



Equity and Gender Equality in Health Workforce

Developed by





People for Health

This document is a product of the People for Health Project, and developed by Swasti, Health Resource Centre. The People for Health project is jointly implemented by Swasti Health Resource Centre and Public Health Foundation of India with financial support from the European Union.

The objective of this fact sheet is to study, analyse, and document the issues, and reform initiatives related to equity and gender equality among the health workforce in India.

Authors: Dr Angela Chaudhuri, Dr Indrani Sharma

Copyright: Content and images of this report are properties of Swasti. The same can be reproduced and shared with prior permission from Swasti and with source acknowledged.

Year of Publication: 2013

Number of copies: 500

Acronyms

ANM	Auxiliary Nurse and Midwife
AP	Andhra Pradesh
ASHA	Accredited Social Health Activists
ANSWERS	Academy for Nursing Studies and Women's Empowerment Research Studies
AYUSH	Ayurveda, Unani, Siddha, and Homeopathy (Alternate systems of Medicine)
CHC	Community Health Centre
CDMO	Chief District Medical Officer
CMD	Chief Medical Director
CMP	Contract Medical Practitioners
DHS	Director of Health Services
DMO	District Medical Officer
FBO	Faith Based Organisation
GNM	General Nursing and Midwifery
HR	Human Resources
HRA	Human Resource Allowance
HRC	Health Resource Centre
HRH	Human Resources for Health
HRMIS	Human Resource Management Information System
HRM	Human Resources Management

IPHS	Indian Public Health Standard
INC	Indian Nursing Council
KILA	Kerala Institute of Local Administration
MCI	Medical Council of India
MIS	Management Information System
MLOP	Mid Level Ophthalmic Personnel
MO	Medical Officer
NGO	Non-Governmental Organisation
NHSRC	National Health Systems Resource Centre
NMSU	Nursing Management Support Unit
NRHM	National Rural Health Mission
P4H	People for Health
PG	Post Graduate
PHFI	Public Health Foundation of India
PHC	Primary Health Centre
PSU	Public Sector Units
PEB	Professional Examination Board
SCC	Short Service Commission
SHSRC	State Health Systems Resource Centre
SOP	Standard Operating Procedure

1. Introduction

“People for Health” is an initiative for advancing Human Resources for Health (HRH) with specific focus on improving human resource policies, strategies, and practices in the health sector in India, through partnership between the government, civil society, and private sectors. The People for Health initiative is led by Swasti, a Health Resource Centre (HRC), in partnership with the Public Health Foundation of India. The initiative is funded by the European Union for the time frame of 2011–2014. While the initiative takes into account experiences from across India, Kerala and Madhya Pradesh have been chosen for operationalising state level actions. The project integrates three core areas while

keeping in view the need to engage the government, civil society, and private sector domains. These core areas are:

- Knowledge building (through operational research) and gathering evidence
- Skills-building (capacity building) to strengthen cross-learning platforms and initiate new approaches and strategies
- Advocacy and learning (through existing and new platforms) for change

This factsheet on equity and gender equality among health workforce is a product of the ‘Knowledge building’ core area.

2. Equity and Gender Equality in Health Workforce

2.1 Definition

An emerging issue on the horizon of health system researches is health workforce equity, a concept that embraces many issues such as fair wages, safe working conditions, the right to organise, job security, the chance to advance, and the possibility for voice at work. Equity has been defined as equal remuneration and opportunity for equal work and qualification across cadres and equivalent posts.ⁱ An integral component of equity is gender equity. Gender equality in HRH is said to exist when ‘women and men have an equal chance of choosing a health occupation, developing the requisite

