Health system and policy analysis: Why there is a need for a paradigm shift in our approach to improve health status of brick-kiln migrant workers in India?

Dr. Fnu Kajal, M.D., M.Sc., DrPH student, University of Arizona

- Corresponding author's name: Dr. Kajal
  - Mailing address: D-113, The Belaire, DLF-5, Gurugram, India-122002
  - Telephone number: 91-7233866266
  - Email address: kkajal@email.arizona.edu

Keywords: Health policy, migrant workers, brick-kiln workers, informal sector Abstract: Urbanization is a global phenomenon and as the economies are shifting from rural based subsistence to services based, the net flow of migration is inevitable. Unfortunately, In India, migration is very poorly understood. India is next to China in production of bricks, accounting for nearly 13% of global annual bricks' production. The condition of brick-kiln workers is pitiable, especially due to poor care available. They are exposed to health hazards such as various communicable diseases, sexually transmitted diseases and occupational health hazards. The diseases such as respiratory problems, allergies, gastrointestinal ailments and malnutrition are frequent in these populations. This paper reflects upon various policies that exist for the welfare of unorganised sector but do these workers qualify for these benefits? This paper provides empirical basis for paradigm shift for policy formulation to provide safety nets for migrant population and have better urban planning for future.

## **Background**

Urbanization is a global phenomenon and as the economies are shifting from rural based subsistence to services based, the net flow of migration is inevitable. Unfortunately, In India, migration is very poorly understood. The real struggle comes in defining a migrant. Who is a migrant? As per International Organization for Migration (IOM), Migrant is an umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons <sup>1</sup>. The census is the prime resource to identify the pattern of migration and has always been fascinating demographers. It identifies migration by two reasonsmigration by birth place and migration by place of last residence.<sup>2</sup> It also captures reasons for migration. NSSO (National Sample Survey Office) surveys, part of Ministry of Statistics and Program Implementation (MOSPI), defines migrants into three categories- migrant households, migrants and short-term migrants. Though incomplete, these are valuable data sources to get an insight into the

trends in migration pattern. It does provide empirical basis for policy formulation to provide safety nets for migrant population and have better urban planning for future.

India is next to China in production of bricks, accounting for nearly 13% of global annual bricks' production.<sup>3</sup> Given that this activity is mostly concentrated in the unorganized sector, hardly any of it comes under the radar of regulatory authorities, even though it is one of the most environmentally polluting sectors in the country. Brick-kiln workers are considered seasonal migrants who move from their native places for few months in a year to work at a brick-kiln. There is no consensus on the definition of term "seasonal migration" anywhere, nationally or internationally. Usually, it is considered a movement that is linked with distinct peaks in labor demand. The brick-kilns are closed for monsoons (June-August) in India, hence the demand lies for rest of the months in a year. Since the brick-kilns are leading to Greenhouse Gas emissions, including that of black carbon and particulate emission, its linkage to poor health outcomes are very well documented by researchers across the world.<sup>3</sup>

The 2017 report of "Working Group of Migration" by Ministry of Housing and Urban Affairs (MoHUA) has mentioned that migrants are exposed to health hazards such as various communicable diseases, sexually transmitted diseases and occupational health hazards.<sup>4</sup> The diseases such as respiratory problems, allergies, gastrointestinal ailments and malnutrition are frequent in these populations. Heat stress is prevalent amongst brick-kiln workers and ergonomic factors also play a vital role in aggregating health illnesses in these areas.<sup>5</sup> This is a labor-intensive factory where workers have to carry heavy loads, remain seated in squatted positions for a long time and therefore, musculo-skeletal disorders are invariably found. Brick-kiln workers are also exposed to injuries, and blistered hands, bruised feet, lacerations are some of the major injuries frequently found amongst the brick-kiln workers. Young children are particularly vulnerable and there have been studies that report cognitive impairment amongst kids due to delay in brain development.<sup>6</sup>

