



Neglected Domestic Chore of Women and Its Health Impacts: An Exploratory Qualitative Study from Rural Maharashtra

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Financial Support: Tata Trusts
Conflict of Interest: None declared
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How to cite this article:
Jadhav AV. Neglected Domestic Chore of Women and Its Health Impacts: An Exploratory Qualitative Study from Rural Maharashtra. Natl J Community Med 2018; 9(4): 288-293

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Date of Submission: 23-03-18
Date of Acceptance: 22-04-18
Date of Publication: 30-04-18

ABSTRACT

Introduction: In underdeveloped rural areas most of the work is powered by human energy and women need to contribute a lot. There is literature gap regarding the effect of such strenuous lifestyle on their health, especially on Musculo-Skeletal Disorders (MSDs).

Methodology: It was an exploratory qualitative study in two villages with 29 women, through a pre-tested, semi-structured interview schedule.

Results: Apart from contributing to farm activities, women have to work hard towards domestic work, fetching water, care of domestic animals, bringing fodder and firewood. Most of these are very strenuous tasks but women ranked bringing fodder, firewood and water on the top-list of difficulty. There were many MSDs in this group and health-seeking was not effective due to lack of proper health care facilities.

Discussion: The excessive burden of MSDs appears to be due to harsh domestic working conditions. Most of the strenuous physical activities can be reduced if basic facilities like water and cooking gas connection are made available at door-step. There is a need for further scientific investigation of this problem and better implementation of rural programs towards access to water, cooking gas, fodder and health care to reduce the drudgery.

Key-words: Musculo-skeletal disorders, Women's health, Domestic work, Rural health care

INTRODUCTION

The group of Musculo-Skeletal Disorders (MSDs) is one of the most common chronic health problems with a very high burden of suffering, cost, and disability.¹⁻³ Globally, the prevalence of low back pain (LBP) is very high in this group^{4,5} and women take a higher burden of this health problem, especially in the age group of 40 to 80 years.⁵ MSDs are studied mostly with occupational health perspective informal or semi-formal sectors with the focus on occupational hazards. In developed countries, a lot of work has been done on MSDs from various angles including absenteeism, medical compensation, preventive measures at workplaces, scientific norms to reduce the risk among workers and so on.⁶⁻⁹ But when it comes to unpaid

and unaccounted domestic work, there are hardly any studies. This is mainly due to the fact that such risks in domestic set-up exist in low and middle-income countries where research inputs are low. Also in such countries, public health priorities are very different due to the huge burden of other groups like infectious diseases. Therefore the perceived importance of burden of MSDs is relatively less. When it comes to research focus, such diseases are neglected, and also foreign experts are not willing to engage in domestic hazards of these deprived areas. Even the recent MSD research frameworks¹⁰ do not focus on related hazards in domestic domain nor do they have the gender perspective. It is typically assumed that domestic work of women is a relatively safe task. Although

it may be true in the developed world, unfortunately in underdeveloped areas domestic work is altogether a different struggle. Life of women in rural areas is burdensome but neglected from the health perspective. In underdeveloped rural areas carrying heavy weight for distances is a very common strenuous activity on a daily basis. Health effects of this drudgery have not been studied much and have never been inquired from an ergonomics perspective. This strenuous work over an extended period is likely to have a cumulative effect on the bodies of these women leading to various disorders. However, in low and middle-income countries there is hardly any focus on this specific issue due to the high burden of other diseases. Most of the public health programs for women are around maternity related themes.

There is an effort to decide maximum load bearing norm for women in occupational set up in India, which is 15.4 kgs.¹¹ But in domestic set up women are helpless, and their daily needs are in complete control of their physical activities. Because of these difficulties, there is no detailed ergonomics data or studies available for India.

It is essential to study what kind of physical activities are involved in routine domestic work so that hazardous ones can be identified. This exploratory study tries to understand domestic context, type of tasks that rural women have to undertake and its impact on their health. An attempt has also been made to understand women's perception about most strenuous tasks.

