

Resource allocation as a cost-effective method to overcome some challenges facing Egypt to eliminate schistosomiasis as a public health concern

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Under the guidance of

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Introduction

- Schistosomiasis
- Prevalence
- Schistosomiasis in Egypt

Introduction.... cond

- The strategies used to control schistosomiasis are varied, and all strategies applied to control the disease are based 3 pillars
- 1- spreading awareness
- 2- MDA
- 3- combating snails

Rationales

- Despite efforts to control schistosomiasis in Egypt, new cases keep emerging.
- This study looked at the reasons for the disease's persistence and the challenges to eliminating it.
- Understanding these factors is key to developing effective, lasting control strategies

Objectives

- To examine the risk factors (Human factors (Demographic, Behavioral), environmental factors) responsible for schistosomiasis cases
- To find out the challenges for schistosomiasis case treatment and other programmatic challenges and suggest recommendations

Methodology

- a mixed-methods approach, combining quantitative and qualitative data collection and analysis techniques.
- **Quantitative data**
- **Qualitative data**
- **Contextual analysis**
- **Stakeholder analysis**

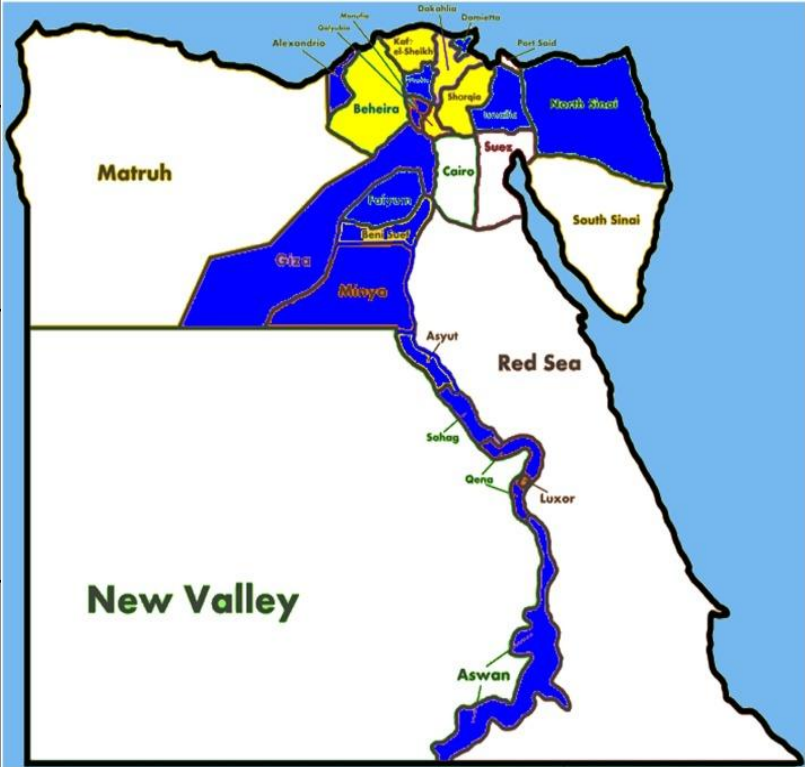
Sampling

- This research was conducted in two villages, the first being Kafr Saad in Damietta Governorate, Egypt, and the second being Talbent Qaisar in Gharbia Governorate, Egypt.

Factor	Kafr Saad Village (Village B)	Talbent Qaisar Village (Village A)
Population	8,612	8,449
Number of Individuals Surveyed	~5,000	~7000
Last Survey Date	Jan-24	Aug-23
Individuals Examined in Last Survey	790	845
New Bilharzia Cases in Last Survey	26	0
Questionnaires Collected	150	150

Context analysis (geographical distribution)

Geographical distribution	The extent of infection among the population
North and East Delta region	<i>S. mansoni</i> represents the dominant species in this region, where infections constitute 60% of residents
South Delta region (south of Cairo)	In the areas south of the Delta, the infection rate did not exceed 6%, despite the abundance of the intermediate host of <i>Biomphalaria alexandrina</i> .
The Nile Valley	In the third region, which forms part of the Nile Valley, the parasite was <i>S. haematobium</i> , representing 60%.
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Contextual analysis.... cond

Domain	Analysis
Geographical	-The Nile River and its irrigation systems are central to schistosomiasis transmission in Egypt. -The presence of freshwater canals and agricultural areas creates suitable habitats for snails, the intermediate hosts of the parasite. -Human transformation of the environment through irrigation projects and dam construction has influenced the distribution and prevalence of the disease
Socio -Cultural	The shared behaviours, and practices of a community. In Egypt, certain cultural practices and behaviours can contribute to schistosomiasis transmission. These include swimming in canals, using canal water for domestic purposes, and walking barefoot in agricultural fields. Traditional beliefs and practices may also influence healthcare-seeking behavior and adherence to preventive measures

Context analysis....cond

Socio-Economic	The social and economic conditions that influence health and access to resources. Poverty, limited access to clean water and sanitation, and low levels of education are significant socio-economic factors contributing to schistosomiasis in Egypt.
Legal	The laws, regulations, and policies that govern health and disease control. The Egyptian government has implemented various legal and policy frameworks to address schistosomiasis, including the National Schistosomiasis Control Program. These frameworks aim to regulate water and sanitation practices, promote health education and ensure access to treatment.

