

Original Article

Gender perspectives in ear care: A cross-sectional study in Delhi

Charu Kohli¹, Udhayabashkaran Kadirvelu², Suneela Garg³

^{1,2}Resident, ³Director Professor and Head, Community Medicine, Maulana Azad Medical College, New Delhi

Author for correspondence:

Dr. Charu Kohli,
Resident, Department of Community Medicine,
Maulana Azad Medical College, New Delhi-110002, India
Email ID: kohlicdoc17s@gmail.com

Abstract:

Background: Ear disease in children is a major public health problem in developing countries. There has been scarcity of evidence of any gender differentials if exist with ear care in the Indian context.

Objective: To study the gender perspectives in ear care with regard to attitude and care seeking behaviour of care givers of children 1-10 years of age in Delhi. **Materials and methods:**

This was a cross-sectional study conducted in an urban health centre situated in north east district of Delhi from January to March 2015. 160 caregivers of ill children aged 1-10 years who came to seek medical care in out-patient department (OPD) constituted the study population. Chi square test or Fisher's Exact test (wherever required) was used to observe the differences between qualitative variables. **Results:** The study was conducted among 160 caregivers of 87 (54.4%) male children and 73 (45.6%) female children. Mean (\pm SD) monthly family income was INR 7637.5 \pm 1155.30. When inquired about the attitude of caregivers about playing of their child with another child who is suffering from hearing loss, 18 (20.7%) caregivers of male children perceived that their child will also suffer from hearing loss while 30 (41.1%) caregivers of female children, agreed for the same ($\chi^2 = 7.87$, $df = 1$, p value = 0.01). **Conclusion:** The present study showed gender differences in some aspects of ear care which points towards stigma and discrimination. There were important implications of differences in health seeking with gender.

Keywords: Ear care, gender, Delhi

Introduction:

Ear disease in children is a major public health problem in developing countries which can result in a number of social and psychological problems for affected children and their

families.^[1] Prevalence of hearing impairment is substantially higher in middle and low-income countries. The global prevalence of hearing impairment in 2008 was 1.4% for children

aged 5–14 years, 9.8% for females >15 years of age and 12.2% for males >15 years of age.^[2] In India also, hearing impairment and preventable ear diseases are important health problems among children with prevalence of ear diseases to be 11.3%.^[3]

Gender is one of the important determinants of health seeking behaviour along with others like family structure, literacy status, socioeconomic status etc. as documented by another study.^[4] In the last decade, a considerable amount of research has been conducted in the area of gender and health to study gender differences in vulnerability to, and the impact of specific health conditions.^[5] Social factors, such as the degree to which women are excluded from schooling, or from participation in public life, affect their knowledge about health problems, their prevention and treatment. The degree of which gender differentials affect health and disease varies by geographical or cultural patterns within countries but it is most pronounced in

developing countries.^[6] There has been ample evidence that gender differential affect health seeking behavior. Gender difference has been described in literature with regard to mental health, micronutrient deficiencies, communicable diseases and non-communicable diseases like cardio vascular diseases and their risk factors.^[7-11]

In Indian context, this gender difference is well documented in different areas affecting health of girl child. Girl child having lesser likelihood of getting immunization and nutritious diet has been solely a case of gender disadvantage.^[12] There has been scarcity of evidence of any gender differentials if exist with ear care in the Indian context. Looking at the burden and consequences of ear morbidities in children, it is important to study the gender perspectives in ear care with regard to attitude and care seeking behaviour of care givers so that future strategies can be chalked out accordingly.

Materials and methods:

Study design, participants and sampling technique: This was a cross sectional study conducted in an urban health centre situated in north east district of Delhi. Monthly patient load was approximately 3500. The study was conducted over a period of 60 working days from January to March 2015. In the study, 160 caregivers of ill children aged 1-10 years who came to seek medical care in out-patient department (OPD) constituted the study population. Study subjects fulfilling the inclusion criteria were selected by random sampling method.