Over and above these health hazards, there are socio-economic issues which exacerbate their agony. Thaddeus and Maine 1994 developed a 'three-delay framework' and it aptly suits to comprehend the situation of migrant workers. These delays are:- (1) delay in decision to seek care, (2) delay in reaching care and (3) delay in receiving care. Borhade (2011) identified that maternal and child health indicators remain poor in brick-kiln workers due to early marriages, early pregnancies, repeated child births, lack of trained birth attendants, low breast feeding, lack of complementary feeding etc. The research by Harvard scholar, C. Bohne, demonstrates that socio-economic factors which are experienced by migrant workers at brick-kiln permeate every part of their lives and hence lead to

the 'three-delays' in their utilization of health care. The findings are corroborated by Siddiah et al, wherein the researchers claimed that socio-economic inequity leads to health inequity. Maternal health outcomes were influenced by few factors. Gaps in knowledge regarding health systems, sub-standard private health care, misconceptions and mistrust in public health care system alienate these workers from utilizing health care services.

## Health system and Policy overview:

#### **Health Insurance:**

The world has a very ambitious dream of having Universal Health Coverage (UHC). World Health Organization (WHO) defines it as that all individuals and communities receiving the health services they need without suffering financial hardship. 10 As per the bulletin of WHO, trends in catastrophic health expenditure (CHE), defined as more than 10% monthly household income expenditure on health, were analyzed from 1993 to 2014. It was found that the proportion of households experiencing CHE increased more in the poorest than the richest quintile. 11 There are various health insurance schemes being run by Government of India and State governments such as Employees State Insurance Scheme, Central Government Health Scheme, Earlier Rashtriya Swasthya Bima Yojana (RSBY) and Prime Minister Jan Arogya Yojana (Ayushman Bharat). So far, only Kerala has launched Kerala Awaz Health Insurance Scheme for migrant workers, 2018 under which 18-60 years eligible workers will be provided with health insurance). 12 RSBY has been using "insurance based" model whereas the PMJAY is using "assurance-based" model. In the former, insurance companies were empaneled who would register below-poverty line families and get a fixed premium for that. The PMJAY model is using Social and Economic Census database of 2011 and provides assured coverage to these families. Both of these schemes are portable and hence, very relevant for brick-kiln workers. However, there is no separate database available on the number of brick-kiln workers' families included under RSBY/PMJAY. Nandi et al reported the impact of bringing UHC in the state of Chhattisgarh in 2012 by making RSBY universal. It is pertinent to note that although those insured incur less Out of Pocket Expenditure (OOPS), still 95% of insured private sector and 66% of public sector insurers incurred OOPs. 13 ESI scheme provides insurance to workers employed under Factories Act. Sources (government employee's version on account of anonymity) revealed that despite having good intentions, there has been lot of lobbying against it and so far, Brick-kiln industry could not be registered under factories Act. The rationale by brick-kiln owners for not registering under this Act is that it is a seasonal and rural industry, which is a subsidiary of agriculture. In the state of Uttar Pradesh, the brick-kiln owners have gone to courts to avoid being regulated by the provisions of Factory Act. However, the state government

of UP has adopted brick-kiln workers under the Building and Construction workers Act so that social benefits can be accrued to them under the same. This allows the pregnant women to get monetary benefits of Rs 6000 per pregnancy. Still, it does not cater to any health insurance per se for brick-kiln workers.

## **National Health Mission (NHM):**

This is one of most important and critical programs launched by Government of India by which it seeks to provide accessible, affordable and equitable health care to population, especially the vulnerable groups. 14 The NHM was launched initially for rural areas, but has now been extended to urban areas as well. NHM has four components- RMNCH+A, Health system strengthening, Communicable and Non-Communicable diseases and Infrastructure maintenance. All the services are provided through frontline workers which include Accredited Social Health Activists (ASHA), Auxiliary Nursing midwives (ANM) and Anganwadi workers (Integrated Child Development Scheme). There are no user charges and all medicines and diagnostics and treatment is provided free-of-cost in public sector health facilities. The brick-kiln workers also have the option to use the healthcare services provided under NHM. ASHAs and ANMs are required to visit brick-kilns and do immunization and ante-natal checkups. Hence, it is a two-way process where both client and provider can seek to access or provide healthcare to the needy. However, the health of brick-kiln workers is under crisis. The following figure (Figure 1) chalks out the various delays that occur while accessing healthcare services by them.