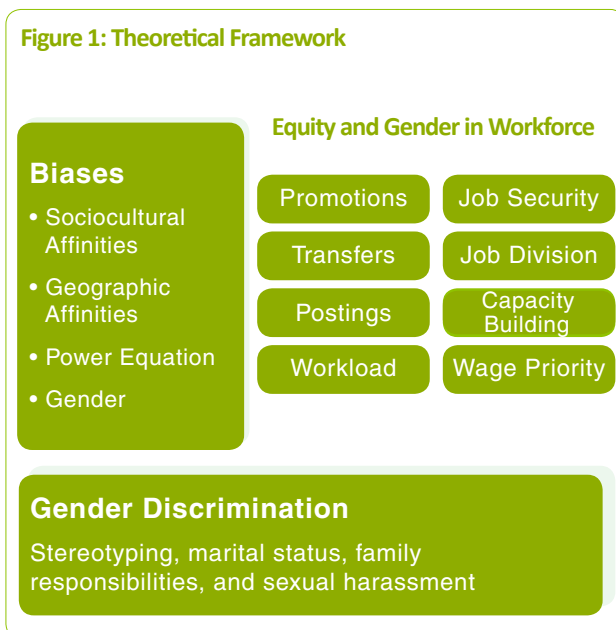
skills and knowledge, being paid fairly, enjoying equal treatment, and advancing in their career’.ⁱⁱ Although gender is one of the major areas where inequity is observed among the health workforce, it is least considered during policy development, planning, and research.

2.2 Theoretical Framework

Health workers across the globe strive for financial security and a better quality of life. However, several biases in the workplace lead to inequity and therefore contribute to attrition, lower productivity, and absences

from work. The framework depicted in Figure 1 captures this bias, commencing with evidence of inequity and outlining the areas in which biases may operate.

Figure 1: Theoretical Framework



Sociocultural affinities, geographical affinities, power equations, and gender are salient biases that operate through various HR management areas such as promotions and incentives, workload, and postings among others.

Gender, among other power relations, plays a critical role in determining the structural location of women and men in the health workforce and their subjective experience of that location. The resulting gender biases influence how work is recognised, valued, and supported with differential consequences at the professional level (career trajectories, pay, training and other technical resources, and professional networks) and at the personal level (personal safety, stress, autonomy, self-esteem, family, and other social relationships).

The resulting health system outcomes are not only inequitable, but also unproductive as they restrain the true capacity of individuals working in the health sector.ⁱⁱⁱ Stereotypical work models either assume women are the same as men and thus expect them to conform to male work models that ignore their specific needs or swing to the other extreme and

naturalise women's differences so they are seen as inherent to individual women rather than as differences structured by the social environment. For instance, women are more likely to be stereotyped as caring health personnel than men. This not only excludes, or even worse excuses men, but also presents a homogenised, static expectation of women's capacities that absolves managerial responsibility from addressing their less autonomous and under-resourced roles in health systems. At the same time, the specific needs of women health workers are often not addressed, whether it is childcare or protection from violence. These problems are seen as caused by women, rather than by how health services are organised. By stereotyping women as being more caring in health work or conversely as being problematic for health care organisations due to their sexuality and childcare needs, gendered ideologies obscure important structural elements of disadvantage and bias. Although the consequences of these biases are blunted by women's individual private adjustments, they are not 'women's problems' alone and require collective, public efforts to resolve.

The globalised and under-resourced health systems also have gendered impacts through the migration of health workers. More female health workers have been migrating than before as they are attracted by better financed and functioning health systems. A gender analysis of human resources in health reveals that while health systems are meant to heal and provide social equity, they can exacerbate many of the social inequalities as well.

2.3 Objective

The objective of this fact sheet is to study, analyse, and document the issues, and reform initiatives related to equity and gender equality among the health workforce in India. Twenty two documents have been reviewed and analysed to develop this fact sheet.