Study tool: A pre-tested, pre-designed, semi-structured questionnaire schedule in local language consisting of items on demographic profile including age and sex of the child, religion, education and occupation of caregivers etc was used. Questionnaire consisted of items to assess gender perspectives in attitude towards ear morbidities and ear care. Health seeking behaviour about health system and preference

of health care provider were also asked. Questionnaire was pilot tested in a different setting among similar study subjects for assessing its feasibility and reliability. Suitable modifications were done afterwards. Cronbach's alpha which is a coefficient of internal consistency was calculated which came out to be 0.82. Average time duration of each interview was approximately 5-10 minutes.

Inclusion and exclusion criteria: Caregivers of all patients aged 1-10 years coming out from the consultation rooms were included. Caregivers of seriously ill patients who need immediate referral were excluded from the study.

Statistical analysis: Data were analysed using SPSS software (version 17). Results were presented in simple proportions and percentages. Chi square test or Fisher's Exact test (wherever required) was used to observe

the differences between qualitative variables. The results were accepted statistically significant if “p” value was less than 0.05.

Ethical issues: All study subjects were explained about the purpose of the study and confidentiality was assured to them before taking interview. A written informed consent was taken from the participants before start of interview.

Results:

Socio demographic profile

The study was conducted among 160 caregivers of 87 (54.4%) male children and 73 (45.6%) female children. 48 (30%) children were less than 2 years of age, 66 (41.2%) were between 2-5 years of age and 46 (28.8%) were

more than 5 years of age. Majority of families were Hindu (90.6%) and nuclear (53.8%) residing in same community. Mean (\pm SD) monthly family income was INR 7637.5 \pm 1155.30. Details are shown in Table 1.

Table 1: Socio-demographic profile of study subjects and the patients

Characteristic		N= 160	Percentage (%)
Gender of child	Male	87	54.4
	Female	73	45.6
Age (in years)	<2 yrs	48	30.0
	2-5 yrs	66	41.2
	More than 5 yrs	46	28.8
Religion	Hindu	145	90.6
	Muslim	15	9.4
Education of mother	Illiterate	25	15.6
	Till Middle	61	38.1
	High school completed	47	29.4
	Graduation and above	27	16.9
Education of Father	Illiterate	14	8.8
	Till Middle	47	29.4
	High school completed	71	44.4
	Graduation and above	28	17.5
Type of family	Nuclear	86	53.8
	Joint	74	46.2

Attitude towards ear care: Gender perspectives:

When asked about the attitude of caregivers if they would like to disclose to relatives if their child develops any hearing problem, among

caregivers of male children 68 (78.2%) replied positively while among caregivers of female children, 51 (69.9%) replied positively, but

this difference was not statistically significant ($\chi^2 = 1.43$, $df = 1$, p value = 0.23). About the attitude of caregivers on marriage of an unmarried girl if she is hard of hearing, then among caregivers of male children, 63 (72.4%) agreed that there will be problems in marriage while among caregivers of female children, 58 (79.5%) agreed for the same but this difference was not statistically significant ($\chi^2 = 1.06$, $df = 1$, p value = 0.30). When inquired about the attitude of caregivers about their child playing with another child who is suffering from hearing loss, caregivers of 18 (20.7%) male

children and 30 (41.1%) female children perceived that their child will also suffer from hearing problem. This difference was statistically significant ($\chi^2 = 7.87$, $df = 1$, p value = 0.01). About the perception of caregivers if they would like their child to marry a person with treated hearing loss, 38 (43.7%) caregivers of male children replied positively, while 19 (26%) caregivers of female children agreed for the same. This difference was statistically significant ($\chi^2 = 5.39$, $df = 1$, p value = 0.02) as shown in Table 2.

