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Systematic hierarchies and Systemic failures:

Gender and Health Inequities in Koppal District

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1. Introduction

Although Karnataka is among the more socially advanced southern states of India, it lags behind its other southern neighbours (Kerala, Tamilnadu, Andhra Pradesh) on many dimensions. According to the Karnataka Human Development Report of 1999, Karnataka stood 7th among 15 major states ranked by their human development indices (GOK 1999). The primary reason for this middling position is that average indicators for the state conceal striking disparities among the districts within it. The northern districts of Karnataka, of which Koppal is one, form a cluster of poorly performing districts that pull down these average indicators.

Koppal is one of the poorer districts in Karnataka where drought periodically takes its toll on the agrarian economy. The lack of income and livelihoods security forces people to migrate or undertake work at great risk to their health. Deprivation is widespread. Public services, including for health, exist but are inadequately developed and largely of poor quality. Even private services, because of the widespread poverty of consumers, tend to be thin on the ground, and leave much to be desired in terms of their quality. Belief systems are strongly

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gender-biased; traditional practices include many that are inimical to women's health and well-being. Poor women's lives are marked by low levels of literacy, inadequate diets, hard labour, below minimum wages, recurring fatigue and illness.

In the midst of these hardships, poor women are also more vulnerable to inferior health outcomes due to denial of their human rights, including their reproductive and sexual rights. Maternal morbidity and mortality are high even as son preference and high infant death rates contribute to repeated childbearing. Reproductive morbidity is common but is often unspoken or taken as a 'natural' part of women's existence. Anaemia is endemic but is only casually – and ineffectively – addressed by public health programmes. Many of these problems have clearly been present over a long period of time. More recently, the threat of HIV infection looms over the region, and infection rates including among women have been going up sharply due to a combination of poor awareness, weak prevention, cyclical out-migration for work, and the denial of women's sexual and reproductive rights. Koppal shows up poorly in many of the health indicators that health administrators and policy makers use.

Health and health care inequities in Koppal reflect *systematic hierarchies* based on gender, caste, economic class, and life-stage; they also reveal *systemic failures* in health care services, both public and private. Although over the years, the government has implemented many public health programmes, they appear to have made little difference to girls' and women's health status or health care access on the ground. Three main reasons can be attributed. *First*, significant gender biases, low levels of health awareness and lack of acknowledgement of certain health problems by families and by health providers have a negative impact on health –seeking behaviour. *Second*, widespread poverty and, especially recently, rising health costs reduce access even to public health services. *Third*, government health services have tended to be so top-down in their approach, so gender-biased (or at best gender-blind), so poor in quality and so unresponsive that they have been unable to bridge the gap between service providers and their intended beneficiaries. On the other hand, NGO-implemented projects have tended to be difficult to replicate or scale up.

Biased Against Maternal Survival: Preliminary Findings from Koppal" forthcoming working paper, Brighton, Institute for Development Studies, Sussex University.

The unfortunate interplay between systematic hierarchies and systemic failures makes it possible for families and communities on the one side and health providers on the other to exonerate themselves and hold the other side responsible for poor health status and outcomes. Families and communities tend to blame health providers for insensitivity, negligence, and the sheer absence of services; health providers typically hold the view that women and their families are ignorant, superstitious, and careless. Our research reveals undoubted elements of truth on both sides. Nonetheless the 'blame game' diverts attention away from the absence of accountability by both, and the low levels of acknowledgement overall of women's health needs. At the same time, however, changes are also occurring. For instance, whether because of government awareness programmes or not, health seeking by women and their families from private and public providers is far higher than one might anticipate, especially for maternal health. Despite this, preventable maternal deaths continue to be high, and women die in unconscionable numbers from causes related to childbearing.

Our involvement with the Gender and Health Equity Project in Koppal since 2001 has given us an opportunity to study these issues and to address some of them through community and health department level actions. The project is a tripartite partnership between IIMB, the Government of Karnataka's Department of Health and Family Welfare and Mahila Samakhya (Karnataka). A formal MOU among the three partners seeks to foster an enabling environment to:

- Improve health *awareness* and practices affecting women and adolescents;
- Increase responsiveness of public health services to support better quality and equity of *access*;
- Strengthen the *accountability* of public providers of health services and communities to promote women's rights to health.

The project works in 60 villages[2] affiliated to eight primary health centres (PHCs) and eighteen sub-centres in two of the four *talukas* (sub-districts) of Koppal. The project combines community mobilisation and surveillance, joint meetings between community representatives and government health functionaries, and collaborative research. Groups

[2] 56 villages were selected by MSK, four of which have *tandas* large enough to be considered administratively by MSK as separate villages, which leads to the total of 60 villages. A *tanda* is a sub-group of houses usually populated by a different, often marginalised social group. The *tandas* in the project site were populated by a ST group (*Lambanis).*

representing the community at village, cluster (a set of villages), and district levels facilitate interaction with the health department, and are part of an effort to build institutional mechanisms that will be robust and will outlive the project.

