


**Review Article**

## 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?

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### Abstract

Urbanization is a global phenomenon, and as economies shift from rural-based subsistence toward service-based economies, net migration is bound to happen. Unfortunately, migration needs to be better understood in India. The real challenge is to define what a migrant is. Who is a migrant? According to the International Organization for Migration (IOM), the term “migrant” is an umbrella term not defined under international law, reflecting the common understanding of a person who moves away from their place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons [1]. The census has always fascinated demographers and is the prime resource for identifying migration patterns. Migration is noted for two factors: migration by place of birth and migration by place of last residence [2]. It also captures the reasons for migration. NSSO (National Sample Survey Office) surveys, part of the Ministry of Statistics and Program Implementation (MOSPI), define migrants into three categories- migrant households, migrants, and short-term migrants. Though incomplete, these are valuable data sources for gaining insight into the trends in migration patterns. Therefore, we understand that migration exists in many forms, and it is challenging to define migrants using only one definition. However, the abovementioned data sources provide an empirical basis for policy formulation to offer safety nets for the migrant population and better future urban planning.

**Keywords:** Health policy, Migrant workers, Brick-kiln workers, Informal sector

### Introduction

Urbanization is a global phenomenon, and as economies shift from rural-based subsistence toward service-based economies, net migration is bound to happen. Unfortunately, migration needs to be better understood in India. The real challenge is to define what a migrant is. Who is a migrant? According to the International Organization for Migration (IOM), the term “migrant” is an umbrella term not defined under international law, reflecting the common understanding of a person who moves away from their place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons [1]. The census has always fascinated demographers and is the prime resource for identifying migration patterns. Migration is noted for two factors: migration by place of birth and migration by place of last residence [2]. It also captures the reasons for migration. NSSO (National Sample Survey Office) surveys, part of the Ministry of Statistics and Program Implementation (MOSPI), define migrants

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into three categories- migrant households, migrants, and short-term migrants. Though incomplete, these are valuable data sources for gaining insight into the trends in migration patterns. Therefore, we understand that migration exists in many forms, and it is challenging to define migrants using only one definition. However, the abovementioned data sources provide an empirical basis for policy formulation to offer safety nets for the migrant population and better future urban planning.

India produces almost 13% of the world's annual brick production, placing it second only to China in the industry [3]. Despite being one of the most environmentally damaging industries in the country, because this activity is primarily concentrated in the unorganized sector, very little of it comes under the radar of regulatory authorities. Brick kiln workers are considered seasonal migrant workers who relocate from their birthplace for a few months to a specific location each year to work at a brick kiln. No consensus exists on the definition of "seasonal migration" nationally or internationally. Typically, it is regarded as a movement associated with distinct peaks in labor demand. In India, brick kilns are closed for the monsoons (June–August). Hence, the market remains unproductive for the remaining months of the year.

Because brick kilns lead to greenhouse gas emissions, including black carbon and particulate emissions, researchers worldwide have established a strong correlation between brick kilns and poor health outcomes [3]. The 2017 report of the "Working Group of Migration," Ministry of Housing and Urban Affairs (MoHUA) highlighted that migrants are exposed to health hazards such as various infectious diseases, sexually transmitted diseases, and occupational health hazards [4]. Infections such as respiratory problems, allergies, gastrointestinal ailments, and malnutrition are frequent in these populations [5-8]. Heat stress is prevalent among brick kiln workers, and ergonomic factors are vital in aggravating diseases in these areas [6]. This labor-intensive industry requires workers to carry heavy loads and remain seated in squatted positions for extended periods. Therefore, musculoskeletal disorders are common among these workers. Brick kiln workers are also exposed to injuries such as blistered hands, bruised feet, and lacerations, some of the most common injuries among brick kiln workers. Young children are particularly vulnerable, and studies have reported cognitive impairment among them due to delays in brain development [9]. In Bihar, India, a study examined the impact of migration on child wasting and stunting [10]. They found that the overall prevalence of stunting was approximately 50%. Children were three times more likely to be wasted in summer than in winter. Beyond these health hazards, socio-economic issues exacerbate their agony.

