

Understanding Paradigm of Public-Private Partnerships in Reproductive Healthcare through an empirical study in India

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Abstract: This study was done to find out quality of care differentials and determinants with respect to utilization of public-private health facilities for reproductive health care purpose in India. The research is based upon secondary analysis of data collected as a follow up to National Family Health Survey by International Institute for Population Sciences, Mumbai, India and The Johns Hopkins University, USA. Findings are based upon cross tabulation, logistic regression analysis, Jaccard analysis and SWOT analysis. This study is an attempt to establish the relationship between facility type used with quality of care perceptions. The study tries to understand the quality of care perceptions related reasons of utilization and relative perceptual strengths and weaknesses of public and private sectors. Based upon the empirical findings a schema for public-private partnerships has been developed. The schema is based upon the constructs of core competence, quality of care ethos and need for dignified treatment.

Key Words: Public-Private Partnerships, Healthcare, Quality of care, Reproductive Health Service, Public Health Policy

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Introduction

Globally, there is historical evolution of involvement of public and private sectors in health services provisioning including reproductive health services. Many a times nature of relationship between the public and private sectors is seen on the dimension of four types of activities, namely; parallel activities, competitive activities, complementary activities and collaborative activities (Ravindran, 2005). Parallel activities represent coexistence of public and private sectors with little contact between each other, and providing different sets of services- to different sectors of the population. Competitive activities in the public and private sectors cater to the same population and compete with each other. Complementary activities from the public and private sectors complement each other either geographically and in terms of population coverage, or in terms of range of services provided, e.g. primary care by the public sector and specialist care by the private sector. In collaborative activities public and private sector work together on the basis of shared objectives, strategies and agreed monitoring and evaluation criteria, usually through the formation of a new joint entity for implementation. While these kinds of relationships between the public and private sectors in health care are not new, the 1990s has witnessed the development of specific kinds of complementary and collaborative relationships between the two sectors, known as 'public-private partnership' (PPP) (Ravindran, 2005).

Arguments for public private partnership (PPP)

There are two major arguments given in favour of 'public-private partnership' (PPP). The one argument is that it reduces the burden on tax payers by the introduction of private capital, private expertise and competitive practices to the provision of public services like reproductive health (Grimsey and Lewis, 2002). The second argument is that the private sector is better able to provide services to a higher level of efficiency and effectiveness than the public sector. It is argued that public sector is characterized by its bureaucratic, mechanistic and politicized method of operation. So, the interaction of private sector ethos with public sector often helps into promoting managerial efficiency (Adams, Young and Zhihong, 2006).

National Rural Health Mission (NRHM) and public private partnership (PPP)

National Rural Health Mission (NRHM) aims to forge a partnership between the central, state and the local governments, set up a platform for involving the Panchayati Raj Institutions (PRIs) and community in the management of primary health programmes and infrastructure and develop a framework for promoting inter sectoral convergence for promotive and preventive health care. It is very clear from NRHM goals that collaborations and convergence are the two key strategic issues. In NRHM's plan of action 'public-private partnership for public health goals, including regulation of private sector' is highlighted as one of its components (GOI, 2008).

To empower the local government and PRIs, NRHM has envisaged certain roles. According to NRHM report, The District Health Mission (DHM) has to be led by the *Zila Parishad*. The DHM has to control, guide and manage all public health institutions in the district, Sub-Centres, PHCs and Community Health Centres (CHCs). PRIs have to be involved in the Hospital Management Committees for good hospital management. It also aims at ensuring that health related database is available to all stakeholders, including Panchayats at all levels. NRHM

report also elaborates upon constitution of Hospital Management Society for district hospital, CHCs and PHCs, after which maintenance grant of Rs. 1 lakh shall be released by the Government of India. To ensure the decentralization and empowerment of local bodies, there is facilitation of village health planning under the guidance of village Health and Sanitation Committee of the Gram Panchayat. NRHM aims at exploring models of Public-Private Partnership (PPP) to supplement with services in the district, like contractual engagement of district paramedics, hiring services of district specialists on payment of remuneration, and contracting out services to NGOs/accredited private health facilities in the district ((GOI, 2005).

Quality of care in reproductive health

Quality of care, as a basic human right, has emerged as a critical element of family planning and reproductive health programs. Local stakeholders, such as women's health and primary health care organizations, seem to be promoting it. It seems to get affirmed at international conferences, such as the 1994 International Conference on Population and Development (Creel et al, 2002). Creel et al (2002) argue that providing high-quality care attracts more clients, reduces per capita costs of services and ensures sustainability of the services.

There have been many attempts to define quality of care in reproductive health context (De Geyndt, 1995). There has been historical evolution in the definition of quality of care. In 1933, Lee and Jones defined it as good medical care, a kind of medicine practiced and taught by the medical profession at a given time or period of social, cultural and professional development in a community or population group. (Lee and Jones as quoted in De Geyndt, 1995). Later in 1958, Esselstyn tried to conceptualize quality of care in terms of care process (accurate diagnosis, adequate therapy, documentation, comprehensiveness, continuity) and structure (availability and acceptability).

In the reproductive health context quality of care is often defined in terms of choice of methods, information given to clients, technical competence of providers, interpersonal relationship between clients and providers, follow up and continuity mechanism and appropriate constellation of services- (Bruce, J, 1990). The definition given by Bruce seems to have brought paradigm shift in the literature of reproductive health as for the first time intangible aspects of service quality were emphasized in the context of family planning. Bruce et al (1992) has commented upon how quality of care is achieved and managed and how it can be improved and monitored. According of Jain, provision of service should focus upon individual acceptor and programme managers should be helping the individuals to achieve their reproductive health goals.

It is often argued that one's perception of the quality of care received is based on a comparison with what was expected of that service. Following this, measurement of quality of care focuses upon gap between actual delivery of quality of care and expectations (Parasuraman et al., 1985, 88, 91).

Public-Private differentials in reproductive health care

There is substantive literature available that throws light upon public and private health care differentials. The differences can be categorized in three broad manner (Palmer et al, 2003). In one view, private sector is argued to be more efficient than public sector. Second perspective argues that private sector is often not superior in quality or efficiency; contracts are not straightforward to design and implement. Neither public nor private sector has uniform characteristics. The analysis of South African cases shows that there has been difference in nature of services sought by clients (Palmer et al, 2003). Usage of private sector is driven there by inaccessibility of public services, perception of greater privacy, speed of service, quality of diagnosis, prescribing and counselling. Further, findings also indicate that in South Africa,

private sector is more likely to be approached for curative services rather than for immunization and chronic conditions like Tuberculosis.

In India, despite having one of the most highly privatized health care systems in the world, there has been an overall lack of collaboration between the public and private sectors despite international policy recommendations- and local initiatives. There are various reasons which can be attributed to lack of collaboration. At very basic level there is lack of readiness among stakeholders due to lack of trust. It seems that "conflicting perceptions" might contribute to the uncooperative attitude between the two sectors. To explore these perceptions among key stakeholders in the public and private health sectors in Madhya Pradesh, a study was done by Costa et al. Findings indicate very clearly that there are barriers of mistrust, which hinder true dialogue, are complex, and have social, moral, and economic bases. It suggests that there is need of structural change prior to significant long-term partnership between the two sectors is possible (Costa et al, 2008).

PPP in reproductive health care –International scenario

In Vietnam, a community based survey results indicate that private providers successfully compete with public health centres systems in rural areas. The competition is successful despite the fact that direct cost of care as charged by private providers are no lower and the quality of service is also not superior in comparison with the public sector. The quality of private health care services is regulated by government (central/state or local) and is significantly poorer than the public service (Tran Tuan et al 2005).

Result of a study in Northern Cyprus shows that on all the dimensions of quality of health care in hospitals i.e. giving priority to patients' needs, professionalism of staff, providing patients with high-quality services and opportunities, relationships, equipment, medicine, facilities and

other provisions, hygiene, environment and design; private hospitals perform better than public hospitals (Arasali H et al. 2004). However, the comparison is more on the perceptions. So, the findings need to be evaluated in the holistic manner after incorporating cost and sustainability of services.

In Afghanistan, basis World Bank March 2002 mission, donors propose performance based partnership agreements for the reconstruction of the health system. Ridde (2005) argues that the overall monitoring and evaluation of services provided by subcontractors have been problematic. It was observed that the contracts were not sufficiently clear in setting out the expected results; there was inadequate information, a lack of interest in monitoring.

