

Urban Development and Emerging Issues of Inclusion, Governance and Sustainability- A Note on Vulnerable Populations in Urban India

Sanghmitra S Acharya

Professor

Centre of Social Medicine and Community Health

School of Social Sciences

Jawaharlal Nehru University

New Delhi

Access to resources, services and opportunities has differed for people as individuals and as groups over time and space. Governments and international agencies have strived for equitable distribution and have attempted various measures time and again. Universal access to health care has been one such prime concern for a fairly long time. Emanating from the Alma Ata Declaration 'Health for All' in 1978, the signatory countries, including India, have formulated policies and programmes in this direction. However, considering the layers of disparity with which the country is laden- social, religious, ethnic, linguistic and regional, for instance, India has continuously experienced barriers in materializing universal access to health care. Social disparities superimposed on regional, further accentuate the differentials in access to health care and utilization of health services. Urban areas are better endowed with infrastructure as compared to rural areas; within urban, non-slum area is better than slum. The health outcomes also follow the similar differentials. Broad social, rural-urban, regional and sub-regional disparities in infrastructure, educational attainment and health outcomes are fairly well evident. However, not much has evolved to examine social discrimination in access to resources and services, particularly, health, in the urban areas. Universalisation of access to health care therefore needs to be understood from that perspective. The trajectory of availability, access and utilization continuum is used to analyse the universal access to health care.

Towards Utilization of services and resources

Utilization of services can happen when there are adequate resources available and sensitive providers accessible, that is can be reached and communicated with. While availability of resources can be measured by existing data; measuring the sensitivity of providers towards the issues of enabling environment for utilization of services still awaits a meaningful framework for generating the data base. Along the same axes, access, therefore, becomes an outcome of the capability of awareness, information, knowledge and conducive environment to use these; and propensity to overcome inhibitions and obstructions for interactions with providers and providing institutions. Inhibitions largely arise due to no or few opportunities for education and income generating activities leading to poor living conditions comprising of housing, nutrition, lifestyle and health, and social environment. Availability of resources is governed by the procurement chain- from the place of generating the resource, through the market to the providing intuitions/ individual providers to the users. The policy regime, market and marketing, media and advertisement and motivation and buying capacity of the user collectively influence the availability of resources. Perception of self has elements of the image created by others. The positive images enhance confidence by limiting inhibitions, and are cherished, while negative images, particularly when emanating from biases and stereotypes, are resented and continuous efforts are made to deconstruct them.

Utilization of resources and services is determined largely by three factors- access, availability and perception of self. Such factors cause disparity in utilisation and are relevant in addressing social inclusion of vulnerable populations. Thus, utilization is affected by exclusion and discrimination as much as it is by the access to and availability of resources, services and personnel (Acharya, 2010). This becomes extremely relevant, therefore, to examine the determinants of social discrimination and its consequences on health care access among vulnerable populations in urban areas. The research in this area needs to delve in the nuances of social ecology of residential spaces of the urban poor in slums to reflect on social discrimination affecting utilization of resources and services.

There is a need to emphasise on women, children and youth who become most vulnerable for reasons such as follows-

- They are migrants, mostly from rural and less endowed places of origin; and are likely to have poor information about the place of destination which hinders their access to resources and services and the subsequent utilization.
- They are dependent on male adult for their housing, food and security. They often do not have documents to support their claim to any or most beneficiary schemes which may be of help to them.
- They often reside in small dwellings with poor ventilation and lighting; and use smoke emitting cooking fuel, completely or partially, posing health risks.
- Congested locations affect availability and use of basic services. It is mostly women, children and youth who have the responsibility of fetching water from public sources, if available.
- Crowding within the housing units restricts their space use, empys constraints on health and hygiene sense; and also deprive them of their privacy. Children and young adults become vulnerable to the exposures of physical intimacies of the adults as well as undesirable advancements of such intimacies towards themselves.
- Open defecation is often resorted to due to the lack of toilet facilities. It makes women and girls- small and young, more vulnerable to the risk of sexual violence against them.