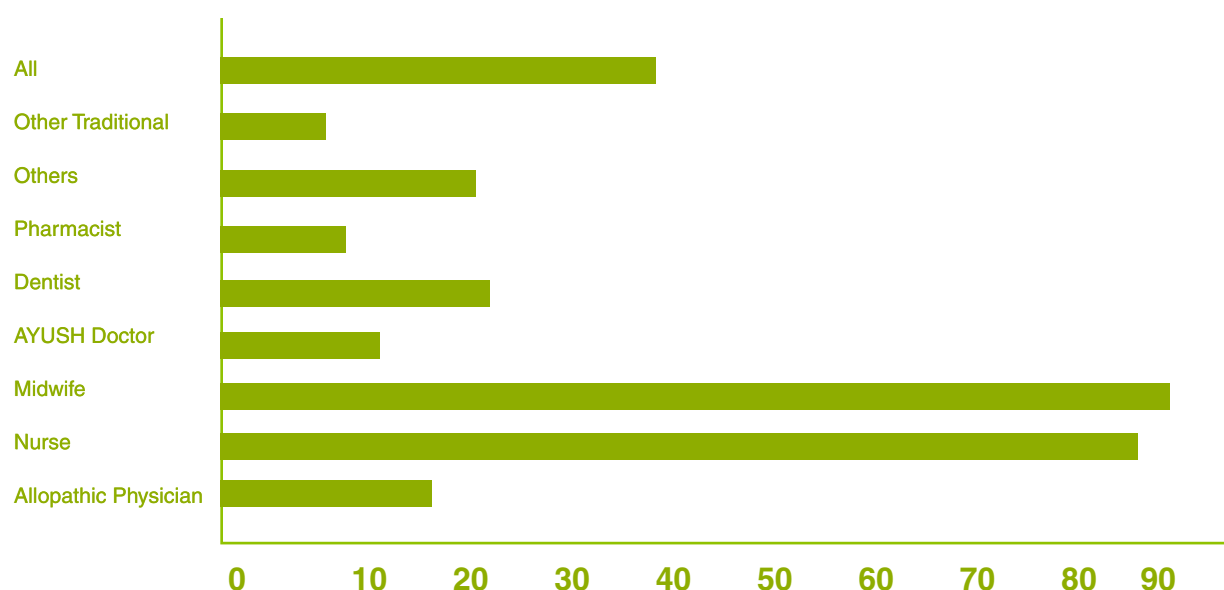
3. Key Issues and Challenges to HRH Equity and Gender Equality Equity in India

Estimations indicate that there are seven female health workers for every 10,000 people in India, which makes one-third of the total health workers in the country women.^{iv} It is interesting however, that the health system in India continues to experience occupational clustering by sex. The more skilled or 'higher' health roles such as doctors, managers, and policy makers are usually dominated by men, while nursing, midwifery, and other 'caring' cadres are typically over-represented by women. A similar picture has been revealed by the gender analysis in few other selected countries. The proportion

of women was considerably higher for occupations at the associate professional level compared to the professional level, and for nursing and midwifery professionals as compared to physicians. Furthermore, women tended to average fewer working hours than men and earn significantly lesser than their male counterparts.^v

Figure 2 depicts the distribution of women across various health professions in India and the statistics confirm that women comprise only 17% of doctors in the country.^{vi}

Figure 2: Women in health workforce in India



3.1 Biases and Areas of Discrimination

Applying the HRH equity and gender equality framework in India reveals the key gender challenges faced by women workers in the health sector.

Sociocultural affinities

Studies on the nature of exclusion and discrimination

faced by health workers from marginalised communities are scant. However, anecdotal evidence claims that the exclusion of health workers from marginalised communities such as dalits, muslims, and tribals persists in the Indian health sector. Workers from these communities are the least paid, least protected, and suffer widespread exploitation. Shocking practices such as untouchability continue

continue to impact workers' lives in rural India. On the flip side, the quota system and reservation of seats in medical colleges and other professional institutions have benefitted workers belonging to minority groups.^{vii, viii}

Geographical and ethnic affinities

Geographical equity in the deployment of health human resources has always been a difficult task in India. Many respondents perceived that they lacked in choice in determining their respective deployments and were dependent on government's placement process.^{viii}

Power equation

Nepotism and power relation in any area leads to the undermining of merit-based performance. In the health system, there are no concrete rewards except promotions and salary increments. All promotions and increments are linked to seniority in the system, vacancy and, at times even caste and political connections. Postings and transfers are also not based on performance, but perceived to be based on 'government's wish', which lends itself to political and administrative influence. Active corruption in the allocation of postings and transfers reveals that remote and less preferred locations were assigned to those who did not have personal or pecuniary influence on authorities.

