

Sex Differentials in IMR: An Inter-District Analysis

(Dr. Achala Srivastava, ICSSR Post Doctoral fellow, Giri Institute of Development Studies, Lucknow)

Introduction

It has been found that the mortality differentials among Southern and Northern States are widest in the childhood ages than they are in the later part of life. And in Northern India, U.P. is considered to be one of the most backward states in terms of its socio-economic development. Strong son preference and discrimination against women have existed throughout Uttar Pradesh. The evidence for this bias is found in various socio-economic and demographic indicators, like SR at birth (SRB), fertility rate and excess mortality among female infant and children. The female infant mortality rate in U.P. found very high as pointed out by Drez & Sen (1995), that female disadvantage in survival was most pronounced in Bihar, Haryana, M.P., Punjab, Rajasthan and Uttar Pradesh. It is also noted that there exist large variations across the districts by residence, sex and education within the state of UP. Sex differentials in child mortality are also very pronounced in Uttar Pradesh (Dyson, 1987).

It would thus be important to study the difference in IMR by sex and residence in Uttar Pradesh. Hence in the present paper our focus is mainly on sex or gender differentials in IMR at the district level by place of residence.

Sex Differentials

The measures of sex differentials in infant mortality, used here is sex ratio of male to female infant mortality (SRQo). The ratio of male IMR to that of females for 2001 is given in Appendix 1 for all the districts of U.P. by place of residence. It may be observed from Appendix 1 (ratio of male to female combined) that in 2001, in the majority of districts (with the exception of Kanpur Nagar, Mau, Sonebhadra, Bijnore, Gorakhpur, Kushi Nagar and Maharajganj male IMR is higher by about 10 per cent or less than that of female), female IMR, on the whole is in excess of that for male in most of the districts; though their degree varies considerably from one district to another. It may also be observed from the same table that the gender/sex differentials in terms of IMR are the highest in Gonda (.752) followed by Varanasi (.800) and Mirzapur (.822); on the other hand, the ratio were observed in favour of female only in Kanpur Nagar, Mau, Sonebhadra, Bijnore, Gorakhpur, Kushi Nagar, Maharajganj respectively indicating that the male IMR in these districts is marginally higher by about 1 to 3 per cent than for females. While in all the remaining districts it is in favour of males (Appendix I), Only Ambedkar Nagar registered no gender gap (1.0) in terms of IMR.

It is interesting to note from the table that the differentials in IMR by sex seem to be significant for the state as a whole and for majority of the district in general. Female IMR in the state is higher than the male for the state as a whole.

Rural-Urban Differentials

The situation in this regard is slightly different when place of residence is taken into consideration. For example in rural areas, female IMR is lower than the male IMR in six districts (5 from Eastern region and one from Western region) whereas it is same in one district, i.e. Azamgarh of Eastern region. Further the gap was insignificant in case of rest of the districts.