The paper will present empirical evidence and analysis of health inequities, and will draw on insights gained through research, community mobilisation and institution building efforts over the past three years. It will argue that both the systemic and the systematic elements need to be tackled if any policy or programme changes are to really take hold. The research to date has had four main components:

- A health survey of 1920 households that has helped us understand the nature and magnitude of intra- and inter-household inequities in health care access for illness and pregnancy. Influencing such inequities are the cross-cutting axes of social stratification – gender, economic class, caste, and age / life stage;

- A census of all private health care providers in 60 project villages and a few important towns in the vicinity has helped us understand the role that the formal health system as well as traditional midwives and unqualified practitioners (RMPs) play in conducting normal deliveries and those with complications. The census also allows us to understand the world of informal health providers and unqualified medical practitioners who constitute the bulk of the 'health care sector' in Koppal;

- Qualitative research about government service delivery in order to understand its operational constraints particularly in the area of human resource management, primarily from the point of view of those based in the district providing or supervising primary health care services. Survey questionnaires were complemented with open-ended interviews and participant observation of outpatient clinics, ANC clinics, supervision meetings and field visits.

- Qualitative enquiry into maternal deaths that occur with depressing regularity in the project villages, in order to identify more carefully their causes and possible remedies. This is backed up by continuing community surveillance of health services by representatives of neighbourhood groups, and village level health workers.

2. Koppal district – human development and gender

Table 1: District-wise selected key indicators of Karnataka

Sl no	Districts	Female literacy %	Girls married below 18 years %	Current users of FP Method %	Birth order 3 & above %	Safe delivery %	Comp-lete immuni zation on %	% Decadal populat -ion growth rate	Comp-osite index %	Regions
I	**DISTRICTS WITH GOOD PERFORMANCE**									
1	Hassan	59.32	15.20	75.10	19.70	69.70	92.80	9.66	81.55	Old Mysore
2	Shimoga	67.24	16.50	69.30	22.80	83.00	92.90	12.90	80.37	Old Mysore
3	Kodagu	72.53	22.00	70.60	18.80	79.40	94.80	11.64	80.06	Old Mysore
4	Dakshina Kannada	77.39	4.50	63.70	32.00	91.50	86.00	14.51	78.77	Old Mysore
5	Uttar Kannada	68.48	15.00	66.00	27.20	86.10	89.90	10.90	76.11	B'bay K'taka
6	Udupi	74.02	4.50	63.70	32.00	91.50	86.00	6.88	75.97	Old Mysore
II	**DISTRICTS WITH AVERAGE PERFORMANCE**									
7	Mandya	51.62	37.00	71.70	26.10	61.90	88.00	7.14	75.86	Old Mysore
8	Mysore	55.81	47.90	65.40	23.90	69.70	92.70	15.04	75.70	Old Mysore
9	Bangalore Rural	78.98	21.05	63.00	16.40	79.10	83.70	34.80	75.34	Old Mysore
10	Bangalore Urban	78.98	37.00	60.10	26.10	90.60	77.00	34.80	75.19	Old Mysore
11	Chitradurga	54.62	30.05	59.90	34.40	53.80	88.40	15.05	73.98	Old Mysore
12	Tumkur	57.18	27.10	61.30	27.30	63.50	88.00	11.87	73.97	Old Mysore
13	Dharwad	62.20	36.50	61.20	37.40	65.30	74.80	16.65	73.03	B'bay K'taka
14	Chamraj Nagar	43.02	47.90	65.40	23.90	69.70	92.70	9.16	72.18	Old Mysore
15	Chikkamagalur	64.47	37.00	71.40	26.10	78.00	83.50	11.98	72.13	Old Mysore
16	Kolar	52.81	33.50	57.10	29.70	59.20	90.60	13.83	71.92	Old Mysore
17	Gadag	52.58	36.50	61.20	37.40	65.30	74.80	13.14	69.72	B'bay K'taka
18	Belgaum	52.53	55.80	61.80	36.70	68.60	64.80	17.40	68.75	B'bay K'taka
19	Haveri	57.60	36.50	61.20	37.40	65.30	74.80	13.29	65.66	B'bay K'taka
III	**DISTRICTS WITH POOR PERFORMANCE**									
20	Bellary	46.16	44.20	50.40	48.60	54.00	52.60	22.30	65.54	H'bad K'taka
21	Davangere	58.45	35.50	59.90	34.40	53.80	53.80	14.78	65.43	Old Mysore
22	Bijapur	46.19	64.80	47.10	43.00	50.10	53.20	17.63	62.86	B'bay K'taka
23	Bidar	50.01	67.60	50.60	52.90	52.50	50.30	19.56	60.55	H'bad K'taka
24	Raichur	36.84	57.10	45.40	52.80	48.00	37.20	21.93	58.34	H'bad K'taka
25	Gulbarga	38.40	47.70	39.20	53.70	47.70	25.30	21.02	58.31	H'bad K'taka
26	Bagalkot	44.10	64.80	47.10	43.00	50.10	53.20	18.84	54.71	B'bay K'taka
27	**Koppal**	**40.76**	**57.10**	**45.40**	**52.80**	**48.00**	**37.20**	**24.57**	**53.09**	**Hyderabad Karnataka**

Source: GOK 2003, Pg 10

Notes: B'bay K'taka is an abbreviation for Bombay Karnataka
H'bad K'taka is an abbreviation for Hyderabad Karnataka

Karnataka with its population of 52 million accounts for a little over 5% of the population of India (Census of India, 2001). The present Karnataka state was formed in 1956 by combining Kannada language districts from the then states of Madras, Hyderabad, Bombay and Coorg with the former princely state of Mysore. As was true in other parts of India (e.g. Kerala), the area under the princely state of Mysore was better on social and economic indicators at independence than the districts that had been under direct colonial rule. These differences have persisted after independence as noted by the Nanjundappa Committee's Report (GOK 2004). While many reasons such as the drought-proneness of agriculture, and semi-aridity can be adduced for the greater poverty of the northern districts, significant gender inequalities and biases seriously hamper social and economic development in this region. These inequalities are a major reason for the poor health and other indicators of the region. They also come in the way of government health programmes and constrain their effectiveness while providing a ready excuse for government functionaries and even NGOs for their own limitations.

