male children from Africa who go to health centres.
- To study the circumstances and ways in which these circumcisions are performed.
- To detect the prevalence of potential complications associated with this practice.

Methods

This was a descriptive study that evaluated primary care consultations at 21 health centres in Aragon (northern region of Spain) between June 2010 and June 2011.

We obtained information regarding circumcision by means of interviewer-administered questionnaires to African parents.

A sample size of 233 respondents was considered based on the estimation of prevalence of circumcision in African children living in Spain (80 %), with a 95 % confidence

interval and precision of 5 %, and on the fact that the population of African boys younger than 15 years of age in Aragon was 4,400 in 2010 according to data from the National Statistics Institute (Instituto Nacional de Estadística).

The inclusion criterion for this study was children of African origin between 0 and 14 years of age. The following exclusion criteria were applied: children who were circumcised for therapeutic reasons (circumcisions performed within the public health system) and the existence of major difficulties in communicating with the parents related to explaining the nature of the study and performing the questionnaire in a reliable manner.

Primary care paediatricians who worked at centres with a large immigrant population were contacted by letter or email. All paediatricians who agreed to collaborate received a careful explanation of the study and of how to complete the questionnaire. African children who visited their paediatrician for any reason were randomly selected, and their parents were invited to participate in the study.

Prior to completing the survey, the parents were informed of the study objective and freely agreed to participate (oral consent). It was made clear that there would be no negative repercussion as a result of any answers provided. The paediatricians signed a document that expressed his/her commitment to explaining the study to the parents in a clear and understandable manner. In addition, an explanatory document was translated into English, French, and Arabic for the immigrants who were more comfortable in one of those languages. After filling up the questionnaire, paediatricians verified the circumcised/uncircumcised status of the child and the presence of sequels by inspecting the genital area.

The socio-demographic variables studied included date of birth, parents' country of origin, religion professed by the parents, number of siblings, and place of birth of the child.

If no circumcision had been performed, the following variables were examined: the intention to perform a circumcision, the age at which it was intended to be performed, the place planned for performing the circumcision, and the person who was expected to perform the procedure.

If the child had been circumcised before the migratory process, the following variables were studied: age at which circumcision was performed, place where this procedure was performed, the person who performed the procedure, the intervention data (presence/absence of anaesthesia, type of anaesthesia, material used, sterility of the material), subsequent monitoring of the intervention, recommended care, subsequent complications, and presence of sequels. All variables were obtained by parents' interview except for sequels which were assessed by penile examination.

If the child had been circumcised after the migration process, a distinction was made between those who were circumcised in Spain and those who were circumcised in the family's country of origin, and the same variables were studied as in the previous case.

The data obtained in the questionnaires were introduced into a Microsoft Access® database, and statistical analysis was performed using the programme Epiinfo 3.5. The sample sizes as well as the confidence interval of the population mean age were calculated using Epidat 3.1. A descriptive study was performed on the different variables, along with an estimation of the parameters with a 95 % confidence interval.

This study was approved by Ethic Committee of Clinic Research of Aragon.

Results

A total of 27 paediatricians corresponding to 60 % of the invited, agreed to participate in the study. These doctors worked in 21 health centres located in all sectors of Aragon.

A total of 283 questionnaires were completed, giving a response rate of 93.7 %. Only 19 parents refused to participate in the study because of time constraints (8), difficulties in communication (6), or no reason given (5).

Children from 15 geographic regions of Africa were included in the study. Table 1 lists the percentage of surveyed African children from each country of origin, the percentages of all African children living in Aragon and in Spain from each of those countries of origin (according to census data), and the proportions of Muslims and Christians surveyed from each country. A total of 86.9 % of the children were born in Spain, and 13.1 % were born abroad.

The average age of the surveyed children was 4.1 years [standard deviation (SD) 3.76 years]. The mean number of siblings per family, including the surveyed child, was 2.65 (SD 1.40).

Of the 283 children, 193 (68.2 %) had been circumcised. Of the 90 children who had not been circumcised, 96.66 % of the parents intended to have the operation performed in the future. Of these, 71.3 % planned to have the circumcision performed in their country of origin, whereas the rest planned to have these procedures performed in Spain, either at home, at a mosque, or at a private hospital. In other words, 98.93 % of the African children who were surveyed either had been or were going to be circumcised.