Table 1: Gender Gap (Female-male Ratio), SRQo (Female-Male Ratio in IMR) 2001

Districts	Urban	Rural	Districts	Urban	Rural	Districts	Urban	Rural
Agra	0.76	0.85	Auraiya	0.90	0.98	Ballia	1.36	0.86
Aligarh	0.93	0.91	Barabanki	1.14	0.88	Balrampur	0.79	0.86
Baghpat	1.09	0.91	Fatehpur	1.57	0.96	Basti	1.56	0.95
Bareilly	0.98	0.91	Hardoi	1.34	0.94	Chandauli	1.00	0.94
Bijnor	0.86	1.01	Kannauj	0.88	0.93	Deoria	0.78	0.89
Budaun	1.11	0.95	Kanpur Dehat	0.81	0.91	Faizabad	0.87	0.97
Bulandshahar	1.06	0.89	Kanpur Nagar	1.17	0.97	Ghazipur	0.93	0.87
Etah	0.89	0.88	Kheri	0.73	0.96	Gonda	1.11	0.77
Etawah	0.91	0.88	Lucknow	0.92	0.92	Gorakhpur	1.14	1.03
Farrukhabad	0.85	0.92	Rae Bareli	0.88	0.95	Jaunpur	0.98	0.94
Firozabad	0.85	0.83	Sitapur	0.88	0.99	Kaushambi	1.03	0.97
Gautam Buddha Nagar	0.91	0.82	Unnao	0.74	0.99	Kushinagar	1.02	1.01
Ghaziabad	1.12	0.76	Banda	0.75	0.96	Maharajganj	0.95	0.99
Hathras	0.95	0.84	Chitrakoot	1.05	0.94	Mau	1.02	1.05
Jyotiba Phule Nagar	1.02	0.98	Hamirpur	0.90	0.86	Mirzapur	1.20	0.80
Mainpuri	0.83	0.87	Jalaun	0.67	0.93	Pratapgarh	0.63	0.87
Mathura	0.91	0.87	Jhansi	0.89	0.90	Sant Kabir Nagar	0.89	0.98
Meerut	1.10	0.90	Lalitpur	0.84	0.93	Sant Ravidas Nagar	0.96	0.87
Moradabad	0.98	0.92	Mahoba	0.89	0.98	Shrawasti	1.06	0.84
Muzaffarnagar	0.91	0.93	Allahabad	0.74	0.93	Siddharthnagar	0.79	0.88
Pilibhit	0.79	0.89	Ambedkar Nagar	0.93	1.01	Sonbhadra	0.56	1.05
Rampur	0.79	0.88	Azamgarh	1.05	1.00	Sultanpur	0.96	0.82
Saharanpur	1.24	0.98	Bahraich	1.18	0.95	Varanasi	0.84	0.77
Shahjahanpur	0.65	0.89				U.P.	0.98	1.04

With respect to urban areas, it is noticed from Table 1 that the difference between two is lower than rural areas. It may be important to note that the female IMR in urban areas of Fatehpur, Basti, Ballia, Hardoi, Saharanpur, Mirzapur, Bahraich, Kanpur Nagar, Gorakhpur, Barabanki, Ghaziabad, Gonda, Badaun, Meerut, Baghpat, Bulandshahr, Shrawasti, Azamgarh, Chitrakoot, Kaushambi, J.P. Nagar, Kushi Nagar

and Mau is lower than that for female in rural areas and these gaps are significant (Table 1). It is interesting to note that in almost all the districts, the gaps in IMR by sex are wider in rural areas as compared to the gaps in urban areas.

It is found that the ratio of male IMR to female ranged from a minimum of 0.75 in Ghaziabad followed by Gonda (0.76) to the highest 1.95 in Mau followed by Sonebhadra (1.049) in rural areas, while in urban areas it is found minimum in Sonebhadra (0.56) followed by Pratapgarh (0.63) and highest ratio is found in Fatehpur (1.57) followed by Basti (1.56).

Table 2: Classification of Districts According to the level of SRQo (Sex Ratio of IMR)