Experience also reveals that the staff members who are available at their place of posting and provide 24-hour service are not recognised and receive a similar treatment and salary as employees who are absent or available for only three to four hours a day. The latter are not penalised as they are capable of wielding political or nepotistic influence. In such a system, many settle for the minimum acceptable level of performance.^{ix} Similarly, the selection of trainees for capacity building opportunities does not follow a structured and pre-determined process. They are based on recommendations from the reporting or senior officers.

Gender

Gender inequalities and discrimination operating in the health workforce often obstruct entry into health occupations and contribute to attrition and

low morale among health workers. For example, women seeking maternity care in many parts of India often express a wish or need to be served by female practitioners. But there remains a continued shortage of female healthcare providers, especially doctors, specialists and those at supervisory cadres.^x

A male doctor who is willing to serve in rural areas feels demoralised in the absence of appreciation and support from colleagues as well as from the community. On the other hand, certain female-dominated occupations, notably nursing and midwifery, are often not given market value commensurate with their skill level as the work is seen simply as 'women's work'.^{xi} Omission of gender considerations may also lead to inadequate health system responsiveness to the needs of men, for example, reproductive health services are often not set up so as to encourage male involvement. Gender stereotypes or feminisation of care giving work may mitigate men's participation in such occupations.



It has long been understood and accepted that leadership and power are traits commonly associated with the male sex. This is evident in the health workforce where women are often segregated into professions that ultimately reduce the possibility of exercising autonomy and supervisory authority.^{xii} Experience from India demonstrates that the frontline health workers are mostly females and their supervisors mostly males. The load of implementation and community empowerment rests with the frontline health workers and in return they receive lower wages and are the least acknowledged. Female frontline health workers compensate for the shortcomings of health systems through adjustments in personal life, at times to the detriment of their own health and livelihoods.^{xiii} A study in rural Uttarakhand found that along with

other factors, the Accredited Social Health Activists (ASHAs) were institutionally limited by the rigid hierarchical structure of the health system and a lack of support to voice concerns.

Stereotyping is yet another element of discrimination that women health professionals face. The gender disparity in the field of orthopaedics is attributed to the physical strength required to manoeuvre dislocated bones and joints back into place. The emergence of technology, that limits the role of physical strength, has not resulted in more women orthopaedic surgeons. The fact that recruiters continue to maintain the bias of physical superiority refrains women from choosing this specialty.

Women also encounter discriminatory practices in the workloads allocated or circumstantially forced on to them. The experiences of nursing students working in rural areas reveal this practice. Most rural facilities in India are understaffed. Doctors are often not present, leaving the nurses to manage patients alone and forcing them to take decisions for which they are not adequately trained. They are less paid and not trained but more burdened than other staff in the facility.

Gender inequity includes discrimination on the grounds of maternity and family responsibilities and extends to sexual harassment (of both women and men). For example, women often resign from the workforce when they get married or are required to care for their children, parents, or grandchildren. This movement of women, in and out of the paid workforce, negatively impacts their retirement savings. Despite the crucial role women have in the delivery of health services, there are no special policies to address the professional needs and the needs which emanate from assigned gender roles of mothers and wives.

Exclusions or restrictions at work that are made on the basis of 'life cycle events' such as marriage, pregnancy, and family responsibilities are common in the health sector. Some scenarios which present as deterrents for women in the health sector are:

- Questions regarding planned pregnancies during recruitment

- Forced retirement at marriage or pregnancy
- Exclusion from hiring to maintain health insurance profitability or efficiency
- Exclusion from training opportunities owing to women's greater responsibilities at home
- Part-time employment to accommodate family responsibilities

A review of workloads of nurses in West Bengal and Andhra Pradesh by Academy for Nursing Studies & Women's Empowerment Research Studies (ANSWERS) reveals that the current availability falls short of the requirement in large hospitals. The Indian Public Health Standards (IPHS) does not give norms for hospitals that have more than 500 beds and serve as teaching institutions, probably because they do not come under public health. However, these hospitals are used for training of nurses and for in-service education and hence it is necessary to ensure that the minimum requirements are met. In the interest of producing required health personnel as early as possible, the Indian Nursing Council (INC) relaxed the requirements for bed strength of hospitals to have training institutions attached to it. The INC adds 30% leave reserve while calculating requirements for nurses. This is important, especially for female dominant occupations and in particular nursing, where round-the-clock services throughout the year are critical.

