SEX PARITY INDEX OF HEALTH OF GUJARAT-ECONOMETRIC ANALYSIS

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ABSTRACT

Despite the discrimination of health amongst genders many debates and researchers growing in India. Health is key factor in the process of national development. In Gujarat, health sector is contributing a great indenture for social and economic change. Present paper illustrates Female's contribution in live birth, infant death, CBR and CDR. The study provides the details of male and female weight factor scores in health and trying to exemplify gender gap through Sex gap and Sex Parity Index. In very few talukas Sex gap is negative and SPI is more than 1.It shows more contribution of male than female. In Ahmedabad city SPI for three indicators is 0. It shows absolute inequality in the health of male and female. Here we found a huge sex gap between male and female in health. In Ahmedabad district SPI for all four is between o and 1.It shows that both birth and death of male is more than female in Ahmedabad district.

Key words – health, Sex Parity Index of health

Introduction

Health is the most important fundamental prerequisite to the development of women and is basic to their advance in all fields.

Women and men play important roles, frequent different public areas and face difficult health risk not only in India but all over the world. Women suffer disproportionately from diseases, injury and violence because their access to resources in often more limited than that of their male counterparts.

In developing countries like India the health condition of female child or women is very poor. Right from the childhood female child is getting less food than the male child. In many parts of India women and girls eat after the male members of the family. Even at the time of pregnancy women does not get balanced diet. Because of unhygienic condition and lack of medication many pregnant women die during deliver the child.

The maternal mortality rate often represents a major cause of death among women of child-bearing age. This period is high risk for women. In 21st century also women are not taken to the hospital while delivering and they deliver child at home in unhygienic conditions and inadequate equipment's. The pregnant and lactating mothers are also getting fewer calories than the requirement. As a result women give birth to low weight child.

Mortality rate of female infant is more than male infant child. In urban Gujarat also the number of female mortality is more than the rural Gujarat.Demand of male child also leads to abortions. Frequent abortions weakened the women's uterus and suffer from several health problems. Women those are engaged in physical labour does not gain much weight and deliver low birth weight babies, as compared with women doing less work but having the same food intake. A women's health affect the hours hold economic well-being, as a women in poor health will be less productive in the labour force.

In India health problem of women- the higher maternal and infant mortality, maternal morbidity, mental disorders, suicide rate and certain sex selective diseases are linked to their status and role in the society. Child bearing and rearing is still the dominant role assigned to most women in developing nations. In the context of low socio-economic status of the bulk of the population, this factor becomes adverse to good health in the case of women. All the developing nations are faced with rapidly growing population. In adequate housing, sanitation and poor medical facilities adversely affect the vulnerable segment of those communities. Maternity therefore, constitutes as special problems. The bulk of the stress and strain falls on the women who suffer from extremely poor health.

Most of the health care focus around women has been in family planning and nutrition . While it is important for women to have access to information and services to control their fertility. More services such as regular checkups and pre and post natal care is to be given to the women. Make

women aware of danger of synthetic contraceptives .Proper nutrition, balanced diet should be

provided equally to women also. Improvement in female health status are critically dependent on

a number of non-health development components such as education, opportunities for skill-

building income generating and decision making and the availability of basic support service to

carry out women's multiple role. If women are healthy and safe from diseases, so are their

families. Healthy women can taste the fruit of success and become an important agent of

progressive country.

Review of Literature

1) World Bank paper (Aug.1975)-Population projects of world bank provide family planning

services. They are an integral part of maternal and child health services. The provision of rural

health services, information and education activities, research on the determinants of fertility and

family size decision ,training of family health and extension agents to deliver in the quality of

family planning and maternal and child health services.

This paper proves that the knowledge and providing services of family planning will help women

to overcome from ill health.

2) B.N.Ganguli(1977)- According to B.N.Ganguli the health status of women is affected by too

many and too frequent pregnancies ,increase in mortality rate ,infant mortality rises with

pregnancies, medical complications occur in pregnancies when too early or too late in the

reproductive period. It is also affected by factors other than biological ones, such as prevailing

social attitudes and the lack of knowledge of health services which are available. The finding of

the author is that the proper knowledge and appropriate services can be helpful to reduce

maternal rate and infant mortality rate.