METHODOLOGY

This was an exploratory qualitative study conducted in two villages which were chosen purposively. One was Bublī village in Sargana Taluk of Nashik which is a tribal village with 223 families & 671 females as per 2011 census. The other village was Undargao of Lohara taluk in Osmanabad district which is in a drought-prone region with 298 families and 598 females. Both villages are selected as they are in relatively underdeveloped areas. Data was collected using a pre-tested semi-structured interview schedule in the local language (Marathi). Women with age more than 25 years were included with the assumption that it takes at least few years of strenuous work to affect health. It was a community-based study and women were identified by going in all major roads from the central point of the villages approaching every alternate household from the end of the road. It was predetermined that at least 12 women from each village will be interviewed. Women who were in professional or regular jobs were excluded, as their physical activities at the job may add to the ad-

verse health effects. Among the 29 participants, 15 were from Bublī, and 14 women were from Undargao.

The participants were expected to be with low levels of education, and it was known that there would be reluctance and fear in these communities about signing any document and hence only verbal consent was taken after explaining to them all the details and purpose of the study. Data was collected on relevant demographic details, daily physical work, health complaints and coping mechanisms towards those health problems.

RESULTS

Demographic details

The age range of the participants was 25 to 85 years with mean age 54.2 years. Higher mean age was mainly because of the inclusion criteria and also because more elderly women were available while younger women were on farms during daytime; though there were nine women younger than or equal to 40 years of age. Education range is from no schooling to graduation with 20 women without any schooling, 2 with less than 5th class education, six women between 5th to 10th class and one woman completed graduation. Among the participants 14 belonged to ST, 2 were SC, 7 were OBC. Among these women, 18 were from below poverty line, and rest were marginal poor; 25 women were currently married, and four were widows.

Daily work and hardship-

Most of these women said that they start their day very early. Daily activities were divided into four main categories. Those were- work in the house, work in the house premises, work towards the care of domestic animals and work outside house premise. Out of all the respondents, 28 had kachha house, and 11 did not have electricity. These kachha houses need regular maintenance in the form of limping with cow-dung and filling the walls, both from inside as well as outside; all of which is done by women. There were six families with one room, and 16 had two room houses. Lesser the number of rooms, higher is the reliance on house-yard, and it needs to be maintained on a daily basis.

One respondent narrated, "I wake up at 4 am. It takes three hours for me to fetch water as I have to make 5-6 trips with two pots... one on the head and one on the waist. Then I sweep, mop and clean the house. Make children ready and send them to the school. After finishing cooking etc. I have to leave to the farm by 10 am... If I go late, then I will have to work in the hot sun for a long time."

There were only seven out of 29 respondents who had LPG gas at home for cooking (mostly in Undargaon), and rest of 22 women were using firewood and earthed stove (*Chulha*). Even a small family of four needs around 20 to 25 Kgs of firewood per day. Apart from cooking this also serves for heating water for bathing etc.

Another woman explained the difficulties related to firewood gathering. *"We need to go far away. Forest people have banned us, but we cannot survive without firewood. Sometimes I mangle with small branches gathered from here and there and dung cakes but I have to go to the other side of the hill and carry as much as I can."*

These chores are central to the lives of these women and they spend whole life doing these tasks without any gap. One 85 years old lady said, *"Now I take rest due to my age... I just bring two pots of water for my needs and prepare two jawar-roties...that's it"*. Even in old age women have to contribute to the daily tasks.

Hardship in fetching water

Out of 29 respondents, only 11 had tap in-house premises, and most of them were from Undargaon. Those who had tap reported that water used to come once a week or even at a greater interval. None of the respondents was not entirely relied on tap and all of them needed to go out to fetch water daily.

Among these 29 women, 14 said that the distance was more than or equal to 2 KMs from house to regular water source whereas ten women said the distance was half a kilometer or less. Roughly every woman needs to make around five such trips a day. The number of trips varies depending upon on season, the number of family members, domestic animals, etc. The distance also changes with the seasonal source of water. In dry season women have to walk long distances.

