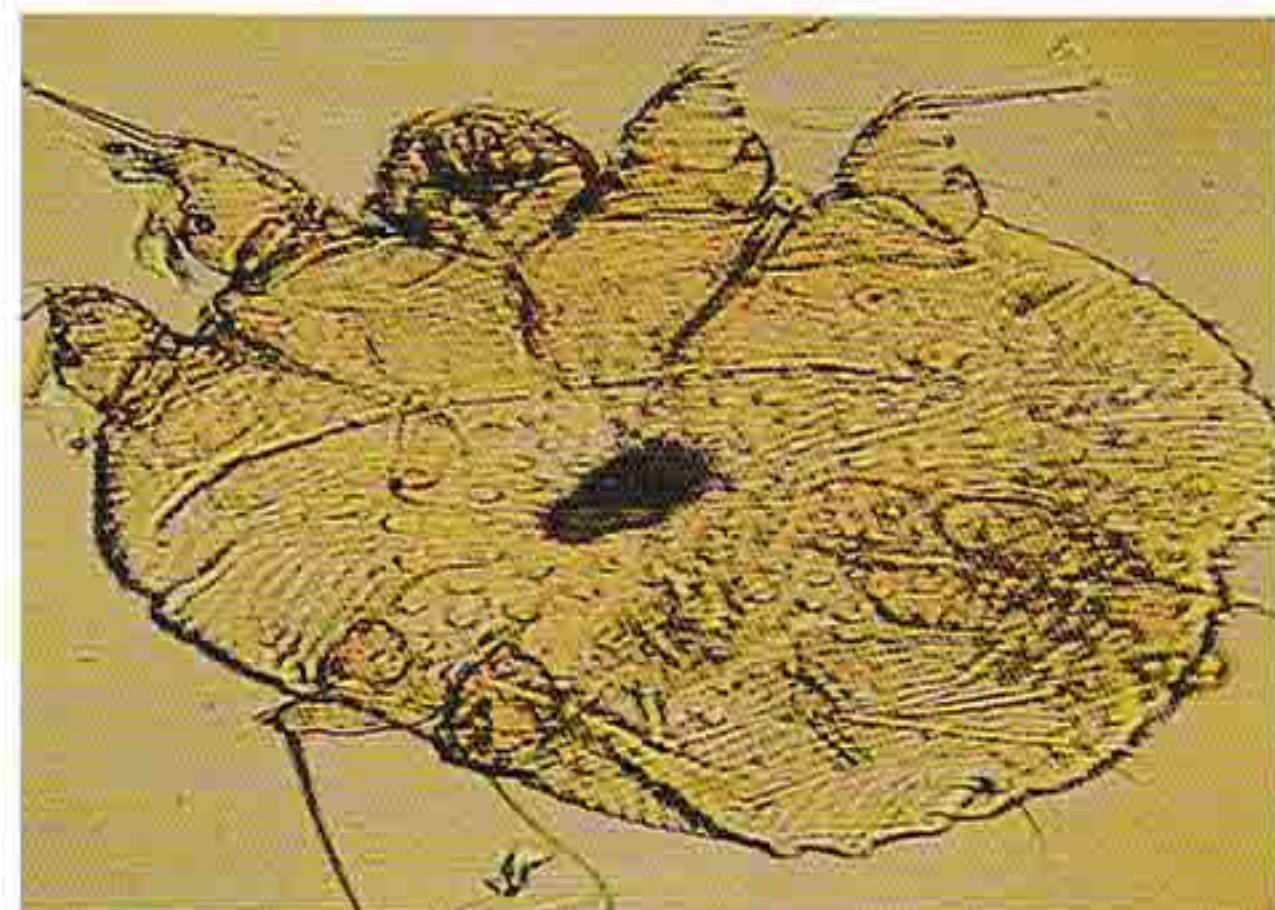




NATIONAL SCABIES TREATMENT PROTOCOL FOR PRISONS POPULATION

Government of The People's
Republic of Bangladesh



ICRC



National Scabies Treatment Protocol for Prisons Population

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MESSAGE

Scabies is a highly contagious skin condition that can cause significant discomfort and distress for those affected. It is also a public health concern, as it can easily spread from person to person, particularly in close living quarters such as prisons.

The health and well-being of people deprived of liberty is a crucial aspect of our prison system, and this protocol is a testament to our commitment to providing quality healthcare services to this vulnerable population. The protocol provides clear and concise guidelines on how to diagnose, treat and prevent scabies in prisons and will assist prison health staff in their efforts to control the spread of this condition.

It is my pleasure to introduce the National Scabies Treatment Protocol for places of detention, a comprehensive guide for the management and control of scabies outbreaks in prison settings. This protocol has been developed in response to the growing incidence of scabies in prisons and the need to ensure the health and well-being of inmates and staff.

