# Parental Role and Attitude Towards Child Healthcare Practices: A Cross-sectional Study from North 24-Parganas District of West Bengal

# <sup>1</sup>SUBIR BISWAS<sup>†</sup>, <sup>2</sup>MITHUN DAS<sup>‡</sup> & <sup>3</sup>SUMAN CHAKRABARTY<sup>\*</sup>

<sup>1</sup>Department of Anthropology, West Bengal State University, Barasat 700126
West Bengal

<sup>2</sup>Department of Anthropology & Ttribal Studies, Sidho-Kanho-Birsha University
Purulia 723104, West Bengal

<sup>3</sup>Department of Anthropology, Mrinalini Datta Mahavidyapith,
Birati 700051, Kolkata, West Bangal
E-mail: sumanshabar@gmail.com

*KEYWORDS*: Gender role. Healthcare seeking behaviour. Hygiene. Gender disparity. Parental perception.

ABSTRACT: The study of parenting role and attitudes towards child healthcare practices is not only a burning issue for the proper physical as well as psycho-social development of the children but also important to understand the magnitude of gender disparity, equality, and equity in developing countries like India. In order to conceptualise these consequences, the present study aims to investigate parents' (mothers-father dyad) role and attitudes towards children healthcare seeking behaviours by incorporating 177 families (373 preschool children) from different settlements living in North 24 Parganas district of West Bengal, India. Multistage cluster Sampling was used to select the families. Data were collected on healthcare practices performed by their parents by using structured and pre-tested schedules. It was found that there exist significant difference between boys and girls for healthcare seeking measures, where boys were being significantly placed better than girls. The healthcare practices of the girls were significantly lower thereby raising serious public health issue and required to be addressed properly for better gender equality and equity.

#### INTRODUCTION

Gender bias occurs when male and female identities are assigned different 'value' within the community they are born into, leading to boys and girls receiving different treatment, care and resources according to their given 'value'. There are interconnecting social, cultural, political and economic factors which underpin son preference and bias against girls (Richards, 2011). Of the children

that aren't in school right now, the majority of them are girls. The statistics showed that women constitutes more than two-thirds of the world's non-literate adults (Lopez-Claros and Zahidi, 2005). Typically, women have globally less economic opportunities to improve their lives. They are often restricted in terms of education, the ownership of wealth, monetary return for their work, financial opportunities, and opportunities to influence the decision making at the level of the family and the society. Given that women are about half of the population and economic potential, it is likely that

<sup>†</sup> Professor

<sup>‡</sup> Associate Professor

<sup>\*</sup> Assistant Professor (Corresponding author)

this situation shows at the macroeconomic level as well. Casual observation indicates that countries in which women and men have more equal economic opportunities are also the more affluent countries. There seems to be some association between level of development and the role of women in the society (Mikkola, 2005).

Beside this it has also been found that a healthy population is essential for sustainable economic development and eradication of poverty. All men and women have a basic right to health and well-being, but global statistics show serious breaches and inequalities in health status and access to health services (Magar, 2015). There are historical and social disadvantages which prevent one sex, often women, from benefiting fully from society's resources. There are continuing traditions of stereotypes and conceptions of what it means to be a woman or a man which are embedded in systems and practices. Discriminatory practices have resulted in the systemic devaluation of attitudes, activities and abilities ascribed to women. For men, this discrimination has contributed to devaluation of feminized characteristics in males and reinforced the prevalent male stereotype. The equity approach attempts to recognize these differences and address the underlying reasons for these differences. This approach also acknowledges that addressing the impacts of gender on health will often require different strategies for women and for men and that these will be influenced by a range of social and cultural factors (NSW, 2000). The socioeconomic development and the process of modernization have brought a profound transformation in the lives of women and men. There are also substantial cross-national differences even among nations as similar levels of development, such as between Sweden and Japan, the United States and the UK, or South Africa and India (Inglehart and Norris, 2003). However, irrespective of macro level differences, the micro level understandings have equally significant as the gender inequality started from household level, where parental roles and attitudes hold a key determinant for proper child physical as well as psycho-social development (Minhas et al., 2018). The reflection of the parental attitudes and behaviour for healthy children is mainly visible through their healthcare practices and often

unsatisfactory in nature (Bhattacherjee and Biswas, 2020). In order to understand these above mentioned situation and dearth of in depth studies on this issue, the present study aims to investigate parents' (mothers-father dyad) role and attitudes towards children healthcare seeking behaviours.