Most slums have no or poor infrastructure. Electricity, water supply, sanitation, and drainage- these needs remain mostly unmet. Various layers of discrimination continue to prevail and act as barriers in access to resources and services, particularly those related to health, in various ways. Emotional stress of leaving the place of origin and adjusting in the destinations; uncertainty of work, of home, of neighbourhood, and of the very longevity of the physical location accentuate the vulnerability. Most of the work opportunities that are available to these people and their 'caretakers' are of low remunerations; without any socio-legal security and protection against health hazards and accidents. Most vulnerable among them are those engaged in conservancy work. Children and youth among conservancy worker are more vulnerable due to their exodus from the sphere of educational attainment, and improving propensities for better work opportunities in lieu of engaging in conservancy work. Therefore, in addition to their vulnerabilities as women, children and youth, also vulnerable are those who engage in work related to sanitation, drainage, sewerage and cleaning of public spaces. The poor infrastructure and living condition of the slum if superimposed with the nature of their work, necessitates the understanding of their health issues, their access and utilization of resources and services. These workers' health needs, access and utilization of resources and services needs to be address in two ways. One, which allows and examination of those who are already engaged in such work, often termed as conservancy; and two, to create alternative propensity and opportunity for the youth from steering away from getting enveloped in the fold of this work. This is important because, youth has to be endowed with opportunities which help in upward scaling of self, and allows them to live and work with dignity rather than take up a work which is guaranteed to lower their self esteem. There is mechanization happening in all spheres. State can consider this as a priority to mechanize conservancy work and promote alternative work opportunities for the youth. For those who are already engaged, safety at work, medical benefits, regular health check ups, appropriate compensation of accidents and deaths while at work, legal support, housing and related benefits and policy environment needs to be put in place.

Social inclusion of vulnerable populations who have been historically excluded, has been the focus of the governments, sympathizer; and affected communities, groups and individuals. Understanding the elements and processes which create a social divide has been a continuous intellectual pursuit despite the fact that subordination and marginalization of some group in relation to others, is fairly well recognized. Denial of access to resources and services to some individuals and groups is a universal phenomenon which has existed over time and space and varies from class, race, ethnicity, religion, age and gender. Access to civic amenities and social facilities has always been a concern for urban poor, especially those vulnerable due to gender, age and conservancy work. While much of the literature has explored social discrimination in general; and partly in the field of education; not much seems to reflect on the experience of social discrimination in accessing health care among these urban vulnerable populations.

Therefore, as an initiative for working in the area of urban health, exploring health concerns and issues of the urban poor has been proposed for examination through the following aspects-

- Issues of social discrimination in Universal access to health among urban poor engaged in conservancy work, particularly women, children and youth;
- Determinants and consequences of engaging in conservancy work(sewage and allied); and
- Measures for social inclusion for access to health care of those engaged in conservancy work, particularly women, children and youth;
- Exploring best practices for creation of enabling environment for inclusion urban poor engaged in conservancy work, particularly women, children and youth; in urban slums.

Some Characteristics of Slums

The physical characteristics of slum life include shelter but lack a permanent residence, a house and most of the times even space. The average population density in a shanty town in Delhi, for instance, is 3,00,000 people per square kilometer and an average dwelling houses 6-8 people, yet measures only 6ft by 8ft. Many slums have no toilet facilities, and those that do have an average of one latrine serving 27 households. Often one water pump is used by 1000 people on average and more often than not water flows through these pumps only once a day. These low hygiene and sanitation facilities lead to unhealthy living conditions in the slums. This, along with illegally high rates for electricity connections makes every basic need for slum dwellers terribly difficult¹. Another physical characteristic is the close proximity of the slums to most of the resident's places of work, thus negating transport costs or reducing it due to convenient transport stations close by.

Most of the migrant are illiterate or semi-literate. Many others do not find enough means of gainful employment. They often are believed to undertake petty offences like pick pocketing and burglary². The elite civil society is concerned about potential hazards and dangers posed by such populations. They often demand their eviction from residential areas³. They, however, forget about their own dependence on slum population for their daily needs. The services for supplying vegetable; domestic help; milk supply; laundry and ironing of clothes; petty jobs of fixing household gadgets; cleaning; gardening-are all provided by the slum residents. They form an important component of any urban household. They have established an interdependent relationship with the formal commercial, industrial and manufacturing functions in the city. From domestic help and unskilled factory jobs to semi-skilled and manual work, they are now an essential requirement of the city's daily life. The cheap labor they provide, the large numbers of domestic help and service personnel they consist of, and the sizable informal functions they perform, and their political engagement; make them significant partners in Delhi's life and existences.

