

# Barriers to childhood vaccination as perceived by accredited social health activists and multipurpose health workers in Mewat, Haryana (India): A qualitative research

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## ABSTRACT

**Background:** As compared to other parts of the country, vaccination coverage and literacy rate in district Mewat, State Haryana (India) had been low, that is, 20.8–27% and 54%, respectively. National immunization program of the country was being implemented primarily through the field workers, and accredited social health activists (ASHAs) were one of the key grass root level link workers. **Aims:** Hence, this study was carried out with the objective to identify barriers to childhood vaccination by field staff in field practice area of SHKM Govt Medical College Nalhar, Mewat as perceived by ASHAs and health workers. **Methods and Material:** The current study was a qualitative research which was conducted in the field practice area attached to SHKM Government Medical College Nalhar Mewat. Focus Group Discussions (FGDs) were carried out among health workers (MPHW-F/M) and ASHAs. **Statistical analysis used:** None. **Results and Conclusions:** The barriers to childhood vaccination as identified in the study are pain during vaccination and other side effects, additional expenditure on treatment of side effects, worsening of interpersonal relations of the functionaries (workers/ASHAs) with the beneficiaries, extra work burden, unawareness of the benefits of vaccination, myth/belief of potential risk of impotency in adulthood, denial by elders, lack of cash benefits, inaccessibility to vaccination services due to remote work places, people's beliefs in supernatural causes of childhood diseases, delayed BCG vaccination, etc., The barriers to childhood vaccination from the perspective of ASHAs and health workers are explored and identified which can be utilized in tailoring the efforts and strategies to improve the vaccination coverage.

**Keywords:** ASHA, barriers, childhood, immunization, Mewat, MPH, program, vaccination

## Introduction

District Mewat was characterized by high birth rate in comparison to other districts/other areas of State of Haryana in India, and as a result, proportion of beneficiaries for vaccination services

was also relatively higher with infants and children below 6 years constituting 22.29% of the total population [Census 2011].<sup>[1]</sup> In spite of the consistent efforts by the Govt, vaccination coverage in district Mewat was far less, that is, 20.8–27%, as compared to rest of the state of Haryana.<sup>[2]</sup> Moreover, hesitancy and resistance to vaccination had been reported time to time as per the field staff of PHC Nagina and Tauru. Low literacy rate of 54.08.10% (males = 69.9%; females = 36.6%)<sup>[1]</sup> in the district might contribute to the ignorance and blind beliefs or myths among the beneficiaries families and society, who might be

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living in closed shells, simply cutoff from the public healthcare, so much so that the general population won't be even aware of the ill health, facilities, and immunization programs operating around them. Barriers to vaccination can be because of its side effects, for example, pain, swelling, lack of knowledge, etc., or in the form of misconceptions about vaccinations like—it weakens the child's immune system or causes other chronic disorders like asthma, diabetes mellitus, etc.<sup>[3]</sup> As National immunization program is being implemented through the field workers and accredited social health activists (ASHAs) and because the ASHAs were one of the key grass root level link workers, it was warranted to know their viewpoints as to why the beneficiaries didn't come forward for vaccination. The current study would contribute to advancement of knowledge regarding the barriers to vaccination with the aim to improve the vaccination coverage. Hence, this study was carried out with the objective to identify barriers to childhood vaccination by field staff in field practice area of SHKM Govt Medical College Nalhar, Mewat as perceived by ASHAs and health workers.

## Subjects and Methods

### Study area and duration of study

The current study was a qualitative research which was accomplished in approximately 1 year. This study was conducted in district Mewat in the area served by Primary Health Center Tauru and PHC Nagina. This area was also the field practice area attached to SHKM Government Medical College Nalhar Mewat for teaching, training, and research purposes.

### Study design and data collection

Information like list of names and contact numbers of various key grass root level health functionaries in the area was collected from the records of office of Senior Medical Officer Community Health Center (CHC) Nuh/medical officer in-charge (MOI/C)/lady health visitor (LHVs)/etc. of respective PHCs. Focus group discussions (FGDs) were carried out among the various sections of grass root level service providers, that is, health workers (MPHW-F/M) and ASHAs to bring out the barriers to childhood vaccination in the area. The above stakeholders who were ready to participate voluntarily were included in the FGD. For the FGDs, the functionaries, as mentioned above, who were working/staying in the field practice area of interest for more than 6 months and were ready to participate voluntarily were included in the study. Investigators themselves moderated/facilitated the FGDs. To collect data efficiently, trainings and hands on practice for note takers and moderators was done in the department of community medicine. Open-ended discussion guide was used for FGDs to bring out the responses of the participants, to keep the discussion focused and to explore the picture of the barriers in the community. Prior to the start of FGDs, necessary preparations were made, for example, finalizing the venue for the FGDs, or informing the participants through multipurpose health supervisors/ASHA facilitators (ASHA coordinators)/MO I/C, etc., Participants were selected by purposive sampling