In Canada federal government provides about 30% of the funds from corporate and personal income taxes. The provincial governments' contribution varies from 38-50 percent. Private sources provide 20-30% of the funding. Supplementary insurance plans from insurance industry provide upgraded hospital room coverage, prescription plans, vision care or hearing care (Isbister, 1991).

A paper by Sophie et al (2007) describes a scheme adopted in Ghana to tackle the issue of high cost of user fees for deliveries and so limited access to skilled attendance. The paper describes a scheme introduced in Ghana in 2003 to exempt all pregnant women from payments for delivery, in which public, mission and private providers could claim back lost user fee revenues, according to an agreed tariff. The findings are based upon an evaluation study, in which interviews with 65 key informants in the health system at national, regional, district and facility level, including policymakers, managers and providers were conducted. Findings show very clearly that the exemption mechanism was well accepted and appropriate, but there were important problems with disbursing and sustaining the funding, and with budgeting and

management. It also led to increase in staff work loads as more women attended, and levels of compensation for services and staff were also found to be an important factor for scheme's acceptance (Sophie et al 2007).

In 2006, Society for International Development, Rome, investigated the public- private partnership model for provision of quality health care, especially reproductive health, to rural women of Pakistan. The study was done to determine whether it was based on human rights approach. Findings from the study suggest very clearly that the PPP model was ensuring the availability of PHC to the rural women. The study evaluates the model as a successful model which was based on the strategies of easy access, availability of quality medicines and personnel, affordable services with mutually agreed objectives and methodologies, a jointly acceptable monitoring and evaluation system, creating a pro- poor environment facilitating easy utilization by poor rural woman, bridging the gaps between community and public health systems for the un-served and under-served rural populations. The study also highlighted the model's weaknesses as "*1) limited provision of Reproductive health services for the women, however this was more the fault of the public health system rather than the partnership per se and 2) poor links with traditional medical services*". The study concludes that the PPP promoted exercise of rural women's fundamental and basic right to health (Khan, 2008).

In Cambodia, Government contracted with non-governmental entities in 1998 to provide health services in the districts. To select contractors, there was *competitive process* based on the quality of their technical proposal and their price. Through *Contracting in*, contractors provided only management support to civil service health staff, and recurrent operating costs were provided by the government through normal government channels in three districts. Through *contracting out*, contractors had full responsibility for the delivery of specified services in the

district, directly employed their staff, and had full management control in two districts. In *Control areas*, the usual government provisions were retained in four districts. Health facility surveys were conducted in 1997 before the experiment. The contracted out districts often outperformed contracted in districts which outperformed control districts (GOI,2004).

PPP in reproductive health care –Indian scenario

In 1940, there was introduction of National Health Service (NHS) in Britain (Shaw, 2003). Around same time, India also had Bhore Committee report in 1946, the Chopra committee report on Indian systems of Medicines in 1946 and the Sokhey committee report in 1948 (Baru, 2005). The recommendations of these three committees acted as guide for formulating health services plans in India. Since then, in India, there has always been utilization of private health services along with public health services. Private interest is not restricted to provisioning alone but has penetrated financing, technology, drugs, medical and paramedical education as well (Baru, 2005). The interaction between private and public providers in health care revolves around forms of partnership (joint venture, providing subsidies and various fiscal incentives, having informal understanding about the provision of services), focus (clinical or non-clinical services, other provisions such as handling management aspect etc.) and flexibility (in terms of having their own structure). Further public-private partnership models can be compared on the dimensions of policy statement, implementing agency within the government, information to prospective bidders/partners, eligibility requirement, condition for making facility operational, participation management, location specification and availability, free care to poor and other price specification, minimum investment requirement incentives, amendments in laws enabling policy implementation, inter-department coordination, response and follow up, public image, problems related to implementation, availability of field personnel etc (Bhat,2000). Citing

instances of partnership with Industry and NGOs in primary health care, Bhat shows that in Tamil Nadu, the state government has involved industry in improving the performance of PHCs (primary health centres). Industry was required to adopt a local PHC, health sub-centre or district hospital. It had the responsibility of building, maintaining and equipping the facility. The state government continued to provide staff and medicine. Similarly in Gujarat, SEWA was given the responsibility of providing primary health care services, while government financed it. The study by Bhat (2000) argues in favour of effectiveness of these partnerships; with Industry in Tamil Nadu and with an NGO (SEWA) in Gujarat. However, in India, NGOs have varied performance levels (Mavalankar, 1996), so the selection of partner is a critical factor in partnership.

In year 2006, the Government of Gujarat has started a programme called “Chiranjeevi Yojna” based on the public-private partnership model. In this programme, Gujarat Government outsources deliveries to private gynaecologists. First phase of this programme started in the districts of Banskantha, Dahod, Kachch, Panchmahal and Sabarkantha. 215 doctors were enrolled during Jan-April 2006. Chiranjeevi Yojna targets only to BPL (below poverty line) women. These districts covered 25% of BPL population. Government compensated private gynaecologists. Certain assumptions and procedures were elaborated for deciding compensation. Assumption was that 85% of deliveries would be normal and 15% with complications. The payment for doctor was fixed for a package of 100 deliveries, so that there was no temptation for any doctor to do more caesarean surgeries. The reimbursement was made directly to gynaecologists. BPL woman carried only BPL card. Concerned doctor was supposed to directly pay two hundred rupees to pregnant women as transport allowance. TBA (Trained birth attendant) or person accompanying the expectant mother was paid Rs. 50^{*}. The average cost for

* Indian currency in Rupees.

one delivery was calculated as Rs. 1795. Preliminary evaluation indicates that there was absence of deaths among the 11,146 mothers who delivered under the scheme.

Meta Organizational nature of PPP

In public-private partnership, the partnership is not limited to the service provider only for delivering health services. It may include families in the decision making like a case of designing a service plan for young child with special health care needs (Feinberg E, 2005). In the context of these facts, it can be inferred that it is not a public-private partnership but public-private partnership(S) wherein partnerships at various level involving community of clients and family as mentioned in the above study, is emphasized. Therefore, the issue is not partnership per se, but collaboration among various stake holders including the clients. Such an approach refers to multi-level partnership paradigm. It gets well reflected in the argument that such collaboration between organisations and communities is likely to provide the genesis for meta-organisations where organizational control is beyond locus of any one organization or stakeholder (Anand and Parashar, 2006). Genesis of meta-organizations is also based upon specific set of needs and therefore partnerships. Meta organization in reproductive health care sector includes government, funding agencies, NGOs and its partners, clients/communities and private sector.

“The case for privatization ranges from very strong to unpersuasive, with some fascinating intermediate cases. Where purchases are frequent, information is abundant, costs of a bad decision are small, externalities are minimal, and competition is the norm, privatization ought to be pursued. At the other extreme, in situations externalities and collective interests abound, natural monopolies are dominant, distribution goals are important, or debate and experience will alter preferences, governmental determination of service levels and public provision should continue. Intermediate situations are....the most interesting and hotly debated

areas. These intermediate situations have both private and collective characteristics, choices are made infrequently with little information, have monumental consequences, distributional considerations are critical, and public debate about the level and type of service substantially affects individual behavior (Chamberlin and Jackson, 1987). Inevitability of public-private partnership is not the sufficient reason for integrating these services. Integration through partnership is required to achieve the welfare aspect, promotion of quality of care through competition, and this means partnership not only between two parties but integration among all stake holders including service recipient.

Governance in reproductive health care

It is observed that many countries including U.S.A. and U.K are having the third revolution in health care. In the first revolution, there was focus on rapid expansion in medicine and technology. The second revolution was era of cost containment. The current third wave is focussed on assessment and accountability e.g. in U.K. , Government's efforts at restructuring the entire NHS by making GPs (General Practitioners), and hospitals accountable for managing their own funds and documents such as *Working for Patients* and *The Patient's Charts*, which require health care providers to become more responsive to patient's needs (Tomes & Ng,1995)

In China, PPP experience indicates that there are various risks which are associated with it. In particular, the major barriers to PPP are corruption, asset ownership uncertainty and rapid regulatory change (John Adams, Alistair young, Wo Zhihong, 2006).