Of the 193 children who had been circumcised, 32 were circumcised prior to the migration process (16.58 %), and 161 were circumcised after immigrating or else were born in Spain. Of these 161 children, 51 (32.9 %) were circumcised in Spain, 2 were circumcised in another

Table 1 Countries of origin for the total African child (boys) population in Aragon and in Spain (according to census 2011 data: www.ine.es) and the origin and religion of the parents of the surveyed children

Country	% of African boys in Spain	% of African boys in Aragon	Boys in the study		
			n (%)	*n* (%) Muslims	*n* (%) Christians
Morocco	78.3	54.6	141 (49.8)	141 (100)	0 (0)
Gambia	2.0	9.3	39 (13.7)	39 (100)	0 (0)
Algeria	5.5	14.8	35 (12.7)	35 (100)	0 (0)
Senegal	3.1	5.0	18 (6.3)	18 (100)	0 (0)
Equatorial Guinea	1.1	1.8	14 (4.9)	0 (0)	14 (100)
Ghana	0.7	2.2	13 (4.5)	3 (23)	10 (77)
Mali	1.1	3.0	8 (2.8)	8 (100)	0 (0)
Nigeria	4.1	2.4	5 (1.8)	1 (20)	4 (80)
Others[a]	4.1	6.8	10 (3.5)	1 (11.2)	8 (88.8)
Total	100	100	283 (100 %)	246 (86.9 %)	36 (12.7 %)

Data obtained in the years 2010–2011

[a] One family of the surveyed child reported being of animist religion

Table 2 Intent to circumcise and the place where the circumcision was performed for boys with the six most frequent countries of origin

Countries of origin	Total	Intent to circumcise	Circumcised before migrating	Circumcisions performed after migrating or for boys born in Spain	
				Circumcised in the country of origin	Circumcised in Spain[a]
	n	*n* (%)	*n* (%)	*n* (%)	*n* (%)
Morocco	141	43 (30.4)	24 (17)	70 (49.6)	4 (2.8)
Gambia	39	1 (2.5)	0 (0)	1 (2.5)	37 (94.8)
Algeria	35	14 (40)	0 (0)	21 (60)	0 (0)
Senegal	18	12 (66.6)	2 (11.1)	4 (22.2)	0 (0)
Equatorial Guinea	14	7 (50)	2 (14.2)	4 (28.5)	1 (7.1)
Ghana	13	2 (15.4)	0 (0)	4 (30.8)	7 (53.8)

Data obtained in the years 2010–2011. Aragón (Spain)

[a] The two cases of circumcision in Europe (outside of Spain) were grouped together with circumcisions performed in Spain

European country, and 108 (67.08 %) had been circumcised in their country of origin. A total of 92.4 % of the children who underwent circumcision in Spain were from sub-Saharan Africa, and only 7.5 % were from Morocco.

Half (49.1 %) of the families who had the circumcision performed in Europe did so at home. 26 of the children in the study were circumcised at home, 22 thereof were from Gambia and the rest of them came from Ghana, Mali, Guinea-Conakry, and Morocco. The individuals who performed these circumcisions were not health professionals in 84.6 % of the cases; 7.6 % of the families who had the circumcision performed at home did not respond to this question, and only one family responded that the circumcision was performed by a doctor. The average age at which the child was circumcised at home was 5.07 months (SD 8.72). In 100 % of the cases, the individual who performed the circumcision was a foreigner.

Of the 108 children who were circumcised in their country origin during a trip, 64.8 % were from Morocco and 19.5 % were from Algeria. This indicates that the majority of the boys who were circumcised when travelling to their country of origin were from Maghreb. The location where the procedure was performed and the intention to have a circumcision performed in the six most frequent countries of origin are shown in Tables 2 and 3.

Most of the children who were circumcised when travelling to their country of origin underwent the procedure in health centres (80.9 %) and only 18.5 % of them were circumcised at home. 91.6 % of these procedures were performed by a doctor. This contrasts with the figures obtained from the families who carried out the circumcision in Europe: 49.1 % at home and 24.5 % at a hospital.