## Types of Bondage and Exploitation

Understanding the bondage is essential to understanding critical issues surrounding brick-kiln workers' health. Brick kiln workers are not "free" to choose the alternatives. They are "bonded" to their employers. This results from marginalization and exploitation, a topic already dealt with [11]. Brick kilns often rely on a seasonal workforce that migrates to the kilns during the brick-making season. To secure this seasonal workforce, the brick kiln owners give loans to the poor workers to cover travel and other expenses. Once at the kiln, the workers have to work off the debt, often being exploited and abused. The term "bondage" needs to be explained further to understand the extent of abuse these workers endure. One article suggests that there is a "continuum of labor relations." [12] These relations exist from "mild" to "harsh." In harsh form, there are long working hours, poor working conditions, and little or no pay. On the other hand, the mild form of bonded labor involves less exploitation, better working conditions, and better wages. However, both are violations of human rights. The author considered brick-kiln a "mild" form and rice-drying activity a harsh form of bondage. The level of bondage depends on the "freedom" to choose between alternatives. The author believes that brick kiln workers can opt for employment elsewhere during the off-season. There are various payment systems for these families, and the International Labor Organization (ILO) has coined the word "neo-bondage" to describe these workers [13]. The ILO defines neo-bondage as short-term bondage based primarily on economic transactions. These workers take loans at exorbitant interest rates, fail to repay them, and are trapped into working for the loan grantee. This sets a vicious cycle, and the workers are not left with enough time to access health care, even if it is freely available. I have discussed this in more detail below. Another form of payment is to take an advance, after which they are bound to work for the brick kiln owners. Migrants from different states are not well versed in the available facilities, and their language becomes a barrier to accessing healthcare. On the other hand, some studies have reported that despite being known as a "mild" form of bondage, these debt chains are the drivers of this industry [14, 15]. Although seemingly innocuous, these debts continue for generations and are never cleared.

## Challenges leading to Health Crisis among bonded labor

The health of brick kiln workers is in crisis. The following figure (Figure 1) outlines the various delays while accessing healthcare services.

### Where are the delays?

Thaddeus and Maine (1994) developed a 'three-delay framework' that is aptly suited to comprehending the situation of migrant workers [16]. These delays are (a) delay in the

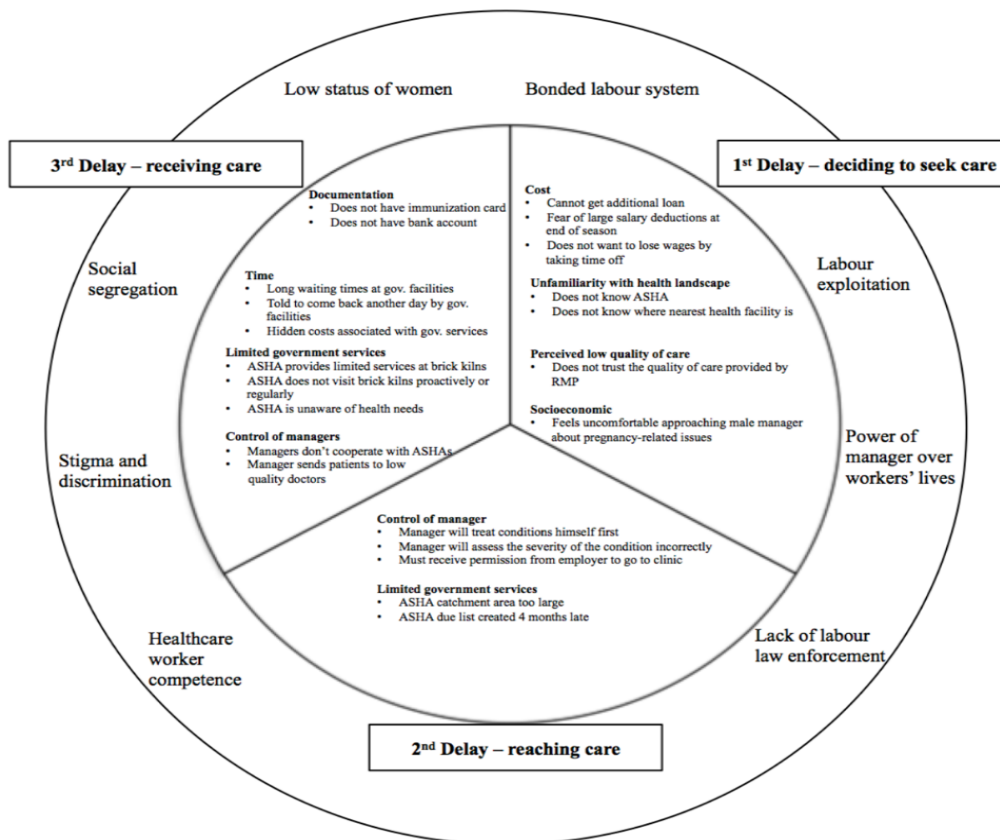


Figure 1: Three delays model for seasonal brick-kiln workers (Bohne Thesis, 2018)