Koppal, a small district carved out of the erstwhile Raichur, is a dry district with four *talukas* (sub-districts), a population of 1.193 million, and an overall literacy rate of 55% (IIPS forthcoming). Its indicators are near the bottom for the state. Table 1 places the composite social development indicator for Koppal at 53.09 almost 30 points behind the top district, Hassan. Although not uniformly the lowest on all the sub-indicators, this is cold comfort since it lies fairly close to the worst levels for all. Table 2, drawn from Round 2 Phase 1 of the all-India district level Rapid Household Survey conducted in 2002 under the Reproductive and Child Health (RCH) programme corroborates this for a number of specific health-related indicators for women.

Table 2: Range of RCH indicators in Karnataka

	Indicators	**Minimum**		**Maximum**		**Koppal**
1	Girls married below 18 (%)	2.2	Kodagu	59.4	Raichur	51.4
2	Illiterate eligible women (%)	19.9	B'lr urban	74.9	Raichur	66.8
3	Total fertility rate	1.37	Mandya	2.98	Raichur	2.77
4	Birth order 3 and above (%)	11.9	B'lr urban	51.0	Gulbarga	48.2
5	Infant mortality rate (per1000 live births)	16.3	B'lr urban	88.7	Koppal	
6	Knowledge of any modern family planning (FP) methods (%)	97.3	Raichur	99.8	Gulbarga	98.5
7	Current use of modern FP methods (%)	40.3	Gulbarga	73.5	Mandya	42.4
8	Full antenatal check-up (%)	12.8	Gulbarga	49.8	B'lr rural	24.4
9	Safe delivery (%)	41.2	Gulbarga	95.7	B'lr urban	52.8

10	Full immunisation (%)	48.1	Gulbarga	95.2	B'lr urban	50.2
11	Eligible women aware of HIV (%)	37.7	Raichur	89.2	Kodagu	41.4
12	Use of govt health facilities for antenatal care (%)	7.2	Uttar Kannada	60.6	Kodagu	19.4

Source: IIPS forthcoming

Additional data from the same source (IIPS forthcoming p 48-49; Koppal – Key Indicators) reveals the following: age at first cohabitation among currently married women (ages 15-44) was below 18 in 73.9% of the cases; 41% of them had illiterate husbands; and 51.4% of girls married during 1999 (until the survey) were below 18.

For women in Koppal, in addition to a life of hardship shared with poor men, gender power takes the form of curtailed autonomy and domestic violence. Women are married into their in-laws' households while very young, making it harder for them to have a voice of their own. Once married there is tremendous pressure to bear children, especially sons. The health implications of having closely spaced pregnancies at a young age further exacerbate existing malnutrition, anaemia and the risks of future maternal morbidity and mortality.

Apart from son preference, high fertility in northern Karnataka (Sekher et al. 2001), is also a counter to high neonatal and infant mortality with the trade off being women's reproductive well being. It is not considered unusual for a woman to have repeated miscarriages or abortions. The reasoning being that if a pregnancy is lost, a woman can always get pregnant again (Umamani & Yogananda 2003). Yet such attitudes hold significant risks for women's health, especially considering existing levels of unrecognised but high reproductive morbidity. Maternal deaths, however, represent only the extreme end of a continuum of underlying maternal morbidity. Not only are the risks to women of maternal mortality and morbidity undervalued, but so are their direct linkages to neonatal well being and survival.

Such risks to women's and newborn health are heightened by the hazards of poverty. In a study by the Academy of Nursing Studies (2001) in Andhra Pradesh, all of the women dying from pregnancy and obstetric complications were reported to have been working for subsistence reasons (mostly agriculture or labourers). In Tamil Nadu many women who had uterine prolapse ascribed their condition to heavy manual labour within a week or fortnight following delivery, possibly explaining why the mean age for developing symptoms was 26 years (Ravindran et al 1999). In southern Karnataka, women continued to undertake

strenuous work until late in their pregnancy (Mathews et al. 2001). When pregnant and postnatal women are forced to do heavy manual labour in order to survive, health education messages asking them to “take rest” while pregnant have little relevance to the hard reality of their lives.

3. Methodology

Our research uses both quantitative and qualitative methods to study the patterns of systematic hierarchy and system failures in health-seeking behaviour and access to health care. The quantitative data are based on a cross-sectional survey designed to document intra- and inter-household inequities in health care seeking during sickness and pregnancy. It also sought to elicit household level attitudes to education of girls, attitudes to gender power, and domestic violence. A household census conducted prior to the survey in 56 villages enumerated 15,358 households and 82,901 individuals. A unistage-stratified sampling design was adopted with households as the sample units. The project villages under each PHC were grouped, and each group treated as a separate stratum. With eight PHCs in the project area, there were thus eight strata. A sample was drawn from each stratum to the extent of 12.5 per cent of all the households within it leading to 1920 households.