	RURAL	URBAN
Female in advantageous position(Above 1.00)	Mau, Sonbhadra, Gorakhpur, Kushinagar, Ambedkar Nagar, Bijnor	Fatehpur, Basti, Ballia, Hardoi, Saharanpur, Mirzapur, Bahraich, Kanpur Nagar, Gorakhpur, Barabanki, Ghaziabad, Gonda, Badaun, Meerut, Baghpat, Bulandshahar, Shrawasti, Azamgarh, Chitrakoot, Kaushambi, Jyotiba Phule Nagar, Kushinagar, Mau
No discrimination (Equal to 1.00)	Azamgarh	Chandauli
Female in Disadvantageous position(Below 1.00)	Sitapur, Maharajganj, Unnao, Mahoba, Sant Kabir Nagar , Jyotiba Phule Nagar, Auraiya , Saharanpur, Faizabad, Kaushambi, Kanpur Nagar, Kheri Fatehpur, Banda, Bahraich, Budaun Basti, Rae Bareilly, Chitrakoot , Jaunpur Hardoi, Chandauli, Kannauj , Lalitpur, Muzaffarnagar, Jalaun, Allahabad, Farrukhabad, Lucknow, Moradabad, Aligarh, Baghpat, Kanpur Dehat, Bareilly, Jhansi, Meerut ,Bulandshahar, Pilibhit, Shahjahanpur, Deoria, Barabanki, Siddharthnagar, Etawah, Rampur, Etah, Mainpuri, Ghazipur, Mathura, Pratapgarh, Sant Ravidas Nagar , Ballia, Balrampur , Hamirpur, Agra, Shrawasti, Hathras, Firozabad, Sultanpur, Gautam Buddha Nagar, Mirzapur, Varanasi, Gonda, Ghaziabad	Bareilly, Jaunpur, Moradabad, Sultanpur, Sant Ravidas Nagar, Maharajganj, Hathras, Ambedkar Nagar, Ghazipur, Aligarh, Lucknow, Mathura, Muzaffarnagar, Gautam Buddha Nagar, Etawah, Auraiya , Hamirpur, Etah, Jhansi, Mahoba, Sant Kabir Nagar , Sitapur, Kannauj, Rae Bareilly, Faizabad, Bijnor, Firozabad, Farrukhabad, Lalitpur, Varanasi, Mainpuri, Kanpur Dehat Siddharthnagar, Rampur, Pilibhit, Balrampur, Deoria, Agra, Banda, Allahabad, Unnao, Kheri, Jalaun, Shahjahanpur, Pratapgarh, Sonbhadra

The situation in this respect (Table 2) in urban areas seems to be quite different as in 23 districts male IMR was higher than the female IMR in which 11 belonging to Eastern region (Basti, Ballia, Mirzapur, Bahraich, Gorakhpur, Gonda, Shrawasti, Azamgarh, Kaushambi, J.P. Nagar, Kushi Nagar and Mau), 4 belongs to Central region (Fatehpur, Hardoi, Kanpur Nagar and Barabanki, 7 from Western region (Saharanpur, Gonda, Moradabad, Mathura and Mainpuri) and one from Bundelkhand region (Chitrakoot).

In these districts females are in better position in terms of IMR than their male counterparts, whereas in rural areas only six districts came in this category (Table 2). These are Mau, Sonebhadra, Gorakhpur, Kushi Nagar, Ambedkar Nagar and Bijnore. Further, the ratio of male IMR to female IMR in urban areas is unusually lower in Sonebhadra (0.561), Pratapgarh (0.633), Badaun (0.651) and Jalaun (0.671) suggesting substantially higher mortality among female infants while in rural areas the lowest male to female ratio is found in Ghaziabad (0.757) followed by Gonda (0.766) and Varanasi (0.774), which show smaller gap between male IMR and female IMR than their urban counterparts.

It is observed from Table 3 that the female infant mortality is higher than the female population in both rural and urban areas across the districts. However, the degree of differentials in male and female infant mortality is more in urban than rural areas across the districts.

Table 3: Index of Dissimilarity Between Rural and Urban Areas(2001)

	Rural	Urban	Total
Western Region	0.107	0.124	0.096
Central Region	0.052	0.208	0.058
Bundelkhand Region	0.074	0.159	0.071
Eastern Region	0.090	0.153	0.079
Uttar Pradesh	0.088	0.153	0.080

As far as the state is concerned, the index of dissimilarity indicates more male – female gap in IMR in urban areas (0.153) in comparison with rural areas (0.088). In fact in all the regions male–female differences are lower in rural areas than their urban counterparts.