in such a way that participants from each of the sub-centers in the area were recruited for the FGDs. Further recruitment of the participants for FGDs was stopped when new information was no longer generated by the FGDs. Total number of FGDs conducted among participants and the group size are described in Table 1. When new responses were not there, further FGDs were not carried out. Schematic seating arrangement and the identifiers used while carrying out FGDs are shown in Figure 1. Written field notes, including photographs of the FGDs, were taken which were later transcribed by note-taker/facilitator. The field notes were then translated into English and interpretations of the statements were made.

### Data management and analysis

The data so collected was collated and analyzed manually to bring out the results and draw conclusions.

### Ethical considerations

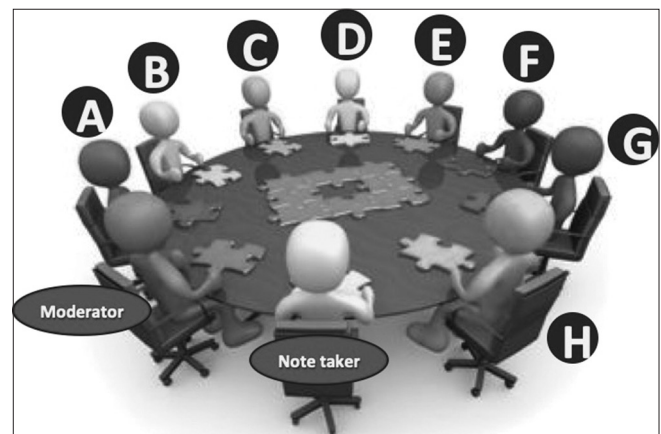
The confidentiality of the participants' individual responses was maintained. Written informed consent (in Hindi) to participate voluntarily in the study was obtained from individual participants. Prior approval from Institution Ethics Committee was also sought. Date of the approval = 24-05-2014.

## Results

The results compiled here are the interpretations on the basis of field notes and expanded notes. At places, the original verbatim statements narrated by the participants have been presented and are italicized. Some of the beliefs, as had been found in their FGDs, may be in common to both ASHAs and MPHWs, but they are presented here separately for a better understanding on the topic.

### Barriers to childhood vaccination as perceived by accredited social health activists (ASHAs)

- **Pain during vaccination and the post-vaccination side effects:** The care takers of beneficiaries get



**Figure 1:** Schematic seating pattern of the participants, moderator and the note taker and the identifiers used while carrying out Focus Group Discussion

**Table 1: Description of number and size of the focus group discussions (FGDs)**

| Type of participants | Number of Focus Group Discussions | Total participants in each group. |
|----------------------|-----------------------------------|-----------------------------------|
| ASHA*                | 4                                 | 10-12                             |
| MPHW - F/M†          | 2                                 | 10-12                             |

\*Accredited social health activist; †Multipurpose health worker – male / female

scared of vaccination seeing the child in pain during vaccination (particularly with the penta valent vaccine) and post-vaccination side effects e.g, swelling, fever, tenderness, pain.

*“Jab bhi kisi ek bacche ke penta lagta hai, uske gaanth ban jati hai, jo ki babut dard karti hai aur baccha chal bhi nahi paata. Ek aise bacche ko dekh kar fir baki sabhi gaon waale teeka lagwane aate hi nahi.”*

*“Ek baar sooj gayaa to fir log nahi aate teeka lagwane”*

- **Further expenditure on side effects:** People have to pay private doctors to get rid of the side effects. They find it totally useless to get shots and then waste their money by paying the private doctors.
- **Extra work burden:** Also, if the child got sick it would add an extra work burden on the family as it required more spending of time with the children first for going to the center for getting the vaccination done and then for getting treatments for the side effects and they (care takers of beneficiaries) would not be able to manage their work.
- **Worsening of interpersonal relations of the functionaries (workers/ASHAs) with the beneficiaries:** Care takers of the beneficiaries children believed that ASHAs made their children suffer from pain and fever just to make their money only. This resulted into worsening of their relations with the beneficiaries due to which the beneficiaries did not come forward for availing the services of vaccination.
- **Unawareness and invisibility of the benefits of vaccination:** No effect of the counselling/health education done by them or other functionaries because the side effects were visible, whereas the benefits were not visible.
- **Myth/belief that there was a potential risk of impotency in the child due to the vaccination:** Reasons for this belief were further explored among the participants. As perceived by the ASHAs, it could be the lack of awareness about benefits of vaccination and that the same workers were providing services for promoting family planning methods as well as the vaccination.
- **There is no mention of vaccination in the religion of beneficiaries:** On the issues of ambiguity when people are in dilemma, they tend to go by the practices advised in the religion only.
- **Elders in family did not permit:** One participant also told that the elders in the beneficiaries' families did not use to permit the young generation to vaccinate their kids.
- **No provision of cash benefits:** There were no cash benefits for the care takers in lieu of getting their children vaccinated.
- **Inaccessibility to vaccination services due to distant work sites:** One of the participants also expressed that