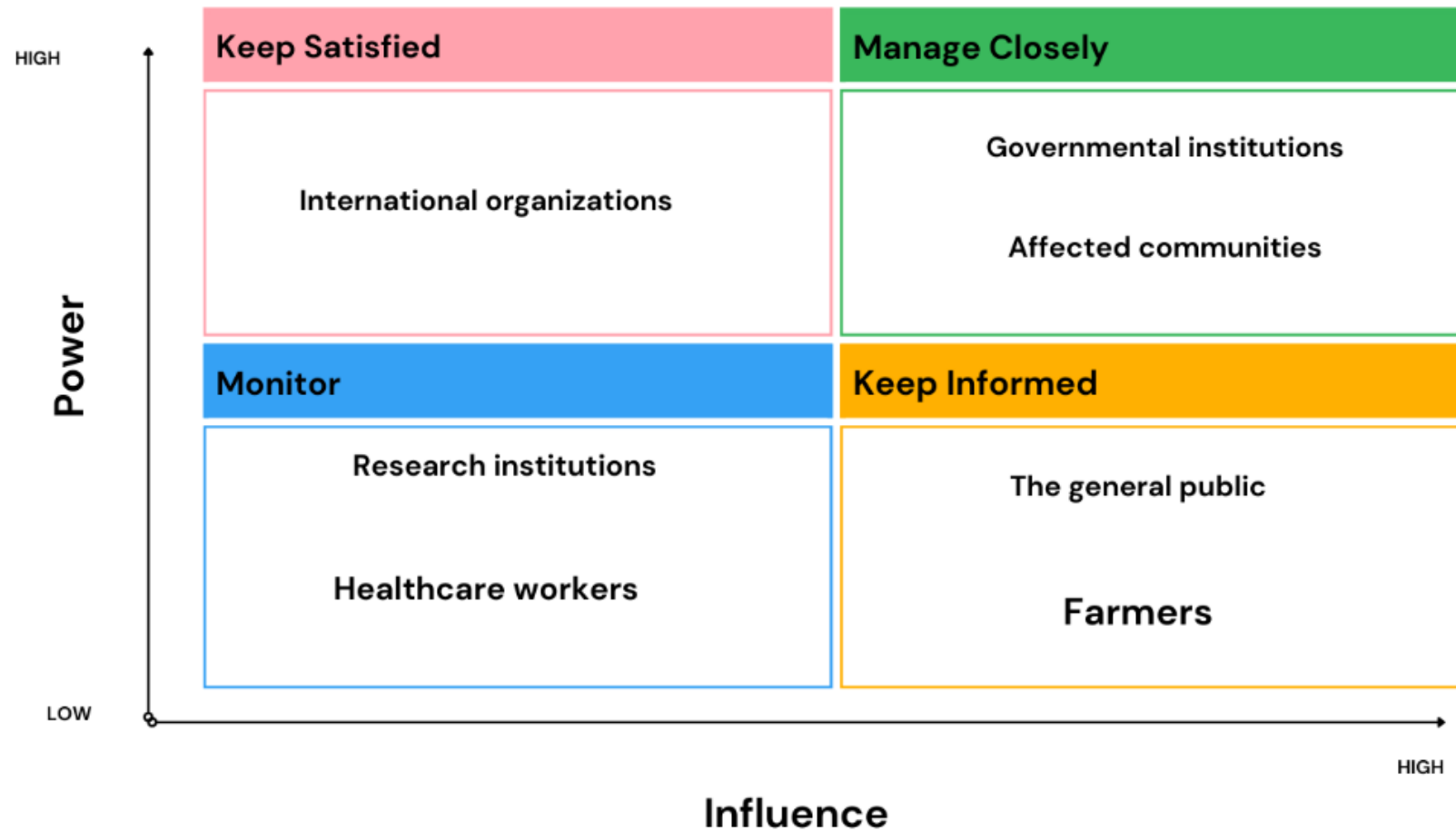
Context analysis.... cond

Political	Political stability and effective governance are also essential for sustained efforts to combat the disease
Health System	The organization, resources, and delivery of healthcare services. The capacity and functionality of the health system play a vital role in schistosomiasis control. This includes the availability of diagnostic tools, medications, trained healthcare workers, and accessible healthcare facilities. The efficiency of surveillance and monitoring systems, as well as the integration of schistosomiasis control into primary healthcare services, are also critical factors

Stakeholder analysis

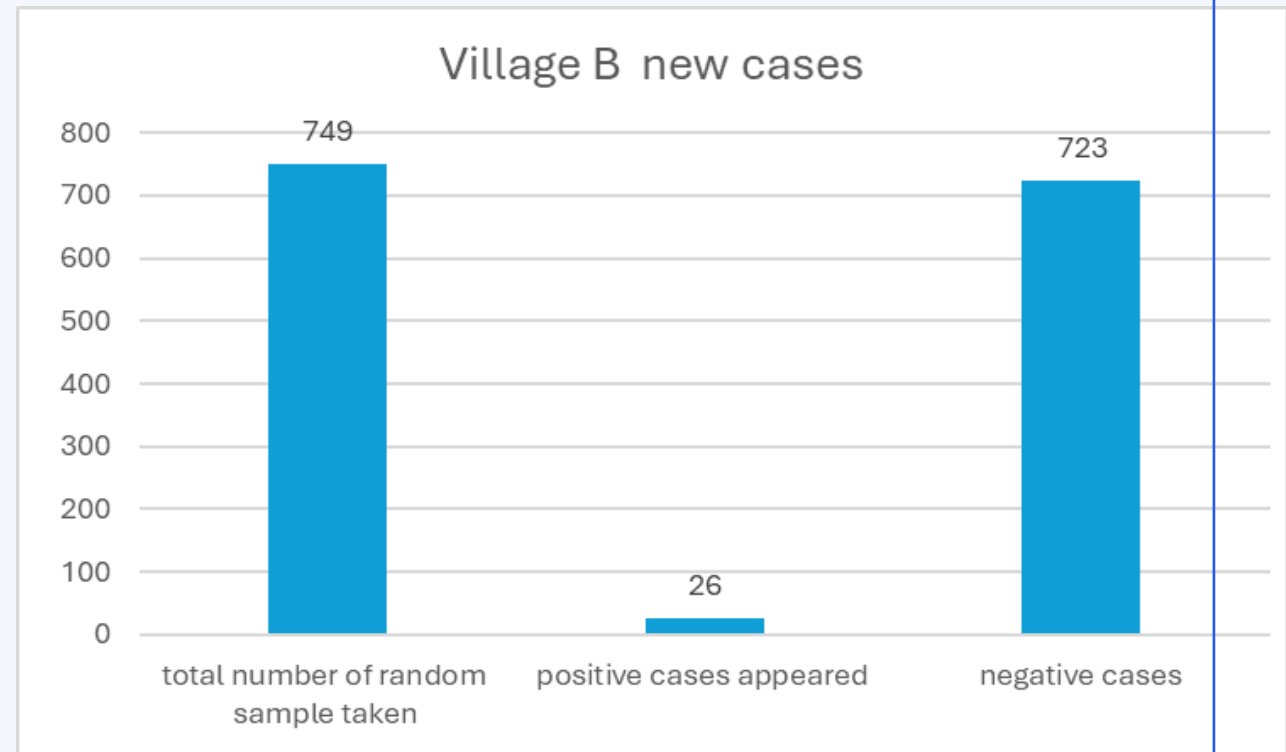
- Governmental organizations:
- Affected communities
- International organizations:
- Research institutions:
- Healthcare professionals.
- The public and farmers