Gender Related Health Index for Infants (GHII)

For the calculation of Gender related health index for infants we have used GHI (Gender-related health index) methodology which is introduced by UNFPA in its publication *“Towards Population and Development Goals.”* This index measures the gender inequalities in selected health and education related parameters. GHI comprises three indicators, viz. life expectancy at birth, Infant Mortality Rate, and educational attainment. This measure computes an equally distributed index of each of these three parameters and combines them into a composite index by assigning equal weights to them. The method of computation of the index is similar to UNDP’s GDI methodology. The educational attainment index in the GDI (UNDP) indicates development effort, whereas in the GHI it is viewed as a proxy for positive health. The methodology adopted by UNFPA in the computation of GHI for states will be followed in the computation of GHII(Only IMR and education attainment indicators will be included as the data for life expectancy is not available at the district level) for districts in our analysis to gauge the degree of discrimination against female infants.

Index for males and females will be computed separately and then the equally distributed index (Harmonic Mean of the index for males and females weighted in the proportion to the 2001 census population) will be computed. This index shows relative achievement of the district in gender equality in IMR. To construct IMR index fixed maximum and minimum values have been established (maximum and minimum values have been based on UNFPA, GHI Index). The following formula has been used for the computation of IMR:

$$\text{Index of IMR} = 125 - \text{IMR} / 125 - 8, \text{ Index of education} = 100 - \text{adult literacy ratio} / 100 - 0$$

(The formula is same for males and females)

Equally distributed index of IMR (with ϵ_2) :

$$[\% \text{ share of female population (FIMR Index)}^{1-\epsilon} + \% \text{ share of male population (MIMR)}^{1-\epsilon}] / 1^{(1-\epsilon)}$$

(The formula is same for educational attainment)

The GIHI is a simple average of the IMR and education attainment index. It is calculated by dividing the sum of these two indices by 2. This index will be used to identify the relatively developed and backward districts in terms of gender gap in IMR. A index lesser values between 0 and 1. Index with a value higher than 1, suggests that females have better attainment than males. Index with a value of unity, i.e. 1 reflects an absolute equality in the respective attainments of males and females. Index having value below 1.0 suggests that males have better attainment than females reflecting high gender inequality in infant mortality rate.

Analysis of Gender Related Health Index for Infants

This index has been calculated for 2001 for the districts of Uttar Pradesh. We have classified all the 70 districts into the following five categories:

- (i) Developed Districts
- (ii) Moderately Developed Districts
- (iii) Less Developed Districts
- (iv) Backward Districts
- (v) Most Backward Districts.

¹ Due to non-availability of data the computation of GHI for 70 districts of U.P. have presented in this paper have left out gross enrolment rates and assigned full weightage to adult literacy as was done in HDR 1990 and Shiv Kumar A.K. (1996).