decision to seek care, (b) delay in reaching care, and (c) 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 childbirths, lack of trained birth attendants, low breastfeeding, lack of complementary feeding, etc [17]. The research by Harvard scholar C. Bohne demonstrates that socio-economic factors experienced by migrant workers at brick kilns permeate every part of their lives and hence lead to the ‘three delays’ in their health care utilization [18]. The findings are corroborated by Siddiah et al., wherein researchers claimed that socio-economic inequity leads to health inequity [19]. A few factors, such as gaps in knowledge regarding health systems, sub-standard private health care, misconceptions, and mistrust of the public health care systems in the realm of bondage, alienate these workers from utilizing health care services.

The first delay is in deciding to seek care. Thaddeus and Maine have spoken about significant barriers, including costs, transportation, quality of care, and socioeconomic factors. Most of these workers come from a family unit, which means that the male household head, the woman, and the children also participate in this activity. Siddaiah et al. found that only 22% of women working at the brick kilns in Faridabad, Haryana, had institutional deliveries. About one-

third used any ambulance service or received cash transfers through Janani Suraksha Yojana (JSY) [19]. For the benefit of all, JSY is a conditional cash transfer scheme offered by the government of India to reduce maternal and child mortality. This program entails cash transfers to pregnant women to incentivize institutional deliveries. The overall rate of institutional deliveries has risen. However, it is still abysmal for the women working at the brick kilns. Although these brick kilns are not too far from the primary health facilities, taking leave from their manager at the cost of their daily wages is a primary hurdle. The families are being paid as a unit and not as individuals, which means that the whole family is being produced by the number of bricks they have prepared at the end of the day. So, if a person takes off to access a medical facility and a smaller number of bricks are ready, they get less remuneration.

Further, the family unit in this system is not paid for the day as per the provisions of the Minimum Wages Act. Thus, the workers are paid a piece rate minimum wage rather than a time rate minimum wage [20]. 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.

The second delay is in the costs associated with reaching health care. Invariably, the women at the brick kilns do not have enough money or resources to get an ambulance. They must make extensive arrangements by borrowing a vehicle or paying extra cash to someone who can help. Thus, they prefer not to deliver at the hospital. Another delay in getting care is the limited number of frontline healthcare staff such as ASHA and ANMs. One ASHA usually caters to a population of 1000, and an ANM is supposed to cater to a people of 5000, but in real life, this is hardly achieved. An ANM usually caters to a much larger catchment area and is overloaded with work. These brick-kiln workers are provided with bare-minimum services such as immunization. This has become more critical in natural disasters such as the COVID-19 pandemic as pregnant women and children are especially vulnerable to viral infection due to immune and anatomic factors [21]. There have been reports of brick-kiln workers getting stuck during the lockdown and not being paid by their employers [35].

Sadly, there was insufficient evidence of COVID-19 on the health outcomes of brick-kiln workers in the literature. The control managers have over their health also contributes to this delay. Pandemics like this reflect the weakened health systems in developing countries, and the service delivery of already compromised healthcare staff is threatened further [22]. The third delay is in receiving care. Poor documentation and the non-portability of schemes hamper brick-kiln workers from receiving care at 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 the private sector. For example, even when they arrive at the hospital, the lack of trained staff and medicines accentuates the deterioration of their economic condition. They are either referred to a higher facility or must bring expensive drugs from their pocket. Sadly, this decision is also not a free choice made by the workers. The brick kiln manager controls their lives and usually has 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 hurriedly called in or brought to them later. Another solid reason for this delay has been documented by Babu et al. 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 [24]. Only 20% of women and 22% of children had been provided antenatal and vaccination services by frontline staff. This study reveals that migrants are seen as "outsiders" and, thus, warrants changes in migrant-specific policies to cater to their vulnerabilities. On top of these delays, language barriers, stigma and discrimination, and lack of awareness among the brick-kiln workers further deteriorate their health.