I would like to express my gratitude to the dedicated team of experts who have worked tirelessly to develop this protocol and to the stakeholders who have provided valuable input and support.

I am confident that the implementation of this protocol in all prisons throughout the country. Adherence to these guidelines will not only improve the health and well-being of our incarcerated population, and prison staff but will also reduce the risk of further spread of scabies to the wider community.

Prof. Dr Abul Bashar Mohammad Khurshid Alam
Director General
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ACKNOWLEDGMENT

Scabies is an infestation of the skin by the human itch mite (*Sarcoptes scabiei* var. *hominis*). This skin lesion predominates in crowded areas such as prisons, refugee camps, etc. As it's very contagious, it also may turn into fatal complications. Our aim was to develop an updated national guideline to ensure proper case management and potential outbreak prevention, especially in prisons.

The national Scabies Treatment Protocol for Prisons has been developed through a wide range of discussions and consultations with experts and stakeholders. I would like to convey gratitude from the Disease Control Division of DGHS, Ministry of Health and Family Welfare to the society of medicine, the society of dermatology, the Prison Directorate, and the International Committee of the Red Cross (ICRC) for their valuable contributions and expert opinions. I would also like to thank each one involved in the process.

I hope this comprehensive guideline will serve as an important resource for all the health professionals working in prison.

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With the contribution of the ICRC Health Care in Detention in Bangladesh

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i. CONTEXT AND JUSTIFICATION

1. Scope of the Problem

Scabies is among the most common disease worldwide. According to the World Health Organization (WHO) more than 200 people worldwide¹ are suffering at any time from scabies while the Global disease burden estimated an annual incident case of 455 million². Both high income and low- and middle-income country are affected. Scabies is listed as of WHO as “Neglected Tropical Diseases” since 2009 and prevalence varies from 0.2% to 71% (WHO) depending on the settings. Institutions like prisons are prone to occurrence of the scabies outbreaks due to overcrowding, poor hygiene conditions, difficult access to water, and difficult access to healthcare. Even though there is no clear data on the number of cases, scabies cases are reported and remain an important health problem for detainees in Bangladesh prison. In close and overcrowded setting such prisons daily case management alone is not sufficient to contain the spread of scabies once an outbreak occurred. Outbreak of scabies in prisons hamper deeply detainee's health and daily life. Major challenges of the scabies management in BD prisons are lack of health staff, limited resources, lack of awareness among detainees and prison authorities. Also, there is no national protocol guidance on scabies outbreak management in prisons settings. Rather cases are handled in individual perspective than a public health approach for the prison population. This guideline aims to provide to health and prisons authorities guidance

steps and practical experience on scabies management, in line with international standards, in prisons settings. It aims also to enhance the multidisciplinary approach between health and prison authorities during outbreak response in prison and toward detainees' access to health.

2. Bangladeshi Public Health System

The Ministry of Health and Family Welfare (MoHFW) oversees public health care service delivery in Bangladesh. The Directorate General of Health Services (DGHS) is its main implementing agency. There are six tiers of healthcare infrastructure under the DGHS: national, divisional, district, upazila (sub-district), union, and ward levels.

- At National level: institutions for specialized tertiary care and for postgraduate medical education and training.
- At Divisional level, public health is managed by divisional health director and there is medical college with their attached medical college hospitals, infectious diseases hospitals, general hospitals, and nursing and health technology training institutes.
- At District level, the Civil Surgeon (CS) is the chief healthcare manager responsible for primary and secondary health care services delivery.
- At Upazila level (sub-district) public health programs and Primary Health

1. WHO Link

2. Chandler DJ, Fuller LC. A Review of Scabies: An Infestation More than Skin Deep. *Dermatology*. 2019;235(2):79-90.
doi:10.1159/000495290

Care (PHC) are managed by the upazila health and family planning officer, who also oversee the Upazila Health Complex (UHC).

- At Union level: rural health centers, union sub-centers, and union health and family welfare centers. Each union-level health facility employs a medical doctor among other staff. This level provides out-patients services only.
- At Ward level community clinics provide Primary Health Care (PHC) services through health assistant and trained community health workers.

The Ministry of Health and Family Welfare (MoHFW) has a defined package of essential health care services for each level and referral pathway starting from community care, primary and secondary health care, up to tertiary specialized hospitals.

