ORIGINAL ARTICLE

Perception and Practices of Circumcision among Rural and Urban Population of Pakistan

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ABSTRACT

Aim: To compare the perception & practices for circumcision in rural and urban population in Punjab.
Methodology: This was a descriptive cross sectional study carried out from January to November 2014 in 10 different cities of Punjab. Questionnaires related to study objectives were filled out by face to face interviews with parents of 400 male children less than 10 years of age. Three hundred and fifty agreed to participate. SPSS 20 was used for analysis and was approved by ethical committee.
Results: All the 335 children under study had gone through circumcision of which the most common method used is blade cutting. Mean age for circumcision was found to be 4.46±2.50 years. The majority (58%) children were circumcised before 1 year of age. The main reason for circumcision was religious and traditional while medical reasons were considered for only 2.1% of the families. The operation was carried out by the traditional circumcisers in 26% of the children. Ethical considerations for the procedure were not taken in majority of the cases as 67% were not explained the procedure and its benefits. **Conclusion:** Although the most circumcision is done by doctors and general practitioners, circumcision by non-professional still exits and may lead to complications.
Keywords: Circumcision, rural population, urban population

INTRODUCTION

Circumcision is defined as a surgical procedure in which (prepuce or foreskin) skin covering the end of penis is excised. Circumcision is the most common surgical intervention performed in non-medical setting within the community and is performed on millions of male children worldwide[1]. Neonatal circumcision is shown to have a preventive effect on UTI in infants and penile cancer that might develop later in life. Neonatal circumcision (circumcision in 1st couple of months of life) is generally regarded as cheaper, simpler and safer procedure compared with circumcision of older boys and men[2,3] and nearly about 25% of total world population is circumcised. Coagulation profile is mandatory pre-requisite profile for circumcision but is not routinely practiced except where family history of coagulopathy is present.

Circumcision provides protection from HIV infection, penile carcinoma, urinary tract infections and ulcerative sexually transmitted diseases[5]. It has been presented as a symbol of therapeutic state, as a mutilating procedure, as a religious ritual and as a prophylaxis against a variety of diseases[6,7]. Neglecting hygiene and incorrect methods of circumcision can lead to dangerous and early complications which occur mainly if circumcision is performed by incompetent, uneducated and unlicensed individuals.

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This research work comprises of the study that is made on the perception and practices of circumcision among urban and rural population of Pakistan. As people have different thoughts about the circumcision of their children. their practices and age at which the child is being circumcised also differs. It is thought that with the passage of time and changing education levels of population, circumcision practices might have changed.

The objective of the study was to compare the perception and practices for circumcision in rural and urban population in Punjab.

METHODOLOGY

This cross-sectional study was conducted in rural and urban areas of 8 cities of Pakistan which includes Rawalpindi, Lahore, Sialkot, Khanewal, Chicha-Watni, Khanpur, Rahim Yar Khan, and Sadiqabad. A written approval was taken from Hamdard University, Karachi to carry out our study. A total of 350 male childrenless than 10 years of age living in the rural and urban areas were selected by non-probability convenient sampling after taking informed consent. One hundred and twenty eight were taken from urban and 207 from rural areas.The questionnaire was made after thorough study of different research articles about various aspects of circumcision. The questionnaire included demographic information of the participants including timing, by whom and why it is performed, education level of parents, methods and possible complications, and questions related to

ethical aspects were also included.Anonymity and confidentiality was maintained throughout the research project. Data was analyzed using SPSS 20. Frequencies and percentages were done for descriptive variables while cross tabulation was done for categorical variables. Chi-square test was applied to the categorical parameters where necessary.

RESULTS AND DISCUSSION

Out of the complications notices, the most important was swelling 23(46.9%) and bleeding in 17(34.7%) while the rest were very minor complications. There was no need of re-circumcision noticed in any case. In 99.4% cases, there was no need of readmission to hospital due to any complication while it was seen in only 2(0.6%) if the cases. In 225(67.2%) procedure was not explained before performing while it as explained in only 32.8% (102) of the cases. The benefits of circumcision were explained in 233(69.6%) cases while it was explained only in 102(30.4%) of the cases. The complications of the procedure were not explained in 282(84.2%) cases while they were explained in 53(15.8%).