Table 4 shows the average age at which the circumcision was performed under the various conditions and the characteristics of the intervention.

The complications found were higher in the case of children circumcised in their country of origin [8.3 %; 95 % confidence interval (95 % CI): 2.6–14] than in case of those circumcised in Spain (5.7 %; 95 % CI: 1.2–15.6). These complications were four infections, one haemorrhage, one oedema, and two urinary meatus stenosis in children circumcised in their country of origin and one haemorrhage, one infection and one urinary meatus stenosis of those circumcised in Spain. The physical examination was normal for 92.6 % (95 % CI: 87.1–98) in children circumcised in their country of

Table 3 Place of performance of the circumcisions after migrating or for boys born in Spain with the six most frequent countries of origin

	Morocco *n* (%)	Gambia *n* (%)	Algeria *n* (%)	Senegal *n* (%)	Ecuatorial Guinea *n* (%)	Ghana *n* (%)
Circumcised in the country of origin						
Home	12 (16.2)	1 (2.6)	5 (23.8)	1 (25)	1 (20)	0 (0)
Medical centre[a]	58 (78.3)	0 (0)	16 (76.2)	3 (75)	3 (60)	4 (36.3)
Mosque	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Circumcised in Spain[b]						
Home	1 (1.3)	22 (57.8)	0 (0)	0 (0)	0 (0)	1 (9)
Private hospital	2 (2.7)	6 (15.7)	0 (0)	0 (0)	0 (0)	4 (36.3)
Mosque	1 (1.3)	6 (15.7)	0 (0)	0 (0)	0 (0)	0 (0)
Does not wish to answer	0 (0)	3 (7.9)	0 (0)	0 (0)	1 (20)	2 (18.1)
Total	74 (100)	38 (100)	21 (100)	4 (100)	5 (100)	11 (100)

Data obtained in the years 2010–2011. Aragón (Spain)

[a] Medical centre includes hospitals and health centres

[b] The two cases of circumcision in Europe (outside of Spain) were grouped together with circumcisions performed in Spain

origin and 94.3 % (95 % CI: 84.3–99) of those circumcised in Spain.

Discussion

The results obtained in this study confirm the significance of non-therapeutic male circumcision among the African immigrant population in Spain. Moreover, the large percentage of African boys identified in Aragon who had been or who were planning to be circumcised in the future (98.93 %) is striking. This percentage is greater than expected (WHO/UNAIDS 2007b). The high prevalence of circumcised children or those who intend to be circumcised that was observed in the present study was likely due to the large proportion of Muslim children and also because the sub-Saharan boys included in this study were mostly from western Africa, an area where the majority of the countries display a circumcision prevalence greater than 80 % (WHO/UNAIDS 2007b).

Of the interviewed families, 87.3 % were Muslim from the Maghreb or sub-Saharan African countries. Of these families, 99.59 % had had their children undergo circumcision or were planning to do so. In addition, in the cases of Christian families (12.4 % of those surveyed), 94.44 % of these were going to or had already had circumcisions performed on their children. Therefore, there are reasons besides religious ones for performing this procedure, given that circumcision is not a mandate of the Christian religion (Wilcken et al. 2010).

Almost half of the interviewed children were from Morocco. This finding is in agreement with the census data (www.ine.es) showing that 54 % of the immigrant African children in Aragon are from Morocco, followed by Algeria, Gambia, and Senegal, which suggests that the surveyed population is representative of the immigrant child population in Aragon.

Almost all the parents of uncircumcised children had the intention of circumcising them in the future, mostly in their countries of origin. The families that intended to have the circumcisions performed in their countries of origin were from the Maghreb, while those who intended to have the circumcisions performed in Spain were from sub-Saharan Africa. This perhaps reflects the greater ease of travelling to the country of origin for the Maghreb population in comparison to the sub-Saharan population.