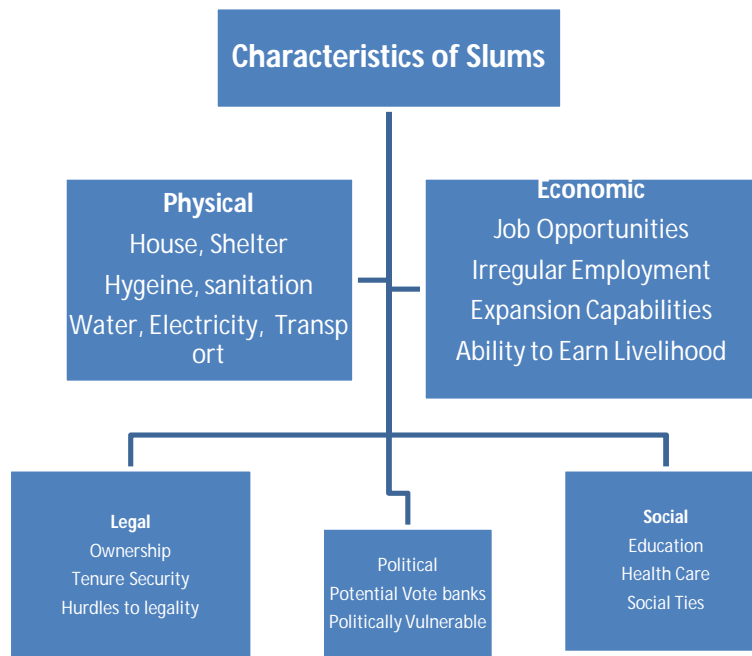
¹Acharya, Sanghmitra S (2011) *Understanding Access to Maternal and Child Health care and Issues of Discrimination in A Selected Slum of Delhi* Report submitted to Programmes for the Study of Social Discrimination and Exclusion, School of Social Sciences, Jawaharlal Nehru University, New Delhi 110067

²The **Chicago School** also known as the **Ecological School** was the first major body of works emerging during the 1920s and 1930s specializing in urban sociology, and studying urban environment using ethnographic methods and symbolic interactionist approach. The Chicago School is best known for its focus on human behavior as determined by social structures and physical environmental factors, rather than genetic and personal characteristics. The major researchers in the first Chicago School included Nels Anderson, Ernest Burgess, Ruth S Cavan, Edward Franklin Frazier, Everett Hughes, Roderick D. McKenzie, George Herbert Mead, Robert E. Park, Walter C. Reckless, Edwin Sutherland, W. I. Thomas, Frederic Thrasher, Louis Wirth, Florian Zaniecki, E Shevky and W Bell. Much of the observed crime and deviant behavior in the work of Chicago School was observe among young people. The theories of urban housing and neighborhood and consequent behavior of those who inhabit have been widely replicated world over.

³ Singh, Pratima (2009) *Sheltering Delhi's Slums*, Centre for Civil Society, Working Paper No 230, Summer Research Internship 2009

The characteristics can be categorized as physical (housing and shelter, hygiene and sanitation, water, electricity and transportation); economic (job opportunities, employment, expansion capabilities, ability to earn livelihood); legal (ownership, tenure security, hurdles to legality); political (potential vote bank, politically vulnerable); and social (education, health care and social ties). Studies⁴ have revealed that settlers in these slums & JJ clusters are pursuing various informal economic activities making significant contribution to the city's economy. (Fig 1). They consume less of the urban resources in comparison to what they contribute to its economy.

Fig 1: Characteristics of Slums



Source- Adapted from Acharya, 2011

Issues of Social Discrimination in Universal Access to Health among Urban Poor

Urban poor are located over physical spaces which are deficient in the provisioning of safe drinking water and sanitation causing high incidence of diseases such as diarrhoea and anaemia. There is almost no sanitation facilities and no underground sewerage system. Availability of basic civic facilities, like potable water, water disposal and sanitation, are vital for healthy living of human populations. The approach road to the settlements of vulnerable populations is usually of a poor condition. Enabling environment for vulnerable populations can be created through the institutions by ways of policies and programmes and the sensitivity of the providers and co-users of the resources and services. Enhancing factors include the positive self image consequent of propensity which allows access in contrast to the negative self image. Thus a matrix of five factors juxtapose themselves to transcend from access to utilization (Fig 2)

⁴ S. Chandrasekhar (2005) Growth of Slums, Availability of Infrastructure and Demographic Outcomes in Slums: Evidence from India. Paper to be presented during the session on Urbanization in Developing Countries at the Population Association of America, 2005, Annual Meeting, Philadelphia, USA.