## MATERIALS AND METHODS

Study Areas and Study Participants

This study was carried out in rural, peri-urban and urban areas of North 24 Parganas district (2nd largest populated district in India as per 2011 census) of West Bengal state in India. The study was focused on different Bengali speaking social groups such as Hindu, Muslims and Scheduled Tribe (ST) by using observational, retrospective and cross-sectional study design. A total of 177 parental pairs (motherfather dyad) with their 373 children were considered for the present study. The data were collected only from those families having at least one children of each sex below eight years of age.

The Multistage cluster sampling method was followed for the present study. Random sample was drawn from 6 blocks, out of 22 blocks by using Probability Proportional Sampling (PPS) model.

# Data Collection and Analysis

Data were collected by the researchers attached to the study. Socio-economic and demographic data includes parent's occupation, monthly family income, sources of drinking water, type of family, and type of house and media exposure etc. were collected from door to door household survey by using of structured schedules and cross verification was also done for the data of hygiene and healthcare seeking behaviour as washing, clearing, brushing etc. Pre-tested and pre-structured Likert scale was used to understand parental role and attitudes towards the studied parents towards their children.

The ethical approval of the study was given by Institutional Ethics Committee of West Bengal State University, Barasat. The data were collected from August 2018 to November 2019 in several instalments.

Healthcare-seeking behaviors of the mother were considered through curative perspective only, which

was subdivided into the following categories as (a) no treatment, (b) treatment from the public sector, and (c) treatment from the private sector). The first category included no treatment at all. The public sector comprised of all types of government medical institutions, community health workers, and nongovernmental organization (NGO) workers; whereas, the private sector included all types of private practitioners, self-treatment, Vaidya, Hakim, homeopaths, traditional healers, and other private sector establishments. Similar kind of approach was also done by Ghosh *et al.* (2013).

Apart from percentage distribution of different socio-economic and demographic variables in household and individuals levels, chi-square test was used to understand the association of different distribution in hygiene and health care seeking behaviours. All the statistical analyses were done with the help of SPSS 16.0 and the significance level was considered at p<0.05.

### RESULTS AND DISCUSSION

Socio-economic and demographic profiles of the

studied participants are shown in table 1 and 2. Table 1 shows the summary of the household level variables, and table 2 shows variables at the individual levels. It was observed from these tables that majorities of the households were belonged to lower socio-economic group as more than 70% of the families had low standard of living index group and living in only "one" living room. Main sources of fathers' earning were coming from uncertain daily wage living activities (38.4%). Though most of the parents were literate but extent of literacy was low. Table 3 shows the genderwise distribution of children according to curative healthcare seeking behaviour and the time taken for the action of treatment. For curative healthcare seeking behaviour frequency of no treatment was higher among girls whereas for seeking treatment whether in public or in private sector the frequency was higher among boys. Though the difference is not statistically significant but the trend of behaviour is understandable. Furthermore the time taken for the action of treatment it was found that boys had higher frequency of availing treatment on the day while girls had higher frequency of availing the treatment on next day or even later. The gender-wise differences was statistically significant (p<0.05).

TABLE 1

Household level summery variables of the studied community (n = 177)

Variables	No	%
Settlement		
Rural	74	41.8
Peri-urban	54	30.5
Urban	49	27.7
Social group		
Hindu	57	32.2
Muslim	106	59.9
Scheduled Tribe (Oraon)	14	7.9
Drinking water sources		
Tap water	62	35.0
Tube well	115	65.0
Number of living room		
1	127	71.8
2	38	21.5
3 & above	12	6.7
SLI group		
Low (up to 5)	129	72.9
High (6 & above)	48	27.1
SLI: Standard of Living Index		