4. Systematic hierarchies

Our broad starting hypothesis was that intersecting hierarchies of economic class, caste and gender (as well as the individual'' position in the life cycle) would affect attitudes to her health needs, and health seeking behaviour. In this paper we do not go into the details of all these intersections, but only focus on the ways in which gender affects health priorities.[3] Nonetheless it is impossible to avoid commenting on the class and caste realities that permeate and define people's lives, their perceptions, and their behaviour.

a. Economic class and caste

The economic position of a household is largely defined, in this poor and largely unirrigated agricultural district, by relationship to land, which in turn defines the extent of the household's dependence on sending out its members as casual wage labourers. As Koppal is a dry and drought prone region, agricultural productivity depends not merely on the amount of land owned but also on the possibility of ground water irrigation. Bore wells and pump

sets are important assets for this reason. In our survey, most households owned some land,[4] but only a handful owned "pump sets."[5] The overall share of landless and small (< 5 acres) unirrigated farm-owning households was as high as 51.8 per cent. 23.9% of households owned unirrigated land equal to or above 5 acres. Households owning irrigated land constituted only 24% of all households.

Our survey did not undertake a detailed study of the quality of irrigation, but this is obviously important in determining the extent to which a household can rely on income from self-employment versus sending out family members as wage labourers. Overall, the major source of income for most households was through self-employment (53.4 per cent), followed by casual wage labour (39.8 per cent). Regular wage employment was rare, as only 5.2 per cent of the households derived their income from it. This picture varied considerably by the household's landholding.

Landless households depended mainly on casual wage labour (61.6%) and artisanal work such as basket or pot making (21.1%). Among unirrigated landholding (< 5 acres) households, only 36.1% managed on self-employment; 57.9 % of these also depended on casual wage labour. By contrast, self-employment without resort to casual wage labour characterised the larger unirrigated landholding (equal to or > 5 acres) households (70.1%), as well as the irrigated landholding households whether small (72.8%) or large (91.1%). Nevertheless, it is clear that owning a plot of land larger than 5 acres or owning a small irrigated plot does not insure almost 30% of such households from casual wage labour.

Most families (78.3 per cent) owned the houses they inhabited. However, only 29.1 per cent of the owned houses were *pucca*[6] structures. Around one fourth (or 22.7 per cent) were semi-*pucca* structures but 48.1 per cent were *kuccha* structures. While electricity was not

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[3] A more detailed analysis of class and caste is available in Iyer, "Gender, caste, class and health care access: experiences of rural households in Koppal district, Karnataka", Trivandrum, Achutha Menon Centre for Health Science Studies, SCTIMST, 2005, from which this discussion is drawn.

[4] As many as 84.1 per cent of the households owned some land, while 15.9 per cent were landless.

[5] "Pump set" is a term that is used locally to describe the system put in place for ground water irrigation. We found that three out of four households (or 75.7 per cent) did not own a "pump set."

[6] Adopting the NSS definition, we defined:
Pucca house: as one that has a *pucca* roof, *pucca* walls and *pucca* or *kuccha* flooring.
Semi- pucca house: as one that has a *pucca* roof but *kuccha* wall; or a *kuccha* roof but *pucca* wall. The quality of the floor could either be *kuccha* or *pucca*
Kuccha house: as one that has *kuccha* roof and *kuccha* walls. The quality of the floor is immaterial.

uncommon, very few of even the *pucca* houses had piped water (15%) or toilets (4.2%). Government allotted housing was only 14.3% of the total (much less than the 26.7% population share of SC/ST households for whom such housing is meant), not all of which was *pucca*, and only 57% of which had electricity while none had toilets or piped water supply.

Table 3: Caste, class and landholding

	Landless	**Owning less han 5 acres o unirrigated land (%)**	**Owning 5 or more acres of unirrigated land (%)**	**Owning less than 5 acres irrigated land (%)**	**Owning 5 or more acres irrigated land (%)**	**Casual wage earning households (%)**	**Proportion of all households (%)[1]**
Upper castes	13.3	28.6	29.1	8.5	20.2	24.7	28.3
Middle castes	11.4	35.2	28.0	9.8	15.6	36.9	37.8
SCs / STs	20.9	45.8	14.3	11.7	7.2	59.2	26.7
Muslims	29.6	31.2	17.1	8.5	13.6	39.9	4.1
All households	15.9	36.0	24.0	9.8	14.3	39.8	100.0

Source: Gender and Health Equity household survey
Note: [1]3% belong to other castes

Caste variations tend to follow the economic class patterns[7] as can be seen from Table 3 above. Upper castes have more large irrigated holdings than the average; while they also have more landless households, this may reflect the fact that almost 9% have regular employment as the major source of income. Middle caste landholding is near the average for all households although they have less irrigated landholding above 5 acres than the average. SC/ST households have higher proportions of landless and casual wage labourers.

How do these variations in the economic and social status of households translate into health care needs and health-seeking behaviour? Are there significant differences across households and within them by gender or age or life cycle status?