The first delay is in deciding to seek care. Thaddeus and Maine have spoken about major barriers and these are: - costs, transportation, quality of care and socioeconomic factors. Most of these workers come as a family unit which means that not just the male household head, but the woman and children also participate in this activity. There are various systems of payments to these families and the word "neo-bondage" is coined for the brick-kiln workers (International Labor Organization-ILO).<sup>15</sup> ILO defines neo-bondage as short-term bondage based primarily on economic transactions. These workers take loans at exorbitant interest rates and then failure to pay them is paid back by working for the loan grantee. This sets a vicious cycle and the workers are not left with any bandwidth to seek time for accessing health care, even if it is available in plenty. Another form of payment is taking an advance and then they are bound to work for the brick-kiln owners. Also, migrants who have come from a different state, are not well versed with facilities available and their language also forms a barrier to access healthcare. Siddaiah et al found that only 22% of women had institutional deliveries at a brick-kiln at Faridabad, Haryana. About one-third ever used any ambulance service or received cash transfers through Janani Suraksha Yojana (JSY).<sup>9</sup> For the benefit of all, JSY is a conditional cash transfer scheme of Government of India to reduce maternal and child mortality.

Although these bricks-kilns are not situated too far from the major health facilities, taking leave at the cost of their daily wages from their manager is a primary hurdle. The families are being paid as a unit and not as an individual which means that the whole family is being paid at the end of the day by number of bricks they have prepared. So, if a person takes off for accessing medical facility and a smaller number of bricks are prepared, they get less remuneration. Further, the family unit in this system is not paid for the day as per the provisions of Minimum Wages Act. Thus, the workers are paid piece rate minimum wage rather than time rate minimum wage. <sup>16</sup> This also reflects upon the poor state of law enforcement and as a result, these migrants are suffering at the hands of the exploitative managers of brick-kilns.

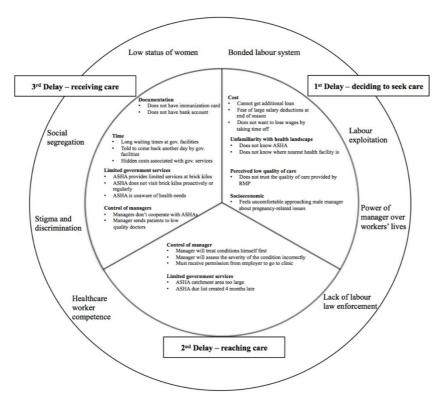


Figure 1: Three delays model for seasonal brick-kiln workers (Bohne Thesis, 2018)

The second delay is in the costs associated with delay in reaching health-care. The reason for delay in reaching care is the limited number of health care frontline staff such as ASHA and ANMs. One ASHA usually caters to a population of 1000 and an ANM is supposed to cater to population of 5000 but in real life scenario, this is hardly achieved. An ANM usually caters to much larger catchment area and is overloaded with work. These brick-kiln workers are

provided with bare-minimum facilities such as immunization. In times of natural disasters such as COVID-19 pandemic, this has become more critical as pregnant women and children are especially vulnerable to viral infection due to immune and anatomic factors.<sup>17</sup> The control of managers to decide for their health also contributes for this delay. The pandemics like this reflects the weakened health systems in developing countries and undoubtedly, the service delivery of already compromised healthcare staff is threatened further.<sup>18</sup>

The third delay is in receiving care. Poor documentation and non-portability of schemes hamper the brick-kiln workers to receive care at the place of work. The perception of having long queues at the public sector hospitals and poor quality of service force them to seek care with RMP (Registered Medical Practitioners) or private sector. This decision is also not of a free choice made by the workers. The brick-kiln manager controls their lives and usually have ties with some local provider. Unless there is an emergency, the brick-kiln managers avoid taking them to public sector hospitals. Instead, the local provider is called in or they are taken to them at a later stage in a hurried manner. Another very strong reason that has led to this delay has been documented by Babu et al, where they studied the internal migrants' experiences and the perceptions of front-line workers in 13 cities in India. In 4 cities, approximately 90% of migrants had never seen these frontline staff visiting their localities. 19 Only 20% of women and 22% of children had been provided antenatal and vaccination services from frontline staff. This study reveals that the migrants are seen as the "outsiders" and thus, warrants changes in migrant specific policies to cater to their vulnerabilities.

