DISSERTATION REPORT

Under the guidance
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A Study on-

The Assessment of Reason of Refusal for Indoor Residual Spray in Patna, Bihar

INTRODUCTION

- Kala Azar, a protozoan disease is the second largest parasitic killer in the world after malaria and remains to be a poor and neglected disease.
- Bihar is the most endemic state for VL in India, contributing to more than 85% of cases.
- Current goal of Government of India is to reduce annual incidence of all Kala Azar cases to less than 1 per 10,000 per year and subsequently, eliminate it by 2017.
- SKAEP started with GoB and private stakeholders in 2013, CARE one of the supportive partners to GoB for providing technical assistance.
- Major way of controlling Kala Azar-quality and coverage of Indoor Residual Spray- however even after various interventions of government these remain poor
- Various reasons for refusal of IRS among community- low quality and coverage of IRS- jeopardizing goal of elimination by 2015

RATIONALE

- Despite the various efforts by the government to control the case incidence of the disease, a huge number of cases are diagnosed with Kala Azar every year.

- The most important way to control the disease and eliminate the vector is through Indoor Residual Spray. However the coverage and quality of IRS in the state is very poor owing to high rates of refusal cases

- Although Patna is a mid-endemic district, to achieve elimination, low and mid-endemic districts have to be targeted first. The refusal rates of Patna are very high

- This study attempts to understand the various reasons for refusal of IRS among community users and subsequently help develop suitable IEC/BCC tools to reduce the rates

AIM OF THE STUDY

- To study the high rates of refusals for IRS that exists among community members which instead leads to low coverage and a rather low quality IRS, thus leading to high incidence of cases of Kala-Azar in Patna district.

Objective:

- The objective of the study was to determine the reason of refusal for IRS among the community users and thus suggest to design IEC tools to reduce the same. The study also aimed to assess the involvement of KLWs in converting the refusals, thus increasing coverage

METHODOLGY

- Type of Study- Descriptive cross sectional

- Study area- The study was conducted in 16 blocks of Patna district, which reported more than one case load in 2013 (Danapur, Maner, Bihta, Vikram, Dhanarua, Bakhtiyapur, Naubatpur, Mashauri, Punpun, Mokama, Athmalgola, Dulhin bazar, Phulwari, Ghoshwari, Daniyama, Fatua)

- Study subjects- Households in the villages of these 16 blocks who refused to spray

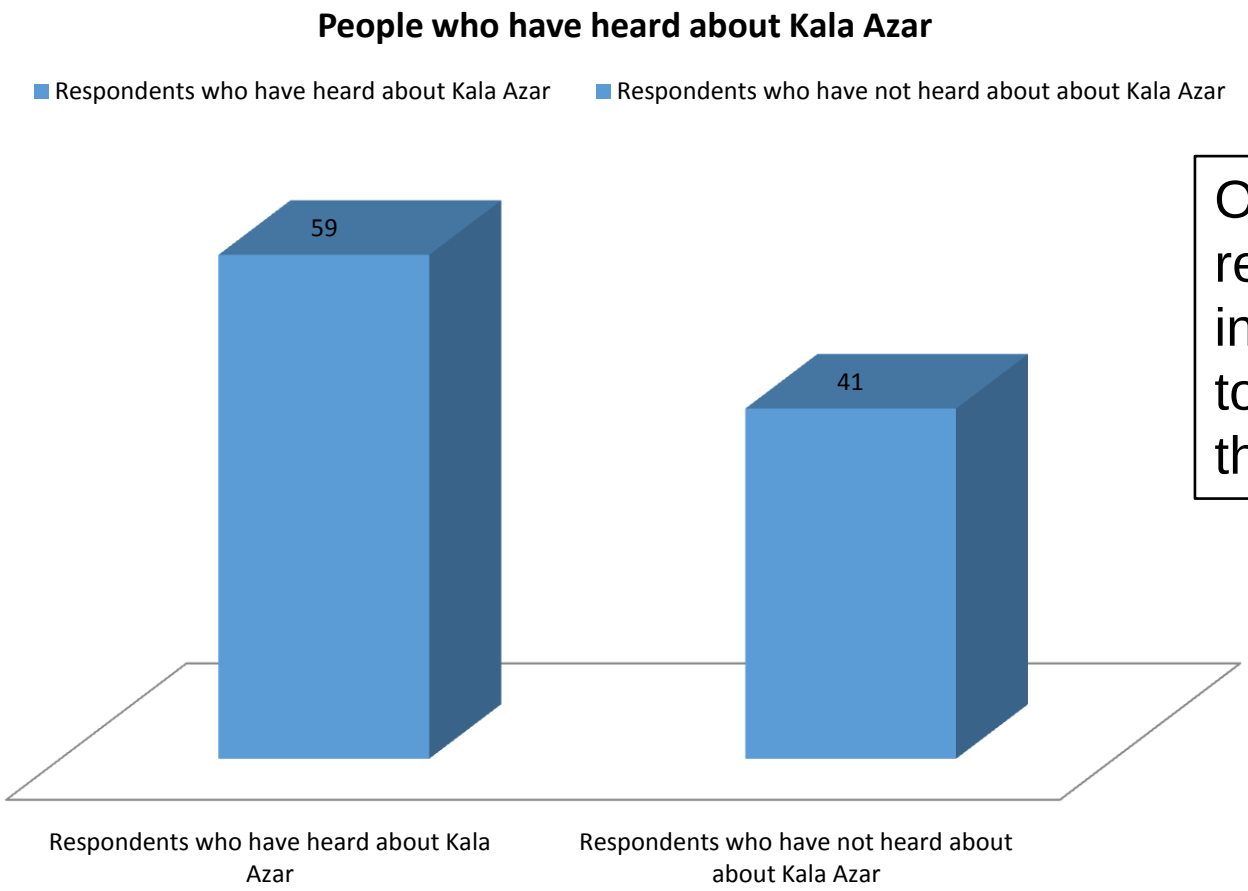
- Sample- Purposive sampling

- Sample Size: 200 households in 16 blocks. 6 households each were chosen from two villages of each block who had refused IRS.