## Health System and Existing Policies in India:

### Health Insurance:

The world has an ambitious dream of having universal health coverage (UHC). The World Health Organization (WHO) defines it as all individuals and communities receiving the necessary health services without financial hardships [24]. As per the WHO bulletin, trends in catastrophic health expenditure (CHE), defined as more than 10% of the monthly household income expenditure on health, were analyzed from 1993 to 2014. The proportion of households experiencing CHE increased more in the poorest quintile than in the wealthiest quintile [25]. The social fibre of the country permits the tradition of dowry during weddings, celebrating religious and cultural functions on a massive scale, adding to their debt. The Government of India and State governments run various health insurance schemes, such as the Employees State Insurance Scheme, Central Government Health Scheme, Earlier Rashtriya Swasthya Bima Yojana (RSBY), and Prime Minister Jan Arogya Yojana (PMJAY-Ayushman Bharat). There are variations across the country. For example, 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) [26]. RSBY has been using an "insurance-based" model, whereas the PMJAY uses an "assurance-based" model. In the former, insurance companies were empanelled and would register below-poverty-line families and get a fixed premium. The PMJAY model uses the Social and Economic Census database of 2011 and provides assured coverage to these families. Both of these schemes are portable and relevant for brick-kiln workers. However, no separate database on the number of brick-kiln workers' families included under RSBY/PMJAY is available. Nandi et al. reported the impact of bringing UHC into Chhattisgarh in 2012 by making RSBY universal. Notably, although those insured incur less out-of-pocket expenditure (OOPS), 95% of the insured private sector and 66% of public sector insurers incurred OOPs [27]. ESI scheme provides insurance to workers employed under the Factories Act. Sources (government employee's version on account of anonymity) revealed that despite having good intentions, much lobbying had been against it. So far, the brick kiln industry has not been registered under the Factories Act. The rationale behind brick kiln owners not writing under this Act is that it is a seasonal and rural industry, a subsidiary of agriculture. In the state of Uttar Pradesh, brick kiln owners have gone to courts to avoid being regulated by the provisions of the Factory Act. However, the state government of Uttar Pradesh (UP) has adopted brick-kiln workers under the Building and Construction Workers Act to accrue social benefits. This allows 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. Therefore, I can correlate that despite having the legal instruments available in the country, the implementation varies widely.

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

This is one of the most critical programs launched by the Government of India. It seeks to provide accessible, affordable, and equitable health care to the population, especially vulnerable groups [28]. The NHM was initially launched for rural areas but has now been extended to urban areas. NHM has four components- RMNCH+A, Health system strengthening, Communicable and Non-Communicable diseases, and Infrastructure maintenance. All the services are provided by frontline workers, including Accredited Social Health Activists (ASHA), Auxiliary Nursing midwives (ANM), and Anganwadi workers (Integrated Child Development Scheme). There are no user charges, and all medicines, diagnostics, and treatment are free in public sector health facilities. Brick-kiln workers also have the option to use the healthcare services provided by NHM. ASHAs and ANMs must 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.

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

This program has been run by the Ministry of Women and Child Development since 1975. The government is committed to improving the nutritional status of children from 0-6 years of age, pregnant women, and lactating mothers [28]. The Anganwadi workers are the frontline staff recruited under this department to serve the population. They are trained to identify malnutrition and form a linkage between Nutrition Rehabilitation Centers (under NHM) and the community. Most of the activities at the community level under the Department of Health and the Department of Women and Child Development are performed together. The states of Uttar Pradesh and Bihar are among the leading examples of establishing AAA (Triple A) platforms where ASHA, ANM, and Anganwadi workers are brought under one umbrella to synergize the service delivery response and incentivized to perform as a team. A study conducted at a brick kiln in West Bengal found that almost 13% of the sample population had fallen under severe (grade-3) malnutrition [29]. However, there is a need for more research in the literature to correlate the impact of ICDS services on the brick-kiln population.

### **Occupational Health**

Under the mandate of occupational health, 16 laws are presently dealt with under two ministries: the Ministry of Health and Family Welfare and the Ministry of Labor.[30] Three constitutional provisions- Articles 24, 39 (e and f), and 42- ensure workers' health and safety. The Government

of India, Ministry of Labor and Employment, released the national health, safety, and workplace environment policy 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. A National Program for Control and Treatment of Occupational Diseases has existed since 1998-99. Under the 3rd schedule of the Factories Act, 29 diseases are listed as notifiable under occupational health. [30] Unfortunately, this concept is new to India and is still evolving. There is no database/statistics for brick-kiln workers regarding their occupational health diseases. Employment is cheap and mostly comes from the unorganized sector; therefore, the Ministry of Labor enforcement is weak. Even the public sector hasn't identified the importance of occupational health. The apathy of employers and lack of trained, skilled personnel prevent occupational health care's further alienation from preventive/primary health care.