Some of the gender differences in working hours are more apparent between married and unmarried professionals, with the brunt being borne by the unmarried professionals. In many places, single male or female health workers had to work more, while married health workers put in fewer hours.

The specific needs of women health workers are often not addressed, whether it is childcare or protection from violence. Sexual advances, requests for sexual favours, or other verbal or physical conduct of a sexual nature is common in the health workforce, although empirical evidence is not

available. Sexual favours are conditional to career progression or continuation in service. In a study carried out in Karnataka, India, female community health workers have reported that they are often harassed sexually or physically when they are on their way to work or during work. The fear of such experiences makes them reluctant to provide obstetric care to patients at night. Another study in Rajasthan revealed that although supervisors

informally acknowledge these problems, they do not assist female health workers in dealing with these difficulties because it is not part of their supervisory remit. The health workers also reported hierarchical and insensitive relationships between themselves and male supervisors who often ignored complaints of harassment and violence, and expected the health worker to be consistently present on the job against all odds.^{xvii}

4. Reform Initiatives to Promote Equity among HRH

Literature reveals several efforts from both the government and non-government/ corporate health sectors to promote equity and gender equality among health workforce.

While the initiatives within the government address the various areas of HRM, they do not comprehensively address biases such as gender, socio-cultural, and power equations.

4.1 Reforms in the Government Sector

Equity Initiative	Description	HRH Addressed	Location
Incentives to address geographic affinities ^{xviii, xix, xx, xxi, xxii, xxiii}	Postings in difficult areas have been made more rewarding by giving additional incentives to regular doctors, including monetary and non-monetary incentives to obtain the accurate skill mix. The NHSRC has developed guidelines for the monetary incentives that include rural allowances, tribal allowances, difficulty allowances, urban areas allowance, duty allowances, accommodation, performance awards, specialty incentives, and service incentives	Doctors, nurses, and midwives	Andhra Pradesh, Andaman and Nicobar Islands, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, MP, Gujarat, Maharashtra, Odisha, Punjab, Rajasthan, Uttarakhand, Manipur, Mizoram, Nagaland, Tripura, and Meghalaya

Equity Initiative	Description	HRH Addressed	Location
Recruitment to address geographic affinities ^{xxvi}	District cadres have been created in Odisha to address the reluctance of employees to work in non-native districts. The workers are given the opportunity to opt for districts and are accordingly reorganised. While recruiting new candidates, preference is given to candidates belonging to the same districts as the vacancy. This reform is expected to result in better availability, less hardship, and consequently better service	ANMs, nurses, pharmacists, and lab technicians	Odisha
Transfer policy to address geographic affinities	Rotational posting in difficult areas is considered as an initiative which builds employee morale and performance. This has been implemented in Haryana, among other states. In Haryana, medical professionals can request for transfers from difficult areas only after completing three years of service in the area. This has reportedly reduced the phenomenon of professionals migrating from rural to urban areas shortly after appointment ^{xxvi}	Doctors	Tamil Nadu, Jammu & Kashmir, Odisha, Karnataka, Maharashtra, Nagaland, and Haryana
Capacity building to address geographic affinities ^{xxvii}	The <i>Swavalamban Yojana</i> (Self-help Scheme) in Madhya Pradesh selects candidates from rural domicile and sponsors them for nursing courses	Nurses	Madhya Pradesh
Recruitment reforms to address power equations	Haryana has taken the recruitment of regular medical officers from under the purview of the Haryana Public Service Commission and given this responsibility to the Haryana Staff Selection Commission, since 2008. Candidates can be selected for regular service through walk-in interviews, which are conducted at regular intervals. This is unlike other states, where such mechanisms are limited to recruitment of contractual employees ^{xxviii} Punjab has also created a recruitment web portal. This effort at transparency is an attempt to minimise corruption and unfair recruitment processes	Doctors	Haryana, Punjab