- Methods and Instruments of data collection-Primary data was collected through face-face interviews using structured questionnaire addressing the aims and objective where both quantitative and qualitative questions were used.

RESULTS and FINDINGS

Figure 1: Respondents who had heard about Kala Azar (n=200)



Only 59% of the respondents interviewed reported to have heard about the disease.

Figure 2: Respondents aware about KA (n=118)

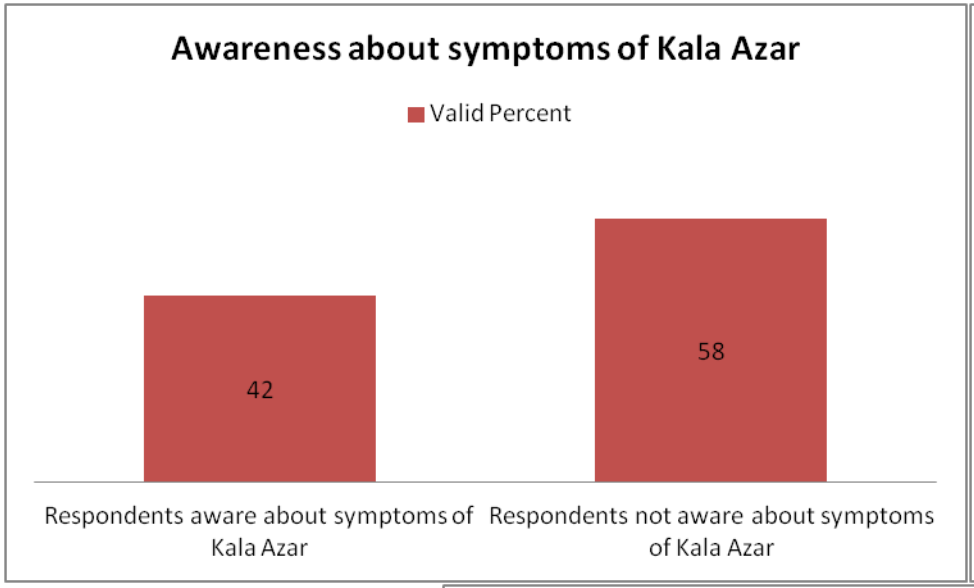
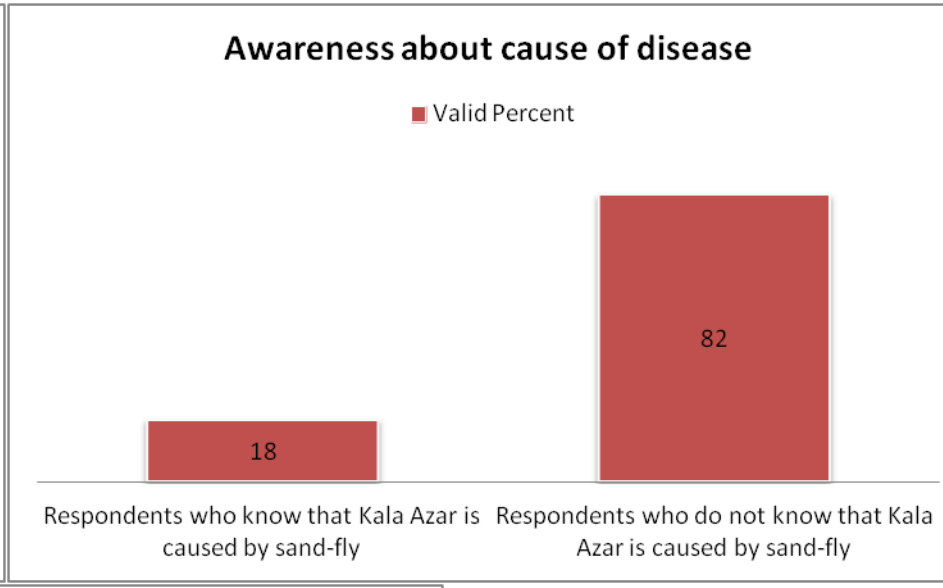


Figure 3: Respondents who were aware about cause of the disease (n=118)