3. Penitentiary Health System in Bangladesh

The Ministry of Home Affairs (MoHA) through the Prison Directorate is the Ministry responsible for health care delivery in Bangladesh prisons. The Jail Code also states that “The Civil Surgeon of the District in which a jail is situated shall be the Chief Medical Officer of such jail”. There are 68 prisons in Bangladesh including 13 central Jail and 55 Districts Jail. The total number of prison population in Bangladesh range between 73,177 to 88,424 and the rate of prison population varied from 45 to 53.2 as per 100,000 of the national population³, which is 165 158 616 inhabitants (National Census 2022). Prisons Doctors are deputed by the Ministry of Health and Family Welfare to the Prison Directorate. The Prison Directorate also contract the health staff through the Ministry of Health and

Family Welfare. There is a health facility in the vicinity of all the prisons in Bangladesh although the services package varies from one place to another. Referrals to outside health facility are organized by the prison administration upon the request of the health staff based on detainee's health needs. Drugs are provided by the Prison Directorate on a yearly basis according to the needs identified by the prison health staff. Health information is reported directly to the Prison Directorate.

4. Actors for an outbreak response in Bangladesh Prisons

Epidemics and Outbreak response has been and will always be a multidisciplinary response. It needs involvement of different actors including the affected population itself. Responding an outbreak in Bangladesh prisons might involve:

- The Prison Directorate
- The concerned prison administration including the Jail Superintendent, the Deputy Jailer, guards, and any relevant prisons staff.
- The prison's health staffs of the concerned prison
- The Civil Surgeon office of the concerned district, including the civil surgeon, his deputy or any health staff deputed to the prison directorate.
- Detainees and their visiting families

Inter-ministerial coordination between Ministry of Health and Family Welfare (MoHFW) and Ministry of Home Affairs (MoHA) is fundamental and crucial to ensure the success of epidemics/outbreaks response in Bangladeshi Prisons.

3. Khan, Md & Yanwen, Tang & Aziz, Moonmoon. (2020). Jails and Imprisonment in Bangladesh: Understanding the Imprisonment Status of Inmates and the Spatial Distribution of Prisons. 6. 404-414.

ii. EPIDEMIOLOGY AND RISK FACTORS OF SCABIES

1. Scabies Definition

Human scabies is defined as a "parasitic infestation of the skin caused by the human itch mite *Sarcoptes Scabiei* var hominis. The microscopic adult female scabies mite burrows into the upper layer of the skin where it lives and lays its eggs, responsible

for a host immune response leading to intense itching and rash". Bacterial skin infection by *staphylococcus aureus* or *streptococcus pyogenes* as secondary complications are possible and may lead to septicemia, heart disease, and renal illness such as glomerulonephritis.

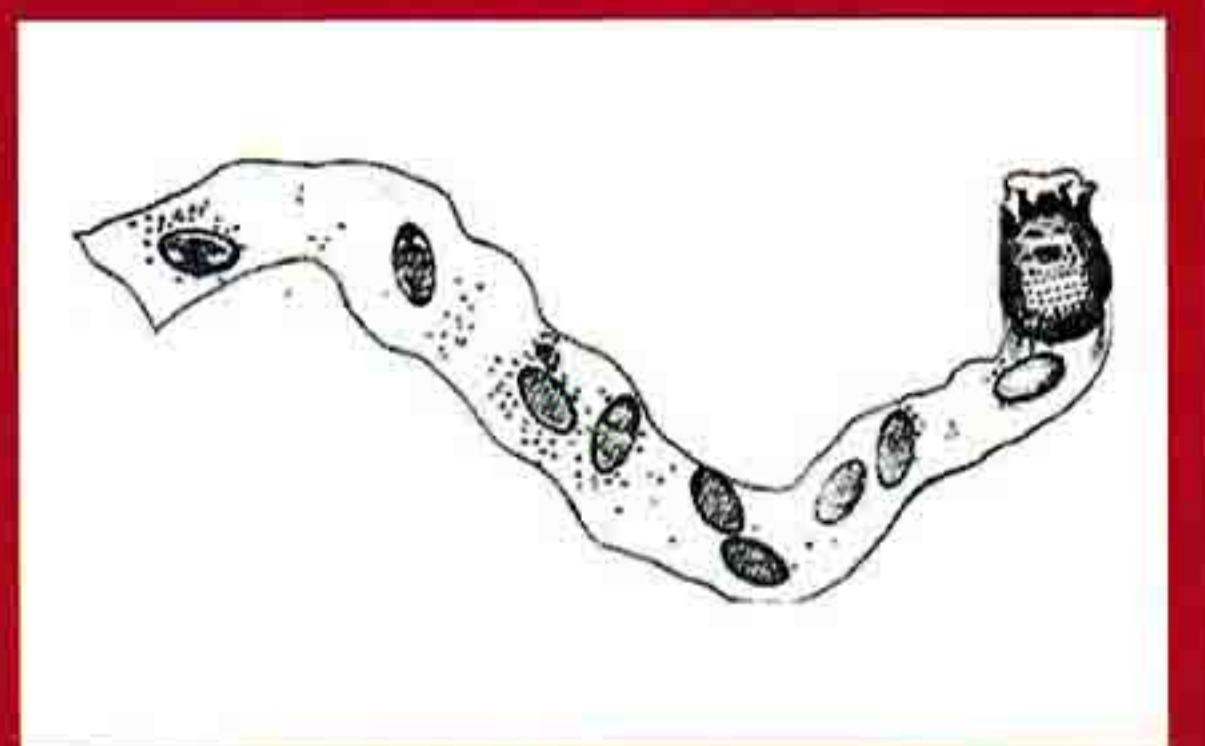


Figure 1: Human scabies mites (CDC); and Diagram showing adult female itch mites and eggs in burrow in skin (Redrawn by H.S. Lesson. after Munro (1919) BMJ).