Equity Initiative	Description	HRH Addressed	Location
Placement policy to address equity in workload	With the intention of strengthening district hospitals, Haryana took a policy decision to limit the posting of specialist doctors at district hospitals and select Community Health Centres (CHCs) which are designated Critical and Emergency Obstetrics Care centres. This decision has ensured that the skills of specialists are utilised to perform specialist tasks and are not wasted on general tasks performed by 'general duty' MBBS doctors ^{xxvi}	Doctors (Specialists)	Haryana
	Tamil Nadu has detailed job descriptions for all categories of public health staff. The manual containing these job descriptions clearly defines the roles of each individual within the system and creates a clear hierarchy of positions. This makes recruitment and evaluation processes much smoother and equitable ^{xxix}	All Public Health Cadres	Tamil Nadu
Delinking capacity building from gender and power equations	The health department of the Indian Railways employs a training database to select the trainees for capacity building opportunities. The database includes parameters pertaining to job responsibilities, skill requirements, and the kind of training employees have received till date. This ensures equitable access to capacity building opportunities, in addition to ensuring programmatic and organisational outcomes	All cadres	Indian Railways

4.2 Examples of Reforms in the Non-Governmental and Private Sector

Kagad Kach Patra Kashtakari Panchayat (Waste Pickers Trade Union) – Improving Lives of Waste Pickers, Pune

The waste picking and recycling industry provides employment to a large number of women workers. These workers are self-employed sans any employer-employee relationship with the scrap traders or the municipalities. They are vulnerable as they face regular

harassment and extortion at the hands of the police and other authorities. The waste pickers who belong predominantly to the dalit class collect scrap from municipal garbage dumps and move mostly on foot covering up to 10–12 km a day while carrying loads of up to 40 kg. They work for 10–12 hours a day, leaving their homes at sunrise and returning at sunset, and make an average meagre daily earning of Rs.60.

The waste pickers' trade union in *Pune, Kagad Kachda Patra Kashtakari Panchayat (KKPKP)*, facilitated the formation of a cooperative of waste

pickers (*Swachh Pune Seva Sahakari Sanstha Maryadit*) and further supported a unique public-private-partnership between the Pune Municipal Corporation and the cooperative. Under this partnership, the cooperative has the responsibility of door-to-door collection of waste from households in the city and is supported by the Pune Municipal Corporation in the form of handcarts, buckets, materials, tools, and uniforms. The municipality further bears the cost of management, supervisors, training, and provides insurance to the waste pickers. The citizens of Pune participate by paying a monthly waste collection fee of Rs. 10 and segregating their waste.

Jamkhed Model – Empowering Marginalised Women to Provide Health Services



Photo credit: <http://www.jamkhed.org/>

The Jamkhed programme, established by Dr. Raj and Dr. Mabelle Arole to bring healthcare to the poorest of the poor, encouraged villages in Maharashtra to select women from dalit and lower castes as the village health worker. The programme believed that empathy, knowledge of how poor people live, and willingness to work were more important than caste and prestige. Selected by their communities, the village health workers not only act as health workers, but also mobilise people to adopt better sanitation and hygiene, family planning, women and child nutrition practices, and women's economic rights. This is a good example of inclusive workforce development. The empowerment was not instantaneous and took months or years before the communities began to heed their advice. This process was forwarded by medical successes, such as delivering a high caste woman's baby or curing a child's fever. The women also received support from a mobile team which consisted of a nurse, paramedic, social worker, and sometimes a doctor, who visited each village every week in the beginning, less frequently thereafter, once the authority of the worker was established.

5. Key Messages

Equality in the context of Human Resource Management (HRM) is creating a fairer working environment where every employee has the opportunity to fulfil their potential. Diversity is about recognising and valuing difference in its broadest sense. Inclusion is about an individual's experience within the workplace and in wider society and the extent to which they feel valued and included. Global literature presents evidence to the fact that equality in workplace results in enhanced performance, improved effectiveness, and efficiency, which has led to accelerated programme outcomes. While Indian health systems grapple with what is perceived to be more basic HRM issues of adequacy and capacity, incorporating equity and gender equality as a core component of HRM will in fact help them achieve adequacy and capacities faster. Currently, equality and gender equality are not recognised as priorities, primarily owing to very little data and the failure to utilise existing data to understand availability and performance of health workers. This fact sheet throws light on some of the key issues and presents reform efforts from various states. While these reforms address specific needs, they remain isolated and do not emerge from a broader or long-term context of developing and maintaining HRH.