Table:4 Gender Related Health Index for Infants

	Equally Distributed Index				Equally Distributed Index		
	Total	Rural	Urban		Total	Rural	Urban
Agra	0.391	0.296	0.526	Unnao	0.256	0.227	0.484
Aligarh	0.280	0.249	0.401	Banda	0.264	0.230	0.534
Baghpat	0.407	0.390	0.479	Chitrakoot	0.264	0.245	0.426
Bareilly	0.282	0.206	0.432	Hamirpur	0.295	0.262	0.438
Bijnor	0.345	0.317	0.444	Jalaun	0.298	0.266	0.445
Budaun	0.122	0.079	0.326	Jhansi	0.319	0.236	0.465
Bulandshahar	0.355	0.331	0.460	Lalitpur	0.192	0.130	0.539
Etah	0.238	0.206	0.372	Mahoba	0.257	0.221	0.399
Etawah	0.295	0.266	0.469	Allahabad	0.234	0.189	0.347
Farrukhabad	0.297	0.271	0.431	Ambedkar Nagar	0.335	0.327	0.464
Firozabad	0.295	0.265	0.366	Azamgarh	0.298	0.291	0.460
G B Nagar	0.394	0.355	0.436	Bahraich	0.175	0.145	0.322
Ghaziabad	0.456	0.397	0.515	Ballia	0.506	0.499	0.551
Hathras	0.254	0.227	0.354	Balrampur	0.130	0.104	0.329
J P Nagar	0.295	0.261	0.425	Basti	0.302	0.291	0.475
Mainpuri	0.335	0.314	0.457	Chandauli	0.336	0.322	0.470
Mathura	0.355	0.314	0.462	Deoria	0.325	0.304	0.519
Meerut	0.403	0.346	0.467	Faizabad	0.346	0.321	0.498
Moradabad	0.311	0.249	0.482	Ghazipur	0.399	0.391	0.467
Muzaffarnagar	0.342	0.316	0.410	Gonda	0.198	0.178	0.507
Pilibhit	0.223	0.190	0.470	Gorakhpur	0.402	0.371	0.525
Rampur	0.199	0.157	0.337	Jaunpur	0.314	0.304	0.472
Saharanpur	0.347	0.308	0.497	Kaushambi	0.208	0.197	0.363
Shahjahanpur	0.199	0.154	0.353	Kushinagar	0.322	0.313	0.465
Auraiya	0.350	0.329	0.474	Mahrajganj	0.188	0.178	0.353
Barabanki	0.256	0.232	0.442	Mau	0.414	0.399	0.473
Fatehpur	0.263	0.243	0.455	Mirzapur	0.283	0.245	0.354
Hardoi	0.174	0.145	0.493	Pratapgarh	0.283	0.272	0.492
Kannauj	0.317	0.300	0.396	S K Nagar	0.270	0.263	0.400
Kanpur Dehat	0.329	0.317	0.511	S R Nagar	0.220	0.199	0.381
Kanpur Nagar	0.546	0.414	0.590	Shrawasti	0.174	0.158	0.351
Kheri	0.305	0.269	0.517	Siddharthnagar	0.211	0.201	0.384
Lucknow	0.415	0.259	0.574	Sonbhadra	0.273	0.237	0.589
Rae Bareli	0.247	0.225	0.417	Sultanpur	0.243	0.229	0.485
Sitapur	0.211	0.182	0.464	Varanasi	0.365	0.327	0.491

Classification of districts according to GHII has been presented in Table 4. As expected Kanpur Nagar takes the lead in terms of gender equality in infants health in terms of infant mortality (with a score of 0.546, which is comparable to that of Kerala state). Badaun district with a GHII of 0.122 stood at bottom. A low index value indicates discrimination against female infants. Table 4 reveals that there is marked gender disparity in all the districts of the state as the index value is below unity.

The district at the bottom is Badaun preceded by Balrampur, Shrawasti, Hardoi, Bahraich, Maharajganj, Lalitpur, Gonda, Rampur, Shahjahanpur, Kaushambi and Sitapur. The low index value in the districts indicates that females are more discriminated against in the above districts in IMR. Out of the top 14 districts in terms of GHII index as many as seven belong to Western region. Two districts belong to Central region (Kanpur Nagar and Lucknow). Some Eastern districts, viz., Ghazipur, Mau, Gorakhpur, Varanasi and Chandauli also come in the category of developed districts in terms of equally distributed infant mortality index. Many of the districts (Kanpur Nagar, Lucknow, Meerut, Ghaziabad and Gautam Budh Nagar), which are developed in terms of gender related health index are more urbanized districts with GHII value 0.546, 0.415, 0.403, 0.456 and 0.707 respectively. In these districts women have better facilities in health and education.