Risk Factors for high prevalence and the likelihood of outbreaks



4. Center for Disease Control and Prevention: <https://www.cdc.gov/parasites/scabies/index.html>

2. Reservoir, modes of transmission, and Life Cycle.

Scabies is a communicable disease transmitted person to person through direct and prolonged skin contact with an infected person. Humans are reported to be the only reservoir and animals don't transmit scabies disease. Infested individuals may transmit the disease during their asymptomatic period which may vary from 2-3 days (in case of reinfection) to 2-6 weeks (newly infected).

The risk of transmission is correlated to the level of infestation of the source and is very high for individual with crusted scabies, who may be an important source of the spread of the disease in close settings like prisons. Individual with crusted scabies can carry from thousands to millions of mites, are very contagious, and are core transmitters within their communities⁵. People with classic scabies carry 5-10 mites. Indirect transmission through contaminated items (clothes, bed linens) are reported and must be considered in prisons setting and or in case of crusted scabies.

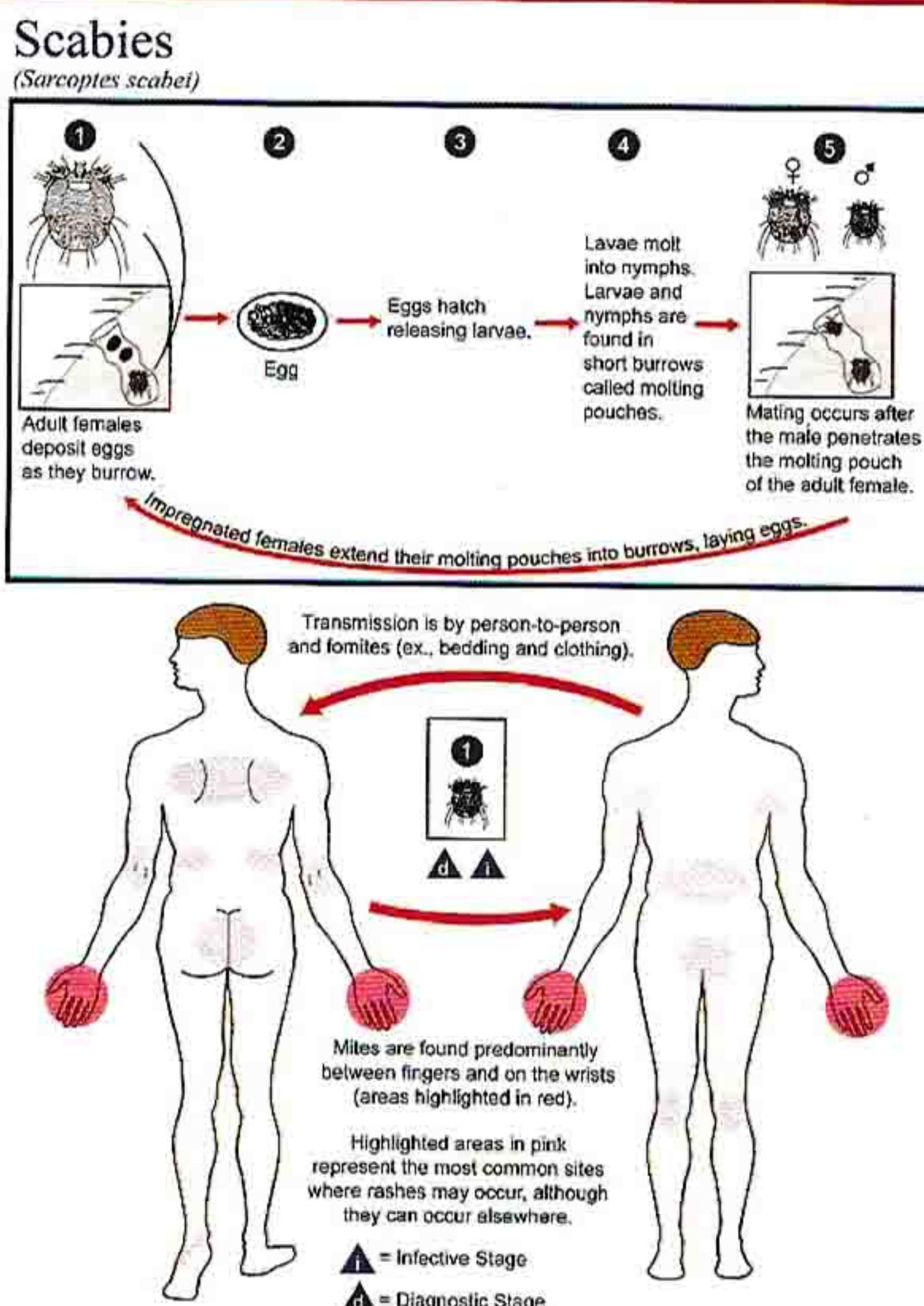


Figure 2: *Sarcoptes scabiei* four stages life cycle: egg, larva, nymph and adult (CDC).