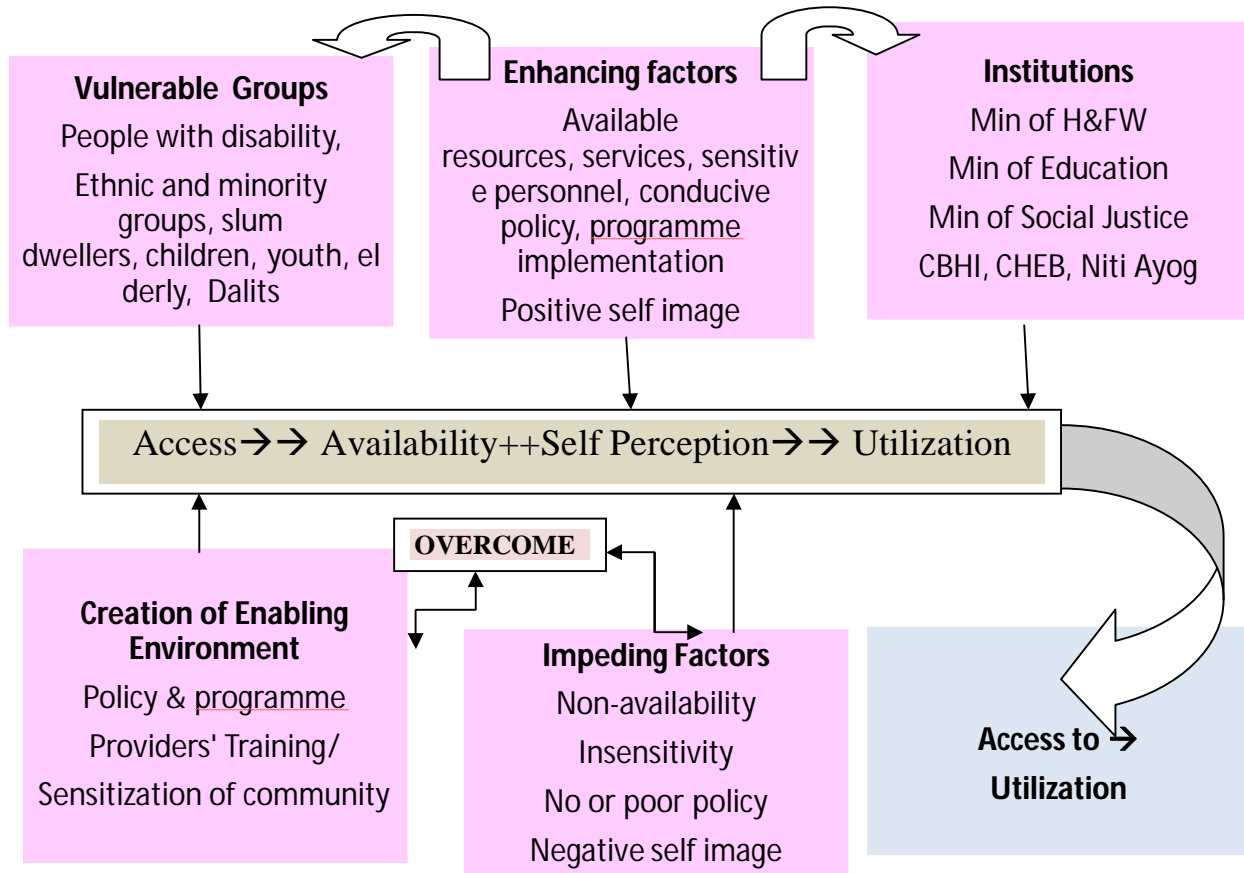
Sinha, S. (2006) Outcome of Antenatal Care in an Urban Slum of Delhi Indian Journal of Community Medicine Vol. 31, No. 3, July - September, 189

Marimuthu, P., M Hemanta Meitei, and BBL Sharma (2009) General Morbidity Prevalence in the Delhi Slums, Indian J Community Med. 2009 October; 34(4): 338-342. doi: 10.4103/0970-0218.58395,

Copyright © Indian Journal of Community Medicine PMID: PMC2822197

Yuko Tsujita (2009) Deprivation of Education: A Study of Slum Children in Delhi, India Background paper prepared for the Education for All Global Monitoring Report 2010 *Reaching the marginalized* 2010/ED/EFA/MRT/PI/12

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Fig 2- Vulnerable Groups- Access to Utilization