Public-private partnership seems to be requiring evolution of detailed norms for use of non-profit insurance schemes. It also requires delivery and services norms. Malpractices as evident throughout the literature (Baru, 2005) on Indian private health hospitals can have two interpretations. First, regulatory systems are not properly evolved and government need to play

more active role in that. Secondly, liberalization does not imply shirking off to private service providers. It is not a question of either national health services or Insurance (Naylor et al. 1999). The main aim is to ensure that quality health services are accessible and affordable to people. In the given context, it can be argued that goal of partnership is not to reduce the role of public-health services but to create alternatives for service recipients at various levels.

Longitudinal Assessment of the issue

In India, there have been few attempts to evaluate the performance of reproductive health service providers through longitudinal studies. A study done by Sinha, Mohanty, Roy, and Koenig (2002) shows that though in 2002 there is low level of home visit by health workers at over all level in the states of Bihar, Maharashtra and Tamil Nadu, however situation has improved if it is compared with year 1998. The study is based upon a follow-up survey. The study concludes that women who receive regular home visits by the health workers are more likely to utilize the reproductive health services. In this manner, the study argues in favour of effectiveness of reproductive health programme efforts made by public service providers. In longitudinal context, a study done by Roy, Ram, Nangia, Saha & Khan (2003) has shown the role of psychological intentions in explaining the contraceptive demand.

State wise differentials in India

State wise differentials in terms of demographic indicators are well established and reflect upon the divide and regional imbalances within India. To highlight it Bose, A (1996) has used the phrase “north-south demographic divide”. Phrase north-south demographic divide highlights the fact that southern states in India have achieved higher literacy level, economic development, lower fertility and mortality level, however northern states are lagging behind. In India, health care divide suggests inequalities in relation to region, income and caste. It is argued

that strategies to target such concern should emerge from understanding the particular distinctive 'logics' of local systems which is often embedded in socio-political and cultural specificities of the region (Reddy, S, 2008).

A study done by Jejeebhoy and Sathar (2001) highlights the importance of political state. The study shows very clearly that state or region is stronger predictor of women autonomy than religion. Socio-political milieu is emphasized here, which is likely to play an important role in public-private partnerships as well. Needless to say here that there is critical importance of human factor and culture in the entire reproductive health system. Roy et al in a book on population and development in Bihar (Sinha and Sinha, 1994) clearly highlights the role of health personnel (human factor) and shows the positive relationship between performance indicators and health personnel. In the same book, Mishra (1994) highlights the negative role of caste in reproductive health services utilization.

Need of the Study

It is well accepted fact that in India, public health services are far from satisfactory. Though there is provision of clinical care in public health services, however, in terms of utilization they have been limited to preventive and promotive aspects of health care in rural India (Gangolli et al 2005). The quality of services being provided by public sector is quite low. The lower level is well established in many studies and observed both in tangible as well as non tangible aspect of services. Proportion of utilization of Private health facility is gradually increasing and acceptance of failure of public health led to the outsourcing to private sector (IIPS and Macro International, 2008; IIPS-JHU, 2005; IIPS and ORC Macro, 2000). However, from the clients' point of view, any health service is just a service whether it comes from public sector organization or private sector (Gangolli et al 2005). The two sectors-public and private sectors,

can not be seen as two extremes and many a times do not have uniform characteristics. Integration of these two requires understanding of the two sectors in their current form and finding out how these services are embedded in needs and context of the people. It necessitates understanding of the issue of integration from all dimensions to look at the utilization of health services across states which are at the different stages of demographic transition. On the basis of literature review (Sinha, Mohanty, Roy, and Koenig, 2002 and Roy, Ram, Nangia, Saha & Khan, 2003) it appears that though there are longitudinal studies conducted in the context of reproductive health but those lack understanding of the above mentioned issues in the longitudinal sense . There seems to be lack of study which tries to understand the comparative picture of public and private sectors in reproductive health context over a period of time. In addition, there is need of integrating these issues with the managerial challenges to provide the holistic picture over a period of time by incorporating the demographic transition differentials represented by various Indian states. So, understanding the reproductive health care service differentials across states like Tamil Nadu, Maharashtra and erstwhile unified Bihar (Now Bihar and Jharkhand) is likely to throw light in terms of public-private sector involvement and reproductive health care management. Needless to say that the differentials and programme correlates need to be seen in the context of cultural differences and variations in other macro socio-economic change factors.

One also needs to understand the functioning of private service providers, particularly in the states which are falling behind in terms of demographic indicators. It is well established now that programme management gets clearly reflected in quality of care (choice of methods, information given to clients, technical competence of providers, interpersonal relationship between clients and providers, follow up and continuity mechanism and appropriate constellation

of services) and thereby in demographic indicators (Bruce J,1990).Understanding of functioning of private service provider is likely to help in exploring the schema of public-private partnership.

This all needs a study which analyzes the public-private reproductive health care differentials among Indian states which are at different stages of demographic transition.

Research Objectives of the Study

In the given context, the study aims at meeting following research objectives:

- I. To find out quality of care differentials and determinants with respect to utilization of public-private health facilities for reproductive health care purpose in India
- II. To develop a schema for public-private partnerships in the area of reproductive health care.

Research Design

The research was secondary in nature. It included analysis of data collected by IIPS and John Hopkins University (JHU) as a follow up study to the 1998-1999 National Family Health Survey. Follow up survey was done in the states of Tamil Nadu, Maharashtra and erstwhile unified Bihar (Now Bihar and Jharkhand). In 2002-03, these four states were selected to capture the variations in socio-economic and demographic conditions. Among four states, socio-demographically, Tamil Nadu is regarded ahead of Maharashtra, Bihar and Jharkhand. Tamil Nadu has the highest literacy level and lowest fertility and mortality rate. In economic sense, Maharashtra is regarded as the most developed state among these. Both socio-economic as well as demographic indicators are at lower levels for Bihar and Jharkhand. For the purpose of analysis, Bihar and Jharkhand have been treated as unified Bihar. Bihar and Jharkhand have been clubbed due to limited sample size for each individual state at various levels of utilization. The

secondary research tried to meet the research objectives. Primarily it was a comparative analysis of quality of reproductive health care as being provided by Public and Private sectors. Sample consisted of 7785 married women residing in rural India, of age 15-39 years in 1998 at the time of baseline study. The total number was 4626 for undivided Bihar, 1485 for Maharashtra and 1674 for Tamil Nadu. These women were followed up in 2002-3. The response rates for follow up were 80.4, 81.8, 76.2, and 93.5 percent for Bihar, Jharkhand, Maharashtra and Tamil Nadu respectively. In effect, the analysis for this study is based upon data collected for 6303 women. It consisted of 2666 women from unified Bihar (2843 from Bihar, 823 from Jharkhand), 1117 from Maharashtra and 1520 for Tamil Nadu.

Data Analysis

List of variables and their operationalization

Variables were broadly categorized into quality of care variables and utilization variables.

Quality of Care variables included perceptual associations with public or private health facilities in terms of: proximity to the health facility, doctor's availability, short waiting time, medicine, cleanliness, treatment by staff and privacy.

Utilization variables included **Utilization of health facilities for ANY reproductive health purpose** refers to utilization of health facilities for family planning advice or other family planning services or antenatal care or delivery care or post partum care or treatment for self and treatment for sick child in the last one year and facility type (measured at three levels – 'public' health facility, 'private' health facility, and 'both public & private' health facility). Public, Private and 'Both Public and Private' are mutually exclusive categories.

Quantitative Analysis

Cross tabulation analysis is done to present bi-variate descriptions of the variables. Logistic regression analysis has been done to establish the causal relationship between dependent variables and predictors. Jaccard analysis has been done to establish the association of quality of care perceptions with facility type used. SWOT analysis has been done to understand the perceptual strengths and weaknesses on quality of care of Public & Private sectors. The results are presented in the next section of findings.

Logistic regression analysis

To establish the causal relationships between dependent variable of longitudinal status of utilization for any reproductive health purpose and facility type used with independent contextual and quality of care variables, binary logistic regression analysis and multinomial logistic regression analysis were done. Logistic regression analysis is done when the response variable is dichotomous (i.e. binary or 0-1). For this, the predictor variables can be quantitative, categorical, or a mixture of the two. Logistic regression analysis is also known as logit regression.