### **Mental Health**

Mental health is the most neglected of all among the migrant population. There is not enough literature where mental health is mainly studied among brick-kiln workers. The dearth of studies in this area highlights the need for policy formulation around the mental health of migrants, esp. among brick-kiln workers. A survey by Ghuncha Firdaus found that among migrants, women's status correlated poorly with their mental health. The study found that widow/single/divorced women were more prone to poor mental health outcomes than married women. Poor housing, insecurity, and adjustment issues led to these outcomes [31]. 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. [32] The government of India passed the National Mental Health Program (NMHP) in 1982 and enacted The Mental Health Care Act in 2017. The three main components are treatment of the mentally ill, rehabilitation and prevention, and promotion of positive mental health. However, often, a lack of preparedness for adjusting to a new place, cultural differences, language issues, control of brick-kiln workers, and complex local scenarios bring adverse experiences among this category of workers. Again, I reiterate that these are no excuses for these workers' injustice. Subsequently, brick kiln workers suffer from various mental health issues. So far, there has been no effort on the part of the government to bring these services closer to the population. The stigma is so huge that the worker and their family would not choose to come to a provider. 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 almost 40% of the population being migrant workers, we do not have a clear definition of 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 a few months to a new place to seek a livelihood. The migrants form a significant chunk of the informal sector; therefore, there is no uniform portal to access their data and drive evidence-based policies. The article has highlighted the lacunae in the system around the health system and policy making. We must address these issues and shift from our traditional reductionist approach of seeing things as “the whole is a sum of all parts.” The brick kiln workers are a very vulnerable population, and the health inequities are majorly drawn from their socioeconomic inequality. A recent study in Pakistan and Afghanistan recommends that age, gender, and education are critical for designing any intervention [33]. Psychosocial factors must be considered when designing any policy. Therefore, merely providing treatment to them for health issues would be equal to brushing the problem under the carpet. We need 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 a strategic framework wherein their health issues are tackled, and the underlying socio-economic conditions are improved, we cannot expect a better future.

We found significant lacunas in the system, lacking good quality of life, including quality and equity in healthcare. I strongly emphasize the following recommendations to be taken up in the future to improve the status of brick-kiln workers.

1. The 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 perform these surveys to collect more detailed information about the migration of brick-kiln workers. Due to many labor (and human rights) violations, enumerators are often not allowed to enter and survey. The government needs to be more accountable in enforcing inspections and responding to the observed needs, not merely revolving around minimum wage payment and living and other working conditions.
2. Enforcement of law: No doubt, even the existing laws must be carried out correctly. The practice of neo-bondage must be abolished by bringing amendments to the existing legislation. The payments have to time-rate minimum wages, and every individual needs to be considered when working. The safety standards for health and the environment are the key sectors. For example,

some basic requirements include having clean technology and providing safety equipment while working must be ensured. There should be a mechanism to inform brick-kiln workers of the relevant legislation.

3. Transparency in facilitating their entitlements and benefits is very crucial. Empowering these workers through knowledge sharing will make them less vulnerable to exploitation by brick-kiln managers. The Ministry of Labour, the Ministry of Health and Family Welfare, the Ministry of Social Welfare, and the Ministry of Women and Child Development cannot keep working in isolation. This issue requires a structured and synergistic action plan to bring transparency and enforcement of the law.
4. Social inclusion is required to bring resiliency among migrant workers. As they come from different cultures, building a supportive environment, such as providing education, creche services, addressing psycho-social concerns through coping skills, etc, must be incorporated into health policy formulation around migrant workers. The policy should focus on bringing a sense of belongingness, seeking care from frontline workers as insiders, being open to new opportunities, and providing a feeling of safety in the new place.
5. Bringing them under the social safety net through a portable and universal health insurance scheme will prevent them from getting into the vicious trap of CHE. Thus, their exploitation by local lenders can be prevented.
6. Occupational health institutions and trained personnel need to be developed in light of the evidence. This needs to be integrated with the concept of primary health care, and all stakeholders should be 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 Aanganwadi workers collect data through one portal that integrates health and nutrition. Innovations such as these will bring more synergy into the service delivery of the AAA platform and improve nutrition status at brick-kiln sites.
8. Reducing three delays in seeking, reaching, and receiving health care services needs to be prioritized. The control of brick kiln owners and managers must be reduced by enacting new laws or improvising the existing ones.

Various policy-focused and systemic interventions are required collectively to bring an enormous impact to address these concerns. Since multiple stakeholders are involved, 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 differentiate “poor-migrant” from the poor. I could not discuss the inter-state and intra-state variations, which I understand would stem from language, socioeconomic status, and other factors. I also acknowledge that some social protection programs would be available at the local or state level, which was beyond the scope of this narrative. Yet, this paper would help understand the bigger picture and provide a nudge to policymakers to make a concerted effort at the health-system level. Otherwise, the averages will not explicitly allow us to see the significant inequities in communities.

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