Field Report

A study of sandstone miner: notes from the field

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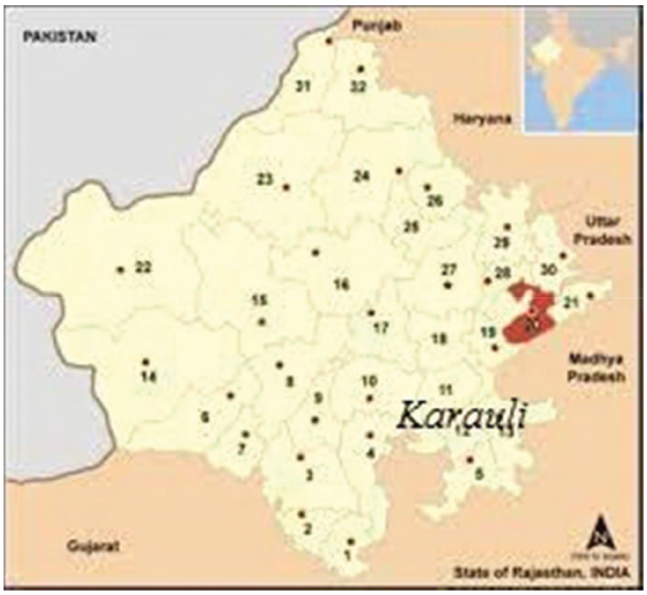
Introduction

This field note has been drawn from PhD field work conducted from May to September 2014 in Karauli district of Rajasthan, India. Rational behind selecting Karauli was that it is a district of Rajasthan and Rajasthan has huge deposits of sandstone exposed over to nearly 35,000 km. It covers districts of Dholpur, Bharatpur, Karauli, Sawai Madhopur, Tonk, Bundi, Jhalawar, Kota, Bhilwara, Jodhpur, Nagaur, Churu, Bikaner, and Chittorgarh.



A study was conducted by National Institute for Miners Health (NIMH), Nagpur, Maharashtra, India, in Karauli district on 101 miners including 9 females who had respiratory problems. Of 93 male miners, 73 had evidence of silicosis, mostly of the age group 31–50 years.[1] It was known only after the study that people were dying because of silicosis and not tuberculosis (TB). Prior to this, the patients were treated for TB because there were no facilities in the district to diagnose the disease.[2] During field work, I too observed that, initially all mine workers were treated for TB by many doctors. After treatment of many years from different doctors, in different cities, they did not recover and died in very young age. Different reported cities are Gwalior, Hindaun, Sawai Madhopur, Gangapur, and Jaipur. Few of them reported traditional treatment too. This field note considers the case of a miner, Chetram, which throws some light on socioeconomic and health status of miners.

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Case Report

Chetram (42 years), a Jattaw (scheduled caste) by caste, as "TB." He is surviving with three children (one son and two aughters) in Kosra village of Karauli district, Rajasthan, India. When Chetram was 6 month old, his father died, who too worked in the mine. His mother brought him up by selling woods. He studied up to second standard in nearby government school and started working in the mine at the age of 12 to support his family. At the age of 24, he had fever and cold for the first time.

> I took medicine but didn't get relief. Then, I went for X-ray and doctor told me that my lungs were damaged. After sputum test doctor told me, I had TB and suggested me to take DOTS. I took DOTS but didn't get relief. I visited many doctors in Karauli as well as in Jaipur and followed their treatments. Right now I have 15 X-rays to my credit. When I took medicine, I got relief and started working. But after few months again, I had shortness of breath. Now I am not able to walk even 10 steps and not able to lift 5-kg weight. From past 1 year, I had not visited any doctor because of short of money.
>
> I earn Rs 25,000–30,000 a year. Our work is from Diwali (October) to Holi (March). In the summer season, it is very difficult to work and after that rainy season starts. During rainy season, mines submerge with water and it is difficult to work. So during those days, miners, who have lands, work at field.
>
> Now my wife is working as a daily wager. I haven't gone for work from last 3 years. I have an outstanding debt of 2 lakh. My children are not going to school because of the economic problem. I have one small room, so I can't abstain my children and wife from myself during my illness. Now my wife too has become fragile.
>
> Five years back, mine agent captured our home because I have not paid his loan. Then, we shifted to my wife's home but they too did not allow me because of my illness. Then, I stayed outside and slept on road. "Everyone hates you when you are ill." After 1 year, some of my relatives arranged money and compromised with the mine agent. Then, we came back to our home.

Chetram, like many miners from poor and marginalized communities in Rajasthan, faced significant challenges for his livelihood. Average age of miners have been estimated to be 52 ± 13 years.[3] There is a workforce of about 2.5 million in mining sector in Rajasthan,[4] and they drill, blast, crush the larger stone to smaller one, and load/unload slab from vehicles.[1] Due to unskilled nature of job, poorest of the poor turn into mining. Most of the workers are Dalits (scheduled caste) and tribals (scheduled tribes).[4] A study conducted in Jodhpur found that sandstone miners were generally either illiterate or had less than primary education and were addicted to substance abuse. Average household size of sandstone miners was found to be five.[5]

Stone crushing operation creates a large amount of dust that contains silica in the range of 20%–70%.[1] Particularly, sandstone contains 67% silica,[6] which leads to respiratory diseases such as silicosis and TB that directly are related to the degree of exposure to silica dust.[1,6,7] Silicosis is associated with breathlessness, chronic bronchitis, recurrent chest illness, and heart failure. Other complications among miners can be TB and microbacterial infection. Chronic silicosis involves at least 15 years of silica dust exposure.[8] Occupational diseases such as TB and silicosis among mine workers are common.[9–13] Saiyed and Tiwari[14] suggested that the prevalence of silicosis among stone quarry workers was 21% and that among stone crushers was 12%. Medical expenses on these diseases increase the chance of unpredictable fluctuation in the household earnings.[13]

The reliable data about these mine workers are not properly maintained so the details of employment history are also unavailable.[1] Only medical professionals did most of the studies. Hence, no such study is available that gives information about the social and economic condition of miners. Now a days, some of the non-governmental organizations (NGOs) such as MLPC and DVS are working for mine workers in this area. Through DVS campaign, state government agreed to provide Rs 00,000 to each silicosis patient and Rs 300,000 to widows, and to grant them below the poverty line status that would make them eligible for various social welfare schemes.[2]

Conclusion

NGOs are not able to reach everywhere. Most of the miners are unaware of diseases they have. They still think it is TB. Doctors were treating them for TB and making money out of poor miners. This treatment lasts for many years and miners are heavily in debt.

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