[7] A detailed enumeration and checking of caste groups was undertaken; details are available in Annexure 3 of Iyer (op cit.).

b. Health care needs and gendered health seeking

The survey classified illness by its duration – short-term (lasting < 3 months) or long-term (> 3 months), and by its severity.[8] Self-reported morbidity was high overall, with 82% of households reporting at least one sick person during the reference period. Considerable care was taken in designing probes to overcome the well–known biases in self-reported morbidity, but because of our use of local, relatively inexperienced interviewers, we are unsure that these have been fully successful. Treatment seeking for illness was also high – almost 90% of illnesses reported for girls / women, and over 90% for boys / men were treated.[9]

Within this overall picture, health-seeking behaviour varied along a number of dimensions. Households appear to 'ration' health seeking among their members depending on the number of illnesses that concurrently need treatment, but this particularly affects households with less than 5 acres of land and middle-caste households. As the number of concurrent illnesses increases, the proportion of households able to treat all of its sick members drops among these middle level households. This kind of rationing of health seeking was not relevant for households that were on either end of the class-caste hierarchies.

'Rationing' of a sort also occurs through the phenomenon of discontinuing treatment even though the illness continues. This varies by gender within the household, and also by the economic class and caste of the household, and the duration and severity of the illness. For simplicity of presentation, economic class in this analysis is represented by three categories based on the main source of household income – self-employment, regular wages, or casual wage labour.

Table 4.1 shows that, for short-term sickness, the proportions of girls / women who were never treated was significantly higher than the same proportions of boys / men among the

[8] Severity for short term sickness was measured based on difficulty in carrying out four different basic activities – eating normally, doing regular work outside the house, doing regular work inside the house, and being able to go outside the house. For long term sickness, severity was based on difficulty in performing usual roles – going to school, doing housework, doing other work and earning an income.

[9] The high levels of treatment-seeking in our survey may be affected in part by two factors: the confounding of illness with treatment wherein people only acknowledge illness as such if it is treated; second, the fairly broad definition of treatment-seeking used in the survey. Nonetheless, even our qualitative and in-depth inquiry into the circumstances of maternal illness and death reveal the same phenomenon of high-levels of health-seeking.

groups earning casual wages or in self-employment. There was no significant difference between the sexes among households dependent on regular wage labour.

Table 4.1: Rationing of health-seeking by gender and economic class (short-term sickness)

	Girls / Women		Boys / Men		Chi-square value[3]	P value
Short-term sicknesses	Total[1]	Per cent[2]	Total[1]	Per cent[2]		
Regular wage earning households						
Ever treated	266	97.1	223	96.5	0.121	> 0.05
Never treated	8	2.9	8	3.5		
Self employed households						
Ever treated	3711	88.3	3196	97.3	208.129	< 0.001
Never treated	490	11.7	88	2.7		
Casual wage earning households						
Ever treated	2843	88.8	2498	94.9	69.026	< 0.001
Never treated	359	11.2	135	5.1		

Source: Gender and Health Equity household survey
Notes: [1]Totals are population estimates
[2]Percentages are over the total number of sicknesses within each gender & class group
[3]Degress of freedom = 1

Table 4.2: Rationing of health-seeking by gender and economic class (long-term sickness)

	Girls / Women		Boys / Men		Chi-square value[3]	P value
Long-term sicknesses	Total[1]	Per cent[2]	Total[1]	Per cent[2]		
Regular wage earning households						
Currently being treated	201	80.4	120	80.0		
Discontinued treatment despite being sick	41	16.4	22	14.7	0.230	> 0.05
Never treated	8	3.2	8	5.3		
Self-employed households						
Currently being treated	2037	58.9	1521	67.6		
Discontinued treatment despite being sick	997	28.8	573	25.5	57.921	< 0.0001
Never treated	422	12.2	157	7.0		
Casual wage earning households						
Currently being treated	1362	53.1	1186	68.9		
Discontinued treatment despite being sick	890	34.7	471	27.4	143.828	< 0.0001
Never treated	315	12.3	64	3.7		

Source: Gender and Health Equity household survey
Notes: [1]Totals are population estimates
[2]Percentages are over the total number of sicknesses within each gender & class group
[3]Chi-squared test for linear trend, degrees of freedom = 1

Table 4.2 shows that for long-term sickness also, there was little difference in health seeking between females and males in households dependent on regular wages. But, as before, there were significant gender-based differences in households dependent on self-employment or casual wages. Girls / women were more likely to never be treated for long-term illness in such households. Discontinuing treatment despite continuing illness was also more likely for

girls / women and the difference was particularly sharp among casual wage labour dependent households.

Table 5.1: Rationing of health-seeking by gender and caste (short-term sickness)

Short-term sicknesses	Girls / Women		Boys / Men		Chi-square value[3]	P value
	Total[1]	Per cent[2]	Total[1]	Per cent[2]		
Upper castes						
Ever treated	1801	89.5	1551	99.0	133.648	< 0.001
Never treated	212	10.5	16	1.0		
Middle castes						
Ever treated	2705	89.2	2232	94.2	42.370	< 0.001
Never treated	327	10.8	137	5.8		
Scheduled castes/Scheduled tribes						
Ever treated	1871	88.4	1763	95.3	60.835	< 0.001
Never treated	245	11.6	87	4.7		
Muslims						
Ever treated	384	88.7	206	100.0	25.248	< 0.001
Never treated	49	11.3	0	0.0		

Source: Gender and Health Equity household survey
Notes: [1]Totals are population estimates
[2]Percentages are over the total number of sicknesses within each gender & caste group
[3]Degress of freedom = 1

Table 5.2: Rationing of health-seeking by gender and caste (long term sickness)