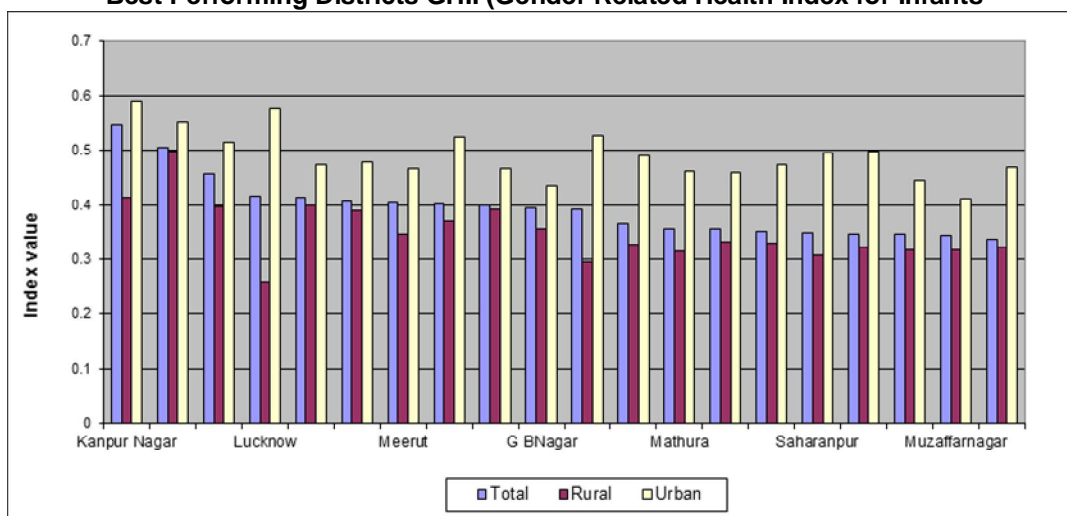
Two interesting conclusions emerged from the above analysis. First all the district show gender discrimination in IMR as the index values ranges between 0.546 (Kanpur Nagar) to 0.122 (Badaun). Secondly, most of the Western districts, which are economically more developed, show a low degree of discrimination against women (except Badaun). The degree of discrimination is relatively moderate in some of the Eastern and Central districts.

Rural - Urban Differences in GHII

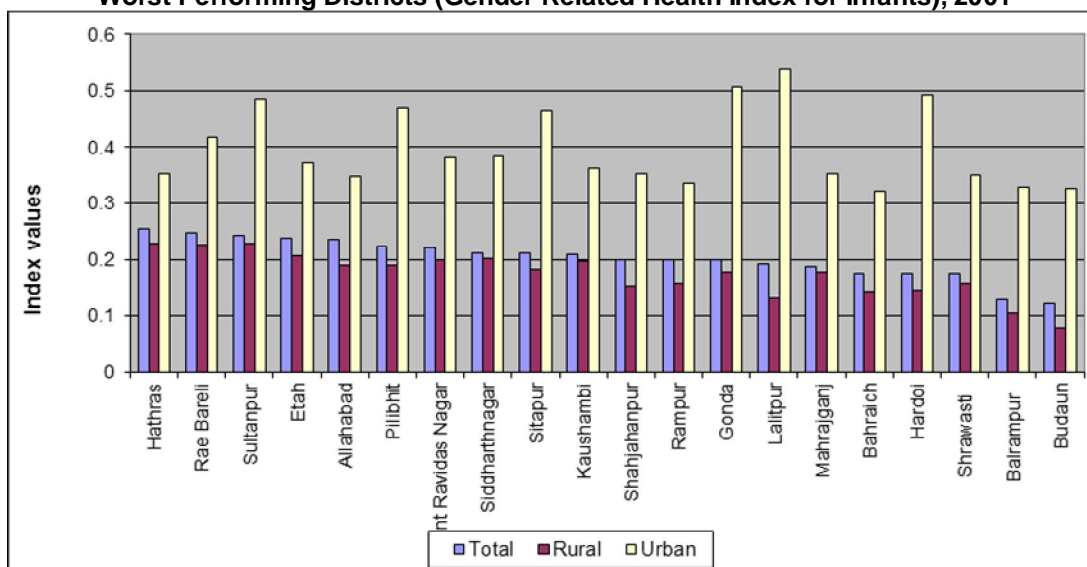
As we seen in Table 4 that higher gender inequality prevailing in the districts of the State in terms of IMR. Further we noticed that gender inequality is higher in rural areas as compared to urban areas. In rural areas highest index value has noticed in Ballia (0.499) and lowest in Badaun, i.e. 0.079.