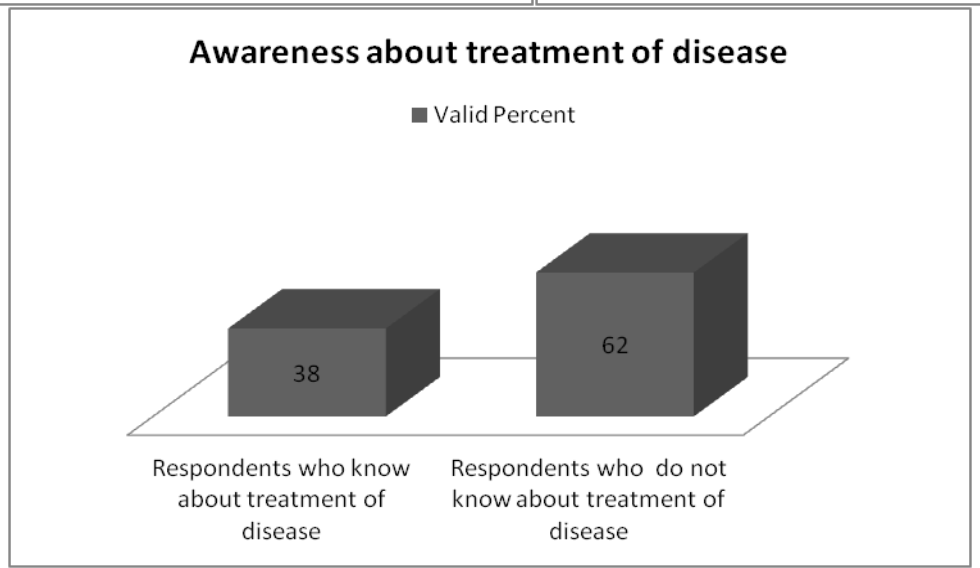
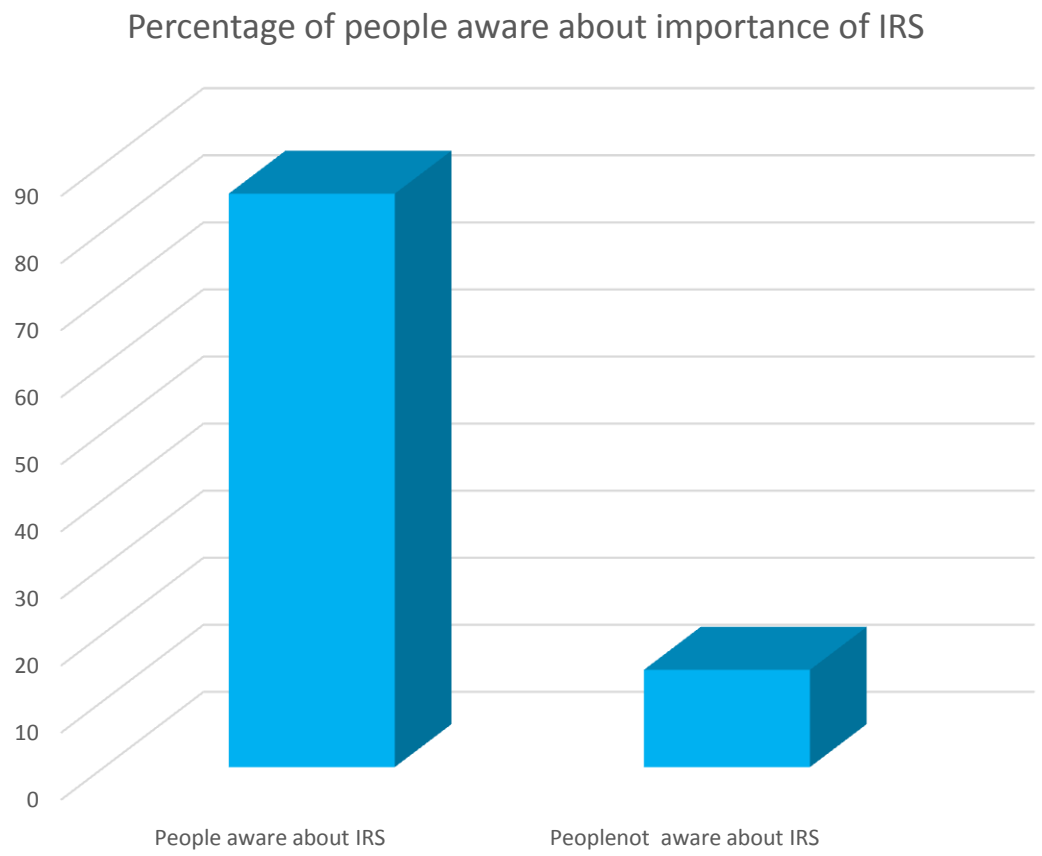


Figure 4: Respondents who were aware about treatment of disease (n=118)