Long-term sicknesses	Girls / Women		Boys / Men		Chi-square value[3]	P value
	Total[1]	Per cent[2]	Total[1]	Per cent[2]		
Upper castes						
Currently being treated	1110	60.7	761	67.6		
Discontinued treatment despite being sick	517	28.3	323	28.7	35.196	< 0.0001
Never treated	203	11.1	41	3.6		
Middle castes						
Currently being treated	1399	54.9	1019	65.4		
Discontinued treatment despite being sick	858	33.7	426	27.3	45.919	< 0.0001
Never treated	289	11.4	113	7.3		
Scheduled castes/Scheduled tribes						
Currently being treated	885	57.2	907	73.7		
Discontinued treatment despite being sick	439	28.4	293	23.8	127.649	< 0.0001
Never treated	222	14.4	31	2.5		
Muslims						
Currently being treated	203	62.7	107	58.5		
Discontinued treatment despite being sick	82	25.3	32	17.5	5.335	< 0.05
Never treated	39	12.0	44	24.0		

Source: Gender and Health Equity household survey
Notes: [1]Totals are population estimates
[2]Percentages are over the total number of sicknesses within each gender & caste group
[3]Chi-squared test for linear trend, degrees of freedom = 1

There were significantly higher proportions of girls / women who were never treated for short-term illness, but this was true across all caste and religious groups (Table 5.1). For long-term illnesses also, the proportions never treated were higher among girls/women across all the caste groups (Table 5.2). Once treatment was started, the likelihood of its being discontinued was significantly higher for girls/women among all caste and religious groups, except for upper caste households.

The foregoing discussion suggests that, while economic class plays a role in translating gender hierarchies into lack of treatment or discontinuation of treatment, caste *per se* plays a less significant role. The lower and more insecure the household's economic status, the greater the chance of what we have called 'rationing' of health seeking, and this is borne disproportionately by girls and women. This suggests that greater income security (and higher income levels) may reduce the rationing phenomenon, and with it the health-seeking differences between women and men. Among regular wage earning households, there were few female-male differences in health-seeking behaviour. However the number of such households is small, and more research may be needed to determine why this is so. While we may be tempted to assume it is because of the security of their income, economic vulnerability may not be the only reason; other factors such as educational status may play a role as well.

Other evidence suggests that the gender differences in health-seeking may not all be explainable by economic class. Basic gender power differences appear to be at play. An examination of the reasons given for lack of treatment gives some indication of this (Table 6).

For both females and males, the major reasons for never treating or discontinuing treatment were only a few: either the illness was not considered serious by the patient or the family, or the treatment was too expensive, or the patient felt s/he was not getting cured. Short-term illness among men was also not treated because they said they didn't have the time for treatment. However the relative importance of the reasons given by women and men varied. Never treating either short or long-term illness because they thought it was not 'serious' was the most important reason for women. For men, expense was the dominant reason for never treating illness. Expense was an important barrier to treatment for women as well but lack of acknowledgement of illness (as reflected in the statement that it was not serious) was the

more salient barrier. This barrier has its roots in powerfully ingrained gender norms that instil in women from an early age a lack of confidence or self-worth, a lower recognition of their needs, and a value to suffering in silence. Men have few such internalised norms of behaviour.

Table 6: Main reasons for non-treatment of sicknesses

	Short term sicknesses		**Long term sicknesses**			
	Never treated		***Discontinued treatment***		***Never treated***	
	Girls / Women	Boys / Men	Girls / Women	Boys / Men	Girls / Women	Boys / Men
Main reason for no treatment	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
I did not know what to do	6.4	0.0	1.5	0.7	9.6	3.4
I did not think it was serious	39.1	23.3	11.1	12.6	42.6	29.1
Family did not think it was serious	11.9	10.0	1.2	2.2	12.5	6.8
No one to accompany me	2.8	3.3	0.7	0.0	3.2	3.4
I didn't have the time	2.8	10.0	1.6	0.0	0.9	3.4
Too expensive	23.1	46.7	20.0	21.6	17.6	40.5
Health provider unavailable	1.9	3.3	1.6	3.7	0.0	3.4
Health provider unhelpful	0.0	0.0	1.2	0.0	0.0	3.4
Medicines make me ill	0.9	0.0	0.0	0.0	1.1	0.0
Not getting cured	3.6	0.0	43.4	30.0	5.1	6.8
Other	7.4	3.3	4.7	5.8	7.4	0.0
No response	0.0	0.0	13.0	23.4	0.0	0.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total[1] (N)	856	240	1944	1083	760	237

Source: Iyer (op cit) Table 4.1
Notes: [1]Totals are population estimates

Both women and men gave ‘not getting cured’ as a major reason for discontinuing treatment for long-term illness. But our evidence shows that women tended to give up more quickly, while men did so after much more expenditure.

Our discussion in this section highlights the fact that systematic hierarchies of economic class and gender play an important role in structuring the health-seeking behaviour of households. While it is noteworthy that the extent of health-seeking overall is high, there are also important ways in which it is ‘rationed’. Such rationing appears to happen both because of economic constraints, and also on the basis of deeply ingrained gender norms. Caste on the other hand plays a smaller differentiating role, except perhaps insofar as it tends to get conflated with economic class, as in the case of the SC/ST population.