5. Engelman D, Cantey PT, Marks M, et al. The public health control of scabies: priorities for research and action. Lancet. 2019;394(10192):81-92. doi:10.1016/S0140-6736(19)31136-5

3. Symptoms, diagnosis, and treatment.

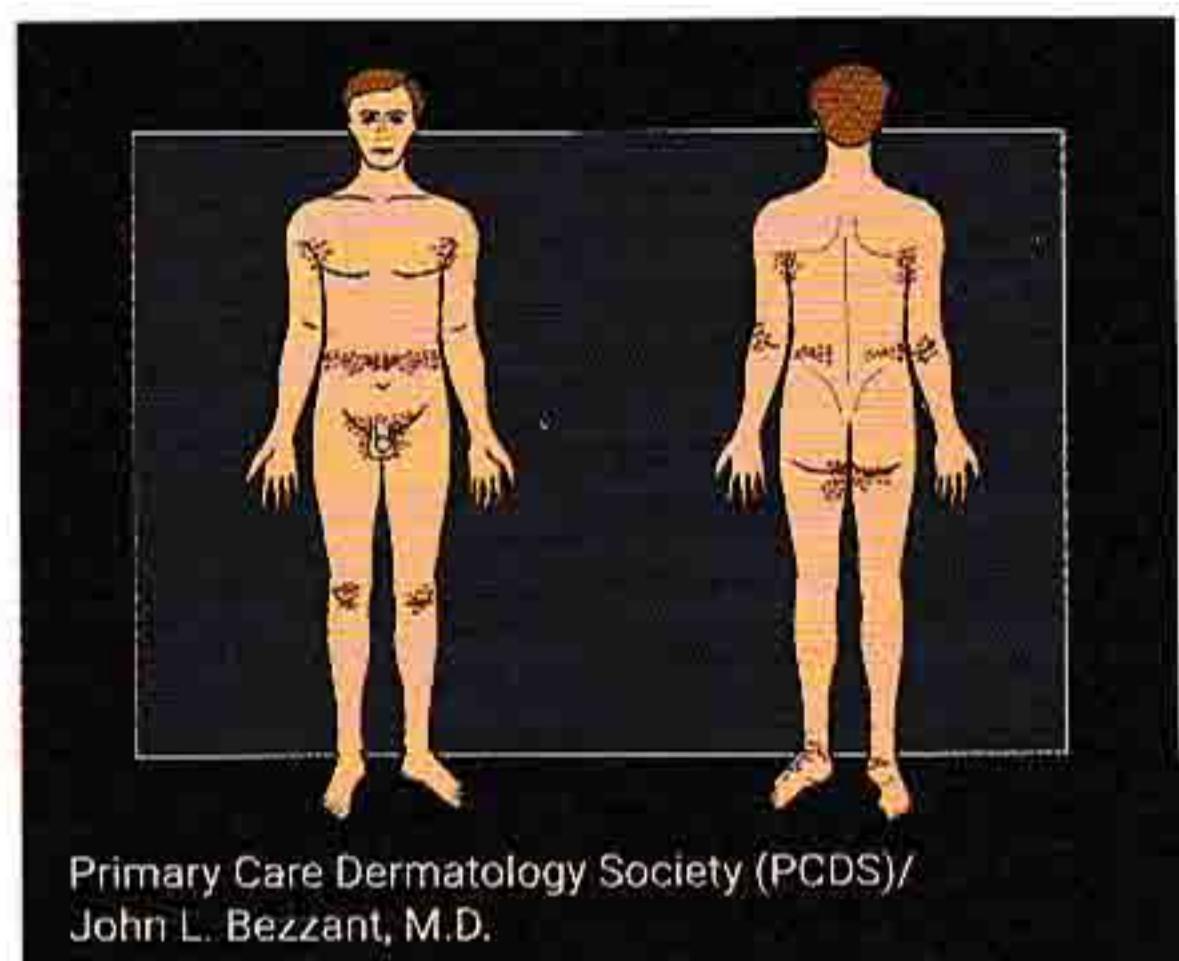
3.1. Common scabies case

Common's symptoms of human scabies are "itching and skin rash, caused by the sensitization of the protein and feces of the mites. Severe itching (pruritus), especially at night, is the earliest and most common symptom of scabies"⁶. Primary lesions are described as erythematous papules, vesicles, bullae and a pathognomonic but rarely observed tunnel or burrow. The tunnel, long from 1 to 10mm, describe a short wavy line



and is most seen on the anterior part of the wrist, and on the fingers and penis⁷. Scabies lesions common sites such as:

- Wrist,
- Elbow,
- Armpit,
- Penis,
- Groin
- Nipple,
- Waist,
- Buttocks,
- Shoulder Blades.