most of the parents were laborers or farmers and had to go to forest/remote area to work for their livelihood. It is very difficult for them to walk around more than 1 km, especially in this scorching heat, to come for vaccination. Therefore, they demanded that health workers should come to their place to provide vaccination as they have the transportation facility available with them.

But, another participant disagreed with this view saying that it was the thinking/belief of those people (beneficiaries) which was required to be changed.

*“Even if we went to their houses for vaccination at the time when they are available, they would refuse.”*

### Barriers to childhood vaccination as perceived by multipurpose health workers (MPHWs)

#### • People's beliefs in supernatural causes of childhood diseases:

People were of a belief that anything which was done would be done by almighty God and it was the wish of the God whether the child was free from disease/death or not. The causes of childhood diseases, as understood by many people is supernatural.

- **Side effects** after initial doses of injectable vaccine doses like: swelling, fever, and pain to beneficiaries' own or other's children.

One participant was of the view that -

Some people believe that while they were not vaccinated during their childhood and nothing happened to them and so their children also didn't require vaccinations. People took vaccination as a bad tool/intervention as it caused only the harm and without any benefit.

- **Poor personal hygiene among beneficiary children:** Infection of the vaccination site, which generally occurred because of poor local personal hygiene maintained by the families. A single case of infected vaccination site would then deter many other families from taking the shot.
- **Beneficiaries were unaware of the benefits of vaccination.**

The people had the belief that the health workers were doing vaccination for their personal interests because they would get incentives or salary for that and that there was no benefit to the child by vaccination.

A participant said:

*“Logon ka sochna hai ki behenji apne fayde ke liye humey samjhaa rahi hain kyunki aisa karne ke unhe paise milenge. Isme unka koi fayda nahi hai.”*

- **Lack of satisfaction with the services provided at Anganwadi centers:**

Due to one or the other reasons of non-availability of ration (Supplementary Nutrition) at Anganwari centers (AWCs), the beneficiaries families were not satisfied with the services at the AWCs. As immunization outreach camps were also organized at AWCs in the villages, they didn't come for vaccination as well.

- **No provision of cash benefits:** People were of the attitude that they didn't come for availing the services of vaccination because they were not getting any incentives by vaccination.
- **There is no mention of vaccination in the religion.**
- **Fathers or other male members in the family do not permit:** The husbands of the mothers of the children or other male family members did not want it and did not allow for vaccination of the children. And in case the mothers went against them, the family members might quarrel or even beat them.
- **Delayed BCG vaccination:** A participant was of the view that delayed vaccination itself was emerging as the cause of drop outs and left outs because BCG if given at a later age, caused more pain and infection of vaccination site.  
*“BCG ka teeka bhi kuchh mahiney baad, lagbhag 6–7 mahiney pe lagaana padta hai. Is time pe dard zyada hota hai. Bahut hi kam bacche hain jinko janam ke samay hi BCG lagta hai.”*
- **Expectation for absolute prevention from diseases after childhood vaccination:** The beneficiaries had incomplete awareness regarding beneficial effects of vaccination like specific protection against diseases, and thus believed that no disease (including common cold) should be caught to their children if the vaccination had been done. Thus they didn't count the beneficial effects of vaccination.  
*“Log sochte hain ke teeka lag gaya to inke bacche ko jukham bhi na ho.”*
- **Apprehensive myth/belief of a potential risk of impotency in the child due to the vaccination**
- **Large family size:** One participant explained that the families were quite large and that the mothers had to take care of the whole family. They had many children in the family, that is, around 10–12 kids per family and it became hard for them to manage their household chores along with field work. If any child was required to be brought to the vaccination session site or if the child fell sick after the vaccination and/or needed more care, it would only add to their existing work burden. Hence they were hesitant about vaccination of their children.