Age at circumcision in rural areas was 49(23.7%) at birth, 44(21%) within 1 month of age, 65(31.4%) in 1-2 years of age, 48(23.2%) in 3-5 years of age and only 1 case in 6-10 years of age. In urban areas, percentage of children underwent circumcision was 46(35.9%) at birth, 43(33.6%) in 1 month of age, 28(21.9%) in 1-2 years of age, 11(8.6%) in 3-5 years of age while no case is reported in later ages. In rural areas, 59(28.5%) of children were circumcised by barbers, 125(60.4%) by doctors, 21(10%) by quacks and only 2(1%) of children by male nurses while in urban areas, 13(10.2%) of children were circumcised by barbers, 113(88%) by doctors, 1(0.8%) by quacks and only 1(0.8%) by male nurses. In rural areas, 25(12%) of children were circumcised by ring method, 71% (147) by blade cutting method, 32(15.5%) of the children by methods unknown to parents and only 1.4% (3) by other methods. In urban areas, 22(17.2%) of children were circumcised by ring method, 68(53.1%) of children were circumcised by blade method and 37(28.9%) by methods unknown to parents and only 1% children by other methods.

Complications were not much significant in rural and urban areas, only 33(15.9%) of children had experienced complications in rural areas while 16(12.5%) children in urban areas.The result of our study revealed that 58% (out of 335) of the cases got circumcised within one month of life and 42% of the cases from 1-12 years of age which is comparable to the study done by Mohammad ZafarIqbal and Mohammad Ali in central Pakistan who reported 26.17% (out of 600) of the cases circumcised in neonatal age and 58% within 1-12 years of age. In our study, circumcision done by unskilled practitioners i.e. barbers and quacks is 28% which was compared to the study mentioned above in whom a big proportion of the cases in circumcised by barbers and quacks 41%. In our study, 51.17% were circumcised by bone cutter method compared to the study above where 64% cases were reported to be circumcised by bone cutter method.

Age at circumcision and area of residence

	Area of residence		**Total**
	Urban	**Rural**	
At birth	49(23.7%)	46(35.9%)	95(28.4%)
Within 1 month	44(21.3%)	43(33.6%)	87(26%)
1-2 years	65(31.4%)	28(21.9%)	93(27.8%)
3-5 years	48(23.2%)	11(8.6%)	59(17.6%)
6-10 years	1(0.5%)	0	1(0.3%)
Total	207	128	335

Person performing circumcision and area of residence

	Area of residence		**Total**
	Urban	**Rural**	
Barber	59(28.5%)	13(10.2%)	72(21.5%)
Doctor	125(60.4%)	113(88.3%)	238(71%)
Quack	21(10.1%)	1(0.8%)	22(6.6%)
Male nurse	2(1.0%)	1(0.8%)	3(0.9%)
Total	207	128	335

Types of complications

	Frequency	**%**	**Valid%**	**Cummu-lative %**
Bleeding	17	5.1	34.7	34.7
Swelling	23	6.9	46.9	81.6
Formation of blood clots	3	0.9	6.1	87.8
Urine obstruction	2	0.6	4.1	91.8
Maggots in wound	1	0.3	2.0	93.9
Slipping of ring	2	0.6	4.1	98.0
Burning sensation	1	0.3	2.0	100
Total	49	14.6	4.1	
No compli-cations	286	85.4	2.0	
Total	335	100	100	

In our study, there was no case of under circumcision as compared to their study where 26 cases were reported to be under circumcised. Hence chances of complications are greater in older age group. All the complication parameters were found high in older age group at a statistically significant extent.

CONCLUSION

The study carried out clearly demonstrated that some proportion of the circumcision cases are being circumcised by the unlicensed traditional circumcisers. Lack of properly trained doctors might be one of the reasons. There is an urgent need to educate the masses regarding age, methods of circumcision and their possible complications.

Recommendations: There is a need to educate masses regarding correct information regarding circumcision.