Stakeholder Mapping

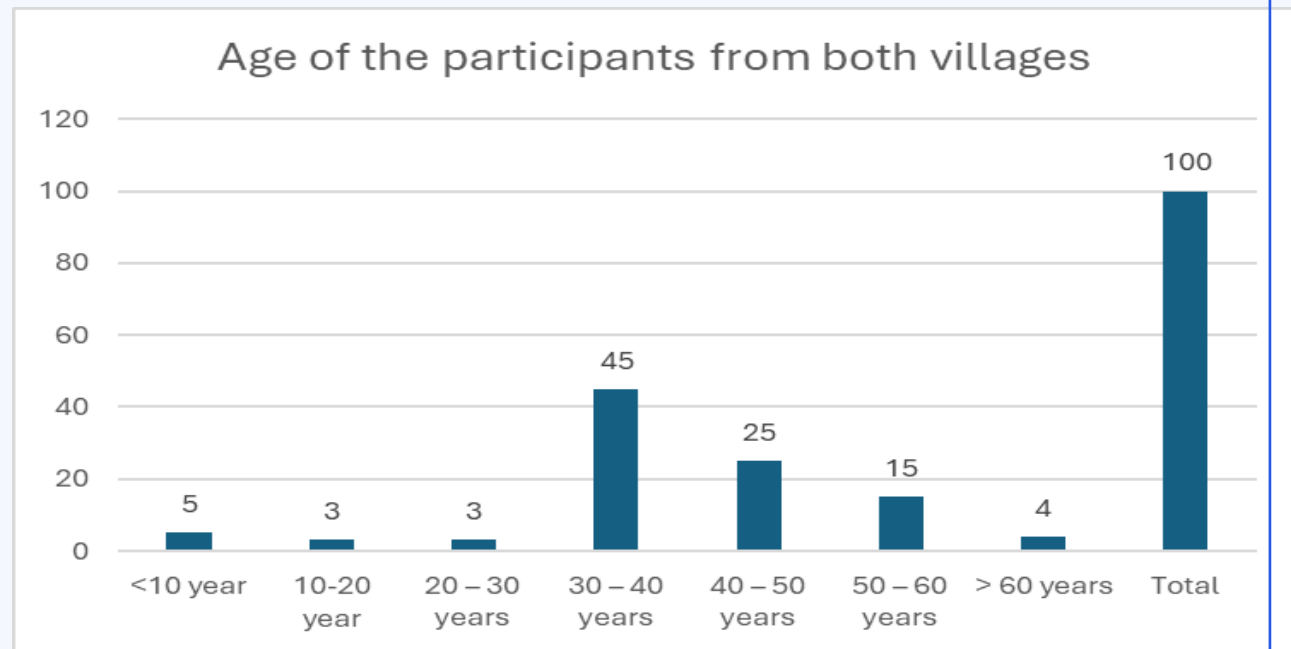


Results and Discussion

Number of new cases appeared in the village B

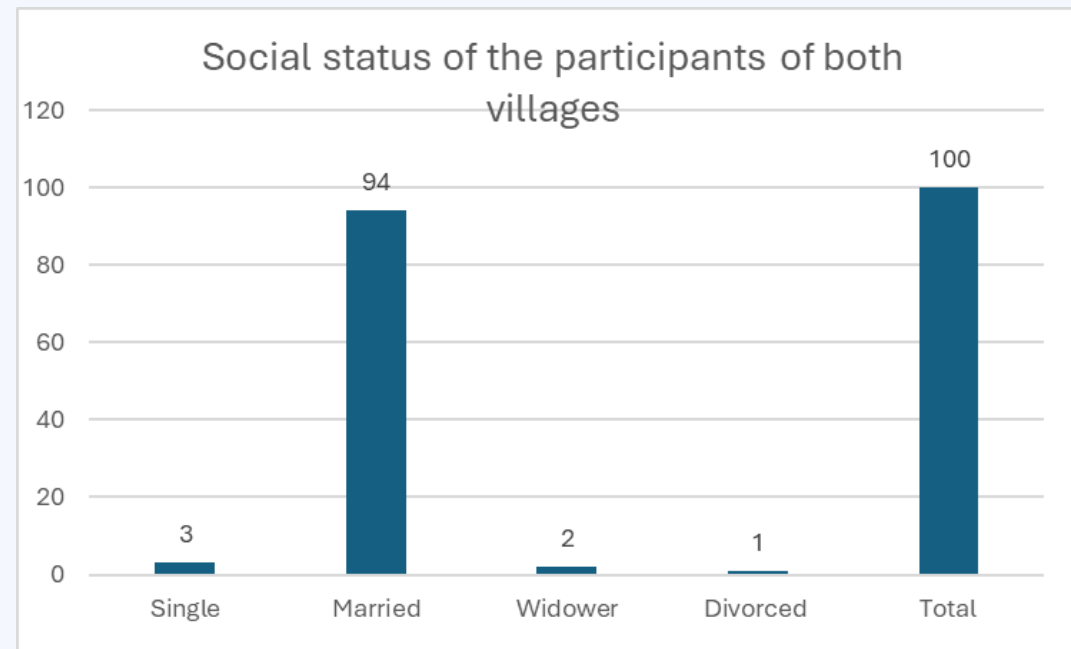


The ages of the participants in both villages A and B

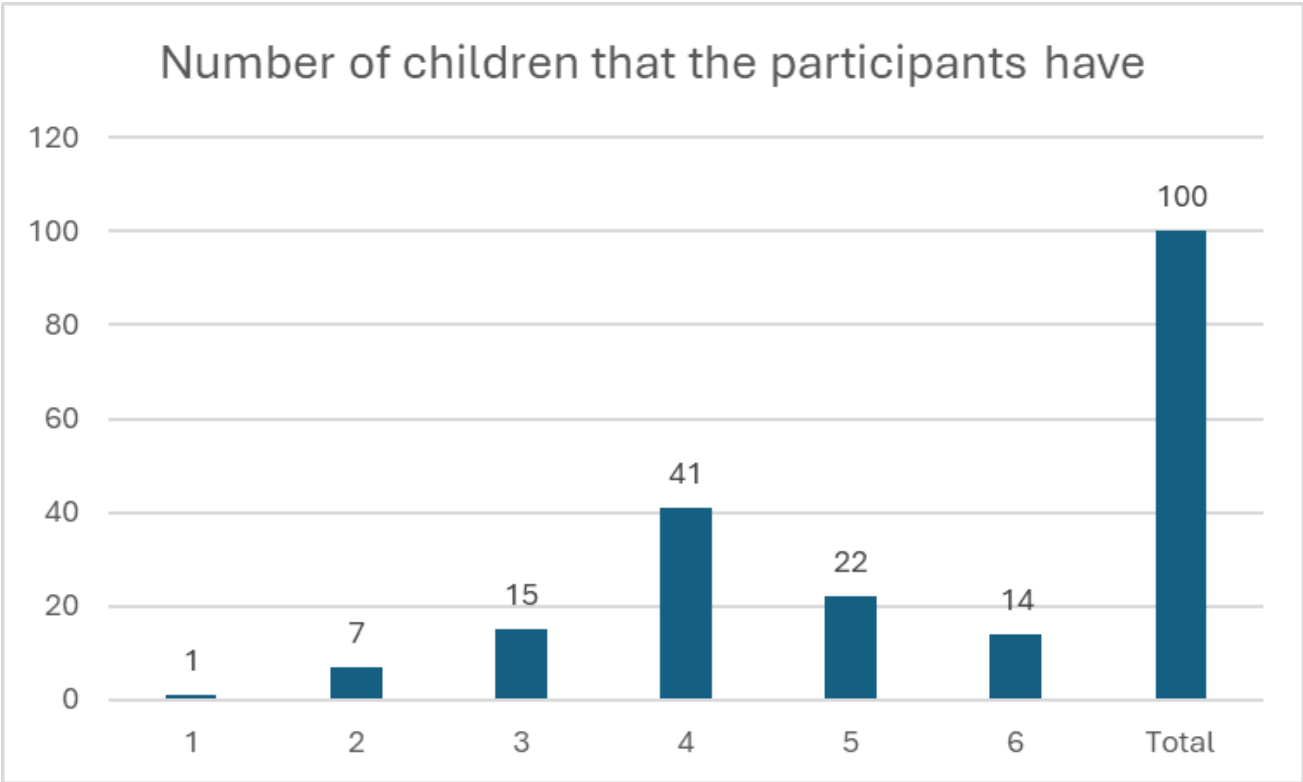


Social Status of Participants