The comparative rural - urban rankings and values of different districts are worth noting. With the districts at the top and bottom of the table (Kanpur Nagar, Ballia) and (Badaun, Bahraich) remaining unchanged. Kanpur Nagar, Sonebhadra, Lucknow, Ballia and Lalitpur seems to have performed better in (GHII) gender related health index in urban areas, whereas in rural areas Ballia, Kanpur Nagar, Mau, Ghaziabad and Ghazipur performed better in IMR rank. Lucknow and Banda however, have adverse differences in ranking between rural and urban of 38 & 3 and 47 & 6 respectively. That means that in these districts infant mortality level is higher in rural areas than their urban counterparts. Here Kanpur Nagar has a difference in ranking of only one (2nd in rural and 1st in urban).

Best Performing Districts GHII (Gender Related Health Index for Infants)



Worst Performing Districts (Gender Related Health Index for Infants), 2001



Within U.P., it is interesting to note that the urban index is higher than the rural index in all districts evidently the levels of socio-economic development of women are worse in rural areas than urban areas.

It is clear that GHII is higher in urban areas as compared to rural areas. This is particularly due to higher literacy level in urban areas. All districts show poor index value in terms of IMR in rural areas whereas in urban areas IMR index is satisfactory. This exhibits the reality that in rural areas differences in literacy level still prevailing.

Gender inequality in infant mortality in rural areas is nearly twice as high as in the urban areas. Easy access to healthcare and education appears to be the main reasons for lower gap in infant mortality in urban areas than in the rural areas. Lower age at marriage of rural girls is also one reason for low mortality in rural U.P.

Two interesting conclusions emerged from the above analysis. First, all the districts show gender discrimination in terms of infant mortality as the index values ranges between 0.546 to 0.122. Secondly, women or female infants are more discriminated in rural areas of the state as compared to their urban counterparts. Badaun registered lowest value in IMR (equally distributed index) in rural areas, i.e. 0.079 while Badaun is one of the economically developed districts of western region. This exhibits the reality that economic development is not a guarantee of low gender discrimination or gender equality. Only education specially female education could be the most important long-term factor in reducing gender gap in infant mortality.

Conclusion

The analysis reveals that there are wide variations in male-female infant mortality within the state. The inter-district differences in infant mortality rates are striking across U.P. It is distinctly observed that women in western region (except Badaun) of the state show low infant mortality levels than their counterparts elsewhere in the state.

Over the years the gender gap has been narrowing down in the state. However, in case of IMR, the male-female gap reduced very slowly. Though there has been good progress in eliminating gender disparities in IMR, sharp gender disparities still exists in the state. The neglect of the female infant in the state is a serious matter of concern and unless the situation improves the male-female and rural-urban gap in infant mortality remained wider.

From the above results we can not state any particular reason for such differences in infant mortality in the state. A number of factors are responsible for the high mortality among female infants in the state. Concerted actions are needed to close the large health gap between female and male infant in the state of U.P. The persistence of spatial variations within the state also calls for an examination of cultural and historical factors and of the role of socio-economic variables. This would require field studies in the area identified as having IMR well below or above the expected level.