# **Integrated Child Development Scheme (ICDS):**

This program is run by the Ministry of Women and Child development since 1975 whereby the government is committed to improve nutritional status of children from 0-6 years of age, pregnant women and lactating mothers. <sup>20</sup> The Aanganwadi workers are the frontline staff recruited under this department to serve the population. They are trained to identify the malnutrition and form a linkage between Nutrition Rehabilitation Centers (under NHM) and community. Most of the activities at the community level under department of health and Department of women and child development are performed together. The states of Uttar Pradesh and Bihar are amongst the leading examples to establish AAA (Triple A) platform where ASHA, ANM and Aanganwadi workers are brought under one umbrella to synergize the service delivery response and incentivized to perform as a team. A study performed at Brick-kiln at West Bengal found that almost 13% of sample population had fallen under the severe (grade-3) malnutrition. <sup>21</sup> However, there are not enough studies in literature to correlate the impact of ICDS services on the brick-kiln population.

### **Occupational Health:**

Under the mandate of Occupational Health, there are presently 16 laws which are dealt under two ministries- Ministry of health and Family Welfare and Ministry of Labor. <sup>22</sup> There are three constitutional provisions- Article 24, 39 (e and f) and 42 that ensures workers' health and safety. The Government of India, Ministry of Labor and Employment, has released a National policy on health, safety and workplace environment in February 2009. It includes eight specific areas for action- enforcement, development of national standards, ensuring compliance, increasing awareness, promoting research and development, occupational safety, data collection and health skills development. There is a National Program for Control and Treatment of Occupational Diseases since 1998-99. Under 3<sup>rd</sup> schedule of Factories Act, 29 diseases are listed as notifiable under occupational health.<sup>22</sup> Unfortunately, this concept is very new to India and is still evolving. There is no database/statistics available for brick-kiln workers regarding their occupational health diseases. The employment is cheap and comes from unorganized sector mostly, therefore the enforcement is weak. Even public sector hasn't identified the importance of occupational health and apathy of employers and lack of trained skilled personnel prepends to the further alienation of occupational health care from preventive/primary health care.

#### **Mental Health:**

Mental health is the most neglected of all amongst the migrant population. There is not enough literature available where mental health is studied amongst brickkiln workers particularly. The dearth of studies in this area highlights the need of policy formulation around mental health of migrants, esp. in brick-kiln workers. A study done by Ghuncha Firdaus has found that status of women had correlation with their mental health. The study found that Widow/single/divorced women were more prone as compared to married women. Mostly poor housing, feeling insecure and adjustment issues led to poor mental health.<sup>23</sup> Having limited access to labor rights, experiencing social stigma for being considered as certain carriers of diseases, discrimination and inequity were the most important factors for poor mental health.<sup>24</sup> The government of India had passed the National Mental Health Program (NMHP) in 1982 and has also enacted The Mental Health Care Act 2017. The three main components of this are-treatment of mentally ill, rehabilitation and prevention and promotion of positive mental health. But many a time, lack of preparedness for adjusting to new place, cultural differences, language issues, control of brick-kiln workers and complex local scenario bring adverse experiences among this category of workers. Subsequently, the brickkiln workers suffer from various mental health issues. So far, there has been no effort on part of the government to bring these services closer to the population. The stigma is so huge that the worker and his /her family would not choose to come to a provider themselves. Hence, again it echoes a call for universal primary care, which includes mental health services as an integral part of UHC.