3). Philip M. Hauser (1979)- According to Philip M Hauser there are number of different types of

population programmes run by the family planning and nutrition as ministry of health

programmes. These programmes are conducted to change the rate of fertility, mortality, family

planning education and to develop and extend family planning service delivery, which has

commanded considerably attention and resources in many developing countries in recent years.

In his book Philip M. Hauser says that programmes for family planning is needed to control family planning and reduce mortality rate.

- 4).Ram Kumar (1990)-According to Ram Kumar family planning should be followed to avoid maternal death. Family planning is also important to the health of any woman who has serious pre-existing health problems that would be aggravated by pregnancy. Repeated child-bearing increase the risk that the uterus will not contract properly. So family planning is also one of the methods to prevent women from many severe diseases and death. In his book he says that adequate knowledge of family planning will be helpful for the healthy life of women.
- 5) JyotsnaAgnihotri Gupta(2000)-In her book "New Reproduction Technologies, women's health and autonomy" she stated that family planning programme meant to promote the health of women and children by helping women control their fertility turned into a full –fledged population control programme. Investments in social sectors such as health (particularly primary health) and education are negligible compared to family planning. Maternal mortality and infant and child mortality are still very high. She finds that family planning programmes are helpful to save women's life which cause due to continuous pregnancy.
- 6).Om Prakash Sharma (2000)-According to him population in developing country like India is increasing at a rapid pace. It is mainly due to high birth rate among poor section. Medical facilities are less and women and girls are suffered by poor nutrition. Author finds that in Indian context where women always come after men and engaged in bearing and caring of child. Women need to understand the importance of small family and drawbacks of large family.
- 7).S.Wal and ShrutiBanerji(2007)-Quality of health is also an important determinant of social development. Health is a source of someone's happiness. In terms of resources for socioeconomic development, health is considered as the highest factor. So it is imperative that health of women should improve .Health policy in India is promoting health can services to improve the health status of people especially women. They conclude that health is an important determinant of social development. It is a key factor in the process of national development.
- 8) Himanshusekhar Rout and Prasant Kumar Panda(2008)-According to them the Global Forum for Health Research believes that a systematic approach to gender issues must be a central part of its strategy for helping correct the 10/90 gap. Around 70 percent of the world's poor are women. Women' health is adversely affected by their poverty and gender inequality that

continue to divide many of the world's poorest countries. In response, the Global Forum is

committed to achieving greater gender sensitivity in all its work.

9).Paul John &.Radha Sharma(2013)-According to the given article boys who are ill are more

likely to be taken for medical treatment than are girls .Parents do discriminate to give treatment

to boy and girl. Girls get inferior medical treatment due to any of the reasons. And on the other

hand parents are ready to sell off their jewellery and mortgage houses. Surprisingly number of

girl infant death is more than a boy infant. Even number of girl infant death is greater in urban

Gujarat than the rural Gujarat.

According to the study female child is being treated inferiorly than the male child. Same

condition is seen in rural and urban area of India.

Objective of the study –

1. To highlight the gender gap of health.

2. To measure Sex Parity Index of health of Ahmedabad district.

Methodology -

Many methods exist to define gender disparities in education like comparing figures, graphic

method representation index /selectivity index, Lorenz curves, Gini coefficient etc. Out of this

we obtain Sex Parity Index (SPI): This index is commonly called Gender Parity Index. The word

gender has a broader meaning now a day. Therefore, Mr. TegegnNuresuWakois calls the

indicator as 'Sex Parity Index (SPI)' instead of gender parity index and said that this may solve

the problem of interpretative capacity of this indicator.

SPI is defined as the ratio between the female and male rates, for example, female net intake

ratio divided by male net intake ratio. The value of SPI is mostly between 0 and 1. The value

goes above 1 whenever the female rate is higher than the male rate. However, when there is a

perfect equality between the two (male and female), SPI is equal to 1. When there is absolute

inequality between the two, the value of SPI is equal to 0.