Table 2: Gender wise distribution of attitude of caregivers about ear care

Attitude	Male N=87 (%)		Female N=73(%)		Chi square, df, p value
	Yes	No	Yes	No	
If your child is suffering from hearing problem, would you like to disclose it to others	68 (78.2)	19 (21.8)	51 (69.9)	22 (30.1)	1.43, 1, 0.23
Do you think an unmarried girl suffer from problem in marriage if she is hard in hearing	63 (72.4)	24 (27.6)	58 (79.5)	15 (20.5)	1.06, 1, 0.30
Do you think if your child plays with another child with hearing loss, your child will also suffer from hearing loss	18 (20.7)	69 (79.3)	30 (41.1)	43 (58.9)	7.87, 1, 0.01
Would you like to marry your child to a person with treated hearing problem	38 (43.7)	49 (56.3)	19 (26)	54 (74)	5.39, 1, 0.02

Among the caregivers of male children, 49 (56.3%) perceived that hearing loss is treatable, 11 (12.6%) thought it being untreatable while 27 (31%) said they have no idea while this proportion among caregivers of female children was 46.6%, 16.4% and 37% respectively. However, this difference was not statistically significant ($\chi^2 = 1.54$, $df = 2$, p value = 0.46). About the preference of health care

provider, 66 (75.9%) caregivers of male children preferred government health facility while 21 (24.1%) preferred private providers. Among the caregivers of female children, 58 (79.5%) preferred government and 15 (20.5%) private providers. But this difference was not statistically significant ($\chi^2 = 0.29$, $df = 1$, p value = 0.58). Data was also collected about the preference of health system for consultation of ear

morbidities. Allopathic practitioners were preferred by 52 (59.8%) of caregivers of male children and 25 (34.2%) of female children. This difference in system of medicine preferred was statistically significant ($\chi^2 = 9.36$, $df = 1$, p value =

0.01). Home remedies were reported tried initially at home for ear morbidities by 26 (29.8%) and 55 (75.3%) of caregivers of male and female children respectively which was significant with $\chi^2 = 32.84$, $df = 1$, p value = 0.01.

Discussion

The present cross sectional study was carried out among 160 caregivers of 87 (54.4%) male children and 73 (45.6%) female children in an urban health centre in Delhi. 145 (90.6%) were Hindu, 86 (53.8%) belonged to nuclear family. Mean (\pm SD) monthly family income was INR 7637.5 \pm 1155.30.

There was no significant difference seen with gender when caregivers were asked about if they would disclose to their relatives if the child is suffering from any hearing problem. This is a positive finding because it is expected that caregivers would not hide of their ear morbidities and approach timely for health seeking so that early intervention and treatment can be initiated. Another positive finding was no significant difference in attitude of caregivers towards marriage of unmarried girl if she is hard in hearing. However, significantly high proportion of care givers of female children than male children perceived that if their child play with another child with hearing loss, their own child would also suffer from hearing loss. This is a serious issue which points towards the stigma and discrimination associated with hearing loss in community. Stigma for hearing loss has been pointed out by other authors as well previously.^[13] This stigma has important implications on health seeking and compliance. In order to avoid being identified as a member of a stigmatized group, individuals with

hearing loss may choose not to seek health services or fail to comply with recommended treatments.^[14]

Significantly lesser number of caregivers of female children expressed their acceptance towards marrying their child to a person with treated hearing problem than male children. This also points towards the stigma associated with people with hearing loss. Social acceptance of people rehabilitated after hearing loss is very important. They should be given equal place for leading a socially productive life.

About the health seeking behaviour, caregivers of both male and female children preferred government health care facility. There was no association found between gender and preference of consultation. This is consistent with the findings of other studies conducted by Patel HC et al and Shah VR et al where also there was no significant difference found between gender and consultation.^[15, 16] However there was gender differences found between preferences of health care providers. Significantly more caregivers of male children preferred allopathic practitioners than female children. Caregivers of female children reported trying home remedies first for ear morbidities which may point towards delay in reporting to health facility. Similar findings of home management of ear morbidities were reported by other authors as well.^[17]

Conclusion

The present study showed gender differences in some aspects of ear care which points towards stigma and discrimination. There were important implications of differences in care seeking with gender. There is need to train health

care providers to assess gender differences with ear care health seeking.