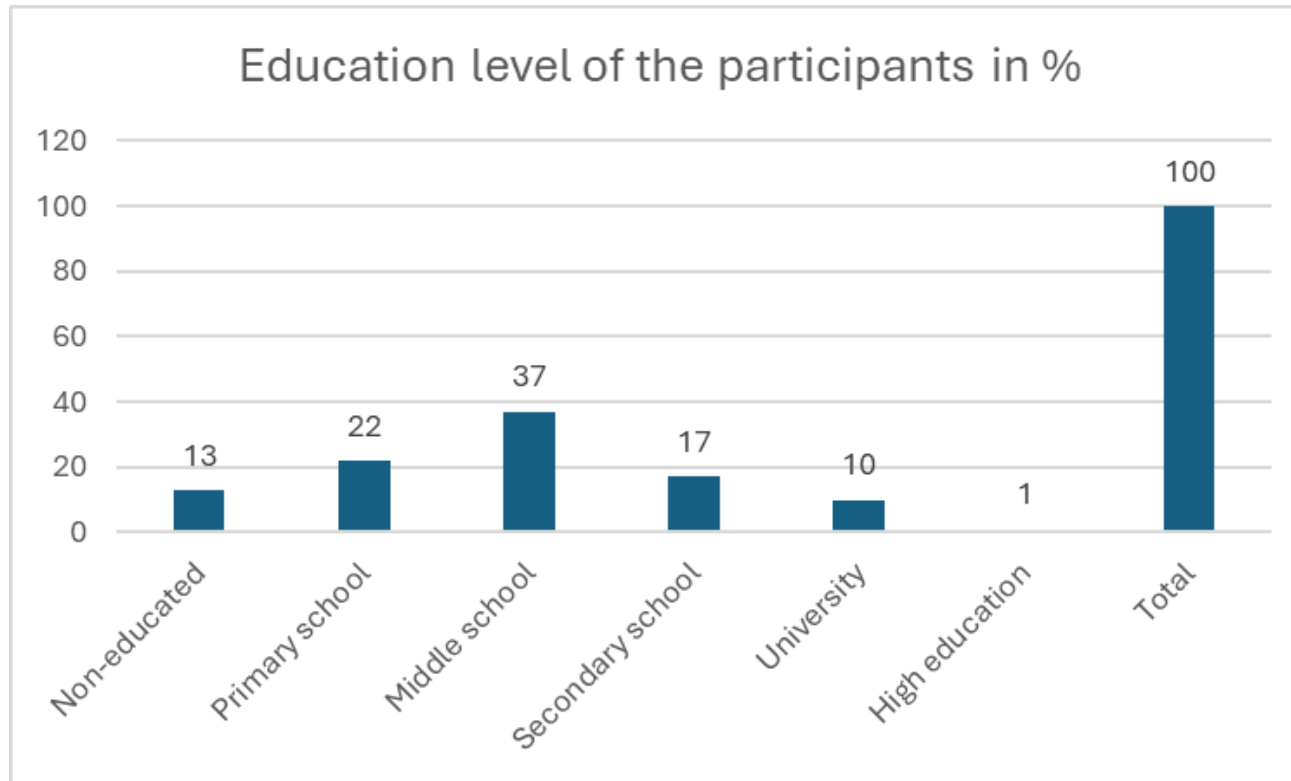
- The social status of the patients was higher in married couples, reaching 94 %, while the single condition was 3 %, widowers 2 %, and divorced 1 %.



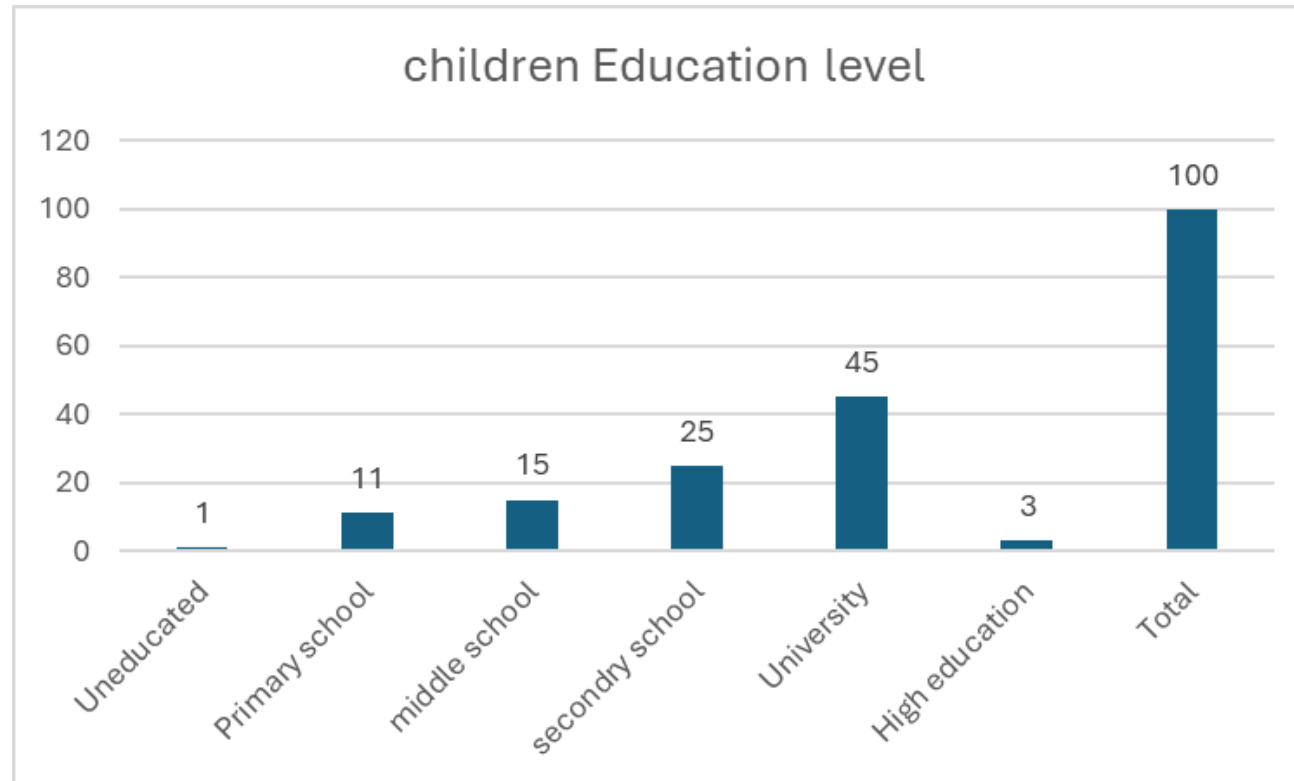
Number of children for participants who have children.