TABLE 2

Individual level variables of the studied population

Variables	No	%
Children under study $(n=373)$		
Male	184	49.3
Female	189	50.7
Age-group of children under study $(n = 373)$		
Up to 2 years	122	32.7
Above 2 years	251	67.3
Mothers' age-group $(n = 177)$		
Up to 30 years	167	94.4
Above 30 years	10	5.6
Mothers' literacy status $(n = 177)$		
Literate	159	89.8
Illiterate	18	10.2
Mothers' extent of literacy $(n = 177)$		
Primary	19	11.9
Secondary	124	78.0
Higher Secondary & above	16	10.1
Mothers' working status $(n = 177)$		
Not working	170	96.0
Working	07	4.0
Fathers' $age$ -group $(n = 177)$		
Up to 30 years	75	42.4
Above 30 years	102	57.6
Fathers' literacy status $(n = 177)$		
Literate	137	77.4
Illiterate	40	22.6
Fathers' extent of literacy $(n = 177)$		
Primary	32	23.4
Secondary	87	63.5
Higher Secondary & above	18	13.1
Fathers' Occupation		
Agriculture	16	9.0
Agricultural labour	14	7.9
Driver	2.7	15.3
Business	47	26.6
Service	0.5	2.8
Daily wage labour	68	38.4

TABLE 3

Gender-wise distribution of children according to curative measures of healthcare seeking behaviours

Variable		Treatr	nent of commo	n morbid c	d condition					
	Male	%	Female	%	Total	%				
Curative healthcare seeking behaviour $(n = 373)$										
No treatment	11	6.0	17	9.0	28	7.5				
Treatment in public sector	81	44.0	79	41.8	160	42.9				
Treatment in private sector	92	50.0	93	49.2	185	49.6				
Chi-square test	1.249, df= 2, p>0.05									
Time taken for the action of treatment $(n = 345)$				•						
On that day	85	49.1	63	36.6	148	42.9				
Next day and later	88	50.9	109	63.4	197	57.1				
Chi-square test		5.506, df= 1, p<0.05								

Table 4 shows the gender-wise distribution of children according to hygiene and health seeking abridge of mothers. It was found that their existed no

significant differences in any of the studied parameters which include: mother's hand wash with soap before chid feeding; child clothes are cleaned everyday by mothers; soap using during child bath per week by mothers (children aged upto 2 years) as well as child

brushes teeth regularly; hand wash before eating regularly; hand wash with soap after toilet regularly (children above 2 years) all as perceived by mothers.

TABLE 4

Gender-wise distribution of children according to hygiene and health seeking behaviours of mothers

Variable		Hygiene	e and health se	eking behavi	iours	
	Male	%	Female	%	Total	%
Mother's hand wash with soap	before child feeding	(aged up to 2 yea	(rs, n = 122)			
No	43	60.6	37	72.5	80	65.6
Yes	28	39.4	14	27.5	42	34.6
Chi-square te	st		1.889, df = 1	, p>0.05		
Child cloths are cleaned every	day by mothers (aged	up to 2 years, n	= 122)			
Not cleaned	03	4.2	05	9.8	08	6.6
Cleaned	68	95.8	46	90.2	114	93.4
Chi-square te	st	1	.507, df = 1, p	>0.05		
Soap using during child bath p	per week by mothers (	aged up to 2 year	rs, n = 122			
Up to 2 times	48	67.6	37	72.5	85	69.7
More than 2 times	23	32.4	14	27.5	37	30.3
Chi-square te	st $0.343$ , df = 1, p>0.05					
Child brushes teeth regularly a	as perceived by mothe	rs (aged above 2	years, $n = 251$	()		
No	11	9.7	20	14.5	31	12.4
Yes	102	90.3	118	85.5	220	87.6
Chi-square te	st	1	.299, df=1, p>	0.05		
Hand wash before eating regu	larly as perceived by	mothers (aged ab	ove 2 years, n	= 251)		
No	28	24.8	40	29.0	68	27.1
Yes	85	75.2	98	71.0	183	72.9
Chi-square te	est $0.557, df = 1, p > 0.05$					
Hand wash with soap after toil	leting regularly as per	rceived by mother	s (aged above	2  years,  n =	251)	
No	46	40.7	57	41.3	103	41.0
Yes	67	59.3	81	58.7	148	59.0
Chi-square test $0.009$ , df = 1,				0.05		

Table 5 shows the gender-wise role and attitudes of parents towards their children. When asked that whether education is more important for both sons and daughters, but more important for a son doesn't show any significant difference statically but the differences in frequencies are quite alarming indeed. However, when asked whether a man with only daughters is unfortunate their existed significant

differences with more mother agreed than disagreed (p<0.05). This may be true nature of patriarchal family system and gender role in south Asian countries including India (Das Gupta *et al.*, 2003). Similarly, when asked whether a daughter is a burden on the family, there exist significant differences with more agreed mothers than disagreed (p<0.05).