### The way forward:

Despite having almost 40% population as migrant workers, we do not have a clear definition around migration. The word "seasonal migration" has been loosely used and thus, there is no clear-cut roadmap to collect data on people who choose to migrate for few months to a new place to seek livelihood. The migrants form a major chunk for informal sector and therefore, there is no uniform portal where one can access their data and drive evidence-based policies. The article has highlighted the lacunae in the system around health system and policy making. There is a need to address these issues and bring a paradigm shift from our traditional reductionist approach of seeing things as "whole is sum of all parts". The brick-kiln workers are very vulnerable population and the health inequities are majorly drawn from their socio-economic inequities. Therefore, merely providing treatment to them for health issues would just be equal to brushing problem under the carpet. We need to have a system wide thinking as interactions among socio-economic factors are not linear but complex. Unless we address the root, the branches can never flourish. The same goes for them. Without bringing a strategic framework wherein not only their health issues are tackled, but the underlying socio-economic conditions are improved, we cannot expect a better future for them.

We found major lacunas in the system which basically devoid them of good quality life, that includes quality and equity in healthcare. I strongly emphasize the following recommendations to be taken up in future for improving the status of brick-kiln workers.

- 1. Definition of seasonal migration is vague and obscure. It needs to be more intelligible and comprehensible by personnel conducting surveys. The surveys need to be more expansive and different approaches are required to conduct these surveys to collect more detailed information about migration of brick-kiln workers.
- 2. Enforcement of law: There is no doubt that even the existing laws are not being carried out properly. We still receive applications under Bonded Labor Abolition Act, 1976; hence the practice of neo-bondage needs to be abolished through newer legislations. The payments have to time-rate minimum wages, and every individual needs to be considered when he/she

is working. The safety standards for health and environment are the key sectors to begin with. For example, having clean technology, providing them with safety equipment while working are some of the basic requirements. There should be a mechanism to make brick-kiln workers aware of the relevant legislations.

- 3. Transparency in facilitating their entitlements and benefits is very crucial. Empowering these workers through knowledge sharing will make them less vulnerable to exploitation at the hands of brick-kiln managers.
- 4. Social inclusion is required to bring resiliency among migrant workers. Building supportive environment such as providing education, creche services, addressing psycho-social concerns through coping skills etc. are required to be incorporated into health policy formulation around migrant workers. The policy should focus upon bringing a sense of belongingness, seeking care from frontline workers as insiders, being open to new opportunities and providing a feeling of safety at the new place.
- 5. Bringing them under social safety net through a portable and universal health insurance scheme will prevent them getting into the vicious trap of CHE. Thus, their exploitation from local lenders can be prevented.
- 6. Occupational health institutions and trained personnel need to be developed in the light of given evidence. This needs to be integrated with the concept of primary health care and all stakeholders should be made aware of this new yet essential field.
- 7. States could use the Common Application Software (CAS) which is being tried in Bihar with the support of BMGF (Bill and Melinda Gates Foundation). This application helps the Aanganwadi workers to collect data at one portal which integrates health and nutrition. The innovations such as these will bring more synergy into the service delivery of AAA platform and hence, improve nutrition status at brick-kiln sites.
- 8. Reducing three delays for seeking, reaching and receiving health care services need to be taken up on priority basis. The control of brick-kiln owners and managers need to be reduced by enacting new laws or improvising the existing ones.

Various interventions are required collectively to bring a bigger impact to address these concerns. Since there are Multiple stakeholders are involved, therefore, we get a splintered view of problems around brick-kiln workers. Undoubtedly, this segment of our population has been "missing-out". The article reiterates the inequalities that are differentiating "poor-migrant" amongst the poor. Thus, there is a need for concerted effort at the health-system level, otherwise the averages will not allow us to explicitly see the major inequities that are prevalent in communities at large.