Primary Care Dermatology Society (PCDS)/
John L. Bezzant, M.D.

3.2. Crusted Scabies

Crusted scabies also called Norwegian Scabies is observed in immunocompromised individuals: HIV, diabetes, elderly. Patients with crusted scabies can have up to millions scabies mites and eggs in their skin and are highly contagious leading to the widespread of scabies within their household, community, or environment. Special consideration should be given to crusted scabies while managing scabies outbreaks in prisons.



3.3. Diagnosis

Scabies diseases can be done clinically through the physical medical examination of the skin's lesions and medical history. Clinical diagnosis after a proper physical medical examination can be retained as the scarcity of resources do not allow. Diagnosis is based on clinical suspicion, severe pruritus, typical distribution of lesions, and response to treatment

6. Center for Disease Control and Prevention: <https://www.cdc.gov/parasites/scabies/index.html>

7. Managing scabies outbreaks in prison settings, ICRC Guideline.

iii. SCABIES OUTBREAK INVESTIGATION IN PRISONS

1. Alert Investigation

When increasing and unusual number (compared to previous years) of scabies cases are reported in Bangladesh prisons, the Jail Superintendent and the Civil Surgeon of the concerned jail or district may conduct a joint assessment for a better understanding of the situation. Both can initiate the joint rapid assessment, in close collaborative manner, and may request additional resources, including human resources, from their respective Directorate. The assessment team will include prison authorities, the Civil Surgeon Office, prison health staff, prison staff, and water and sanitation professional.

2. Diagnostic Confirmation

In prisons settings clinical diagnosis after a proper physical medical examination by the assessment team is sufficient to ensure

the diagnostic confirmation of the scabies diseases. The assessment team will conduct medical examination of a sample of several detainees with suspected scabies lesions. The size of this sample will depend on the total prison population, the distribution of the scabies within the prison facility as reported by the prison health staff, and the assessing team capacity.

The assessment team will confirm or infirm the outbreak according to their findings taking in consideration the incidence of the scabies cases in comparison to the same period in previous years, the attack rate of the scabies within the detention facility.

8. Rachel L. Gilson; Jonathan S. Crane. Scabies, August 2022: <https://www.ncbi.nlm.nih.gov/books/NBK544306/>

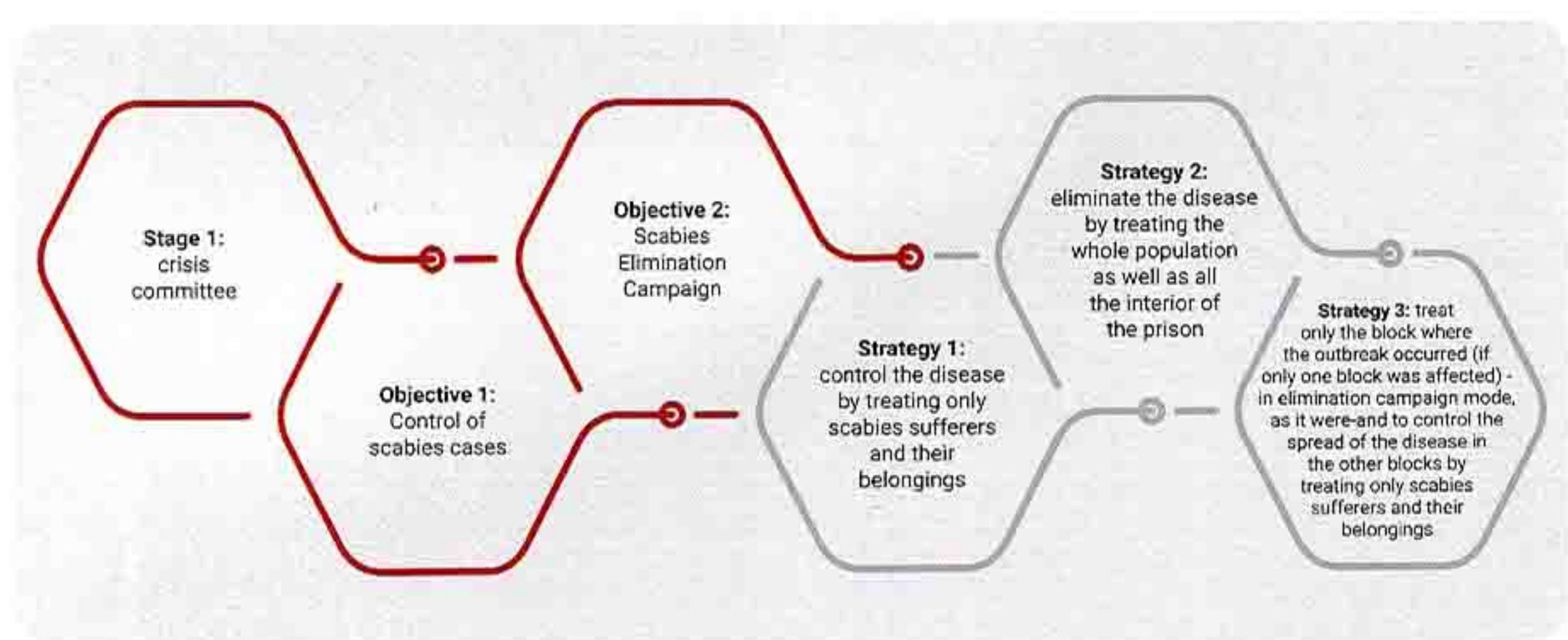
iv. SCABIES OUTBREAK RESPONSE IN PRISONS