It is vital for governments, committed to improving health indicators, to understand the critical role the management of human resources and how addressing equity and gender equality among workforce in health sector can play on improving HRH, and subsequently, the effectiveness of healthcare delivery for people living in difficult and resource poor locations.

The decision-making process for the achievement of gender equality among the health workforce

needs more thought and action. Systems should be put in place to identify and gather information on gender discrimination in HRH through workforce assessments. Gender audits may be helpful to identify gender discrimination during recruitment, promotion, and wage distribution.

It is equally important to develop policies which will address the disadvantages borne by women during any life cycle. Nonetheless, the involvement of women and men equally in HR policy decision-making processes is the best way to tackle this inequality.

Suggested indicators for measuring gender equality in workplace include:^{xxxii}

- *The gender composition of the workforce:*
This indicator seeks information about the gender composition of relevant employers in a standardised format. It is intended to cover a range of workforce characteristics including occupation, classification, and employment status. This will enable the aggregation of data across health systems and will be invaluable to employers to assist them in understanding the characteristics of their workforce, including occupational segregation, the position of women and men in management, and patterns of potentially insecure employment
- *Equal remuneration between women and men:*
This indicator enables the collection of aggregate information about:
 - Remuneration of women and men performing the same or comparable tasks within and across occupations and industries
 - Availability and utility of employment terms

- Conditions and practices relating to flexible working arrangements for employees
- Working arrangements to support employees with family or caring responsibilities

- *Availability and utility of employment terms:*
This indicator seeks to improve flexible working arrangements for employees, and also develop the capacity of women and men to combine paid work and family or caring responsibilities, which are fundamental to gender equality
- *Consultation with employees on issues concerning gender equality in the workplace:* This indicator is to ensure that consultation occurs between employers and employees on issues concerning gender equality in the workplace. Examples of consultation include employee surveys and focus groups

Sex-Based Harassment and Discrimination

Achievement of equity among the health workforce in India requires that we discuss 'what needs to be done' and 'how it should be done'. Accountability, transparency, and improved leadership and partnerships are needed within the health system, accompanied by a systematic assessment and analysis of health-system governance. Literature review reveals the paucity of knowledge on such an issue of importance for HRH, indicating the need for further research in this area. A validated, and if necessary, updated proof of concept should be derived before adapting and replicating or scaling up any of the initiative. Participatory approaches in health workforce planning, development, and management should be ensured, where both women and men health workers are given an active role to ensure that research being undertaken is relevant to their needs and interests.