REFERENCES

1. MC Alanis, RS Lucidi, National Circumcision: A review to World's oldest and most controversial operation, Obs and Gynecological survey, 2014. Journals. lww.com
2. Weiss HA, Dickson KE, Agot K, et al, Male circumcision for HIV prevention: current research and programmatic issues. AIDS. 2010;24(suppl4): S61-S69
3. Binagwaho A, Pegurri E, Muita J, et al. Male circumcision at different ages in Rwanda; a cost effectiveness study. PLoS Med. 2010;7: e1000211
4. Khan NZ. Circumcision- A universal procedure with no uniform technique and practiced badly. Pak J Med Sci 2004; 20: 173-4
5. Battig CG. Electro surgical Burn Injuries and Their prevention. JAMA 1968 Jun 17; 204: 91-95
6. Szasz T: Routine neonatal circumcision: Symbol of the Birth of the therapeutic state. J Med Philos 1996; 21:137-148
7. Weiss G, Weiss E: A perceptive on controversies over neonatal circumcision. ClinPediatr 1994; 33: 726-730
8. Gerharz E.W, Haarman C. The first cut is the deepest? Medicolegal aspects of male circumcision. BJUI, 2000, 86, 332-338
9. Rizvi SAH, Naqvi SAA, Hussain M, Hassan AS. Religious Circumcision, A Muslim Review. BJUI, 1999, 83, Suppl. 1. 13-16
10. BukhariSahih. Anbiya chapter 8. Muslim Sahih. Chapter Fadail. Tradition no. 151
11. Marwat MA, HashmiZa, Waheed D: Circumcision with Plastibell Device: An experiment with 780 children. GJMS 2010;8(1)
12. Moosa FA, Khan FW, Rao NH. Comparison of complication of circumcision by 'Plastibell Device Technique' in male Neonates and Infants. JPMA, 2010 Aug;60(8):664-7
13. Aslam M, Majid A, Mumtaz N. Circumcisional Injuries: A neglected negligence. JPMI, 2010, 24(2), 95-100
14. Iqbal MZ, Ali MZ, Masood S, Anwar M, Jahangir M, Irum S. Methods of circumcision practiced in Central Pakistan and their complications. JSZMC, 2010 April-June 1(2).
15. Moslemi MK, Abedinzadeh M, Aghaali M. Evaluation of epidemiology, safety, and complications of male circumcision using conventional dissection surgery: experience at one center. OAJU, 2011:3 83-87
16. Bowa K, Michelle SL, Mugisa B, Waters E, Linyama DM, Chi BH. A controlled trial of three methods for neonatal circumcision in Lusaka, Zambia. JAIDS 2013;62: e1-e6
17. Brown JE, Micheni KD, Grant EMj, Mwenda JM, Muthiri FM, Grant AR. Varieties of male Circumcision. STD. 2001 Oct;28(10):608-12
18. Rehman JU, Ghani MU, Shehzad K, Sheikh IA. Circumcision, A comperative Study. PAFMJ 2007 December:4.
19. Sahin F, Beyazova U, Akturk A. Attitudes and practices regarding circumcision in Turkey. CCHD, 2003, 29, 4:275-280
20. Rawi AA. Late complications of circumcision. APS 2011, 7:79-81
21. Chaim JB, Livne PM, Binyamini J, Hardak B, Meir DB, Mor Y. Complicatinos of circumcision in Israel: A one year multi center survey. IMAJ, 2005;7:368-370
22. Sadique I, Asif K, Mahmood K, Siraj R. Circimcision by Plastibell – A review of the safety of the technique. Oct-Dec 2012.
23. Plank RM, Ndubuka NO, Wirth KE, Mwambona JT, Kebaabetswe P, Bassil B, et-al. A randomized trial of Mogen Clamp Versus Plastibell for neonatal circumcision in Botswana. JAIDS, 2013;62: e131-e137
24. DeMaria J, Abdullah A, Pemberton J, Raees A, Graga LH. Are physicians performing neonatal circumcision well-trained? CUA 2013:7 (7-8):260-4
25. Atikeler MK, Gecit I, Yuzgec V, Yalcin O. Complications of circumcision performed within and outside the hospital. IUN (2005)37:97-99.