1. Outbreak response committee

The outbreak response committee designate the campaign coordinator. Ideally the dermatologist of the concerned prison, if available, coordinate the outbreak response. If there is no dermatologist assigned to prison the district civil surgeon, in close collaboration the Jail Superintendent, may allocate a dermatologist for the sake of the campaign.

2. Clusters cases control versus scabies elimination campaign.

Considering the context and reality of each detention facility the outbreak response committee may decide for scabies control or elimination by organizing a proper campaign. In prisons elimination campaign are preferable especially if cases are not clustered.



3. Health and hygiene promotion for detainees, prison staff and visitors.

Prior the start of the campaign awareness sessions must be provided to detainees regarding the scabies situation within the prison, its mode of transmission and prevention measures. They should also be informed about the practical of the campaign. The planning of the campaign and what is requested from them should be very clear. Health promotions posters can be posted in the cells/wards to enhance detainees' awareness.

4. Practical organization of a scabies elimination campaign.

Three main components are to be considered during the organization of the scabies campaign in prisons settings. In addition to the case management during the campaign, treatment of clothes and beddings of detainees and the environmental cleaning are essentials. If one the component is not handled adequately it will jeopardize the scabies campaign whatever its objective: control or eradication. It is important to mention that these three components need

9. Managing scabies outbreaks in prison settings, ICRC health Care in Detention Guideline. 2015

to be conducted simultaneously during a campaign and for all the target population.

4.1. Medical Case management of detainees

Mass drug administration is a key during scabies outbreak response in prisons settings. During a control campaign only affected detainees are treated with the chosen medical treatment. For an elimination campaign all detainees whether symptomatic or not, whether infested or not, should be considered and receive the chosen medical treatment. A strategy considering control in some wards/block and elimination in others wards or block of the prison can also be considered according to the distribution of the scabies within the detention facility.

Medical Protocol: Ivermectin oral route or Benzyl Benzoate topical application are the recommendations for a scabies outbreak campaign in Bangladeshi prisons. The choice on Ivermectin or Benzyl Benzoate will depend on its availability, the size of the detainee's population, and the infrastructure setup or design of the concerned prison.

- Ivermectin dosed by weight, is the first-line treatment for typical scabies
 - should be taken with food or close to mealtime, due to a significant increase in bioavailability when the drug is taken with food.
 - The administration of ivermectin should be directly observed.
 - Contraindicated in pregnant or breastfeeding women and children.
 - Ivermectin is available in 3 mgtablets, with the dose based upon

weight (200 micrograms per kg):

36–50 kg = 3 tabs (9 mg)

51–65 kg = 4 tabs (12 mg)

66–79 kg = 5 tabs (15 mg)

≥ 80 kg = 200 mcg/kg

- Day 1 and to be reconducted 7 days later under direct observation.

Ivermectin to be adapted to the available presentation 6 mg, 12 mg.

- Benzyl Benzoate 25 % application all over the body of the detainee after a proper shower ideally with a 2 Liter hand sprayer. For more practically the scheme below is recommended
 - Day 1:** shower and application for 24 hours
 - Day 2:** shower and application for 24 hours
 - Day 3:** shower only

Separate treatment strategy for crusted scabies with both ivermectin and permethrin 5% cream simultaneously in multiple doses. Depending on infection severity, the CDC recommends that the ivermectin/permethrin regimen be administered together in 3 doses (days 1,2,8), 5 doses (days 1,2,8,9,15), or 7 doses (days 1,2,8,9,15,22, 29)^{10 & 11}.