Result and Discussion-

Absolute Value-

Se.No	Taluka	live birth			Infant death		
		Male	Female	Total	Male	Female	Total
1	City	21582	18971	40553	615	467	1082
2	Daskroi	4003	3564	7567	68	59	127
3	Viramgam	2938	2814	5752	36	36	72
4	Mandal	1123	1009	2132	22	25	47
5	DetrojRampura	1275	1225	2500	27	19	46
6	Sanand	3608	3094	6702	73	58	131
7	Dholka	3802	3158	6960	50	66	116
8	Bavla	2167	1788	3955	46	38	84
9	Dhandhuka	2320	1927	4247	36	28	64
10	Barvala	1181	1005	2186	19	11	30
11	Ranpur	1244	1081	2325	19	15	34
	Total	45243	39636	84879	1011	822	1833

Se.No	Taluka	CBR		CI	CDR			
		Male	Female	Total	Male	Female	Total	
1	City	7.02	6.87	13.89	0.20	0.17	0.37	
2	Daskroi	22.98	21.99	44.97	0.39	0.36	0.75	
3	Viramgam	28.07	28.91	56.99	0.34	0.37	0.71	
4	Mandal	29.80	28.16	57.96	0.58	0.70	1.28	
5	DetrojRampura	28.40	29.13	57.53	0.60	0.45	1.05	
6	Sanand	27.90	25.95	53.85	0.56	0.49	1.05	
7	Dholka	27.96	25.24	53.20	0.37	0.53	0.90	
8	Bavla	25.16	22.58	47.74	0.53	0.48	1.01	
9	Dhandhuka	29.30	26.54	55.84	0.45	0.39	0.84	
10	Barvala	28.65	26.32	54.97	0.46	0.29	0.75	
11	Ranpur	24.95	22.88	47.83	0.38	0.32	0.70	
	Total	280.18	264.58	544.77	4.88	4.54	9.42	

Normalize Value -

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Se.No Taluka	live birth	Infant Death

		Male	Female	Total	Male	Female	Total
1	City	1.00	1.00	1.00	0.00	1.00	1.00
2	Daskroi	0.14	0.14	0.14	0.92	0.11	0.09
3	Viramgam	0.09	0.10	0.09	0.97	0.05	0.04
4	Mandal	0.00	0.00	0.00	0.99	0.03	0.02
5	DetrojRampura	0.01	0.01	0.01	0.99	0.02	0.02
6	Sanand	0.12	0.12	0.12	0.91	0.10	0.10
7	Dholka	0.13	0.12	0.13	0.95	0.12	0.08
8	Bavla	0.05	0.04	0.05	0.95	0.06	0.05
9	Dhandhuka	0.06	0.05	0.06	0.97	0.04	0.03
10	Barvala	0.00	0.00	0.00	1.00	0.00	0.00
11	Ranpur	0.01	0.00	0.01	1.00	0.01	0.00
	Total	1.61	1.59	1.60	9.65	1.54	1.43

Se.No	Taluka	CBR		CDR	
		Male	Female	Male	Female
1	City	0.00	0.00	0.00	0.00
2	Daskroi	0.72	0.68	0.48	0.37
3	Viramgam	0.94	0.99	0.36	0.38
4	Mandal	1.02	0.96	0.96	1.00
5	DetrojRampura	0.96	1.00	1.00	0.53
6	Sanand	0.94	0.86	0.91	0.60
7	Dholka	0.94	0.83	0.42	0.68
8	Bavla	0.81	0.71	0.84	0.59
9	Dhandhuka	1.00	0.88	0.64	0.41
10	Barvala	0.97	0.87	0.65	0.23
11	Ranpur	0.80	0.72	0.45	0.28
	Total	9.11	8.49	6.71	5.06

Se.No	Taluka	live birtl	h				
						sex	parity
		Male	Female	Total	sex gap	index	
1	City	1.00	1.00	1.00	0.00	1.00	
2	Daskroi	0.14	0.14	0.14	0.00	1.01	
3	Viramgam	0.09	0.10	0.09	-0.01	1.13	
4	Mandal	0.00	0.00	0.00	0.00	0	
5	DetrojRampura	0.01	0.01	0.01	0.00	1.65	
6	Sanand	0.12	0.12	0.12	0.01	0.96	
7	Dholka	0.13	0.12	0.13	0.01	0.92	

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	Total	1.61	1.59	1.60	0.02	0.99
11	Ranpur	0.01	0.00	0.01	0.00	0.72
10	Barvala	0.00	0.00	0.00	0.00	0.00
9	Dhandhuka	0.06	0.05	0.06	0.01	0.88
8	Bavla	0.05	0.04	0.05	0.01	0.85