There is no pre-established age for performing the practice of circumcision (Puig Solà et al. 2003). In the present study, the average age at which the children had been circumcised in Spain was significantly lower than that amongst children who were circumcised during a trip to their country of origin. This may be because circumcision is simpler at a younger age or because the parents should not wait for a trip to the country of origin to perform the procedure.

Furthermore, there are different procedures for performing circumcisions (Fraser et al. 1981; WHO/UNAIDS 2007b), and it is difficult to specify the type of intervention that was performed through an interview with the parents. As a result, only approximate information on the characteristics of the intervention was solicited. As shown in Table 4, and regarding the pathways used by the parents of the children who were born in Spain or who were circumcised after the migratory process, the safest conditions were present for the children who were circumcised in their country of origin. These children, consisting mostly of Maghreb children, generally had circumcision in medical centres that were administered by health workers using appropriate and sterile materials. The high proportion of circumcisions performed

Table 4 Characteristics of the circumcision's procedure for each of the different assumptions

	Circumcision performed before migrating	Circumcision performed after migrating or for children born in Spain	
		Performed in country of origin	Performed in Spain or Europe
Number	32	108	53
Average age of circumcision (months)	17.5 (95 % CI 12.3–2.6)	22.7 (95 % CI 19.3–26)	5.7 (95 % CI 3–8.3)
	% (95 % CI)	% (95 % CI)	% (95 % CI)
Location of the procedure			
Home	46.9 (28–65.7)	18.7 (10.7–26.3)	49.1 (34.6–63.4)
Health centre	6.3 (0.7–20.8)	19.2 (1.5–27.3)	0 (0–6.7)
Hospital	43.8 (25–62.5)	61.7 (51.4–70.7)	24.5 (12–37)
Does not wish to answer	3.2 (0.1–16.2)	0.4 (0–5)	11.3 (1.8–20.7)
Mosque	0 (0–10.9)	0 (0–3.3)	15.1 (4.5–25.6)
Person who performed the circumcision			
Doctor	59.4 (40.7–77.9)	92.5 (85.9–97.3)	39.6 (25.5–53.7)
Nurse	18.8 (7.2–36.4)	4.7 (1.5–10.5)	9.4 (3.1–20.6)
Non-health professional	18.8 (7.2–36.4)	2.8 (0.5–7.9)	43.3 (29.1–57.6)
Does not wish to answer	3.1 (0.1–16.2)	0 (0–3.3)	7.7 (2–18)
Anaesthesia			
Yes	46.9 (28–65.7)	73.8 (64.3–81.9)	62.3 (48.2–76.2)
No	40.6 (22–59.2)	6.5 (1.3–11.5)	13.3 (3.1–23.2)
Unknown	12.5 (3.5–29)	19.7 (11.5–27.3)	24.4 (12–37)
Type of anaesthesia			
Local anaesthesia	80 (51.9–95.6)	78.4 (68.7–88.1)	80.7 (59.6–91.8)
General anaesthesia	13.3 (1.65–40.4)	8.8 (1.9–15.7)	6.5 (0.74–20.2)
Unknown	6.7 (0.16–31.9)	13.7 (4.6–20.6)	12.8 (3.4–28.2)
Type of instruments			
Surgical	34.4 (16.3–52.3)	74.8 (65.3–82.8)	39.6 (25.5–53.7)
Blade	6.3 (0.7–20.8)	2.8 (0.5–7.9)	20.8 (8.8–32.6)
Scissor	34.4 (16.3–52.3)	10.3 (4–16.3)	1.9 (0–10.1)
Unknown	21.9 (5.9–37.7)	8.4 (2.6–14)	32.1 (18.5–45.5)
Sterilization of instruments used			
Yes[a]	25 (8.4–41.5)	51.9 (41–60.8)	37.7 (23.7–51.7)
No	0 (0–10.9)	0.9 (0–5)	1.9 (0–10)
Probably yes[b]	21.9 (5.9–37.7)	27.4 (18–35.6)	22.6 (10.4–34.8)
Unknown	53.1 (34.7–70.9)	18.5 (10.7–26.3)	37.7 (24.7–52.1)
Subsequent monitoring			
Yes	65.6 (47.6–83.6)	69.4 (47.6–83.6)	71.1 (58.6–84.7)

Data obtained in the years 2010–2011. Aragón (Spain)

[a] Sterile cases were considered to be those in which one of the parents was present during the intervention and saw that the instrument was extracted from an enclosed envelope or taken from a container of boiling water, or if the procedure was performed in a hospital in Europe

[b] Probably sterile cases were considered to be those in which the parent was not present, but was informed that it was sterile

in medical centres in their countries of origin will explain other outcomes found in the study such as more adequate medical instruments and sterile conditions that in those circumcisions performed in Spain.