"Usually we bring water from nearby hand-pump but in summer the pump dries up, and water becomes less. One needs to pump a lot, and only a trickle of water comes. This increases the line and takes our time. We have to wait for our turn... in the hot sun. At times we have to walk to the well which is further away..."

There are 11 respondents who do not have a toilet in their house, and 12 do not have a bathroom. One of the reasons might be the lack of access to water. Lack of access to water compromise the access to toilet and bathroom. This affects community health due to sanitation and hygiene related issues.

One woman explained the trouble in getting water in dry season. *"In summer there is huge problem... we buy water from those who get the tanker... at the rate of 100 rupees per barrel. That water is dirty. We cannot*

drink that water. In summer we literally don't get drinking water."

Agricultural work

Among the respondents, 24 had some agricultural land in the family and 21 primarily depend on agriculture income. Whereas four respondents do not have agricultural land and they depend mostly on manual work for income which is done by men in the families.

"I participate in most of the work on our farm. All the tasks are very laborious and in bending position. At times I work on neighbours farms. Here the rate for working in the farm is Rs.150 per day. If I do not go to work on their farm, why will they participate in my farm related work? Though this is monetary, it is like helping as well. You won't get outsider labors here. We have to help each other ", one respondent was explaining about work that women have to do in farms in her locality.

These women are aware that their life is harsh compared to most of the women in cities. *"Sowing, planting, weeding, deseeding, etc. all the tasks we have to do. All of these tasks are very harsh and strenuous. I can challenge any woman from city to do all these tasks... I am sure they will run away."*

This agricultural work is superadded to their daily work making lives really tough. It keeps them occupied constantly affecting their health.

"After finishing all the work at home, I have to go the farm. I have to participate in almost every task there. At times we have to water the field by hands when electricity supply is not proper (fetching water from a well and pour it by hand in a systematic manner so that crops do not die). Then my low back pains a lot. This is a very difficult task. Sometimes we have to take help from a couple of more labors and pay them."

Work related to domestic animals

Out of 29, respondent 19 had domestic animals. Only five had milk-producing animals. Most of these people had a pair of oxen which is crucial for traditional agricultural practices.

"We feed them with grass n paddy... Processing dung and maintaining stable is also a big task. One ox drinks two buckets of water in a day. How much ever you give them they will eat. However, we have to make sure that they are well fed at least in rainy season as they have to work hard for that duration."

One ox needs at least 20 to 25 Kg forage per day. This needs to be added with a couple of kilograms of special diet with high protein and fat like groundnut or cottonseed oil-cakes. Women explained how much work is required to maintain the domestic animals.

"I give them water, wash them every 15-20 days... Keep the stable plain and clean, take the dung out and make it into the dried cakes. I feed them paddy, grass and prepare the forage... take them to graze in rainy season ". One respondent was giving the details of tasks she does on a daily basis to maintain her oxen.

One woman explained the difficulties in maintaining these animals and how it stretches their capacities. "Now we have sold our pair. They became old, and we did not have money to take care of them... But when those were with us, I used to do all the work and took good care of them... however, in summer there used to be problems always. Even we do not get water for ourselves at times. It used to be a big problem to manage water needs of those animals."

Most strenuous daily tasks

Among all the responses it was evident that bringing firewood was the most cumbersome task. It involves going to the jungles in the parts where forest police do not trouble them much, collecting dried branches make it into a bundle weighing at least 20 to 25 Kgs and bringing it home over the head using a treacherous path.

"When branches are wet, the bundle weighs around 30-35 Kgs. Neck and low back get stiff and tight... then they start paining. Bringing water is also hectic. One needs to walk a lot to fetch water..."

Brining paddy which is used as fodder was next thing among "most strenuous task." As most of the houses had domestic animals, it is a daily task to bring fodder. One ox consumes around 20 to 30 Kgs of forage and 20 to 30 Lit water per day. Maintaining a pair of oxen is a logistical challenge for a small farmer. Some people keep animals on farms; then it is relatively easy. However for safety reasons many keep them at stable inside house premise and in that case the women need to take major responsibility.