Se.No	Taluka	Infant D	eath	sex gap	sex parity index	
		Male	Female	Total	<u> </u>	
1	City	0.00	1.00	1.00	-1.00	1
2	Daskroi	0.92	0.11	0.09	0.81	0.11
3	Viramgam	0.97	0.05	0.04	0.92	0.06
4	Mandal	0.99	0.03	0.02	0.96	0.03
5	Detroj Rampura	0.99	0.02	0.02	0.97	0.02
6	Sanand	0.91	0.10	0.10	0.81	0.11
7	Dholka	0.95	0.12	0.08	0.83	0.13
8	Bavla	0.95	0.06	0.05	0.90	0.06
9	Dhandhuka	0.97	0.04	0.03	0.93	0.04
10	Barvala	1.00	0.00	0.00	1.00	0.00
11	Ranpur	1.00	0.01	0.00	0.99	0.01
	Total	9.65	1.54	1.43	8.12	0.16

Se.No	Taluka	CBR				
		Male	Female	sex gap	sex index	parity
1	City	0.00	0.00	0.00	0.00	
2	Daskroi	0.72	0.68	0.04	0.95	
3	Viramgam	0.94	0.99	-0.05	1.05	
4	Mandal	1.02	0.96	0.07	0.94	
5	DetrojRampura	0.96	1.00	-0.04	1.04	
6	Sanand	0.94	0.86	0.08	0.91	
7	Dholka	0.94	0.83	0.11	0.88	
8	Bavla	0.81	0.71	0.11	0.87	
9	Dhandhuka	1.00	0.88	0.12	0.88	
10	Barvala	0.97	0.87	0.10	0.90	
11	Ranpur	0.80	0.72	0.09	0.89	

	Total	9.11	8.49	0.62	0.93
Se.No	Taluka	CDR		sex gap	sex parity index
		Male	Female		
1	City	0.00	0.00	0.00	0.00
2	Daskroi	0.48	0.37	0.11	0.78
3	Viramgam	0.36	0.38	-0.02	1.06
4	Mandal	0.96	1.00	-0.04	1.04
5	DetrojRampura	1.00	0.53	0.47	0.53
6	Sanand	0.91	0.60	0.31	0.66
7	Dholka	0.42	0.68	-0.26	1.62
8	Bavla	0.84	0.59	0.25	0.70
9	Dhandhuka	0.64	0.41	0.23	0.64
10	Barvala	0.65	0.23	0.43	0.34
11	Ranpur	0.45	0.28	0.17	0.62
	Total	6.71	5.06	1.64	0.76

Analysis

SPI is defined the ratio between the female and the male rates. In Ahmedabad district SPI of live birth is 1. It means male and female live birth is equal .In Daskroi, Viramgam and Detroj - Rampura show higher SPI in female than male. It proves that in these three talukas the female live birth is more than male. On the other hand in Sanand, Dholka, Dhandhuka, Barvala and Ranpur SPI is less than 1.It means that in those talukas male live birth is more than the female. In Mandal SPI is 0.It shows the absolute inequality of live birth between male and female

In Ahmedabad city SPI of infant death is 1.It means that there is absolutely inequality between male and female infant. In other talukas — Daskroi ,Viramgam, Mandal, Detroj-Rampura, Barvala, Ranpur SPI is less than 1.It means male live birth is more than female.

In Viramgam and Detroj- Rampura SPI is more than 1.IT shows that in these two talukas of Ahmedabad district female (CBR) is more than male. But in Daskroi, Mandal, Sanand, Dholka, Bavla, Dhandhuka, Barvala and Ranpur SPI is less than 1.It shows that male (CBR) is more than

female. Where as in Ahmedabad city SPI is 0.It shows that there is absolute inequality of CBR between male and female.

In Viramgam, Mandal and Dholka SPI is more than 1. It proves that female CDR is more than male. In other talukas like Daskroi, Detroj-Rampura, Sanand, Bavla, Dhandhuka, Barvala, Ranpura SPI is less than 1.It shows that male CDR is more than female CDR. Where as in Ahmedabad city SPI is 0.It shows absolute inequality of CDR between male and female.

Conclusion

Quality of health is important determinant of socio-development. State government is trying to improve the ill health of the female. So society can build and can be part of socio-economic/human development. Above study has proved that in Ahmedabad district SPI is less than 1.Female's health is inferior to male's health. State government should focus more on schemes/programmes concerning to female's health. Through good health of male and female only nation could progress.

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