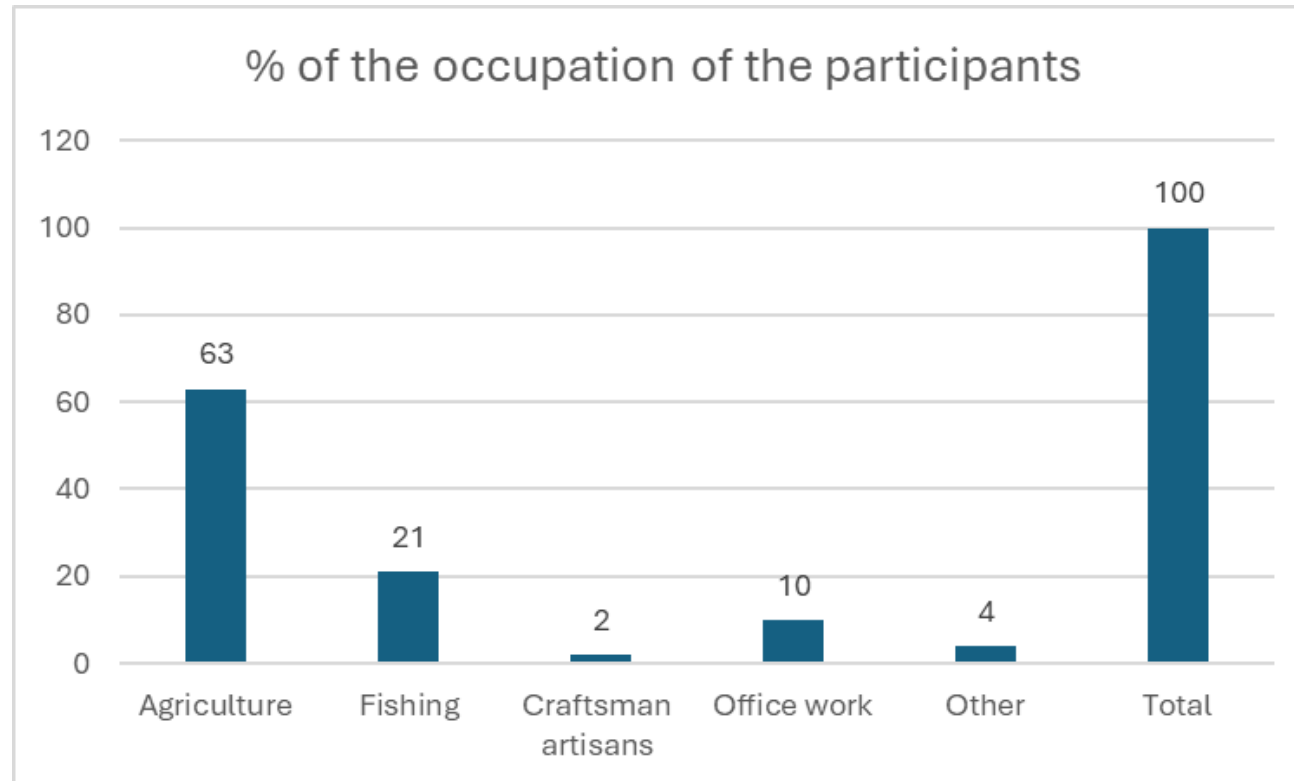
Education level of the participants



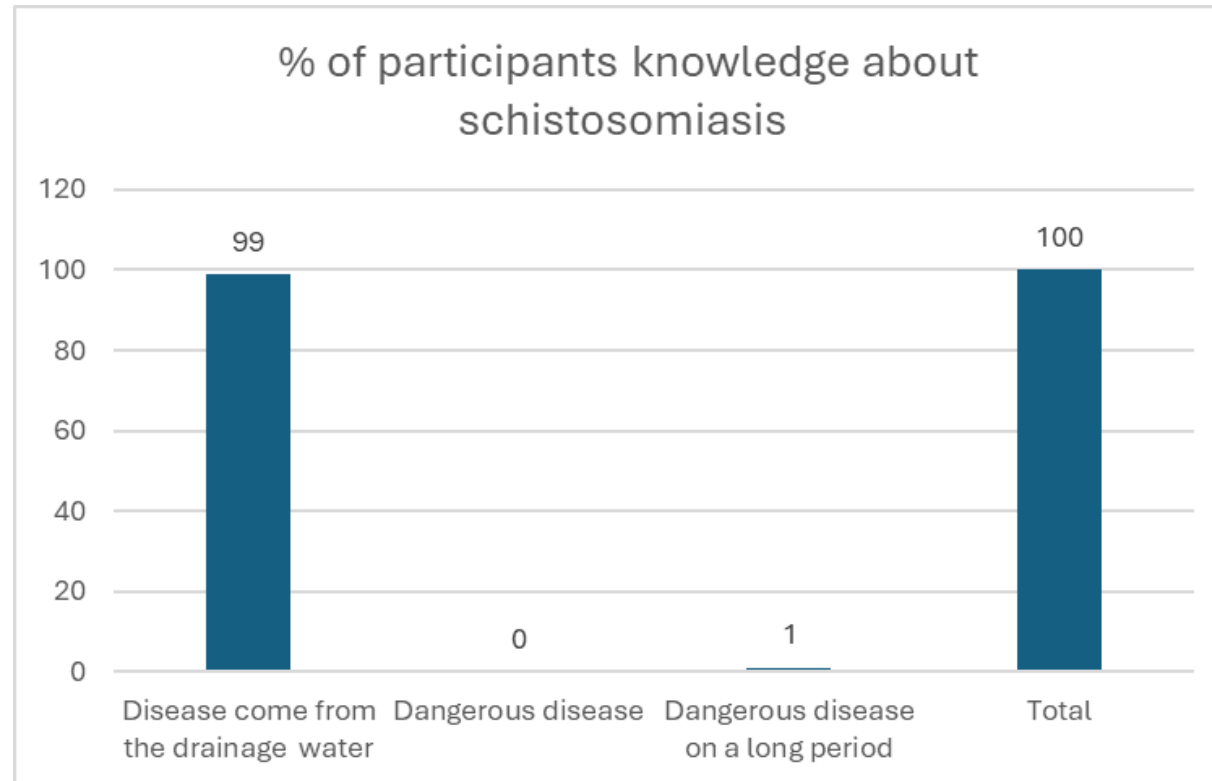
Education Level of Children



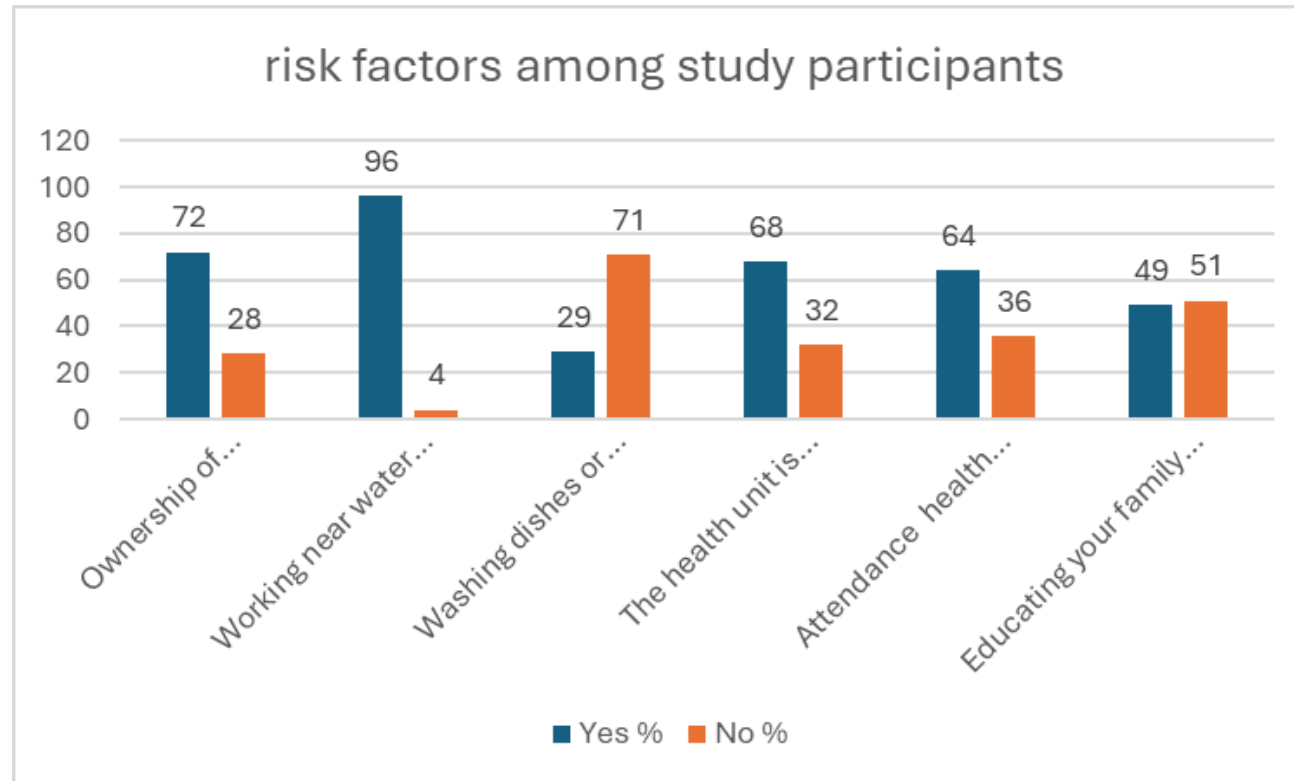