Reference

-
- ⁱ Study Report. Nursing Services in Orissa: Current situation, requirements, and measures to address shortages. National Rural Health Mission. Available in URL: http://mohfw.nic.in/NRHM/Documents/orissa_Nursing_HRH_Report.pdf
- ⁱⁱ Gender Equality in Human Resources for Health: What Does This Mean and What Can We Do? IntraHealth
- ⁱⁱⁱ Asha George, Background paper prepared for the Women and Gender Equity Knowledge Network and the Health Systems Knowledge Network of the WHO Commission on Social Determinants of Health, June 2007
- ^{iv} Rao K., Situational Analysis of the Health Workforce in India. Human Resources-Technical paper I. Public Health Foundation of India
- ^v Spotlight on Statistics. Gender and health workforce statistics. Issue 2, Feb 2008
- ^{vi} Rao K., Bhatnagar A, Berman P. India's Health Workforce: Size, Composition, and Distribution. In: La Forgia J, Rao K, eds. India Health Beat. New Delhi: World Bank, New Delhi and Public Health Foundation of India, 2009
- ^{vii} Reservation of Seats in Medical Colleges. Press Information Bureau, Government of India. URL: <http://pib.nic.in/newsite/erelease.aspx?relid=87157>
- ^{viii} Can Reservations And India Bloom Together? URL: http://www.legalserviceindia.com/articles/res_in.htm
- ^{ix} Kabir Sheikh et al. Why Some Doctors Serve in Rural Areas: A Qualitative Assessment from Chhattisgarh State. Report, April 2010
- ^x Human Resources Management: Issues and Challenges. Dileep V. Mavalankar
- ^{xi} Rao K. Situational Analysis of the Health Workforce in India. Human Resources-Technical paper I. Public Health Foundation of India
- ^{xii} Salvage J., Heijnen S.: Nursing in Europe: a resource for better health. Geneva: World Health Organization Regional Publications, 1997. WHO European Series, no. 74
- ^{xiii} Pascal Zurn, Mario Dal Poz, Barbara Stilwell & Orville Adams. Imbalances in the Health Workforce. Briefing Paper- March 2002, World Health Organization
- ^{xiv} A George. Nurses, Community Health Workers, and Home Careers: Gendered Human Resources Compensating for Skewed Health Systems. Global Public Health: An International Journal for Research, Policy and Practice, 2008; 3 75-89
- ^{xv} Scott, K. & Shankar, S. (2010). Tying their hands? Institutional Obstacles to the Success of the ASHA Community Health Worker Programme in Rural North India. AIDS Care, 22(S2), 1606-1612
- ^{xvi} Gender Equality in Human Resources for Health: What Does This Mean and What Can We Do? IntraHealth
- ^{xvii} Gita Sen, Pirooska Östlin, Asha George. Unequal, Unfair, Ineffective, and Inefficient Gender Inequity in Health: Why it exists and how we can change it? Final Report to the WHO Commission on Social Determinants of Health, 2007
- ^{xviii} Pavitra Mohan et al. Auxiliary Nurse Midwife: What Determines Her Place of Residence? Journal of Health and Population in Developing Countries
- ^{xix} Necessary Angels. By Tina Rosenberg. 2008. Available in URL : <http://ngm.nationalgeographic.com/print/2008/12/community-doctors/rosenberg-text>
- ^{xx} S. Maheshwari, R. Bhat and S. Saha, "Commitment of State Health Officials: Identifying Factors and Scope for Improvement," Ahmedabad, 2006
- ^{xxi} T. Sundararaman and G. Gupta, "Indian Approaches to Retaining Skilled Health Workers in Rural Areas," 2011

^{xxi} NHSRC, “HRH- Non Monetary Incentives and Conditions,” 2009

^{xxii} Human Resources for Health in India. Strategies for Increasing the Availability of Qualified Health Workers in Underserved Areas. Krishna D. Rao, Garima Gupta, T. Sundararaman, 2011

^{xxiii} G. B. O. Planning, “Health Sector Reforms in India: MP,” 2008

^{xxiv} Meena gupta. State health systems, Orissa. Working paper no.89 (2002), Indian Council for Research on International Economic Relations

^{xxv} T. Sundararaman and G. Gupta, “Indian Approaches to Retaining Skilled Health Workers in Rural Areas,” 2011.

^{xxvi} Human Resources for Health in India. Strategies for Increasing the Availability of Qualified Health Workers in Underserved Areas. Krishna D. Rao, Garima Gupta, T. Sundararaman, 2011

^{xxvii} Human Resources for Health in India. Strategies for Increasing the Availability of Qualified Health Workers in Underserved Areas. Krishna D. Rao, Garima Gupta, T. Sundararaman, 2011

^{xxviii} Human Resources for Health in India. Strategies for Increasing the Availability of Qualified Health Workers in Underserved Areas. Krishna D. Rao, Garima Gupta, T. Sundararaman, 2011

^{xxix} Swasti (2011). Tamil Nadu Case Study.

^{xxx} Sankaran, Kamala, Madhav Roopa. Gender Equality and Social Dialogue in India. Working paper 1/2011, International Labour office

^{xxxi} Necessary Angels, Tina Rosenberg, 2008. Available in URL: <http://ngm.nationalgeographic.com/print/2008/12/community-doctors/rosenberg-text>

^{xxii} <http://www.wgea.gov.au/report/gender-equality-indicators-and-reporting-matters>



PUBLIC
HEALTH
FOUNDATION
OF INDIA