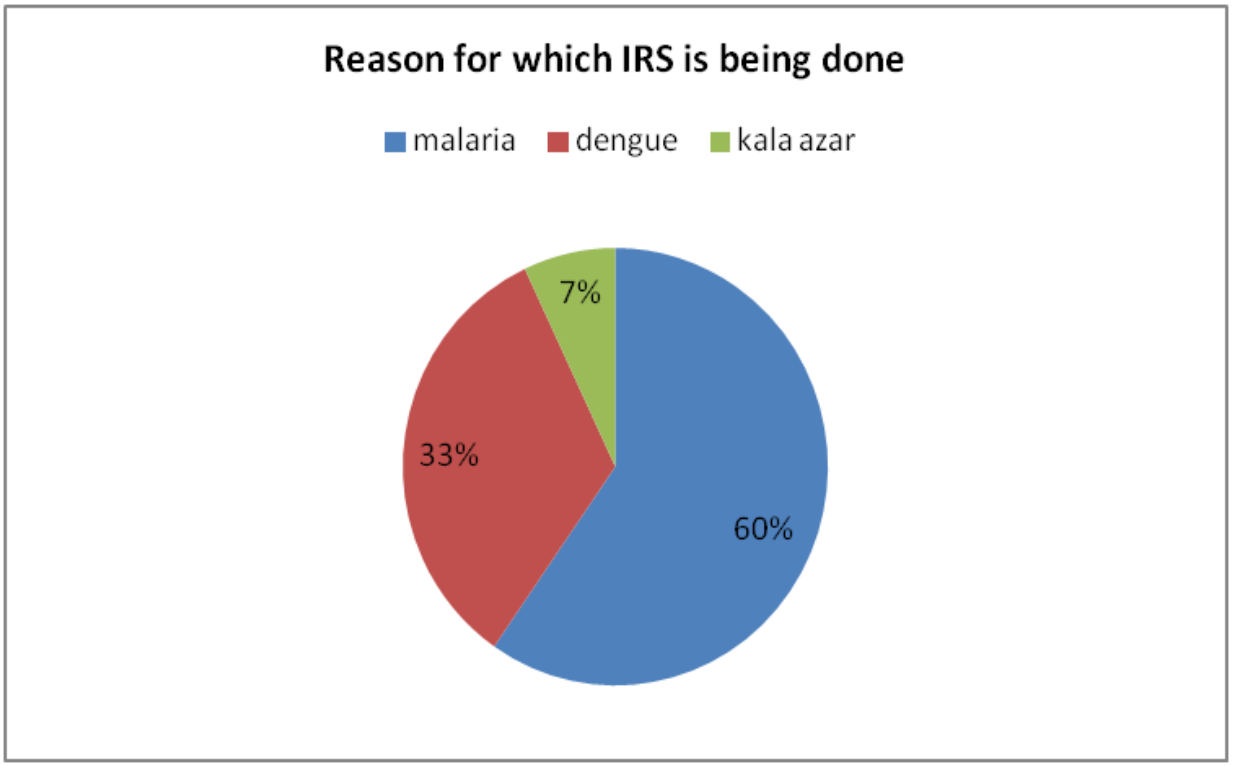
- **About two-thirds of people interviewed had heard about IRS, of these two-thirds most of them had acquired at least primary education. Thus knowledge of IRS can be linked with the educational level of respondents (132 HH-66%)**
- **Spray squads had come to perform IRS in more than 77% of households. To almost two-thirds of these houses the spray squads had come before 12 noon and to the rest, the squads visited only after mid –noon**
- **About 85% of households responded not being aware about the date of spray before-hand. Out of the remaining 15% , 87 % were informed by KLWs (only a few were informed by spray squad members)**
- **PRI members and ASHA workers not much involved in informing about date of spray**

Figure 5:Respondents aware about importance of IRS (n=200)



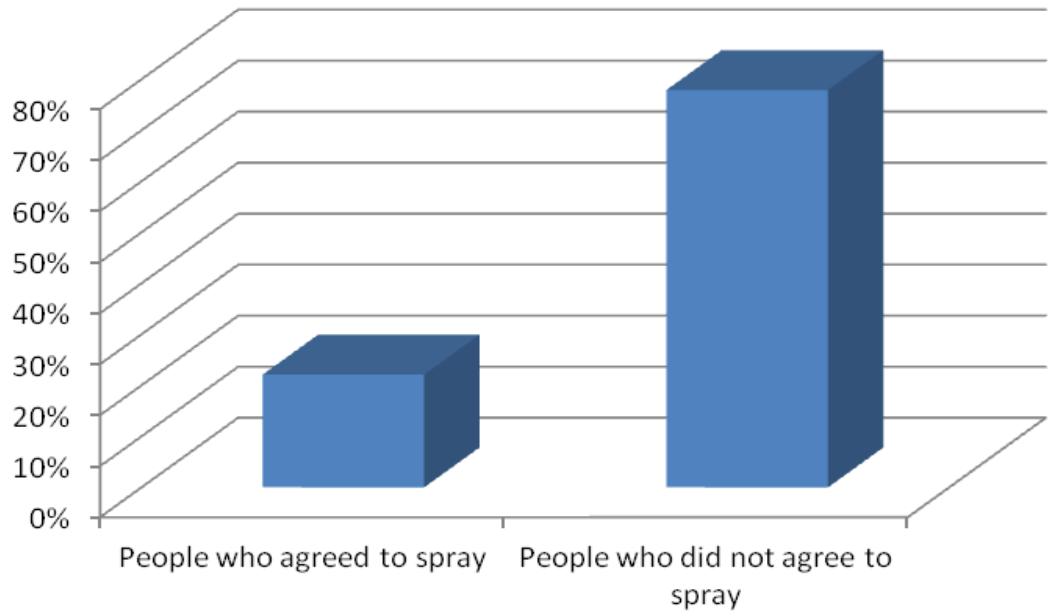
86% (171) households interviewed seemed to be aware about the importance of IRS

Figure 6: Respondents reporting reasons for which IRS is being done (n= 171)