TABLE 5

Gender-wise role and attitudes of parents towards their children

Variable		Paren	ts' role and at	titudes		
	Mother	%	Father	%	Total	%
Education is important	for both sons and daughter	s but is more imp	ortant for a so	on $(n = 354)$		
Agreed	90	50.8	76	42.9	166	46.9
Neutral	12	6.8	14	7.9	26	7.3
Disagreed	75	42.4	87	49.2	162	45.8
Chi-s	Chi-square test 2.22		23, df = 2, p > 0	0.05		
A man with only daugh	hters is unfortunate $(n = 354)$	4)				
Agreed	113	63.8	82	46.3	195	55.1
Neutral	15	8.5	21	11.9	36	10.2
Disagreed	49	27.7	74	41.8	123	34.7

Chi-square test		11.01				
A daughter is a burder	on the family $(n = 354)$					
Agreed	125	70.6	103	58.2	228	64.4
Neutral	05	2.8	25	14.1	30	8.5
Disagreed	47	26.6	49	27.2	96	27.1
Chi-	-square test	15.46	68, df = 2, p < 6	(0.05		

It shows that their existed considerable amount of gender disparity towards child healthcare seeking behaviour is the present studied population. It could only be compensated with gender equality and equity if needed. To compare between gender equity and equality it can be mentioned that gender equality is the absence of discrimination, on the basis of a person's sex, in opportunities and the allocation of resources or benefits or in access to services, whereas, equity is generally regarded as a state of fairness and justice. It requires that the specific needs of particular groups are considered separately and acted upon accordingly. The concept of gender equity recognizes that men and women have different life experiences, different needs, different levels of power and access to decision-making levels in our society, differing expectations by others and different ways of expressing illness. Gender equity strategies recognize that gender leads to different social, economic and political opportunities for women and men. The concept recognizes that women and men have different needs and power structures and that these differences should be identified and addressed in a manner that rectifies imbalance between the sexes. Gender equity strategies seek to achieve fairness and justice in the distribution of benefits and responsibilities between women and men, and recognize that different approaches may be required to produce equitable outcomes (NSW, 2000). Achieving gender equity is critical to sustainable development. In all societies women's and men's roles are socially constructed, but all too frequently genderbased disparities exist that disadvantage women; this impedes their development and hence that of humankind. Despite decades of effort, overall progress in improving women's lives has been inconsistent. Moreover, environmental benefits and burdens affecting human capabilities are inequitably distributed. Women are still underrepresented in all levels of government and other decision-making arenas, whether at work or, for many, at home. Such lack of power is linked to higher levels of female

poverty, especially in rural areas of developing countries where women are responsible for 60–80 per cent of food production as well as fuel and water provision yet have little access or control over natural assets such as land, water and ecological conditions that create opportunities for a better life (IISD, 2002). Gender equality and gender equity can be addressed by using various approaches, including legislation, organizational processes and information gathering.

In Europe, there is consistent evidence that disadvantaged groups have poorer survival chances, dying at a younger age than more favoured groups. For example, a child born to professional parents in the United Kingdom can expect to live over five years more than a child born into an unskilled manual household. In France, the life expectancy of a 35-yearold university lecturer is nine years more than that of an unskilled labourer of the same age. In Hungary, the Budapest Mortality Study found that males living in the most depressed neighbourhoods had a life expectancy of about four years less than the national average, and of five and a half years less than those living in the most fashionable residential district. In Spain, twice as many babies die among families of rural workers than among those of professionals. Large gaps in mortality can also be seen between urban and rural populations and between different regions in the same country (Whitehead, 1992).

Utilization of preventive services such as antenatal care and immunizations remains suboptimal, with marked variation in the utilization of these services by gender, socioeconomic status, and geography. In 2005-06, the national immunization coverage was 44%. Inequalities in immunization exist by household wealth and education, with absolute and relative inequalities showing signs of reduction over time. Inequalities exist by caste: in 2005-6, immunization coverage among scheduled tribes and scheduled castes was 31.3% and 39.7% respectively compared to 53.8% among other castes with absolute inequalities between these castes increasing over time. Coverage remains higher in urban areas (58%)