Jaccard analysis

The Jaccard analysis was originally developed by P. Jaccard to assess similarity among distributions of flora in different geographical regions (Jaccard, 1912). It is done to establish the relationships among attribute which can be paired together. In this study, to understand the quality of care perceptions related reasons of various facilities utilization jaccard analysis was done. For a 2x2 table with 4 cell frequencies a, b, c, d $Jaccard = a / (a+b+c)$, it is possible to generate a similarity measure for pairs of health facilities' type and for pairs of attributes (<http://www.marketresearchworld.net>). "The Jaccard Analysis establishes which attributes are important to consumers and the extent to which each of the channels is managing to satisfy these

expectations" (Chandrasekharan & Rajagopalan, 1989; Embretson & Susan, 2006; <http://www.streamlinesurveys.com>). Jaccard scores were calculated as following:

A 'YY' score = those who utilize a service provider and associate the service provider with a particular attribute

A 'YN' score = those who utilize a service provider but do not associate the service provider with a particular attribute; and

A 'NY' score = those who do not utilize a service provider but still associate the service provider with a particular attribute

Following equation provides the jaccard scores, also known as jaccards.

$$\text{Jaccards} = \text{YY} / (\text{YY} + \text{YN} + \text{NY})$$

In Jaccard analysis, the higher the Jaccard score, the more important is the attribute.

SWOT analysis

To understand the relative perceptual strengths and weaknesses of public and private services on quality of care variables in the four states (Bihar and Jharkhand at the combined level, Maharashtra and Tamil Nadu), SWOT (strengths, weaknesses, opportunities and threat) analysis was done (Winas, 2008; Crow et al, 2008). SWOT scores of Public and Private sectors on quality of care attributes were calculated as following

SWOT Score for a particular sector

on Attribute A = (Score of attribute A – Attribute's average)-

(Average of sector's scores on all attributes

being considered-Grand Average of scores)

In SWOT analysis, strengths and weaknesses are internal to organizations or sectors. For strengths and weaknesses, scores are calculated. A positive SWOT score calculated on the basis

of abovementioned formula indicates strengths while negative represents the weaknesses. The SWOT works on the principle of Zero Sum game. If one organization or sector gains on an attribute, competition will have score in negative to counterbalance that. Opportunities and threats are external to organizations or sectors and inferred.

FINDINGS

Results from cross tabulation in Table I indicate that if the quality of care perceptions are associated with public health facilities, utilization of public health facilities is relatively higher in that group. It is reflected in percentages for utilization of public health facilities within group of women associating quality of care with public health facilities. Perceptual association is 20.7 percent in case of closer to home or work place and 25.8, 22.5, 19.4, 24.7, 27.5, 23.4, 12.7, 24.5 respectively on doctors' availability, waiting time, availability of medicines, cleanliness of facility, staff's treatment of- client, provision of privacy , affordability of services, and effectiveness of treatment. However, even within this group of women who associate quality of care with public health facilities, the percentage of women utilizing private health facilities is relatively higher than utilization of public health facilities. In this group of women, utilization of private health facilities is in the range of 33.1-56.6 percent, while of public is 12.7-27.5 percent only. After utilization of only 'private' health facilities, the utilization of 'both public and private' happens. Most of the women utilize health facilities only from private sector, then there are women who utilize health facilities from both public and private sector. The proportion of women health facilities only from public sector, is the least.

The percentage of women utilizing private health facilities seems to be the highest for ignorant- group of women. Within ignorant group of women approximately 90 percent utilize private health facilities.

Higher level of both public and private health facilities' utilization seems to be associated with group of women associating quality of care perceptions with Public service providers. Around 60 percent of women utilize private health facilities if among group of women, quality of care perceptions are associated private facilities. Level of utilization of private health facilities is higher even among alienated group.

Jaccard analysis (Table IIIa & IIIb and Figure I, III & V) shows that across the states the drivers or quality of care perceptions related reasons for utilizing public health facilities are weaker than for private health facilities. Very low Jaccard scores for utilization of public health facilities clearly indicate this. Among quality of care variables availability of doctor, cleanliness and staff's treatment of client emerge as the top three important reasons for utilization of private health facilities at the combined states level. Other quality of care perceptions related variables also have high Jaccard scores for utilization of private health facilities. Affordability is not the reason for utilization of private health facilities. There is marginal progression in Jaccard scores from Bihar to Maharashtra to Tamil Nadu, however it is indicated very clearly across the states that reasons for utilizing private health facilities are much stronger than reasons for utilizing public health facilities.

SWOT analysis (Table V, VIII & XI and Figure II, IV & VI) shows that at an overall level, public sector is stronger on affordability, proximity and availability of medicines. Affordability, proximity and availability of medicines are the core competences of public sector in reproductive health care. Quality of care ethos like privacy, cleanliness, availability of doctor, short waiting time, dignified treatment and effectiveness of treatment emerge as the core competences of private sector.

Findings from logistic regression analysis in Table II indicate that at all states combined level, associations of proximity, availability of medicines, staff's treatment of client, affordability and effectiveness of treatment with private health facilities enhance the probability of utilizing private health facilities in comparison with public health facilities. At all states combined level, even women with association of privacy with public health facilities have higher probability of utilizing private health facilities than public health facilities. Women who associate proximity and effectiveness of treatment to private health facilities have higher probability of utilizing 'both public and private' health facilities than only public health facilities. Women, who associate proximity, availability of medicines and affordability of services to public health facilities, are more likely to use 'both public and private' health facilities than only private health facilities. Even women who associate privacy to private health facilities, they also show higher probability of utilizing 'both public and private' health facilities than only private health facilities.

Results from cross tabulation in Table IV indicate that In Bihar, relatively lower level of both public and private utilization is observed across the categories.

SWOT analysis (Table V) indicates that in Bihar, in comparison with public sector, private sector is relatively stronger on availability of doctor, cleanliness and effectiveness of treatment in terms of perceptions. These three are major weaknesses of public sector. The major relative strength of public sector in comparison with private sector is affordability of services.

Results from logistic regression in Table VI indicate that in Bihar, associations of proximity, short waiting time and availability of medicines with private health facilities enhance the probability of utilizing private health facilities in comparison with public health facilities. Women who associate proximity to private health facilities have higher probability of utilizing

‘both public and private’ health facilities than only public health facilities. Women, who associate proximity and short waiting time to public health facilities, are more likely to use ‘both public and private’ health facilities than only private health facilities.

Results from cross tabulation in Table VII indicate that In Maharashtra, relatively higher level of both public and private utilization is observed across the categories.

SWOT analysis (Table VIII) indicates that in Maharashtra, the major strengths of private sector are provision of privacy, short waiting time, and cleanliness. The public sector is stronger on affordability and availability of medicines.

Results from logistic regression analysis in Table IX indicate that in Maharashtra, association of doctor’s availability with private health facilities enhances the probability of utilizing private health facilities in comparison with public health facilities. Women who associate doctor’s availability to private health facilities have higher probability of utilizing ‘both public and private’ health facilities than only public health facilities. Women, who associate proximity and availability of medicines to public health facilities, are more likely to use ‘both public and private’ health facilities than only private health facilities.

Results from cross tabulation in Table X indicate that in Tamil Nadu, percentages for utilization of ‘public’ health facilities and ‘both public and private’ health facilities are higher than of ‘private’ health facilities if perceptual associations on various quality of care attributes are formed with public health facilities.

SWOT analysis (Table XI) indicates that in Tamil Nadu, private sector has relative perceptual strengths on privacy, cleanliness and availability of doctor. There, the public sector is stronger on affordability, proximity and availability of medicines.

Results from logistic regression analysis in Table XII indicate that In Tamil Nadu, associations of proximity and availability of medicines with private health facilities enhance the probability of utilizing private health facilities in comparison with public health facilities. Association of proximity and staff's treatment of client with private health facilities also enhances the probability of utilizing private health facilities in comparison with public health facilities. Women, who associate proximity, availability of medicines and affordability to public health facilities, are more likely to use 'both public and private' health facilities than only private. Even women who associate cleanliness to private health facilities, they also show higher probability of utilizing 'both public and private' health facilities than only private health facilities.

DISCUSSION

Based upon the empirical findings a schema for public-private partnerships have been theorized. The schema is based upon the key constructs which have emerged as critical issues in the study. Those constructs are **core competence** (indicated in findings from Logistic Regression Analysis, SWOT analysis), **quality of care ethos** (indicated in findings from Logistic Regression Analysis, SWOT analysis and Jaccard analysis), **need for dignified treatment** (indicated in findings from Logistic Regression Analysis), **and cognitive justice[†] in reproductive health care** (indicated in findings from Logistic Regression Analysis).