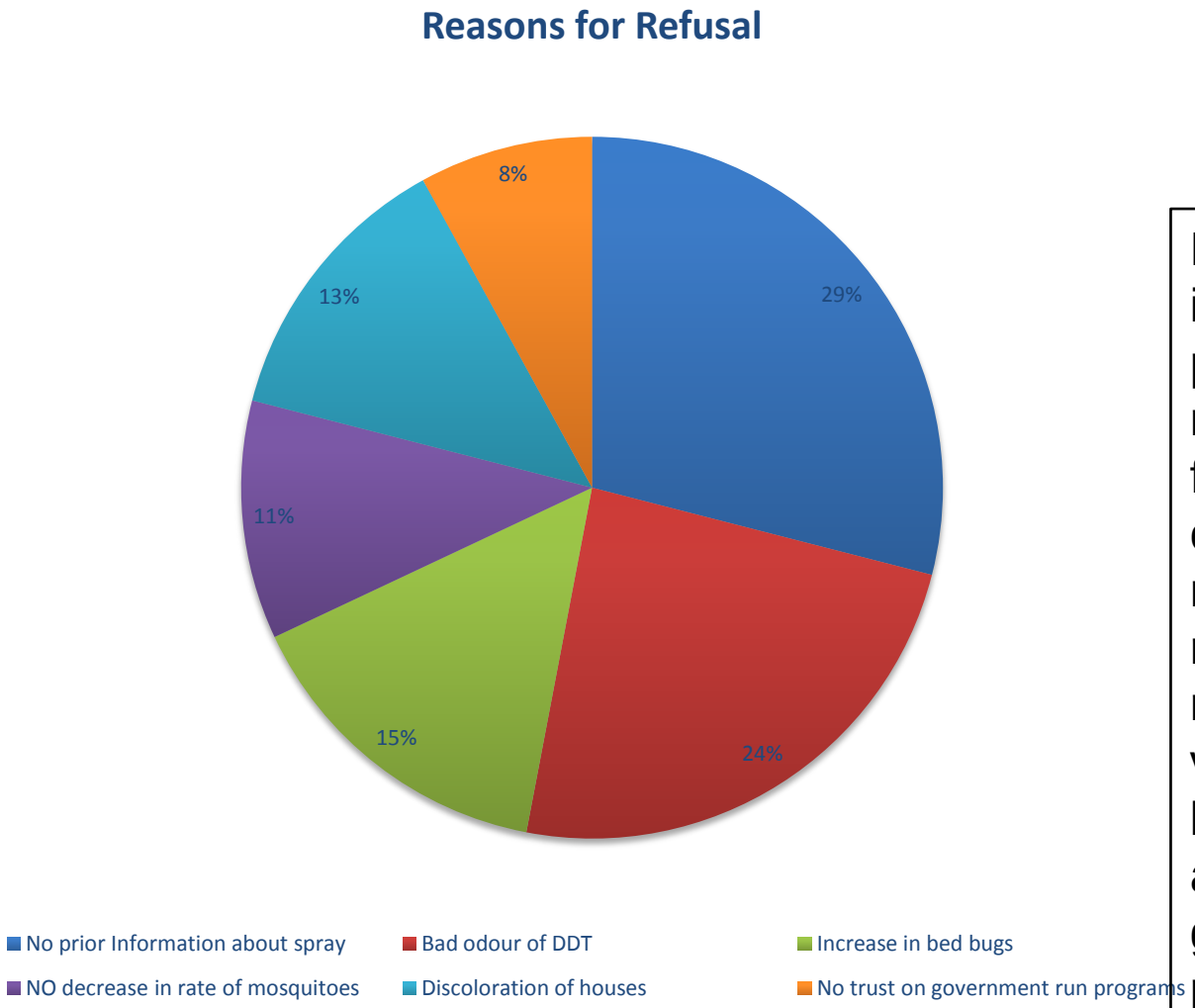
Out of the 86 % households aware about importance of IRS, only 7 percent of them could mention the real reason for IRS. 60% reported that IRS is performed for malaria while 33% reported it for dengue

Figure 7: Respondents who agreed to spray (n=155)