Understanding of discrimination rests largely on how the concept of 'social exclusion' has been understood and evolved. Social exclusion, over last 30 years has referred to understanding the disadvantages experienced by some social groups and means to eliminate them. By early 1980s, 'social exclusion' became a concept to describe deprivation. It helped in recognizing poverty as an outcome of different processes leading to the experience of disadvantage which extended over years due to, and, leading to, poor educational opportunities, low wages and insecure employment. By 1990s social exclusion was distinguished in two broad ways- as an attribute of individuals; and as a property of societies. As an attribute of individuals social exclusion focuses directly on the nature of the lives people live and disadvantages they experience. Socially excluded people are isolated, lack social ties to family, local community, voluntary associations, trade unions or even nations. They are likely to be disadvantaged in the extent of their legal rights or their ability to use them effectively. It involves both consumption and work related aspects of disadvantage. As property of societies, social exclusion is often a part of basic institutional framework and institutional arrangement within a nation. It refers to institutions and rules that enable and constraint human interaction. In this form of 'social exclusion' racial, sexual and other forms of discrimination are present. In the context of Indian sub-continent, caste-based social exclusion is unique and supersedes all other forms. Caste based social exclusion is linked with social deprivation as well as discrimination faced in the market where buying and selling of goods, particularly home based and through small units occurs. Market through which people can earn a livelihood is discriminatory. Public goods which should be available to all are limited to a few (Thorat, et al, 2006) Social determinant framework has also contributed in understanding the elements of social exclusion and has been useful in understanding health issues (Commission on Social Determinants; Nayar, 2007).

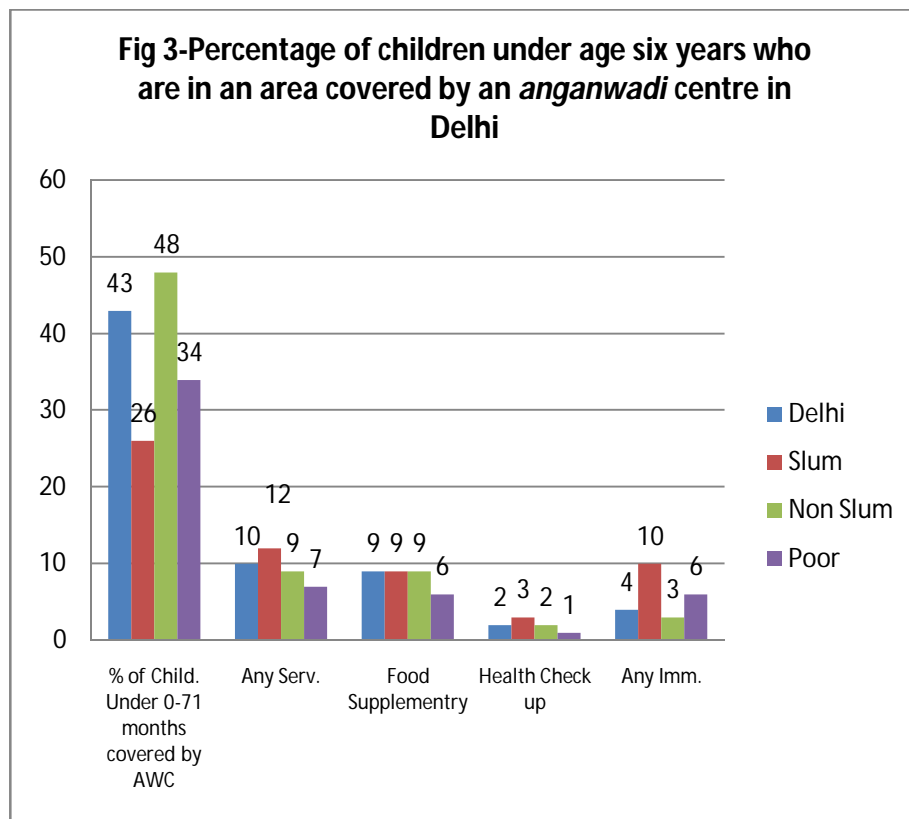
When extended to social exclusion in health care, causes of deprivation; and barriers in access to opportunities, services and resources which create and enhance enabling environment address-

- ▶ Exclusion of some groups
- ▶ Factors leading to their exclusion; and
- ▶ Means to end their exclusion

They are mostly at the lowest rung. It is often observed that Anganwadi workers are non-Dalits and the Anganwadi helpers are Dalits.

Due to differential access to resources, problems thus faced by vulnerable populations- women, children and youth; and those engaged in conservancy work, in these conditions are comparatively worse than others. Sanitation is important in maintaining environmental cleanliness and disease-free surrounding. The incidence of disease can be minimized if proper sanitation can be provided Diseases are often caused by insanitation and unsafe disposal of various type of waste. Historically, Chadwickian Sanitary Reforms⁵ were set in motion because of existing poor sanitary conditions. Persons, particularly youth engaged in such works, without any safety gears, social security and legal protection, are additionally exposed to the risk of health hazards.