## Discussion

District Mewat, in comparison to other parts of the State Haryana, had different sociocultural milieu. Around 89% of the people in Mewat are living in rural areas.<sup>[1]</sup> As per a previously conducted survey results, out of the total population living in rural areas of Mewat, ~26% and ~74%, respectively, were the Hindu and the Muslim population.<sup>[4]</sup> Vaccination coverage in the district as per DLHS – IV was low, that is, 20.8–27%.<sup>[2]</sup> The

barriers/beliefs identified in the current study and the findings of the relevant studies are discussed here.

Some of the barriers to childhood vaccination identified in different studies are the miseducation and misconception of patients, concerns about vaccine safety, for example, myths about risk of autism, pain due to vaccination, lack of access to immunizations, and the perception that vaccines are unnecessary, or the unawareness of risks of not vaccinating the child, etc., Paradoxically, it is also viewed that the success of vaccinations in preventing disease may be one of the reasons for vaccine refusal.<sup>[5]</sup>

In a qualitative study conducted in two States in Nigeria, Africa data was collected with the help of variety of methods, that is, by carrying out observations ( $n = 40$ ), in-depth interviews ( $n = 14$ ), and focus group discussions (FGDs) ( $n = 12$ ) amongst 14 purposively selected health workers, two community leaders, and 84 caregivers in the two states. It was found in the study that the issues related to poor communication skills; poor motivation; and attitudes of community members, including vaccine resistance were perceived by the health workers as the factors which affected delivery of childhood vaccination communication messages and hence, the vaccination. Barriers to receiving vaccination information as perceived by some caregivers were identified to be the clinic environment, long waiting times, and health worker attitudes.<sup>[6]</sup>

In a community-based quantitative cum qualitative study conducted in the slum areas of Mumbai, India, data was collected from multiple sources/methods, including in-depth interviews of healthcare service providers, with the aims to explore major barriers, potential opportunities, and key facilitators of childhood immunization in slums by using qualitative approach. Lack of time, lack of awareness, fear of adverse event, loss of daily income, and migrant population were identified as some of the major reasons to not get immunized. Lack of good behavior of staff was also one of the factors perceived by caretakers as barrier in the immunization.<sup>[7]</sup>

Another qualitative study was conducted to explore determinants of vaccination among undocumented immigrants. In the study, interviews were conducted of seven undocumented parents recruited at non-governmental clinics, three nurses at Child Health Centers, and retrieval of information was done from some key stakeholders. It was found in the study that undocumented parents had a positive view and attitude toward childhood immunization but expressed strong fear of being asked for identification papers at healthcare facilities. When seeking care for their children, parents were incorrectly rejected by health personnel because they didn't have the knowledge on entitlements of the undocumented community. The undocumented had limited access to the complete immunization because of their frequent mobility. Undocumented parents mistrusted healthcare providers and avoided health facilities, which further delayed childrens' access to vaccination and other

healthcare.<sup>[8]</sup> Vaccination *per se* is not confined to children, and some more studies relevant to the identification of such barriers have been conducted in the recent past.<sup>[9-12]</sup>

As the current study provides with better understanding of the barriers to delivery of one of the key elements of primary health care, that is, vaccination against major infectious diseases, the findings would be helpful in further improvement in the practice of primary healthcare.

### Limitations

For better understanding on the topic/problem, thorough in-depth exploratory data could also be collected from the beneficiaries' care takers/mothers, heads of households, and other parallel grass root level functionaries, for example, Anganwadi workers or helpers, etc., The findings of the current study are only the barriers/beliefs and can be partly helpful in solving the problem of poor immunization coverage. However, for finding more appropriate solutions and the views of the various stakeholders on this, further FGDs would be required.

### Strengths

As population of the district Mewat and the health work force are more or less homogenous, and the vaccination coverage is low in district as whole,<sup>[2]</sup> the findings provide understanding of the beliefs of the whole district.

### Conclusions and Recommendations

Various barriers to childhood vaccination from the perspective of ASHAs and health workers in the field practice area of SHKM Govt Medical College Nalhar, Mewat are explored and identified as presented. The current study contributes to advancement of knowledge in better understanding of the barriers to childhood vaccination, and hence, more likelihood of overcoming them and further preventing the disease burden and health care cost. The identified barriers can be utilized in tailoring the efforts and strategies to improve vaccination coverage in the areas of Mewat. Further research involving other stakeholders and beneficiaries and quantification of the various barriers is required for broader understanding on the topic.

### Disclaimer

The findings and conclusions, etc., mentioned in the article are those of the authors only, and do not necessarily represent those of the organisations to which they belong.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

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