"Bringing straw bundle and bundle of firewood is the most strenuous of all. Typically a man cuts the straw, ties a bundle and gives on the head of the women to carry it to the stable. "

Another respondent said, "In summer all the tasks become problematic and exhaustive. Other seasons are better comparatively... However, bringing paddy bundle is very tough. It makes me tired..."

Fetching water and working in farms were the next tasks in this list.

Health complaints

This hard lifestyle ought to have some ill-effects. One can expect higher MSDs in such a population. "As I work hard, my neck, low back, hands, feet everything starts paining. Amongst all neck and back hurt a lot. Sometimes leg also hurt especially in the evening..."

If I get rest, then things become better." One 40 years old women from Bublinarrated.

Table 1 gives the frequency-presentation of various health complaints as given by the respondents. They were asked to tell about all existing health problems they had at that point in time. On an average one participant had 2.6 complaints.

Health sequelae and coping

Women don't have the option other than doing their daily arduous tasks. Taking rest or break is out of the question. A couple of women said that they massage with oil or apply medicated ointments to the hurting body parts when the day ends but that does not help much. When pain becomes intense, they go to the PHC and get some pain-killer pills or injections. Sometimes women directly demand (painkiller) injection to the nursing staff, and s/he complies with it and additionally give painkiller pills. This is a common practice at PHC. If the pain is persistent for long or aggravates, they need to go to the city.

"After work, my back hurts. When it becomes unbearable, I have to go to the hospital for an injection. The doctor says take rest. You tell me... should I take rest or stay hungry?"

One of the respondents who had chronic LBP said, "I cry... I have been admitted to the hospital. If it pains I take pills and then again start work... whatever I can. "

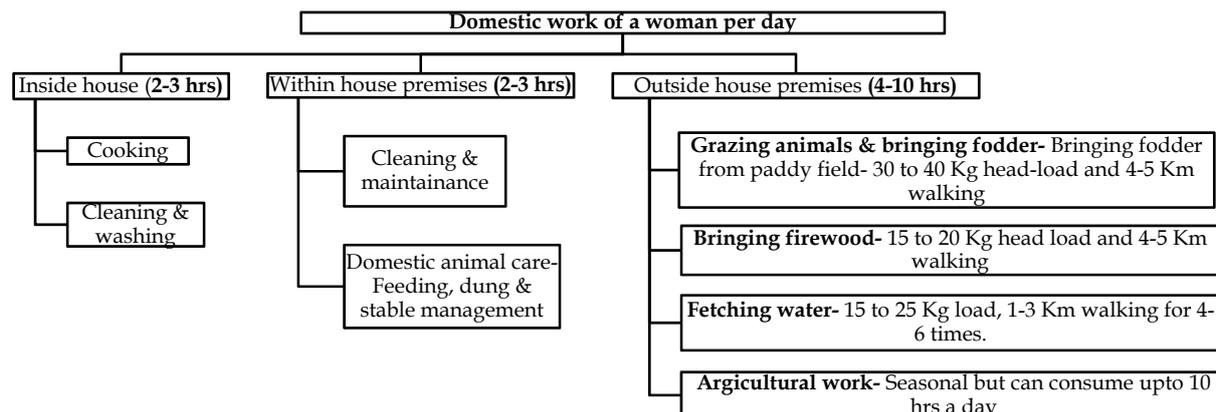
Another woman added how tobacco helps her in bearing her pain, "When I fall sick, my daughter does the work. Without Misarii (locally made powder with tobacco and other things, to be applied to the gums) I don't feel good. It feels good to have it after much work. It has become a habit since long. Most of the women take it here. I take it 4-5 times a day, after a while, I spit it out." Most of the women in Bubli village use Misarii which has tanned their teeth and blackened their gums.