Public-private partnerships schema as discussed in this paper is based on the empirical findings from longitudinal study and insights generated from the qualitative study. From empirical findings it can be clearly inferred that core competence of public services in

[†] Cognitive Justice in reproductive health care refers to justice at perpetual level. It is a higher order justice delivered in psycho-social interaction e.g. between client and staff at PHC. In this study, it is based upon data for quality of care perceptions. It has been explained later in detail in the chapter-6.

reproductive health context is proximity, availability of medicines and affordability while core competence of private is delivery on quality of care ethos namely effectiveness of treatment, privacy, dignified treatment, availability of doctor, short waiting time and cleanliness. The core competence of client is voice assertion for dignified treatment and cognitive justice. If a particular service provider does not treat her in dignified manner, she will shift to some other service provider. By shifting to other service provider, she raises her voice and that becomes her core competence. So, public-private partnerships interactions need to capitalize upon the strength of these stakeholders and to ensure that there is special provision for neglected and marginalized segment. It is well established from study of organizations across the globe that the core competence of an organization is likely to define its success or failure (Hamel and Prahalad, 2005). Following is the diagrammatic presentation of public-private partnerships schema:

Figure II.

The above schema argues in favour of ‘contracting in’ of quality of care ethos through ‘contracting in’ of knowledge and technology. Through contracting in of knowledge and technology, “quality of care ethos could be transferred to public health facilities. Contracting in is likely to create optimum utilization of core competence of both public and private sector. It also ensures that special provisions are made for neglected and marginalized segment by ensuring affordability which is one of the core competences of public sector. This means that there is need of change management programme in public sector to rejuvenate it. Change management programme implies giving contract of change management to private sector which will aim at bringing quality of care ethos in the public sector. Change management programme shall aim at change in organizational culture, improving efficiency, human resource development, contract management and other related issue. Contracting out can be planned out

in the next phase once organizational change in public sector has happened and public sector is ready to handle the contract management of contracting out.

Quality of Care Ethos

Roy and Verma (1994), while explaining clients' perspectives on the quality of care concluded that in Bihar, providers did not have significant interpersonal relationships with their clients. In Tamil Nadu, the relationships between clients and service providers were relatively stronger. The content of communication (information given to clients) was least in Bihar. Seemingly for the first time, any empirical evidence on such issue in India was provided. The study also highlighted the issues related to privacy, attentiveness to patients' problems and courtesy. The current study provides the empirical evidence in longitudinal utilization context and demonstrates up to what extent quality of care factors determine the longitudinal utilization status of women. The study also indicates the extent up to which these factors are responsible for leading women or her family members to make a choice among health facility types- public, private or both public and private. The study is an attempt to relate the quality of care, choice of facility type and demographic transition. The study also shows how affordability perceptions in the four states determine the utilization status of women and also shape the choice of facility type. Therefore the critical enquiry is why there are more problems in delivery on quality of care parameters in Bihar and Jharkhand. There are reasons cited in terms of culture, values, development and work culture (Sinha, 1970 and Sinha, 1988). Corruption is another reason which seems to be embedded in our own system and emerge as a critical issue in the study. Another explanation comes in the form of unsettling memories of citizens of Indian state (Tarlo, 2003). The forceful sterilization experience seems to have created a perceptual barrier in the minds of people. It has been more so in the case of Bihar and Jharkhand, where J.P. Narayan had

led the people's movement in 1977. Tarlo (2003) has cited various narratives of India's emergency and forceful sterilization which shows how these memories still affects relationship of people with the state. It also reflects upon social dominance of some castes like Brahmins who were not forcefully sterilized. The phenomenon is well explained with the help of Social dominance theory (Sdanius & Pratto, 1999). So, the forceful sterilization (family planning) experience has completely taken away the trust with respect to public health system from the minds of people. People have not been able to forget the emergency experience. Further, when people do not get or hope to build the trust either with public or private, then alienation seems to get built in the minds of people. A study done by Anand and Kumar (2007) shows that alienation is the largest factor in explaining utilization of health facilities.

Demand for dignified treatment

Women visiting health facilities are expecting dignified treatment. They are willing to pay extra for dignified treatment. Need for dignity seems to be one of the critical factors influencing the reproductive health services utilization. It is very clearly indicated in the results that "need for dignified treatment" has been the critical trigger in shift towards service providers in reproductive health sector. Clients are demanding right to dignity. The language used by the clients might not be 'right to dignity' language, but the underlying theme is very clear in their responses that they want dignified treatment irrespective of the hospitals or health facilities they visit. Verdict is obvious, the voice is clear. Clients do not want to face any interaction with any health service provider where they feel that treatment given to them is below their dignity. They put all of their efforts where they could avoid any situation endangering their dignity. Dignity has become core to the services being received by individuals. All service providers irrespective of their origin need to meet the minimum requirement of dignity. "The arbitrary deprivation of

life is not limited to the illicit act of homicide; it extends itself to the deprivation of the right to live with dignity. This outlook conceptualizes the right to life as belonging, at the same time, to the domain of civil and political rights, as well as economic, social and cultural rights, thus illustrating the interrelation and indivisibility of all human rights.”Antônio Cançado Trindade, President of the Inter-American Court of Human Rights as quoted in Amnesty International’s primer on economic, social and cultural rights. Literature seems to be suggesting that the right for dignity has been asserted in Tamil Nadu through highly organized “Self Respect” movement by people belonging to lower caste, way back in early 20th century. These movements have been given its due importance in earlier studies while explaining the regional differentials in explaining fertility decline (Bhat, 1998). Results very clearly reflect upon the need of people for dignity.

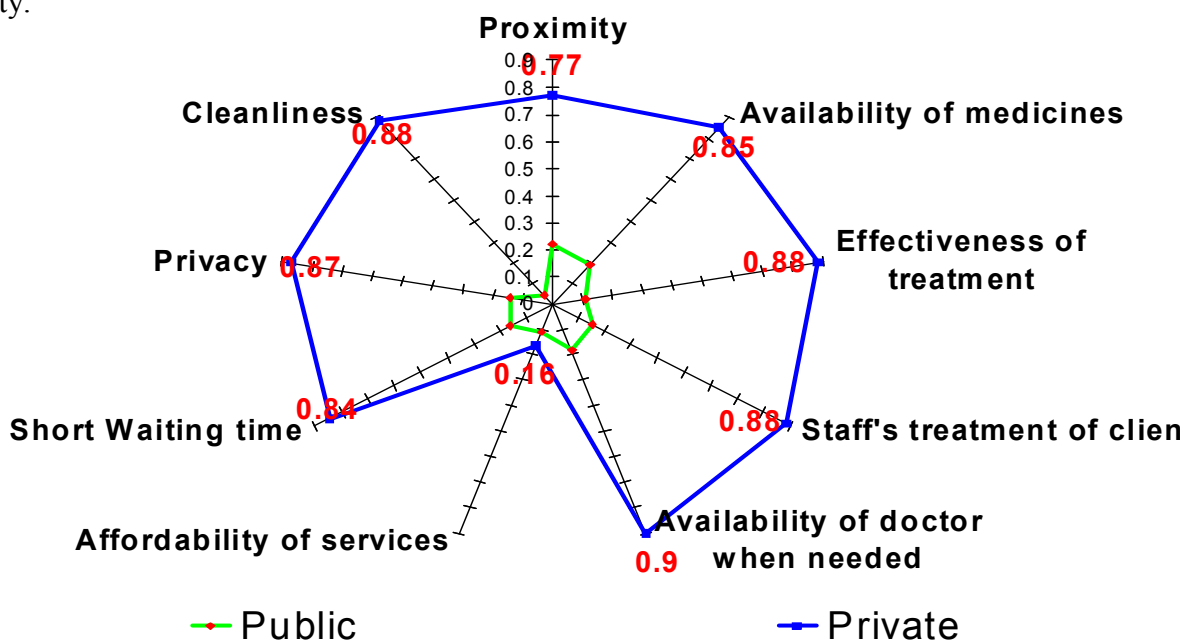


Figure I. Public Private Comparison in Bihar (Findings from Jaccard Analysis)