In contrast, the most unsafe conditions were reported for children circumcised in Spain, as these cases included a high percentage of procedures that were performed at home by individuals who were not health professionals, and this is not legal in Spain. Additionally, in general, the parents of these children, who were mostly from Gambia, had little knowledge of the conditions in which the procedures were performed. However, despite these conditions, there were few complications. In general, there were too few cases to draw conclusions. People from other countries in the sub-Saharan Africa who are a large group here in Spain, such as Senegalese, do not usually perform circumcision at home. Most of them express their intention of circumcising their children when travelling to their origin countries in the future or in Spain, provided they found a safe and cost-effective way of doing it.

Elaborating upon this aspect, 26 of the 283 boys included in the study (9.1 %) were circumcised at home in

Spain [the two cases of circumcision in Europe (outside of Spain) were grouped together with circumcisions performed in Spain]. If we extrapolate this percentage to the population of African children in Aragon, this means that ~400 children have been circumcised at home in this region (1,347,095 inhabitants).

Neonatal circumcision is described as an easy procedure with few complications if it is performed under conditions of asepsis by qualified personnel (Brady-Fryer et al. 2004; Corbett and Humphrey 2003; Dieth et al. 2008; South et al. 2005; Weiss et al. 2006). The prevalence of complications ranges between 1/500 and 1/50, and these complications are generally mild. However, complications are most frequent when the procedure is performed in other ages out of this period, ~2–4 % of the complications according to WHO (WHO/UNAIDS 2007b), and between 2 and 10 % according to a review by the AAP (American Academy of Pediatrics. Task force on Circumcision 2012a, b). The most common complications include a decrease in the sensitivity of the penis, bleeding, infections, lesions of the urethra, and pain (Ahmed 2007; Dieth et al. 2008; Weiss et al. 2010).

The complication rate in our study was somewhat greater than the previously reported rates (Brady-Fryer et al. 2004; Corbett and Humphrey 2003; Dieth et al. 2008; South et al. 2005; Weiss et al. 2010; WHO/UNAIDS 2007b), although all were mild. In principle, they were unrelated to the use of less safe procedures or the age of the child. In this vein, two previous articles asserted that the use of less safe procedures appears to not be associated with a greater number of complications (Ben Chaim et al. 2005; Muula et al. 2007). However, in the current study, there are too few cases to draw conclusions.

One limitation of the present study was the occasional communication problems that arose due to language barriers. Therefore, cases in which the paediatrician reported difficulties with communication and comprehension by the parents were not included.

Another limitation was the potential for dishonesty in the parents' responses, as a result of their fear of the consequences for using unsafe ways for circumcision. Despite our insistence prior to the survey that there would be no consequences, it is possible that some responses were not honest. However, this inaccurate information would tend to prevent the detection of unsafe pathways, such that the reality with regard to the safety of the procedures could have been worse than that observed. Also, the sample comprises those voluntarily seeking a consultation with a paediatrician. This will self-select and bias the sample towards children with parents with health-seeking behaviour. This may consequently over-represent the proportion choosing to have a hospital or health centre procedure, as opposed to a less medical home or mosque-based procedure.

In conclusion, the current study demonstrates that, in Aragon, Spain, almost all immigrant children from Africa have been or will be circumcised and that a considerable proportion has been circumcised at home. Gambians are particularly at risk of selecting unsafe circumcision to be performed. Given that some deaths have been reported due to complications caused by performing circumcision at home by unqualified individuals in Spain, it is essential that the Spanish National Health System gives alternatives to groups which are at risk of performing this procedure in an unsafe way to avoid the risks to which these children are subjected.

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