Mainly gram-positive cocci causes the superinfection. Treatment should be started one or two days before the anti-scabies treatment. Ideally, a seven-day treatment with oral Erythromycin (for adults, 2 g/day, divided into two doses) or Cloxacillin (for adults, 3 g/day divided into three doses) 11

10. Scabies Protocol Prisons. Bureau. Federal Bureau of Prisons. http://www.bop.gov/resources/health_care_mngmt.jsp

11. Health Care in Detention Managing Scabies Outbreaks in Prison Settings. https://collab.ext.icrc.org/sites/TS_YAN/OperationalResponse/Deprived%20of%20freedom/ASSMED/Guidelines%20and%20Strategy/ICRC/ICRC%20Health%20Care%20in%20Detention-Managing%20Scabies%20Outbreaks%20in%20Prison%20Settings%20Jan%202017.pdf

One dermatologist must be involved in the campaign to coordinate the overall response and ensure detection of complicated scabies cases

4.2. Treatment of Clothes and Bedding

Detainees' clothes and beddings must be wash in hot water (or at least up to 60°C) and dried or baged for 7 days, while the medical treatment is initiated, to eliminate the scabies mites and prevent reinfestation. Sets of clothes can be treated before the campaign and kept ready to be handle to them during the campaign. Family members might be asked to provide sets of clean clothes before the start of the campaign. For those who are unable to obtain set of news clothes, for the sake of campaign, alternatives solutions to be found by the outbreak response committee in collaboration with

the prison administration. For the time being Permethrin powder is not authorized for a scabies campaign purpose in prisons settings in Bangladesh.

4.3. Environmental Cleaning

Detainees' livings environment must be cleaned during the campaign. This includes individual or common cells/ward, corridors, shower/toilets. Cells/wards cleaning must take place the first day and last day of the campaign after the medical treatment and before detainees return in. same for the internal corridors. External corridors and showers rooms cleaned on the last day of the campaign.

Both clothes and beddings, and environmental cleaning can be supported by the detainees with clear instruction and supervision by the health staff.

V. MONITORING AND EVALUATION

Prior an outbreak prison health staff must be alert regarding scabies and skin diseases in general as it negatively impacts detainee wellbeing and mental health. These data should be analyzed in comparison to the previous years and any unusual or alarming

trend should be reported and addressed accordingly. When an outbreak is declared a "line listing" should be open to ensure proper follow-up of the cases and the evaluation of the ongoing scabies campaign.

vi. PREVENTION OF SCABIES IN PRISONS SETTINGS

Prevention of the scabies in prison start with the initial medical assessment of all newcomers' detainees within the detention facility along with access to water, health and hygiene promotion, improved living conditions, availability of qualified health staff and access to health care. During an outbreak health and hygiene promotion (use Audiovisual, screen display, leaflets, posters, etc.) play a major role while initial medical assessment should continue or implemented for all news arrivals. Regular dissemination program regarding scabies and refreshment trainings for the health staff will prevent wrong diagnosis and mislead treatment.

Decongestion measures: decongestion was one of the major global calls at the beginning

of the Covid-19 crisis to prevent foreseen dramatic consequences of the disease inside the prisons. These measures may also apply to others outbreak or epidemics. Promotion of alternative measures to detention (e.g., for petty crime), release on bail for detainees that do not present threat for the society, release on humanitarian or medical motives are among others that can be considering for outbreaks/epidemics in prisons. More juvenile centers where they can have access to education and reintegrate the society easily. Decentralization of juvenile wards and early disposal of under trial cases according to the national law can prevent overcrowding in the prison.

vii. PUBLIC INFORMATION AND RISK COMMUNICATION

1. Information Education and Communication

Health Staff must organize sensitization and awareness session for detainees and prison staff as well. Posters can be made on prevention of scabies and pasted on the newcomer ward, so that the awareness develops among them. Audio visual means can be used for health 4education inside prison.

2. Family visits

Usually there is no physical contact between families and detainees in BD Jail. Maintaining

distance in case of crusted scabies from the family member is important as these cases carry millions of mites and are high contagious. Information about the scabies outbreak should be communicated to the family and the planned campaign as well. The campaign should avoid overlapping with the family visits days as much as possible.

Families may support the control or elimination campaign by providing sets of clean clothes for the detainees. These clothes to be used after the medical treatment and before returning the treated old clothes.

viii. RESOURCES MOBILIZATION

Addressing any outbreak in Bangladesh prisons must be a multidisciplinary response and with strong collaboration and communication between the Prison Directorate and the MoHFW through the Civil Surgeon office. The shortage of

prison health staff must be addressed by identifying and allocating additional staff for the campaign. This is also valuable for cleaning and hygiene materials. Active case detection team inside the cells/wards should be conducted by the prison health staff.

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