5. Systemic failures

The systematic hierarchies within communities and households that limit health-seeking behaviour favouring women are compounded by major failures of the health system. These failures are discussed in this section with a particular focus on maternal health. Systemic weaknesses have been documented in our research through a census of private health providers that was undertaken in the 60 villages, as well as in the surrounding larger villages and towns within the district. Information was collected about the characteristics of traditional birth attendants, spiritual and traditional healers, provision stores selling tablets, private doctors, rural medical practitioners (RMPs)[10], medical stores and laboratories. Detailed qualitative information of the government health services was also obtained through in-depth observation and interviews.

In addition to this survey research, we documented the experiences of 12 women with obstetric complications, 9 of whom died despite seeking care from health providers from primarily one *taluka*. These data provide compelling information that highlights how poor women in need of obstetric services interact with plural, unaccountable, and unregulated health systems in Koppal.[11]

a. Government health provision

The Karnataka Government has established an extensive network of health facilities structured according to a hierarchy of services based in theory on population norms[12]. Facilities have proliferated due to the preference of elected representatives for sanctioning PHCs and hospitals in their own constituencies and due to the availability of budget lines for

[10] RMPs stand for rural medical practitioners. They are also called registered medical practitioners, although the Medical Council of India stopped registering them in 1954. They are men who practice allopathy with no formal medical qualifications.
[11] Detailed analysis is available in George, Iyer and Sen (op cit.)
[12] PHCs and sub-centres are supposed to cover populations of 30,000 and 5,000 respectively while CHCs are expected to cover 100,000-strong population. In 2001, PHCs and sub-centres in Karnataka were catering to smaller populations on average than specified by national norms: 20,817 persons and 4,285 persons respectively. CHCs, on the other hand, were dealing with larger population loads on average than envisaged – 1,40,117 persons (GOI 2004). In Koppal, subcentres cater to more than their population norms.

infrastructural development. Several PHCs had new labour rooms constructed with funding from the Reproductive and Child Health programme and foreign funding supported infrastructural improvements of secondary level hospitals, with the aim of improving referral.

In Koppal, this investment in infrastructure has not translated into comprehensive emergency obstetric care as none of the higher-level government facilities have all the required specialists or critical supplies. Neither policy makers nor implementers have addressed the lack of technical inputs for emergency obstetric care (including abortion) by ensuring the availability of specialists, upgrading the emergency skills of existing personnel and ensuring their access to critical supplies such as blood, anti-epileptic and haemorrhage drugs.

Even if the logistics of ensuring emergency obstetric care through appropriate inputs, supplies and staffing were addressed, there still remain large managerial barriers to improving the effectiveness of maternal health care services. A key contribution of the Karnataka Task Force on Health and Family Welfare was to highlight the need to address vacancies at the primary health care level (GOK 2001). Medical officers, lab technicians, nurses and male junior health assistants (MHWs) were recruited within the district on a contract basis, while junior female health assistants (ANMs) were selected for training and recruitment at the state level. Although staff postings are biased against equity considerations through corruption, vacancies in primary health care service delivery in Koppal have substantially improved.

However progress on the more systemic problems identified by the Task Force (corruption, neglect of public health, distortions in primary health care, lack of equity, implementation gaps and weak ethical imperatives) has been more difficult to achieve. These cannot be addressed through managerial reforms alone. They require strategies to combat the political pressures that sustain such inequitable features of health systems.

b. Private health providers

In addition to the government health system, a large number of informal providers including spiritual and traditional healers, shopkeepers selling tonics and tablets, traditional birth attendants and RMPs exist at the village level. Our provider survey interviewed 548 providers working in the 60 villages involved in the project covering a population of about 82,000 people. This included 33 spiritual healers, 135 traditional healers, 178 traditional birth attendants, 45 RMPs, 1 qualified Ayurvedic doctor, 2 qualified Homepathic doctors, 152 provision stores and 2 medical shops. Although there are a few private specialists in the largest towns, the rural reality of Koppal is defined by a health care market dominated by informal providers. The district capital in contrast was where we interviewed 58% of private doctors[13], 41% of medical shops and 50% of laboratories. The 4 largest commercial towns surrounding the project area, including the district capital, accounted for 89% of 45 private doctors, 84% of the 70 medical shops and all the 8 laboratories interviewed through our census.

The end result of the combination of an unaccountable government health system and an unregulated private health system is that women have few qualified providers who can handle obstetric complications. In an emergency, women and their families are forced to run from one provider to the next, often back and forth between government and private providers, all too often without being assured of the services they desperately need.

This forced pluralism is reflected in health seeking behaviour during delivery. In terms of assistance during childbirth, according to our household survey the main provider who helped women during normal deliveries were: traditional birth attendants 60%, RMPs/ private doctors 14%, relatives 18%, auxiliary nurse midwives (ANMs) / lady health visitors (LHVs) 6% and government doctors 0%. When there was a complication during labour some women did seek more 'skilled' providers by turning to RMPs/ private doctors 26% and government doctors 8%. Nonetheless 45% of women with complications still sought the help of traditional birth attendants as a main provider.

[13] This includes those who reported holding a BDS (Dental), BAMS (Ayurvedic), BUMS (Unani), BHMS (Homepathic) or MBBS (Allopathic) degree. Out of 45 private doctors, only 14 (31%) were MBBS.

Apart from their dominant role in assisting women during delivery, traditional birth attendants, unlike other health providers, play an important role in cleaning, massaging and bathing both mother and child for several days after delivery. Traditional birth attendants also take ritual care of the placenta. They are trusted and familiar village level confidantes, who assist women with home deliveries in the customary squatting positions to which women are accustomed. But, despite being so responsive to women's needs, it is a concern that only 36% of traditional birth attendants in the project area reported following 4 of the 5 "cleans" needed for a safe delivery.