The urban poor become vulnerable because they are often migrants from rural or smaller urban centres; and not very familiar with place of destination. They have to find their means of livelihood. In the absence of identity related documents, they are denied access to many resources and services. There is exposure to indoor pollution too. Fetching water and use of public lavatory often is a reflection of differential access. Most of the women work in the unorganized sector and do not get maternity leave resulting in poor health of the woman and the new born child. The birth registration rate in slums is less than 20% and large number of child-births take place at home (NFHS-3). As regards the coverage by Anganwadi Centre, more slum, than non-slum children have access to services from the Anganwadi Centre (AWC). More of them in the slums have got the health check up and immunization done in the AWC as compare dot non-slum children (Fig 3).

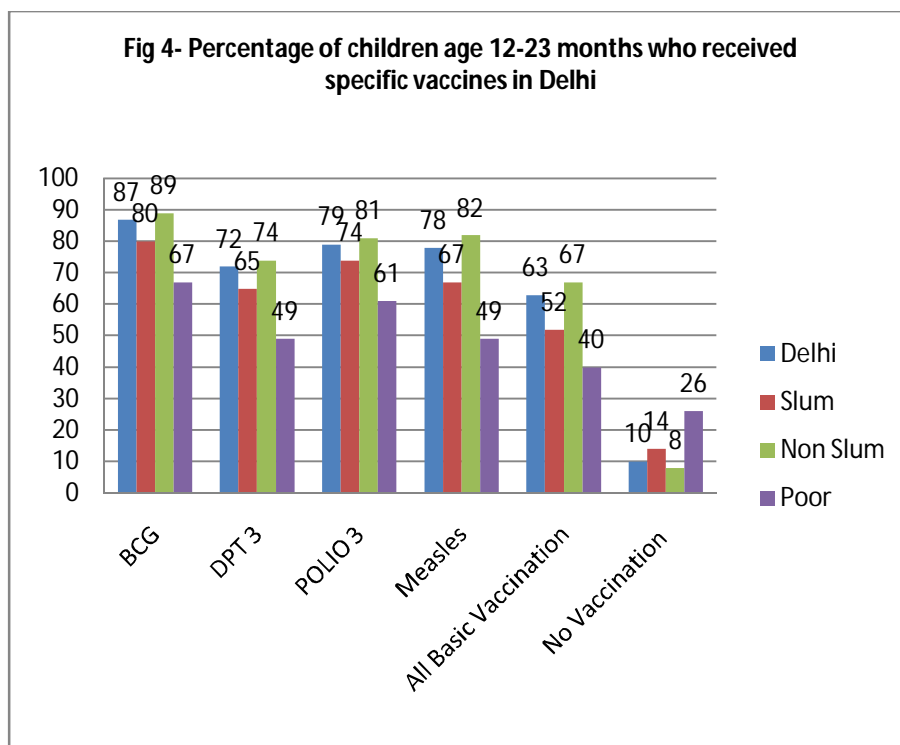


Source- National Health Family Survey (NFHS 3) 2006-07

⁵ After the influenza and typhoid epidemics in England 1837 and 1838, Edwin Chadwick Sanitation Commissioner, was asked by the government to carry out a new enquiry into sanitation. In the report, *The Sanitary Conditions of the Labouring Population*, published in 1842, Chadwick argued that disease was directly related to living conditions and that there was a desperate need for public health reform. A body was created to oversee street cleansing, refuse collection, water supply and sewerage systems.

Chadwick suggested a constant supply of fresh clean water, water closets in every house, and a system of carrying sewage to outlying farms, where it would provide a cheap source of fertilizer for improving sanitary conditions..

Another study⁶ done in the two slums of South Delhi named Ambedkar Camp and Rajiv Gandhi Camp **attempted to** evaluate immunization status of children aged 12 to 23 months and to find out reasons for non-immunization and partial immunization. Through a Cross-sectional design, the study found that 69.3% of the children were fully immunized with BCG, DPT3, OPV3 and measles; 15.7% were partially immunized and 15.1% were non-immunized. The major cause of incomplete immunization was postponement of immunization due to the illness of the child whereas mother's lack of information about place, schedule and eligible age of immunization constituted the main reasons for non-immunization. The coverage of oral Vitamin A concentrate (at least one dose) was 75.9%, whereas, 97% did not get any pediatric folifer tablets. Lack of appropriate information is still the main hurdle for success of primary immunization in slum areas (Malini et al 2009). All basic immunization was 52% among slum children as compared to 67% among the non-slum (Fig 4).