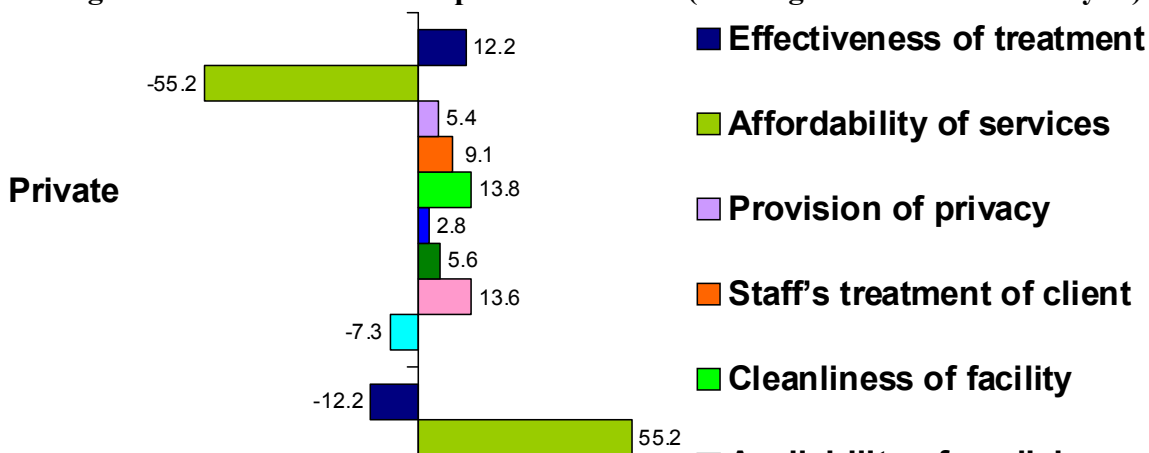


Figure II. QOC Strengths and Weaknesses in Bihar (Findings from SWOT Analysis)

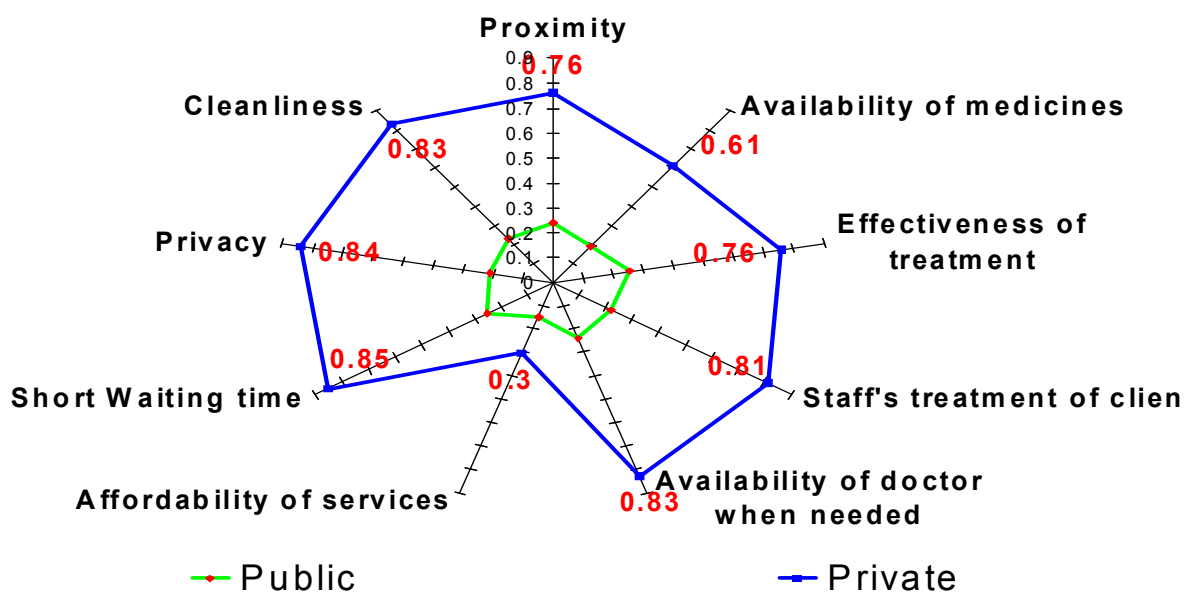


Figure III. Public Private Comparison in Maharashtra (Findings from Jaccard Analysis)

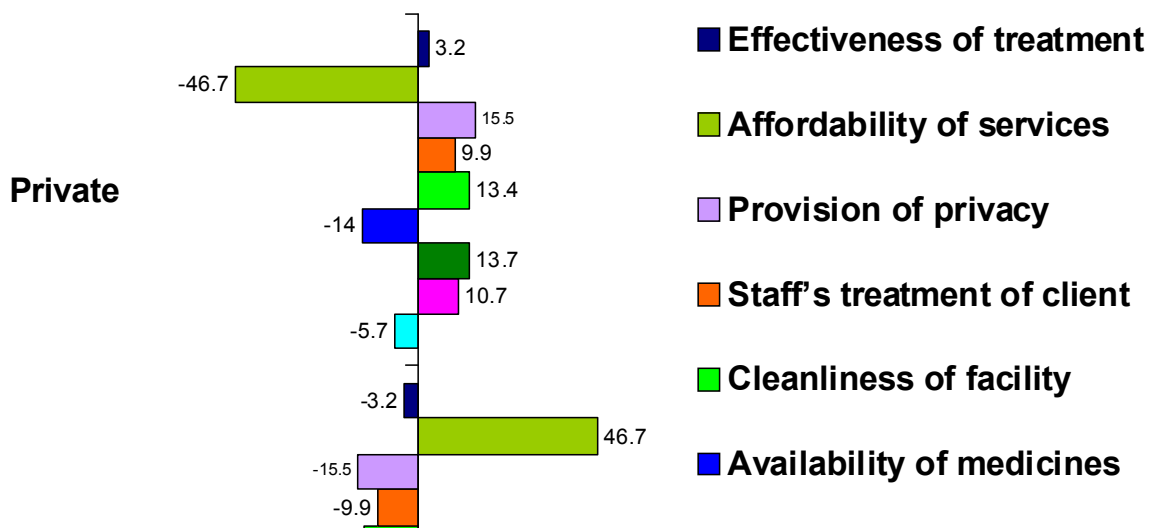


Figure IV. QOC Strengths and Weaknesses in Maharashtra (Findings from SWOT Analysis)

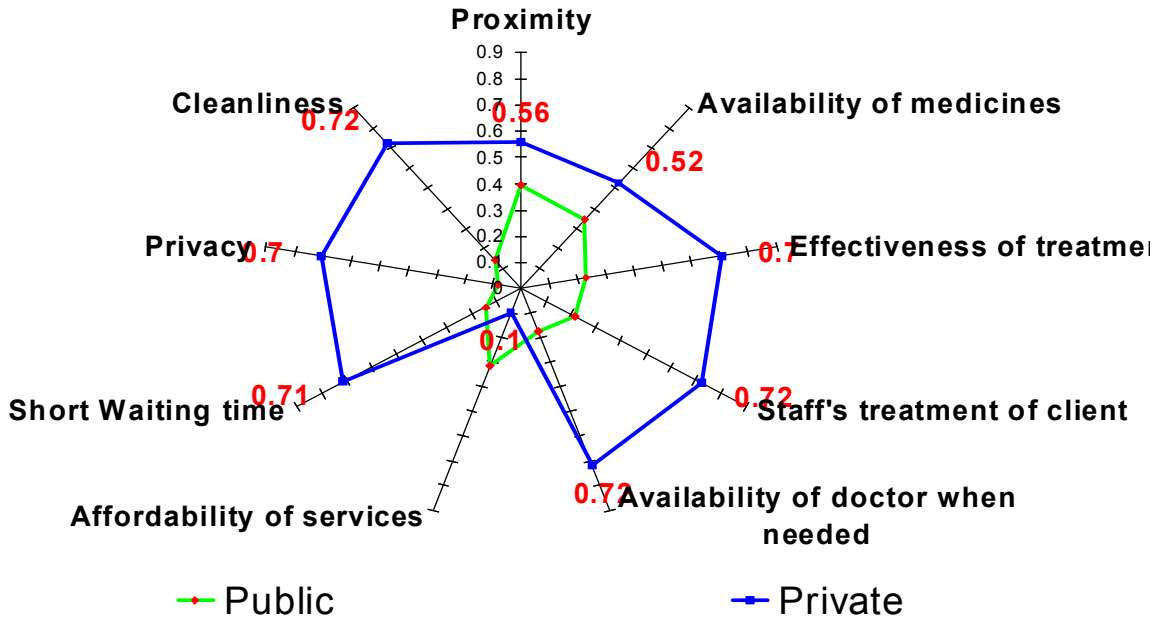


Figure V. Public Private Comparison in Tamil Nadu (Findings from Jaccard Analysis)