Hospitalization and Women's perception

Out of these women, 14 were admitted to hospital for various health problems other than obstetric reasons. Out of these, three women were admitted for MSDs, and all of them have been admitted at multiple times for the same illness. One was for LBP, One for LBP and neck pain and one for recurrent joint pains.

Out of 29 women, 24 expressed that the daily work is a contributing factor to their health problems whereas three women gave a negative answer and two were undecided. Most of the women were aware that their strenuous lifestyle is affecting their health in an adverse manner.

Figure 1 Diagrammatic presentation of Work hours



Source- Original/ Primary study

Table 1 Frequency of health problems among participants

Health problem	Frequency
Low Back Pain	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22
Headache	1, 2, 3
Knee joint	1, 2, 3, 4, 5, 6, 7, 8,
Eye problem	1, 2,
Neck pain	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
BP	1, 2, 3
Other joints	1, 2, 3, 4
Leg pain/weakness	1, 2, 3, 4, 5, 6, 7, 8, 9,
Excessive fatigue	1, 2, 3, 4, 5, 6,
Thyroid problem	1
Breathlessness	1, 2
Chest burn	1, 2
Numbness in extremities	1, 2, 3

Source- Original/ Primary study

DISCUSSION

This study throws light on the real situation, hardship, and status of rural women’s health. Finding direct association or attributable risk between domestic work and MSDs was not expected, but this study directs towards the need for such studies and points towards the literature gap in the context of rural India. It was found in recent Global Burden Study that MSDs is the second cause, after iron-deficiency anaemia, among Indian women which has the highest burden on Years Lived with Disability- YLD index, a morbidity burden measure.¹² Both these measures are higher for women. This indicates relevance of focusing on the issue of MSDs of women.

Women in underdeveloped areas need to work hard towards bringing fodder, firewood, and water to their house and these are very strenuous tasks. They also have to contribute to agricultural activities and care of the domestic animals. Overall this becomes very hectic daily schedule and

strenuous lifestyle. The vulnerability of women is partly shaped by social norms but get aggravated by lack of access to basic amenities like LPG. Harsh and strenuous daily work increases their risk for various health problems and the worst health outcomes. There is a complete absence of specialist health care at grassroots and primary health care is very rudimentary.¹³ Going to cities for health care has a considerable opportunity cost for the families. This translates into the higher incidence of MSDs and disability, degrading the quality of life further.

There is a need for understanding this phenomenon better through more scientific studies so that interventions can be established to prevent these diseases. However, first one needs to recognize the burden of domestic work on women, especially in rural areas. Various frameworks for research in MSDs focus on occupational hazards and emphasize on standardization of various physical activities, but none explores the method to study hazards in the domestic sector.^{6, 14 - 17} There is a need to understand MSDs outside the restricted frame of formal or informal occupation. There exist vulnerabilities and risks outside this domain at a greater scale. It is made evident by the study that there exist risks in the domestic sector which can translate into the related diseases. However, there are no preventive efforts on this front as this aspect of MSDs is not focused at all in preventive intervention. A framework for research as well as for prevention of MSDs needs to be evolved based on evidence from specific studies on domestic sector focusing women. The primary reason to neglect this issue could be the difficulty in assigning responsibility towards the ill health of women due to domestic work. An additional reason could be difficulty in applying and monitor norms which are used in the formal occupational sector.

Some rural parts in India are yet to be touched

with development progress. Human life is laden with poverty driven misery and absence of basic facilities and related government programs. Both men and women have their specific vulnerabilities and hazards which affect their health. Identification of preventable hazards should be the focus so that interventions can be built around it. These interventions can be of certain types. Improving access to essential amenities like water at the doorstep, LPG supply, electricity and fodder for domestic animals can some of the efforts. Already existing programs for rural development has these focuses, and if implemented well these hazards can be reduced. Another step can be the introduction and subsidizing agricultural instruments which can reduce the hardship. Making people aware of early signs of the MSDs and Improving health care facilities is a crucial and needed step.

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