compared to rural areas (39%), although absolute and relative urban-rural differences have decreased over time. Over time, the absolute gender gap has increased with an absolute 2.6% gender gap in 1992-3 increasing to 3.8% gender gap in 2005-6. Similar patterns in inequalities are seen for antenatal care coverage. In 2005–6, 77% of Indian women during their pregnancy received some form of antenatal care in the three years preceding the survey, even though only 52% had the recommended three or more visits. Overall, progress in antenatal care coverage has increased over time. Inequalities by wealth, education and urban-rural residence however persist, even though absolute and relative inequalities have decreased over time. For both these preventive services, there are considerable state differences, with both the number of antenatal visits and the type of services provided during these visits varying. Inadequate access to appropriate maternal health services remains an important determinant of maternal mortality. Although the rates of institutional delivery have increased over time, only 40% of women in India report giving birth in a health facility for their last birth in 2005-6. There exists a sixfold difference between the richest and poorest quintile in institutional delivery. Although this relative difference in inequality has declined over time, the absolute percentage point difference in the prevalence of institutional delivery between the poorest and richest has increased from 65% in 1992–3 to 70% in 2005–6. Among scheduled tribes, institutional delivery was 17.1% in 1998–9 with minimal improvement to 17.9% in 2005–6 (Balarajan et al., 2011).

A cross-sectional study among 3 to 5 Years Old Children in Baghdad City, Iraq showed that the unstable geopolitical situation in Iraq since 2003 still affects the health of people, especially children. The overall prevalence rate of underweight children was 18.2%. There was no significant difference in the prevalence rate between males and females (p=0.797). However, the percentage of underweight children was slightly higher among females (18.9%) compared to males (17.6%) (Ghazi et al., 2013). A study on treatment choices for fevers in children under-five years in a rural Ghanaian district among 529 children under-five years of age showed that caregivers of female underfives use self-care while caregivers of male underfives use public providers instead of self-care,

implying gender disparity in the choice of treatment (Nonvignon, *et al.*, 2010).

Despite of demographic factors, the differences between female and male can be in part explained by social power relations. China should increase attention to gender and equity in health. A total of 156,887 patients were recruited in the analysis, with a male/ female ratio of 1.1:1.0. The average age and the duration of hospitalization were significantly greater among men (p < 0.05). A larger proportion of hospitalized female underwent surgery compared to male (p < 0.05). The total medical expense per inpatient indicated important differences between genders, with higher expenditures observed among men (p < 0.05). Furthermore, gender differences were observed in length of hospitalization and medical expense for five common conditions respectively and most differences favouring men were significant (p < 0.05) while differences favouring women were not significant (p > 0.05). Among all the self-paid patients, men were also superior in all investigating variables compared with women (Song and Bian, 2014). Gender equity in the state of health does not mean equal rates of mortality or morbidity for both sexes. It means absence of preventable differences between women and men in opportunities to survive and enjoy good health, and in the probability of not suffering any disease, disability or premature death from preventable causes (PAHO, 2005). The only practicable strategy for reducing unfair and avoidable inequalities in health outcomes between men and women is to ensure that the two groups have equal access to those resources which they need to realize their potential for health (Doyal, 2000). In India the women are the one who eat the least and at the last in families particularly in rural areas as well as their health and nutrition is not taken care of. Arokiasamy and Pradhan (2005) after analysing national Family Health Survey-2 data set conclude the presence of gender inequity in India in the form of nutrition, immunization, illness and treatment with some regional differences. There was a study conveyed to understand Gender Equity in Nutrition and Sex Differences in Growth among Rajbansis of North Bengal. The result of the study showed that Most of the children are below -2SD irrespective of sex regarding height-for-Age (boys 53.57%, girls 68.75% stunting), weight-for-age (boys 65.17% girls 58.93% underweight) and weight-for-height (boys 29.46%, girls

21.43% wasting) as per NCHS/WHO normalized reference value. The difference between genders is not significant at 0.05% level. Even the BMI below 5<sup>th</sup> percentile distribution and WHO as well as BCIMS clarification does not identify Significant differences between them (Biswas and Mallick, 2008).

## CONCLUSION

Therefore, it may be concluded from the present findings that the healthcare seeking behaviours towards the girls' child was unsatisfactory by the studied parents, which needs serious public health issue and required to be addressed properly for better gender equality and equity as most of the developing and developed countries are trying to incorporate into the national health planning and policy. However, further large scale studies is required to examine the ethnic and settlement-wise variation of such kind boys centric of parental behaviour towards healthcare seeking practices, so that specific intervention and priority group would be indentified for knowledge generation and ensure gender equity.