Occupation of the participants



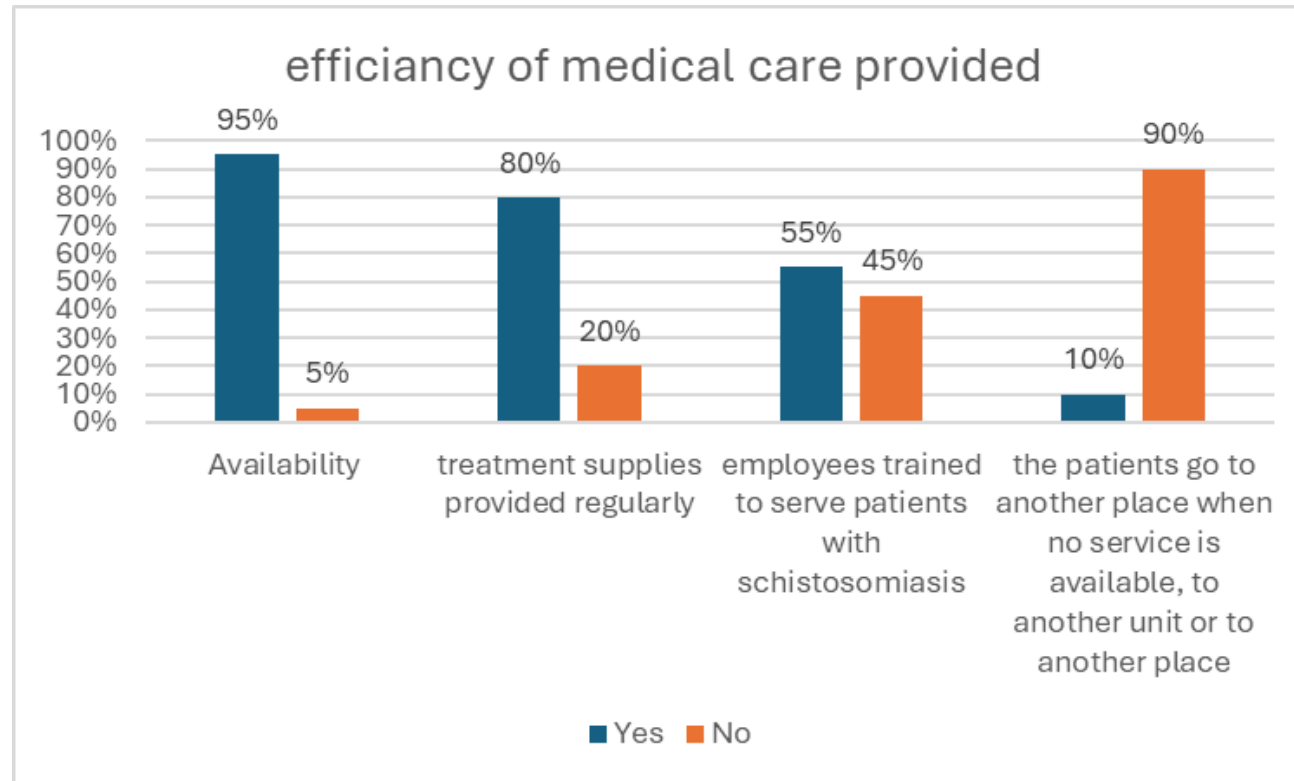
Information on Schistosoma: (public knowledge)



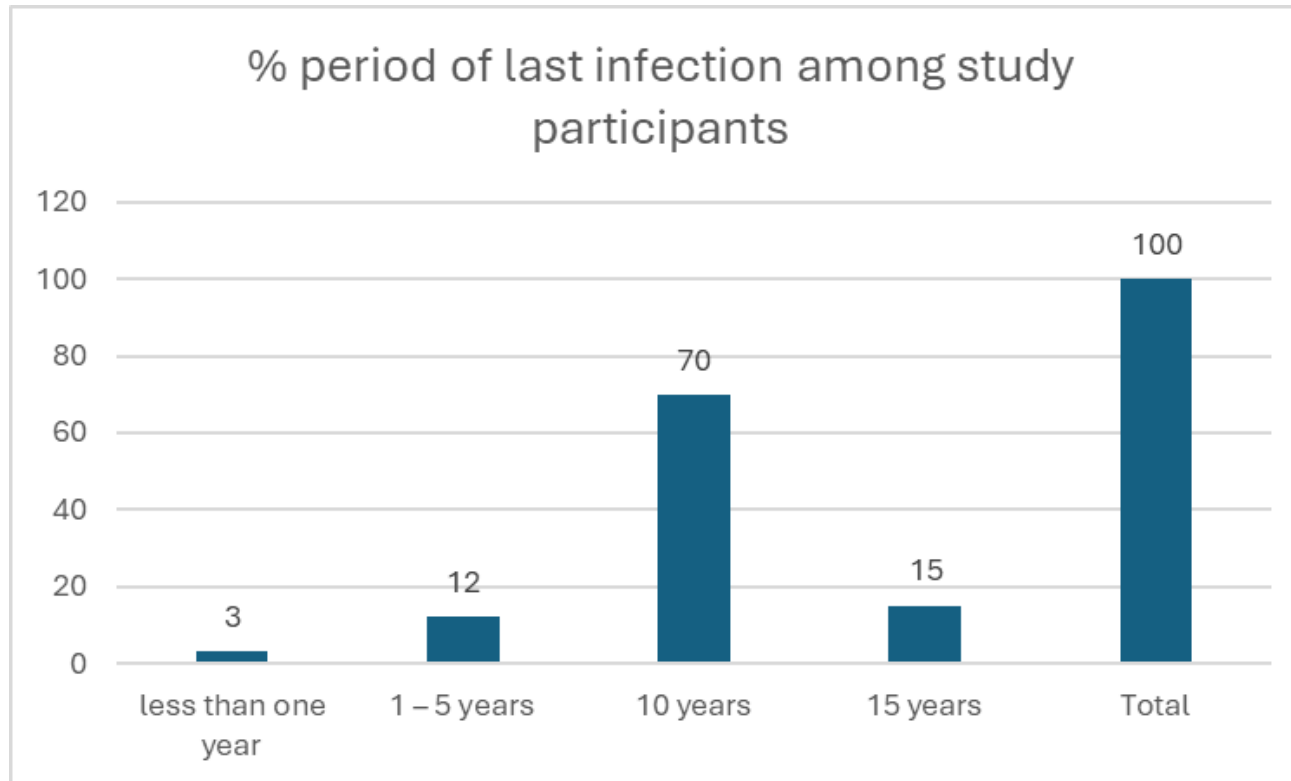
Risk factors for *Schistosoma* incidences:



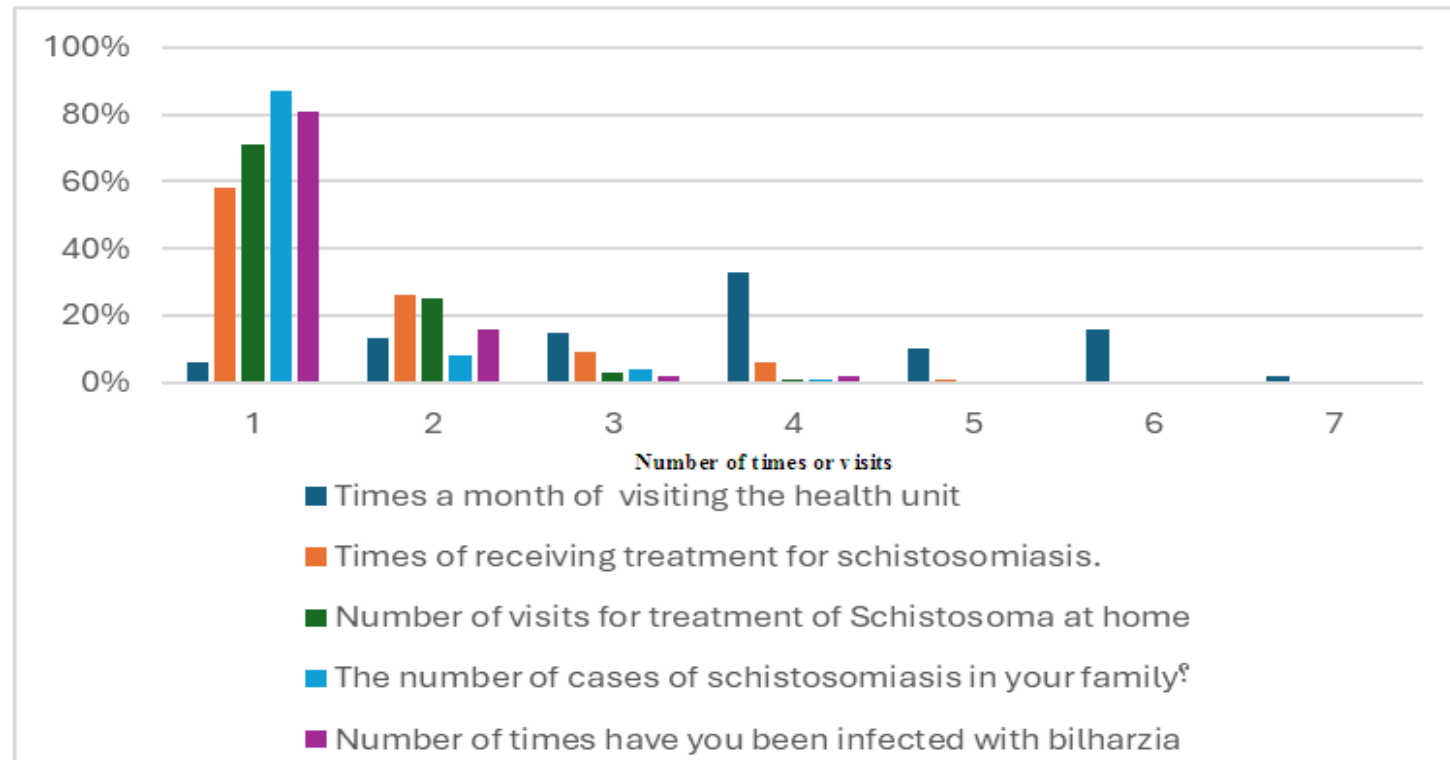
Efficiency of Medical Care



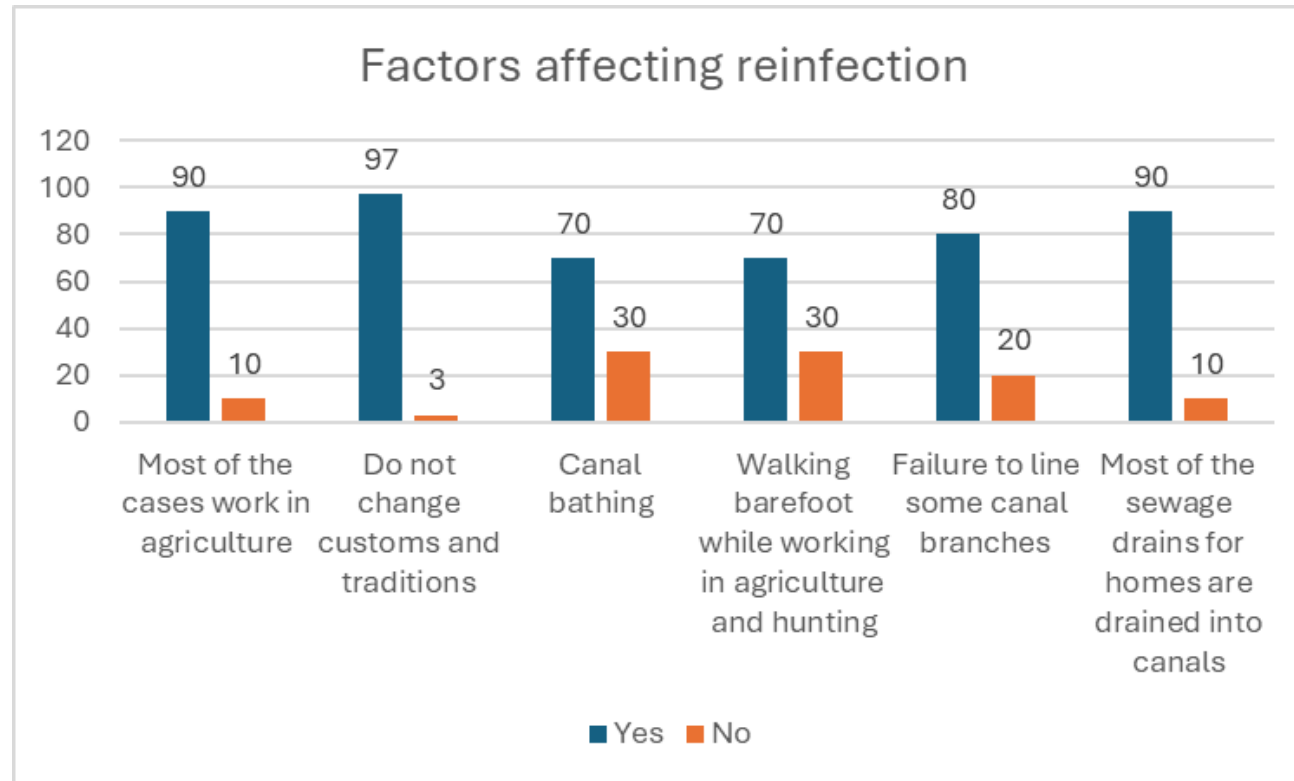
Period of last infection



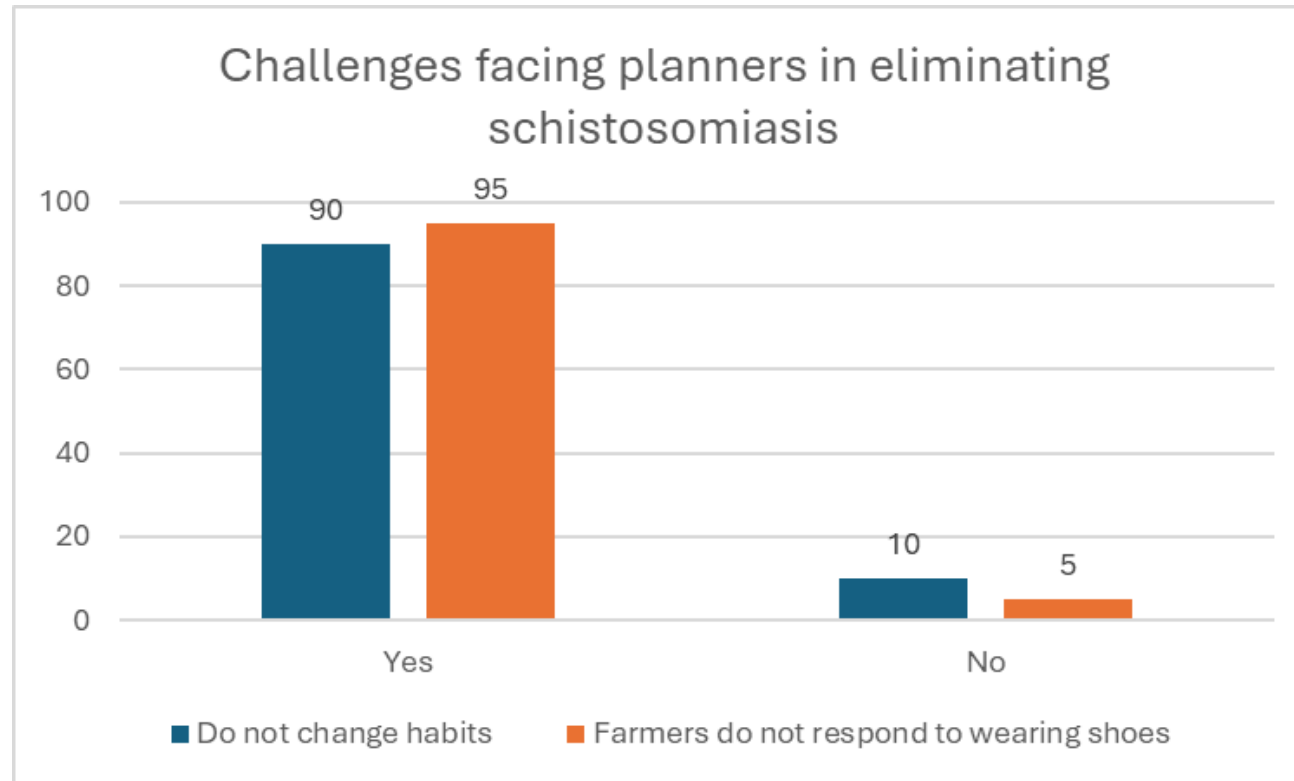
Behavior of the participants towards treatments and health care providing



Factors causing reinfection(human behaviors)



Challenges facing planners in eliminating schistosomiasis in (village B)



Findings from qualitative data:

- **Lack of Education and Awareness**
- **Poor Healthcare-Seeking Behavior**
- **Occupational Risks**

Findings from qualitative data:

- **Environmental Factors**
- Contaminated Water Sources
- Agricultural Practices
- Inadequate Sanitation

Findings from qualitative data:

- **Cultural Factors**
- Water-Related Practices
- Traditional Beliefs

Findings from qualitative data:

- **Programmatic Challenges**

- Limited Resources
- Inadequate Healthcare Infrastructure
- Resistance to Behavior Change.

Conclusion

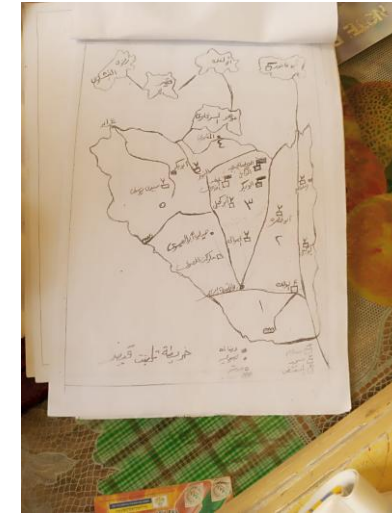
- **Our study concluded that:**
- 1-The demographic characteristics
- 2-The study also found that infrequent healthcare utilization is associated with a higher risk of schistosomiasis.