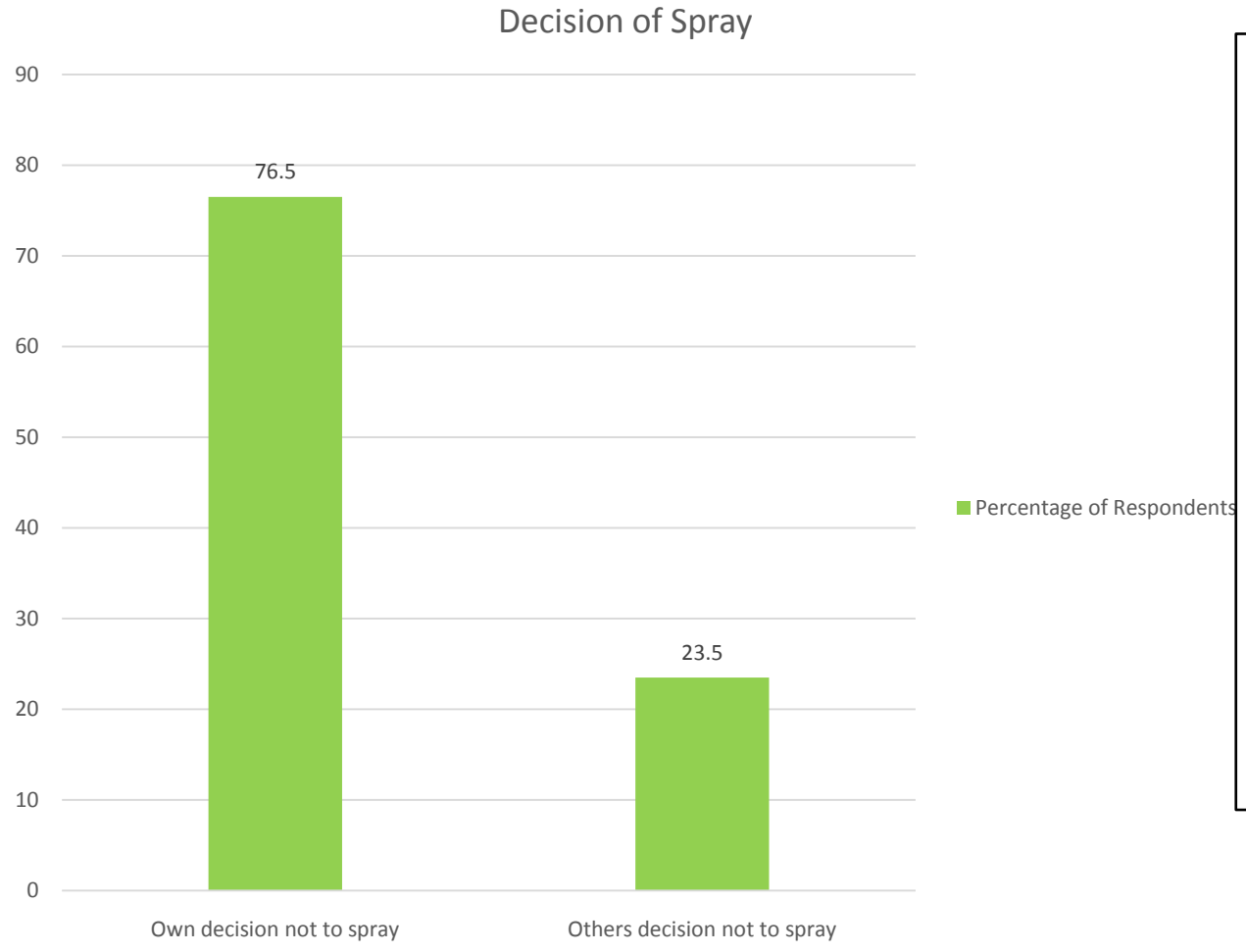
Out of the 77% (155) households to whose houses the spray teams had visited,78% (120) refused to spray their houses citing various reasons

Figure 8: Reason of Refusals provided by respondents (n=120)



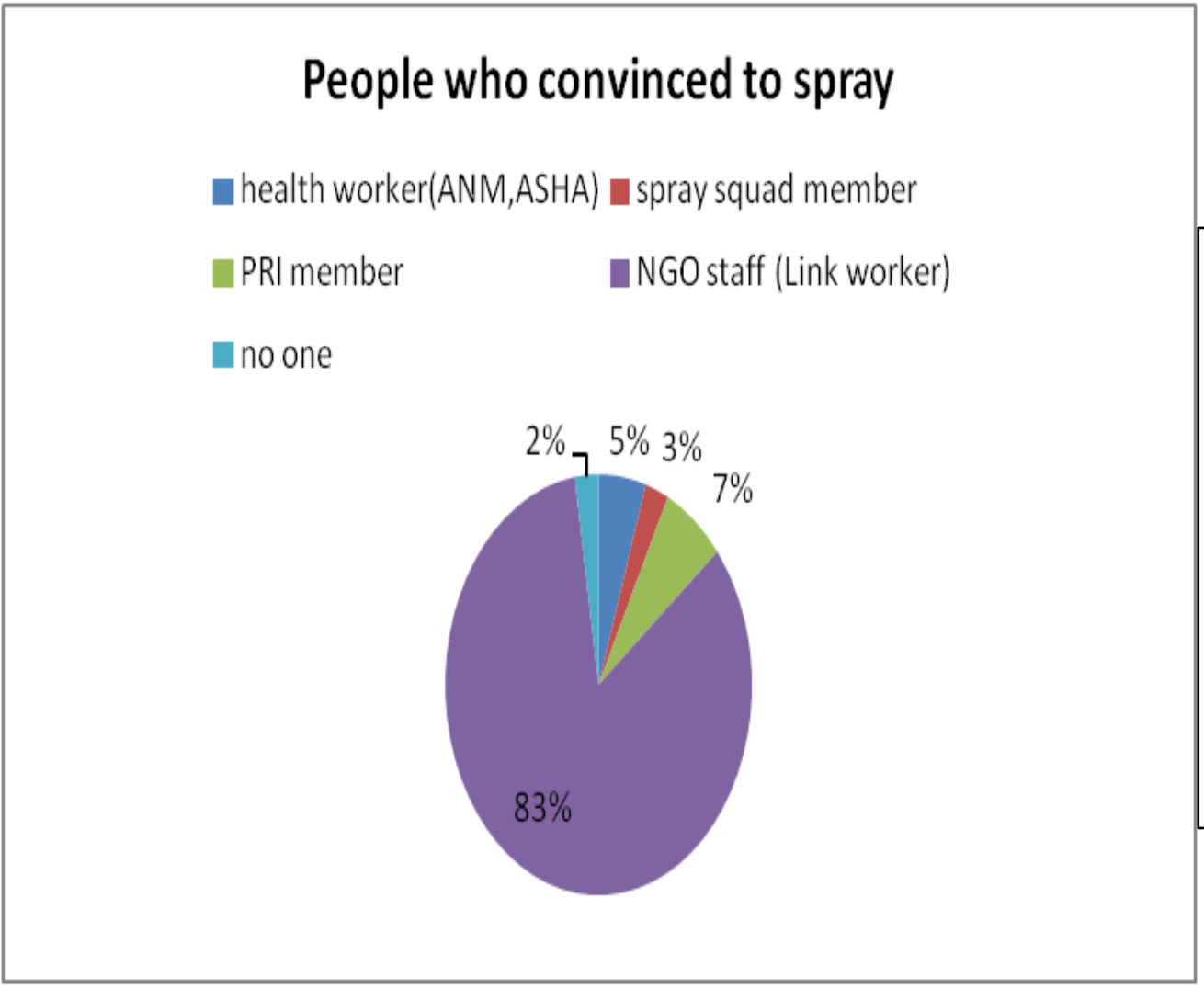
Most of the respondents interviewed, cited no prior information as the main reason for refusal, followed by the bad odor of DDT and the misconceptions of IRS related to bed bugs and mosquitoes . Some cited various bizarre reasons like discoloration of walls and no trust on government run programs