References

- Agnihotri, Satish B. (2001), "Infant Mortality Variations in Space and Time Analysis of west Bengal data", EPW, Sep, 8, 2001, 36(36).
- Arokiasamy P. A (1997), Regional Patterns of Sex Bias and Excess Female Child Mortality in India, Population-E 2004, 59(6), 833-864
- Arokiasamy P.A & Pradhan Jalandhar (2009), Gender bias against female children in India: Regional Differences and their implications for MDGs
- Asaraf, M.S. (1990), "Infant Mortality in Rural India: A Diagnostic Study", Print House, Lucknow.
- **Bhargava, Alok** (2003), "Family Planning, Gender Differences and Infant Mortality: Evidence from Uttar Pradesh (India)", Journal of Econometrics, Vol. 112 (1).
- Dancer, Diane et al. (2007), Infant Mortality and Child Mortality in Bangladesh, Paper Presented in the Royal Statistical Society Conference.
- Das Gupta, Monica (1987), "Selective Discrimination against Female Children in Rural Punjab", Population and Development Review, vol.13.
- Deolalikar Anil B.(2005), Infant and Under-Five Mortality in India: Levels, Patterns, and Correlates, March 6, 2005
- Desai Sonalde, Rastogi Sonya and Vanneman Reeve (2009), Gender Differences in Child Survival in India: What do we know? , Department of Sociology University of Maryland
- Dreze, J. and Sen, A. (1995), "India, Economic Development and Social Opportunity", Oxford University Press, New Delhi.
- Dreze, Jean & Gazdar Haris (1996), "Uttar Pradesh: The Burden of Inertia", in Jean Dreze & Amartya Sen (eds.), Indian Development Selected Regional Perspective, Oxford University Press, Calcutta.
- Filmer, D., Elizabeth King and Lant Pritchett (1998), "Gender Disparity in South Asia: Comparison between and within Countries." Policy Research Working Paper 1867. Washington: World Bank.
- Gandotra & Das (2008), Determinants and Causes of Infant Mortality in Gujarat and Maharashtra
- Mahadeven K, (1987), Fertility and Mortality

Appendix 1: Ratio of Male IMR to Female (SRQo) in Descending Order, 2001

Districts	Urban	Rural	Districts	Urban	Rural	Districts	Urban	Rural
Agra	0.76	0.85	Auraiya	0.90	0.98	Ballia	1.36	0.86
Aligarh	0.93	0.91	Barabanki	1.14	0.88	Balrampur	0.79	0.86
Baghpat	1.09	0.91	Fatehpur	1.57	0.96	Basti	1.56	0.95
Bareilly	0.98	0.91	Hardoi	1.34	0.94	Chandauli	1.00	0.94
Bijnor	0.86	1.01	Kannauj	0.88	0.93	Deoria	0.78	0.89
Budaun	1.11	0.95	Kanpur Dehat	0.81	0.91	Faizabad	0.87	0.97
Bulandshahar	1.06	0.89	Kanpur Nagar	1.17	0.97	Ghazipur	0.93	0.87
Etah	0.89	0.88	Kheri	0.73	0.96	Gonda	1.11	0.77
Etawah	0.91	0.88	Lucknow	0.92	0.92	Gorakhpur	1.14	1.03
Farrukhabad	0.85	0.92	Rae Bareli	0.88	0.95	Jaunpur	0.98	0.94
Firozabad	0.85	0.83	Sitapur	0.88	0.99	Kaushambi	1.03	0.97
Gautam Buddha Nagar	0.91	0.82	Unnao	0.74	0.99	Kushinagar	1.02	1.01
Ghaziabad	1.12	0.76	Banda	0.75	0.96	Maharajganj	0.95	0.99
Hathras	0.95	0.84	Chitrakoot	1.05	0.94	Mau	1.02	1.05
Jyotiba Phule Nagar	1.02	0.98	Hamirpur	0.90	0.86	Mirzapur	1.20	0.80
Mainpuri	0.83	0.87	Jalaun	0.67	0.93	Pratapgarh	0.63	0.87
Mathura	0.91	0.87	Jhansi	0.89	0.90	Sant Kabir Nagar	0.89	0.98
Meerut	1.10	0.90	Lalitpur	0.84	0.93	Sant Ravidas Nagar	0.96	0.87
Moradabad	0.98	0.92	Mahoba	0.89	0.98	Shrawasti	1.06	0.84
Muzaffarnagar	0.91	0.93	Allahabad	0.74	0.93	Siddharthnagar	0.79	0.88
Pilibhit	0.79	0.89	Ambedkar Nagar	0.93	1.01	Sonbhadra	0.56	1.05
Rampur	0.79	0.88	Azamgarh	1.05	1.00	Sultanpur	0.96	0.82
Saharanpur	1.24	0.98	Bahraich	1.18	0.95	Varanasi	0.84	0.77
Shahjahanpur	0.65	0.89				U.P.	0.98	1.04