- 3-The number of times a month that the health workers visited the home for treatment showed a higher level of participation, with 71% visiting the home for treatment once per month.

Conclusion

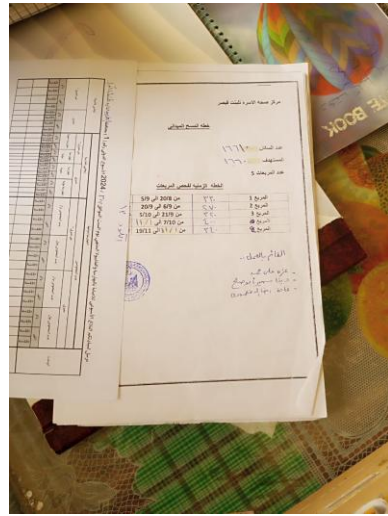
- The main challenges facing the planners in eliminating Schistosoma
- -Education and Awareness:
- -Healthcare Access

Recommendations

- Prioritize preventive measures, such as improving water and sanitation infrastructure and promoting health education.
- Strengthen healthcare infrastructure and human resources, particularly in rural and underserved areas.
- Implement cost-effective interventions, and targeted behavior change programs.
- Foster collaboration and community engagement to ensure that interventions are contextually relevant and sustainable.
- Enhance surveillance and monitoring systems to enable early detection and response to new cases.
- Promote research and development to identify innovative and cost-effective approaches to schistosomiasis control.



Part of visits pictures



Thank you