Source- National Health Family Survey (NFHS 3) 2006-07

It is evident from the studies that dissemination of information is often governed by the social identity of the provider as well as the recipient. It has been observed that social discrimination often sets in at this level of interaction between provider and recipient. A provider with caste Hindu identity is often observed to exclude the recipients at the lower level of social ladder, and those belonging to minority communities. Conversely, a recipient at the higher social ladder is most likely not to encourage interaction with a provider of lower social hierarchy⁷.

⁶ Kar, Malini, V.P. Reddaiah*, Shashi Kant (2009) 'Primary Immunization Status of Children in Slum Areas of South Delhi - The Challenge of Reaching the Urban Poor' Indian Journal of Community Medicine Indian Journal of Community Medicine.vol. 26, No. 3 <http://www.indmedica.com/journals.php?journalid=7&issueid=45&articleid=559&action=article> Accessed on Aug 23,2011.

⁷ Acharya Sanghmitra, S (2011) *Understanding Access to Maternal and Child Health care and Issues of Discrimination in A Selected Slum of Delhi*. Report. Programme for the Study of Social Discrimination and Exclusion, School of Social Sciences, Jawaharlal Nehru University, New Delhi 110067 March

Therefore, it is important to use the following parameters to identify the vulnerable populations, particularly in the slums-

Table 1: Parameters to Identify Vulnerable Populations in Slums

<p>Living conditions</p> <ul style="list-style-type: none"> -Roof -Floor -Access to water -Access to sanitation -Level of education of one illiterate person in the family. -Low food purchasing power and low consumption -Type of employment -Status of children in the household -Child below 14 years who is forced to work. -Family with two or more girl children -Prevalence of alcoholism / drug addiction / other abuses resulting in depleting income for the Family 	<p>Income</p> <ul style="list-style-type: none"> -Annual income of household -Individual income -Household income -From all sources 	<p>INCONSISTENCY IN PARTICIPATION</p> <ul style="list-style-type: none"> -Differences due to caste, creed. -Group conflicts. -Low self esteem -Distrust -Reluctance -To take risk -Sense of powerlessness -Lack of skills in planning and problem solving.
<p>NUTRITIONAL DEFICIENCY</p> <ul style="list-style-type: none"> -Lack of fair price shops. - Lack of awareness and knowledge about nutrition. - Limited income to pay for food, vegetable, fruit etc. 	<p>EDUCATIONAL PROBLEMS OF CHILDREN</p> <ul style="list-style-type: none"> -Lack of school in the neighborhood. - Overcrowding in school. - No follow up on dropout children. - Inability to pay for transport. 	<p>UNEMPLOYMENT</p> <ul style="list-style-type: none"> -Lack of education. - Lack of specialized training centers. - Lack of employment opportunity.
<p>SPECIAL PROBLEMS OF GIRL CHILD GIVEN SECONDARY STATUS</p> <ul style="list-style-type: none"> -Neglect of girl child. -Low priority for education of girl children. -Relatively more work and longer work hours. -Load of compulsory primary education. 	<p>CHILD LABOUR</p> <ul style="list-style-type: none"> -Family needs financial support. - Higher ratio of school dropouts. - Sexual exploitation by employers. - Economy exploitation. 	<p>WOMEN EMPOWERMENT ISSUES</p> <ul style="list-style-type: none"> -Lack of awareness regarding its benefits. - Different groups and lack of faith. - Lack of participation among themselves. - Lack of thrift and credit schemes and difficulty in maintaining account.

Some occupations accentuate the vulnerabilities. Those reported as ‘polluting jobs’, till very recently have come to be recognized as sanitation or conservancy work. Change from the open pit latrines to the flush-pot toilets in last two decades, has stipulated some restrictions on those engaged in cleaning jobs as workers as well as the employers. Advent of ‘The City Beautiful’ further encrypted the importance of conservancy and sanitation in the Mega cities like Delhi. While users’ perspective was prioritized, providers of the services remain a neglected lot even today. Testimony to this laxity is passing of the Manual Scavenging Bill as late as January 2014.

Determinants and Consequences of Conservancy Work among Urban Poor and Measures for Their Social Inclusion

While much emphasis has been given to the users of the sanitation services, little concern is evident for the workers who provide these services. While environment and its conservation has caught everyone's attention; and there is evident concern for the users of sewerage and allied services by way of provisioning of and access to toilets, reduction in open defecation, Total Sanitation Campaign (TSC) and other programmes like provisioning of safe drinking water and clean drains; the concern for sewerage and allied service providers is nearly absent. The plight of these people has not drawn much attention from the required sectors. While the children and the youth need to continue and complete education and equip themselves for alternative work opportunities; those already engaged, need to be provided with conducive work environment and socio-legal safety. Therefore, an examination of the issues pertaining to conservancy workers and their access to resources and services become important.