## **ACKNOWLEDGEMENTS**

First of all, we are thankful to Indian Council of Social Science Research (ICSSR), New Delhi for providing funding of this study (F.No. SC-2/2017-18/ICSSR/RP, dated: March 27, 2018). Then we sincerely acknowledge the contributions of project staff for their extensive dedication on data collection. We are grateful to our study participants for their whole hearted participation.

### REFERENCES CITED

- Arokiasamy, P., and J. Pradhan 2005. Gender bias against female children in India: implications for achieving millennium development goals (MDGs). *IIPS Newsletter*, 45 (3 & 4).
- Balarajan, Y., S. Selvaraj, and S. V. Subramanian 2011. Health care and equity in India. *Lancet*, 377:505-515.
- Bhattacherjee, C. and S. Biswas 2020. Gender Role towards Child Health and Care; A Study among Oraon Pre-School Children of West Bengal, India. *IJAHSS*, 5:37-43.
- Biswas, S. and G.C. Mallick 2008. Excess Female Mortality due to Gender Bias Health Care and Disease Treatment Pattern: A Study on Rajbansis of Darjeeling District, West Bengal, India. New Delhi: Northern Book Centre.
- Census of India 2011. *Census of India*. Registrar General of India. New Delhi: Government of India.

- Das Gupta, M., J. Zhenghua, L. Bohua, X. Zhenming, W. Chung, and B. Hwa-Ok 2003. Why is Son preference so persistent in East and South Asia? a cross-country study of China, India and the Republic of Korea. *Journal of Development Studies*, 40:153-187.
- Doyal, L. 2000. Gender equity in health: debates and dilemmas. Social Science and Medicine, 51:931-939.
- Ghazi, H. F., J. Mustafa, S. Aljunid, Z. Md. Isa and M.A. M. A. Abdalqader 2013. Malnutrition among 3 to 5 years old children in Baghdad city, Iraq: a cross-sectional study. Journal of Health and Population Nutrition, 31:350-355.
- Ghosh, N., I. Chakrabarti, M. Chakraborty and R. Biswas 2013. Factors affecting the healthcare-seeking behavior of mothers regarding their children in a rural community of Darjeeling district, West Bengal. *International Journal of Medicine and Public Health*, 3:12-16.
- International Institute for Sustainable Development (IISD) 2002. Gender Equity Improving Distribution of Environmental Benefits and Burdens. USA: UN Women.
- Inglehart, R., and P. Norris 2003. Gender Equality and Cultural Change around the World. United States of America: Ambridge University Press.
- Lopez-Claros, A., and S. Zahidi 2005. Women's Empowerment: Measuring the Global Gender Gap. Geneva: World Economic Forum.
- Magar, V. 2015. Gender, Health and the Sustainable Development Goals. Bulletin of World Health Organisation, 93:743.
- Mikkola, A. 2005. Role of Gender Equality in Development

  -A Literature Review. Helsinki: Helsinki Center of
  Economic Research (HECER) discussion papers.
- Minhas, A., C. Vishav, S. Sharma and P. Bansal 2018. Health care seeking behavior of parents of under five in District Kanga, Himachal Pradesh. *International Journal of Community Medicine and Public Health*, 5: 561-568.
- Nonvignon, J., M. K. S. Aikins, M. A. Chinbuah, M. Abbey, M. Gyapong, B. N.A. Garshong, S. Fia, and J. O. Gyapong 2010. Treatment choices for fevers in children under-five years in a rural Ghanaian district. *Malararia Journal*, 9:188.
- New South Wales Health (NSW) 2000. Gender Equity in Health. Gladesville: Better Health Centre Publications Warehouse.
- Pan American Health Organization (PAHO) 2005. B a s i c Indicators for Gender Equity Analysis in Health. USA: Pan America Health Organization.
- Richards, E. 2011. Gender Influences on Child Survival, Health and Nutrition: A Narrative Review. New York: UNICEF.
- Song, Y., and Y. Bian 2014. Gender differences in the use of health care in China: cross-sectional analysis.

  International Journal of Equity in Health, 13:8.
- Whitehead, M. 1992. The concepts and principles of equity and health. *International Journal of Health Services*, 22:429-445.