Figure 9 : Respondents citing decision of spray (n=119)



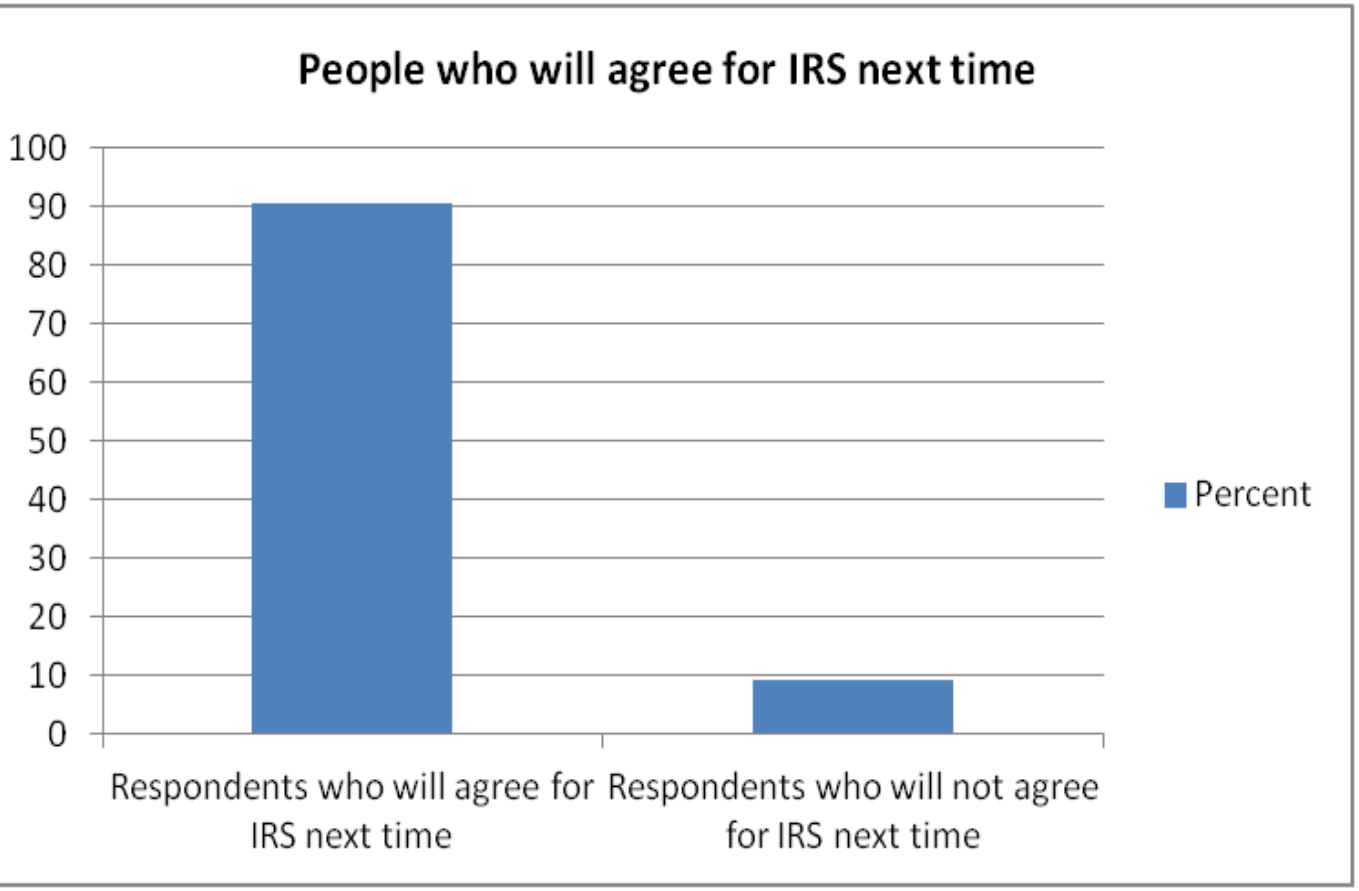
More than three quarters of the respondents (91) reported that it was their own decision for not allowing IRS in their households. Of the decision made by others , most of them were influenced by female members