Unlike traditional birth attendants, RMPs are less involved in the time-consuming work of assisting women during the long hours of delivery and the hard work of caring for mothers, their babies and placentas after birth. Yet RMPs are more literate and command more social status than traditional birth attendants. RMPs are perceived by communities to be much more responsive than government health workers, although they have fewer qualifications (or none at all). Unlike government health workers they will make house visits regardless of the time of day, live in the village and can always be relied upon to provide injections and tablets. Indeed during and after delivery an RMP's primary role is to provide oxytocin, tetanus toxoid and vitamin B injections. However, the irrational use of oxytocin, especially in injection form, can lead to a higher risk of uterine rupture, higher fetal distress and maternal morbidity. In addition to providing and charging for injections, RMPs also seem to play an important role in mediating access to health care for poor, often illiterate families, unfamiliar with larger towns and formal health care institutions.

Women's experiences of childbearing in Koppal have to be seen in the context of the weaknesses of these plural health systems. Our research shows that women and their families made heroic attempts to seek health care prior to and during delivery. These iterative efforts by families and women result in ineffective outcomes because health systems fail to acknowledge women's requests for help and are not held accountable for the systemic failures that continue to allow women to die. It is our argument that these gendered failures in acknowledgement and accountability are responsible for the multiple delays that prevent women from accessing the effective care that could save their lives.

Family planning, antenatal care and a stress on institutional deliveries are critically important, but when they are not integrated into a continuum of care, they are not sufficient to save women's lives. All the maternal deaths we documented in Koppal did receive antenatal care and live within accessible distance of a subcentre or PHC. And they made serious efforts to seek out health providers, both private and public. Yet despite all their efforts, the women died.

c. Gender biased services

Gender bias serves to devalue, and worse, stigmatise women's experiences, their bodies and biological processes. For example, in southern Karnataka, pregnancy is seen as a time during which 'dirty' or 'bad fluids' are accumulated in the body, bleeding after delivery is considered important as it drains the body of this bad blood. Delivery is also a ritually polluting process, after which a long period of cleansing and penance is required. During this post partum period, elders enforce restricted mobility, diets and fluid intake for newly delivered mothers (Kilaru et al. 2004). These biases directly interfere with the recognition of obstetric complications, like haemorrhage, as well as inhibit health care seeking in the postnatal period.

Health professionals also de-legitimise women's point of view. One reason why women are not able to get effective care despite physically accessing government facilities is due to the lack of agreement between women and health providers about what their health needs are. Although women seek help for labour pain, medical officers diagnose them with lower back pain or 'false' labour pain. This disjuncture between women's experiences of labour pain and its medical diagnosis indicates several problems in communication and care seeking. Women might be misinterpreting their experiences or health providers may be misunderstanding the situation. Social bias may also be at play by inhibiting women from speaking freely about their intimate reproductive health concerns with health providers from a different gender, class, educational and caste background. At the same time, health providers may have social biases that invalidate women's experiences. Finally, biases may exist in the technical understanding of what constitutes labour pain. Due to these factors, the process of seeking care and advice may be quite complex in practice.

Access to government facilities for institutional delivery once successfully negotiated does not mean an end to marginalising experiences. It is not just that cleanliness is not assured, but that the treatment received by women can be dehumanising. Women and their families are often left in labour rooms by themselves. They have to trust health workers who are strangers, often having to seek them out from other wards or their quarters. Women are expected to deliver in a position that is different from what they are used to at their homes and which helps the health worker more than it helps them. Even for normal deliveries, medical rituals involve shaving the pubic area, administering IV drips, repeated deep vaginal examinations and episiotomies. Health workers learn their skills in hospital wards giving orders to women in labour who are allowed little control over their situation. Yet if complications arise, health workers tell families, who are neither informed nor in control, to be prepared to face the consequences (Caleb Varkey 2004).

Women with poor entitlements within families and in health systems tolerate high levels of pain, discomfort and humiliation. Not only are their rights to protest weakened by their unequal access to resources, including finances, expertise, and authority, but also because of the shame that surrounds women's bodies and the 'normalisation' of many women's reproductive morbidities. Explicit gender bias thus operates to disenfranchise women objectively through unequal status, and also normatively through disempowering normative local traditions and medical frames of knowledge.

6. Conclusion

Our experiences based on the Gender and Health Equity project in Koppal have highlighted the interplay of systematic hierarchies and systemic failures in determining health outcomes for poor women. Government providers of services often blame communities for their ignorance and superstition, while people accuse providers of bias, neglect and irresponsibility. What our research shows is that there is partial validity on each side but neither is true by itself.

A striking finding of our quantitative and qualitative research and field level interactions is that, whether for general illnesses (short or long term) or maternity, women and their families

invest considerable effort and resources in many instances in seeking health care. Yet the combination of poverty, biased gender norms, and unresponsive and unregulated health systems results in this investment going to nought. The result is that disproportionately women suffer illnesses and die from entirely preventable causes.

While our research has focused on two *talukas* of a single district, we can probably extrapolate our findings to much of northern Karnataka. What should be obvious is that these systematic and systemic factors underwritten by gender bias and underpinning gender biased outcomes must be addressed urgently if the state is to fulfil its development potential.

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