Funding source: None

Conflict of Interest: None

Acknowledgement: The authors are grateful to all the participants.

References

1. Biswas AC, Joarder AH, Siddiquee BH. Prevalence of CSOM among rural school going children. *Mymensingh Med J* 2005;14:152–5.
2. Stevens G, Flaxman S, Brunskill E, Mascarenhas M, Mathers CD, Finucane M et al. Global and regional hearing impairment prevalence: an analysis of 42 studies in 29 countries. *Eur J Public Health* 2013;23(1):146-52.
3. Srivastava DK, Tripathi D, Gour N, Jain PK, Singh CM, Srivastava AK et al. Morbidity profile of under five children in urban slum of Utawah district. *Ind J Community Health* 2012;24(2):153-7.
4. Ghosh N, Chakrabarti I, Chakraborty M, Biswas R. Factors affecting the healthcare-seeking behaviour of mothers regarding their children in a rural community of Darjeeling district, West Bengal. *Int J Med Public Health* 2013;3:12-6.
5. Vlassoff C, Garcia Moreno C. Placing gender at the centre of health programming: challenges and limitations. *Soc Sci Med* 2002;54(11):1713-23.
6. Vlassoff C. Gender Differences in Determinants and Consequences of Health and Illness. *J Health Popul Nutr* 2007;25(1):47–61.
7. Afifi M. Gender differences in mental health. *Singapore Med J* 2007;48(5):385–91.
8. Darnton-Hill I, Webb P, Harvey PW, Hunt JM, Dalmiya N, Chopra M et al. Micronutrient deficiencies and gender: social and economic costs. *Am J Clin Nutr* 2005;81(5):1198S-205S.
9. Khuwaja AK, Kadir MM. Gender differences and clustering pattern of behavioural risk factors for chronic non-communicable diseases: community-based study from a developing country. *Chronic Illn* 2010;6(3):163-70.
10. Njelekela MA, Mpembeni R, Muhimi A, Mligiliche NL, Spiegelman D, Hertzmark E et al. Gender-related differences in the prevalence of cardiovascular disease risk factors and their correlates in urban Tanzania. *BMC Cardiovasc Disord* 2009;9:30.
11. Kaur M, Sodhi SK, Kaur P, Singh J, Kumar R. Gender differences in health care seeking behaviour of tuberculosis patients in

- Chandigarh. Indian J Tuberc 2013;60:217-22.
12. Borooah VK. Gender bias among children in India in their diet and immunisation against disease. Soc Sci Med 2004;58(9):1719-31.
 13. Erler SF, Garstecki DC. Hearing Loss- and Hearing Aid-Related Stigma. Am J Audiol 2002;11:83-91.
 14. Southall K, Gagné JP, Jennings MB. Stigma: A negative and a positive influence on help-seeking for adults with acquired hearing loss. Int J Audiol 2010;49(11):804-14.
 15. Patel HC, Moitra M, Modi A, Patel R, Kantharia SL, Chaudhary IM. Health Seeking Behavior among Parents of Children with Hearing Loss: A Cross Sectional Study. Natl J Community Med 2014; 5(1):33-7.
 16. Shah VR, Lodha N, Patel B, Koringa H, Patel M, Bhatnagar N et al. Assessment of Ear Nose and Throat morbidities prevalent in the school going children aged 5-14 years in rural area of Jamnagar. J Res Med Den Sci 2014;2(4):71-4.
 17. Curry MD, Mathews HF, Daniel HJ, Johnson JC, Mansfield CJ. Beliefs about and responses to childhood ear infections: a study of parents in eastern North Carolina. Soc Sci Med 2002;54(8):1153-65.