Figure 10: Health workers who convinced the respondents to spray (n=120)



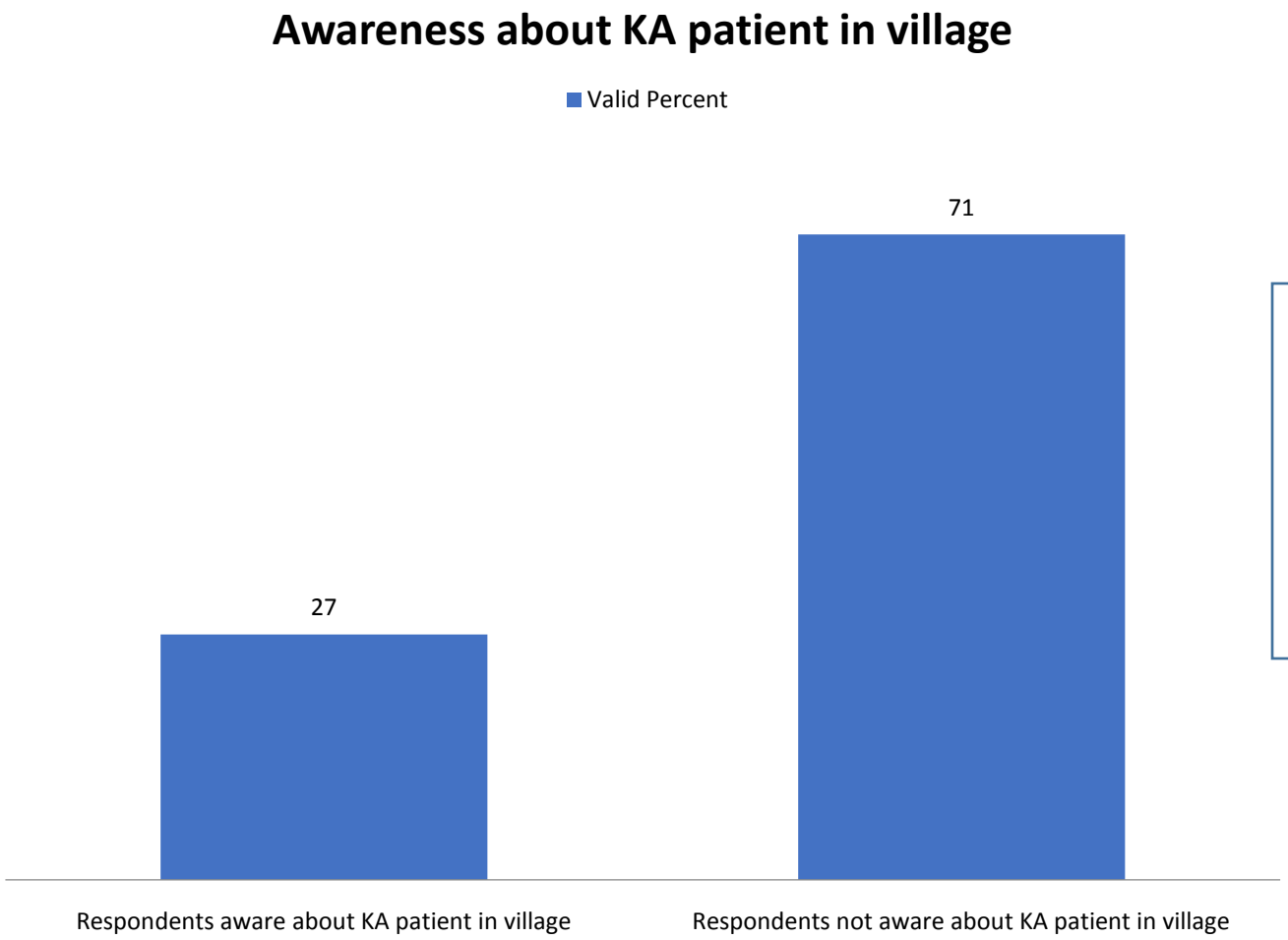
Results show that most of the respondents who refused to spray were convinced further by KLWs (83%). The involvement of other health workers like ASHA, AWWs, PRI members was very low for the same

Figure 11: Respondents who will agree for IRS next time (n=165)



91% of the respondents interviewed agreed to spray during the next round of IRS. The reason of refusal given by the remaining respondents was no effect of DDT, bad odor of DDT and no trust on government running services.

Figure 12: Respondents aware about Kala Patient in village (n=200)



Around 27% of respondents reported to be aware about KA patient in their village

DISCUSSION

- Most of the findings showed that people were not particularly aware about the disease, its symptoms nor the treatment

- Thus as a result of low awareness about the disease, most of the respondents were not aware about the importance of IRS and thus the rates of refusals were very high in the district.

- The link workers recruited by the organization have been able to convert mass refusals through proper counselling, however involvement of other government field health workers in the same is very low.

- After proper counselling , most of the respondents had been convinced to spray in the next time.

LIMITATIONS

- The study is done only in one district of Bihar, so the findings can not be generalized over a large population of the state

- Due to time constrain, the sample collected is small.

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CONCLUSION

- There is low level of awareness about the disease and such the preventive measures of the disease.

- There is a need to develop proper IEC/BCC tools addressing the importance of IRS and generating awareness about the disease

- The involvement of government field health workers needs to be improved upon and they have to sensitized on this program for achieving elimination by 2015.