#### **References:**

- International Organization for Migration. Who is a migrant? | International Organization for Migration. Http://Www.Iom.Int. 2018. https://www.iom.int/who-is-a-migrant%0Ahttps://www.iom.int/who-is-a-migrant.
- Ministry of Home Affairs. Census of India Website: Office of the Registrar General & Census Commissioner, India. 2011. https://censusindia.gov.in/%0Ahttp://censusindia.gov.in/.
- Basu, DD; Yadav, Nivit; Kumar R (Shakti SEF. National Brick Mission; A scoping Paper. 2018 DOI:10.7312/krav18324-004.
- 4 Ministry of Housing and Urban Poverty Alleviation. Report of the working group on Migration. 2017 http://mohua.gov.in/upload/uploadfiles/files/1566.pdf.
- Sanjel S, Thygerson SM, Khanal SN, Joshi SK. Environmental and Occupational Pollutants and Their Effects on Health among Brick Kiln Workers. *Open J Saf Sci Technol* 2016; **06**: 81–98.
- Archana S, Silan V, Kant S. Maternal healthcare and perinatal mortality among brick kiln migrant workers: A case study. *Natl Med J India* 2014; **27**: 280–2.
- Bohne C. Seasonal Work, Interrupted Care: Maternal and Child Health Gaps of Brick Kiln Migrants in Bihar, India. Digit. Access to Scholarsh. Harvard. 2018. https://dash.harvard.edu/handle/1/37945630.
- 8 Borhade A. Health of internal labour migrants in India: Some reflections on the current situation and way forward. *Asia Eur J* 2011; **8**: 457–60.
- Siddaiah A, Kant S, Haldar P, Rai SK, Misra P. Maternal health care access among migrant women labourers in the selected brick kilns of district Faridabad, Haryana: Mixed method study on equity and access 11 Medical and Health Sciences 1117 Public Health and Health Services. *Int J Equity Health* 2018; **17**: 1–11.
- World Health Organization (WHO). Universal health coverage. 2019. DOI:10.1016/s0733-8635(18)30260-2.
- Pandey, Anamika; Ploubidis, George; Clarke, Lynda; Dandona L (WHO B. Trends in catastrophic expenditure in India: 1993 to 2014. 2018.
- 12 Yojana S. Kerala Aawaz Health Insurance Scheme 2018 For Migrant Workers. 2018.
- Nandi S, Schneider H, Dixit P. Hospital utilization and out of pocket expenditure in public and private sectors under the universal government health insurance scheme in Chhattisgarh State, India: Lessons for universal health coverage. *PLoS One* 2017; **12**: 1–18.
- 14 Ministry of health and family welfare G of I. National Health Mission. 2020.
- 15 Kumari S. Neo-bondage in the Brick Kiln Industry: A Case Study of

- Bihar. Soc Change 2018; 48: 384–97.
- 16 Sehgal S. 'Pay brick kiln workers online. 2019.
- Abdelbadee AY, Abbas AM. Impact of COVID-19 on reproductive health and maternity services in low resource countries. *Eur J Contracept Reprod Heal Care* 2020; : 5.
- 18 Church K, Gassner J, Elliott M. Reproductive health under COVID-19–challenges of responding in a global crisis. *Sex Reprod Heal Matters* 2020; **28**: 1–3.
- Babu B V., Sharma Y, Kusuma YS, *et al.* Internal migrants' experiences with and perceptions of frontline health workers: A nationwide study in 13 Indian cities. *Int J Health Plann Manage* 2018; **33**: e807–20.
- 20 Ministry of Women and Child Development G of I. Integrated Child Development Services (ICDS) Scheme. 2020.
- Bandyopadhyay B, Sen D. Assessment of energy balance against the nutritional status of women carriers in the brickfields of West Bengal. *Int J Occup Saf Ergon* 2016; **22**: 399–404.
- Saha RK. Occupational health in India. *Ann Glob Heal* 2018; **84**: 330–3.
- Firdaus G. Mental well-being of migrants in urban center of India: Analyzing the role of social environment. *Indian J Psychiatry* 2017; **59**: 164–9.
- 24 Li J, Rose N. Urban social exclusion and mental health of China's rural-urban migrants A review and call for research. Heal. Place. 2017; **48**: 20–30.