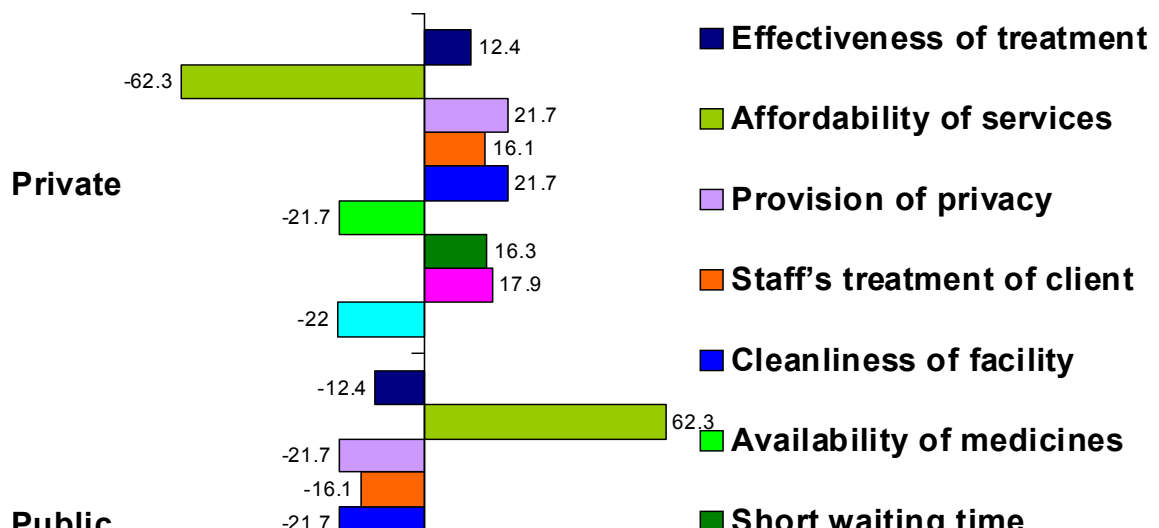


Figure VI. QOC Strengths and Weaknesses in Tamil Nadu (Findings from SWOT Analysis)

Table I: Quality of Care Differentials of Facility Type Used (All)

		Public		Private		Both public and private	
		n	%	n	%	n	%
Closer to home or work place	Public	240	20.7	478	41.3	440	38
	Private	114	5.5	1540	73.9	428	20.6
	Alienated	73	11.6	354	56.5	200	31.9
	Ignorant	0	0	38	90.9	4	9.1
Doctor's Availability	Public	97	25.8	124	33.1	154	41
	Private	315	9.3	2180	64.4	892	26.3
	Alienated	12	12.1	63	63.5	24	24.4
	Ignorant	4	6.9	54	89.7	2	3.4
Short waiting time	Public	97	22.5	178	41.2	158	36.4
	Private	306	9.8	1975	63.2	846	27
	Alienated	20	7.9	170	66.7	65	25.4
	Ignorant	4	3.6	104	92.9	4	3.5
Availability of medicines	Public	231	19.4	469	39.5	487	41
	Private	164	7.3	1562	69.3	528	23.4
	Alienated	23	6.3	306	81.7	45	12
	Ignorant	8	7.2	92	81.8	12	11
Cleanliness of facility	Public	68	24.7	114	41.3	94	34
	Private	341	9.9	2144	62.5	945	27.5
	Alienated	12	12.8	56	60.1	25	27.1
	Ignorant	6	5.5	102	91.6	3	2.8
Staff's treatment of client	Public	111	27.5	143	35.6	149	36.9
	Private	301	9.4	2032	63.1	887	27.6
	Alienated	12	9.7	82	68.3	26	22
	Ignorant	4	2.4	158	95.2	4	2.4

Provision of privacy	Public	63	23.4	112	41.3	95	35.3
	Private	338	10.6	1915	60.1	933	29.3
	Alienated	6	5	91	76.9	21	18.1
	Ignorant	21	6	300	87.8	21	6.1
Affordability of services	Public	398	12.7	1778	56.6	966	30.8
	Private	20	4	397	78.5	89	17.6
	Alienated	8	4.2	175	88.3	15	7.6
	Ignorant	1	1.2	79	95.3	3	3.4
Effectiveness of treatment	Public	131	24.5	212	39.5	193	36
	Private	286	8.9	2067	64.5	854	26.6
	Alienated	6	8.7	45	66.3	17	25
	Ignorant	5	4.8	96	89.6	6	5.6

**Table II: QOC Determinants of Facility type Used (All)
Odd Ratios from Logistic Regression Analysis**

		DV [‡] (Public =0, Private =1)	DV (Public =0, Both =1)	DV (Private =0, Both =1)
Closer to home or work place	Public® Private	4.116***	1.644***	.408***
Doctor's Availability	Public® Private	.912	1.00	1.021
Short waiting time	Public® Private	1.187	1.102	.937
Availability of medicines	Public® Private	2.36***	1.061	.510***
Cleanliness of facility	Public® Private	.774	1.154	1.369
Staff's treatment of client	Public® Private	1.725*§	1.314	.805
Provision of privacy	Public® Private	.563***	.971	1.735***
Affordability of services	Public® Private	2.838***††	1.525	.545***
Effectiveness of treatment	Public® Private	1.718***	1.398*	.870

[‡] DV refers to dependent variable.

[§] $p < .05$

^{**} $p < .01$

^{††} $p < .001$

Table IIIa: Jaccard Values for Public Sector

	All	Bihar	Maharashtra	Tamil Nadu
Closer to home or work place	0.28	0.22	0.24	0.39
Availability of medicines	0.26	0.19	0.19	0.34
Effectiveness of treatment	0.20	0.11	0.25	0.23
Staff's treatment of client	0.19	0.15	0.22	0.21
Doctor's Availability	0.19	0.18	0.24	0.17
Affordability of services	0.18	0.11	0.15	0.31
Short Waiting time	0.17	0.16	0.25	0.14
Privacy	0.13	0.14	0.21	0.08
Cleanliness	0.13	0.04	0.23	0.14

Table IIIb: Jaccard Values for Private Sector

	All	Bihar	Maharashtra	Tamil Nadu
Doctor's Availability	0.84	0.90	0.83	0.72
Cleanliness of facility	0.83	0.88	0.83	0.72
Staff's treatment of client	0.82	0.88	0.81	0.72
Provision of privacy	0.81	0.87	0.84	0.70
Short waiting time	0.81	0.84	0.85	0.71
Effectiveness of treatment	0.81	0.88	0.76	0.70
Closer to home or workplace	0.73	0.77	0.76	0.56
Availability of medicines	0.72	0.85	0.61	0.52
Affordability of services	0.18	0.16	0.30	0.10

Table IV: Quality of Care Differentials of Facility Type Used (Bihar)

		Public		Private		Both public and private	
		n	%	n	%	n	%
Closer to home or work place	Public	75	20	244	65.4	55	14.6
	Private	37	3.6	914	88.2	85	8.2
	Alienated	12	5.6	177	84.3	21	10.1
	Ignorant			36	95.2	2	4.8
Doctor's Availability	Public	28	28.3	50	50.2	22	21.4
	Private	84	5.8	1227	85.2	129	9
	Alienated	7	9.8	55	76.3	10	13.9
	Ignorant	4	7.6	50	90.5	1	2
Short waiting time	Public	38	19.7	117	60.3	39	20
	Private	74	6.1	1033	85.1	106	8.8
	Alienated	7	4.6	137	85.4	16	10
	Ignorant	4	3.8	101	95.3	1	0.9
Availability of medicines	Public	39	24.5	101	63	20	12.6
	Private	62	5.4	950	83.7	123	10.8
	Alienated	18	6.2	261	88.4	16	5.4
	Ignorant	4	4.8	79	91.5	3	3.7
Cleanliness of facility	Public	10	14.8	50	72	9	13.1
	Private	98	7	1177	83.8	130	9.3
	Alienated	10	12.8	50	64	18	23.2
	Ignorant	5	4.8	101	94.2	1	1
Staff's treatment of client	Public	25	25.2	58	58.1	17	16.7
	Private	87	6.7	1092	84.1	119	9.2
	Alienated	9	8.5	77	74.1	18	17.5
	Ignorant	3	2	149	96.1	3	1.9
Provision of privacy	Public	23	23.6	58	58.9	17	17.4
	Private	82	7.1	952	82.6	119	10.3
	Alienated	3	3	83	82	15	15
	Ignorant	16	5	285	91.5	11	3.5
Affordability of services	Public	108	9	955	80	132	11
	Private	9	4.3	185	88.3	15	7.3
	Alienated	6	3.2	172	89.5	14	7.3
	Ignorant	1	1.2	78	96.4	2	2.3
Effectiveness of treatment	Public	19	18.1	63	59.9	23	22
	Private	97	6.9	1181	84.4	121	8.7
	Alienated	5	8.5	41	70.9	12	20.6
	Ignorant	3	2.9	96	93.2	4	3.8