The conservancy workers clean up the roads which most of us consider as our right to litter; they collect our garbage for disposal; and they immerse themselves in the manholes to release the choked drains as if they are taking a holy dip in the conventional Ganges! For most of us they do not even come within the periphery of our thoughts! In other countries engaging in 'polluting' jobs is like doing any other work and often endowed with certain safeguards against the hazards involved. Unfortunately in India, Municipal bodies, the largest employers of these workers, have failed to comply with minimum safety measures required for these workers. Equipments supplied for the cleaning and scavenging are inadequate and unyielding. The big truck that collects the daily garbage is often overloaded or improperly loaded and is invariably leaving a trail of filth behind; the equipment to clean the manhole fails to deal with the nature of filth we generate and stack in our drains which enter the bigger drain arteries. They are so few and so heavy that they obstruct more than help them work. Constant exposure to the dust, dangerous gases and excreta is foolproof prescription for chronic and acute illnesses of various kinds. These Conservancy workers are different from their counterparts in other parts of the world. They are not considered to be the part of society; they are the outcasts- the ones beyond the lowest most position in the social hierarchy which prevails only in India.

Therefore the concern needs to be two-folds- universal access to health care in the light of social discrimination experienced by specific vulnerable groups- women, children and youth; and those engaged in conservancy (sewerage and allied) works among the urban poor. The enquiry should be done at two levels- explore the women, children and youth as an entity; and explore those engaged in conservancy work. What are the constraints in accessing and providing health care, and the existing disparities? Can the best practices for providing better access and provisioning of health care to all be within the scope of the proposed work. The second level needs to include and enquiry into the remunerations and work conditions; safety gears and disability compensation and rehabilitation; retirement benefits; and housing to those engaged; and the understanding of the factors which perpetuate the engagement of youth in such jobs; mechanisms to divert the youth from joining the sewerage and allied works; provide incentives for continuing education and finding alternative work; will also be studied. There is also a need to learn about the health, disease and safety issues; educational opportunities; alternative means of livelihood; and legal and constitutional measures for the safeguard of the workers engaged in sewerage and allied works. There is scope to address the issues of data needs. Data on workers engaged in 'polluted jobs' by duration; contractual/permanent nature of employment; type of actual work; remuneration; employing agencies; educational attainment; training undergone; safety kits/gears; reasons for joining and continuing in 'polluted jobs'. There has been immense thrust on reducing inequalities in access based on wealth and location; halving inequalities between rich and the poorest 20% ; rural and urban; slum-non-slum; in terms of gender, halving the national deficit in coverage in the Millennium Development Goals (MDGs). While technology and financing as constraint can be overcome, '...biggest barrier in sanitation is the unwillingness of ... political leaders to put excreta and its safe disposal on the international development agenda' (HDR, 2006). Those who lend their lives for 'safe disposal' are not within the purview of the MDG. Governments have shied away from the issue for over six decades. Nehruvian Era ushered in technological development in every sector, BUT the State has had apathy for *Safai Karamcharis*. If technology can be used to launch satellites and the Rs 386- crore Chandrayaan (the mission to moon), why can it not be used for garbage and sewage?

The Jawaharlal Nehru Urban Renewal Mission (JNURM), initiated by the Ministry of Urban Development in 2002, envisages spending Rs 1, 20, 536 crore over seven years on urban local bodies. Under the JNURM, 40 percent have been allotted for drainage and sewerage work. Why does so much money get spent on laying/relaying pipes and drains that are designed to kill? And not a share is diverted for the protection of those who are engaged in cleaning? India's urban planners, designers and technologists have never felt the need to conceive a human-friendly system of managing garbage and sewage. Because they are sure of the unending source of disposable, cheap, Dalit labour. Therefore, it is absolutely important to reject engaging in what have been labeled as 'polluting jobs' paradoxically, when they actually clean the pollutants!

For a determined disengagement with hazardous work and engaging with alternative calls for the attention from the individuals and the state both. The individuals need reconstruction of self image; continuing studying against all odds; look for alternative to enhance skills; increase vocational propensity; and avoid the trap of 'government job' in the name of sewerage cleaning and assured risk to life; The State must address immediate mechanization of sewerage and sanitation work; adequate allocation of funds for safety and health of the current workers and education of their children; and urban planners, public health specialist, and civil engineers to practice and evolve courses to sensitise human friendly management of waste material. This will not only make the slums conducive to living; it will also safeguard the health of the workers and provide them with better alternatives for livelihoods.

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