Table V: Quality of Care - Strengths and Weaknesses of Public and Private Sectors in**Bihar**

	Public	Private
(SWOT Scores)		
Closer to home or work place	7.3	-7.3
Doctor's Availability	-13.6	13.6
Short waiting time	-5.6	5.6
Availability of medicines	-2.8	2.8
Cleanliness of facility	-13.8	13.8
Staff's treatment of client	-9.1	9.1
Provision of privacy	-5.4	5.4
Affordability of services	55.2	-55.2
Effectiveness of treatment	-12.2	12.2

Table VI: Quality of Care Determinants of Facility Type Used (Bihar)**Odd Ratios from Logistic Regression Analysis**

		DV (Public =0, Private =1)	DV (Public =0, Both =1)	DV (Private =0, Both =1)
Closer to home or work place	Public®			
	Private	4.463***	2.957***	.388***
Short waiting time	Public®			
	Private	1.598*	.784	.212***
Availability of medicines	Public®			
	Private	3.573***	-	-

Table VII: Quality of Care Differentials of Facility Type Used (Maharashtra)

		Public		Private		Both public and private	
		n	%	n	%	n	%
Closer to home or work place	Public	42	16.1	98	37.7	120	46.2
	Private	27	4.9	387	69.7	141	25.4
	Alienated	5	6.2	48	60	27	33.8
	Ignorant	0	0	0	0	1	100
Doctor's Availability	Public	33	20	58	35.1	73	44.8
	Private	40	5.5	474	65.1	214	29.4
	Alienated	1	30.8		0	2	69.2
	Ignorant	0	0	1	100	0	0
Short waiting time	Public	29	21.8	47	35.7	56	42.4
	Private	42	5.7	481	64.6	222	29.8
	Alienated	3	16.3	5	28.7	10	55
	Ignorant	0	0	0	0	2	100
Availability of medicines	Public	49	12.9	179	47.5	149	39.6
	Private	21	4.5	320	68.1	129	27.5
	Alienated	4	9.3	32	69.3	10	21.4
	Ignorant	0	0	2	66.8	1	33.2
Cleanliness of facility	Public	29	20.6	54	39.3	56	40.1
	Private	44	5.9	477	63.8	227	30.3
	Alienated	1	9.8	2	21.9	6	68.3
	Ignorant	32	19.7	68	41.1	65	39.2
Staff's treatment of client	Public	40	5.5	462	64	220	30.5
	Private	1	11.6	3	35.8	4	52.6
	Alienated	1	47	1	53	0	0
	Ignorant	24	20	46	39	49	41
Provision of privacy	Public	47	6.2	481	62.8	237	31
	Private	2	26.4	3	41.2	2	32.3
	Alienated	1	23.5	3	76.5	0	0
	Ignorant	67	9.8	371	54.2	247	36.1
Affordability of services	Public	5	2.5	159	77.4	41	20.1
	Private	2	34	3	50.6	1	15.4
	Alienated	44	18.9	106	45.8	82	35.3
	Ignorant	30	4.6	423	64.5	202	30.9
Effectiveness of treatment	Public	0	0	4	49.3	4	50.7
	Private	0	0	0	0	1	100
	Alienated	42	16.1	98	37.7	120	46.2
	Ignorant	27	4.9	387	69.7	141	25.4

**Table VIII: Quality of Care - Strengths and Weaknesses of Public and Private Sectors
in Maharashtra**

	Public	Private
	(SWOT Scores)	
Closer to home or work place	5.7	-5.7
Doctor's Availability	-10.7	10.7
Short waiting time	-13.7	13.7
Availability of medicines	14.0	-14.0
Cleanliness of facility	-13.4	13.4
Staff's treatment of client	-9.9	9.9
Provision of privacy	-15.5	15.5
Affordability of services	46.7	-46.7
Effectiveness of treatment	-3.2	3.2

Table IX: Quality of Care Determinants of Facility Type Used (Maharashtra)**Odd Ratios from Logistic Regression Analysis**

		DV (Public =0, Private =1)	DV (Public =0, Both =1)	DV (Private =0, Both =1)
Closer to home or work place	Public®			
	Private	-	-	.413***
Doctor's Availability	Public®			
	Private	11.806***	5.320***	.933
Short waiting time	Public®			
	Private	-	-	1.023
Availability of medicines	Public®			
	Private	-	-	.620**
Cleanliness of facility	Public®			
	Private	-	-	1.224

Table X: Quality of Care Differentials of Facility Type Used (Tamil Nadu)

		Public		Private		Both public and private	
		n	%	n	%	n	%
Closer to home or work place	Public	123	23.5	135	25.8	265	50.7
	Private	50	10.2	240	48.7	203	41.2
	Alienated	56	16.6	129	38.3	152	45.1
	Ignorant	0	0	2	67.1	1	32.9
Doctor's Availability	Public	35	32.1	16	14.6	59	53.3
	Private	191	15.6	479	39.3	549	45.1
	Alienated	4	16.6	8	33.1	12	50.3
	Ignorant	0	0	3	75	1	25
Short waiting time	Public	30	28.3	14	13.1	63	58.5
	Private	189	16.2	461	39.4	518	44.3
	Alienated	10	13	28	36.4	39	50.6
	Ignorant	0	0	3	74.4	1	25.6
Availability of medicines	Public	143	22	189	29.1	318	48.9
	Private	82	12.6	293	45	276	42.4
	Alienated	1	2.9	13	39.3	19	57.7
	Ignorant	4	17.2	11	47.5	8	35.4
Cleanliness of facility	Public	29	42.7	10	14.6	29	42.7
	Private	198	15.5	491	38.4	588	46.1
	Alienated	1	17.5	4	66.4	1	16
	Ignorant	1	26.2	1	23.7	2	50.1
Staff's treatment of client	Public	53	38.5	18	12.9	67	48.6
	Private	174	14.5	478	39.8	548	45.7
	Alienated	2	24.8	2	24.9	4	50.3
	Ignorant	0	0	8	88.7	1	11.3
Provision of privacy	Public	16	30.8	7	13.4	29	55.9
	Private	209	16.5	482	38	577	45.5
	Alienated	1	9.9	5	50.3	4	39.8
	Ignorant	4	15.6	12	45.7	10	38.7
Affordability of services	Public	224	17.7	452	35.8	588	46.5
	Private	6	6.6	53	58.1	32	35.2
	Alienated	0	0	1	50.3	1	49.7
	Ignorant	68	34.4	42	21.3	88	44.3
Effectiveness of treatment	Public	159	13.7	464	40.2	531	46
	Private	1	50	0	0	1	50
	Alienated	2	67.6	0	0	1	32.4
	Ignorant	123	23.5	135	25.8	265	50.7

Table XI: Quality of Care -Strengths and Weaknesses of Public and Private Sectors in Tamil Nadu

	Public	Private
(SWOT Scores)		
Closer to home or work place	22.0	-22.0
Doctor's Availability	-17.9	17.9
Short waiting time	-16.3	16.3
Availability of medicines	21.7	-21.7
Cleanliness of facility	-21.7	21.7
Staff's treatment of client	-16.1	16.1
Provision of privacy	-21.7	21.7
Affordability of services	62.3	-62.3
Effectiveness of treatment	-12.4	12.4

Table XII: Quality of Care determinants of facility type used (Tamil Nadu)

Odd Ratios from Logistic Regression Analysis

		DV (Public =0, Private =1)	DV (Public =0, Both =1)	DV (Private =0, Both =1)
Closer to home or work place	Public® Private	3.355***	1.695***	.506***
Doctor's Availability	Public® Private	-	1.337	1.626
Short waiting time	Public® Private	-	0.888	.664
Availability of medicines	Public® Private	1.835***	1.189	.691**
Cleanliness of facility	Public® Private	-	-	2.591***
Staff's treatment of client	Public® Private	-	1.844***	.802
Affordability of services	Public® Private	-	-	.480***

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