How is WASH significant in AYUSH

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Introduction

WASH: “Water, Sanitation & Hygiene”

Access to WASH
Safe Water
Adequate Sanitation
Hygiene Education

Goal
To reduce Disease and Morality rate
To Reduce Poverty
To Improve Socio-economic status
India houses 11% of the world's total urban population and 43% of urban population that defecates in the open.

More than 80% of the sewage remains untreated in India.

30 million urban households rely on untreated water supply in India.
WASH

WATER

SANITATION

HYGIENE
You will never solve poverty without solving water and Sanitation

- Matt Damon
Awareness

• **Water**:
  - World Water Day: 22\textsuperscript{nd} March
  - World Water Week: 28\textsuperscript{th} August - 2\textsuperscript{nd} September

• **Sanitation**:
  - World Toilet Day: 19\textsuperscript{th} November

• **Hygiene**:
  - Global Hand Washing Day: 15\textsuperscript{th} October
  - International Menstrual Hygiene Day: 28\textsuperscript{th} May
  - World Oral Health Day: 20\textsuperscript{th} March
WASH - Health

- Inadequate access to WASH:
  - Major cause of Death in children below Five years
  - Over 800 children die every day due to Diarrhoea related diseases
- Under nutrition associated with repeated Diarrhoea
- Intestinal worm infestations

Diarrhoea ↔ Under Nutrition
WASH - Health

• Irreversible Physical and Cognitive damage
• One in four children world wide suffer from stunted growth.
• Other Health issues
  • Cholera
  • Malaria
  • Trachoma
  • Schistosomiasis
  • Worm infestations
• Guinea worm diseases
WASH - Education

• Impact on overall performance at school
  • Shortage of school attendance
    • Woman and girl children spent 200 million hours every day for collecting water
  • Reasons for Drop outs
    • Basic needs like lack of Water and toilets at schools
    • Lack of privacy & dignity to manage Menstrual Hygiene in adolescent girls
    • Cognitive impairment
    • Recurrent Health issues
WASH - Economics

• Because of Proper WASH facilities:
  • Can save 263 billion dollars a year worldwide.
  • By controlling of Diarrhoea like diseases, can save 11.6 billion dollars.
  • Could generate 5.6 billion dollars in labour spending
Inadequate WASH - Heath Issues

Pathogens – Diseases

• Bacterial
  • Vibrio cholera (Cholera)
  • Salmonella Typhi (Typhoid)
  • Shigella (Bacterial Dysentry)
  • Escherichia coli

• Viruses
  • Hepatitis A
  • Hepatitis E
  • Polio virus (Poliomyelitis)
  • Rota virus

• Protozoan
  • Entameba histolytica (Amoebiasis)
  • Giardia (Giardiasis)

• Helminthes:
  • Tape worm etc.
Fluoride and Arsenic in ground water

**Fluoride:**
Dental Fluorosis, Skeletal fluorosis, Crippling Fluorosis and Reduced immunity, repeated abortions or still births and male sterility, GIT diseases, UTI, neurological symptoms etc.

**Arsenic:**
Neurological deficit, Cardiovascular diseases, Cancer, Cognitive defects, Vision problems, decreased production of blood cells etc.
Contamination of Ground Water

Man made and Natural calamities :

• Natural Metalloid elements in earth’s crust
• Weathering of rocks
• Volcanic Ash
• Fly ash from combustion of fossil fuel
• Fertilizers
• Natural calamities – droughts, floods & storms
<table>
<thead>
<tr>
<th>Item</th>
<th>Recommendation</th>
<th>Explanation</th>
</tr>
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<tbody>
<tr>
<td>Water quantity</td>
<td>5—400 litres/person/day.</td>
<td>Outpatient services require less water, while operating theatres and delivery rooms require more water. The upper limit is for viral haemorrhagic fever (e.g. Ebola) isolation centres.</td>
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<td>Water access</td>
<td>On-site supplies.</td>
<td>Water should be available within all treatment wards and in waiting areas.</td>
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<td>Water quality</td>
<td>Less than 1 <em>Escherichia coli</em> thermotolerant total coliforms per 100 ml.</td>
<td>Drinking-water should comply with WHO Guidelines for Drinking-water Quality for microbial, chemical and physical aspects. Facilities should adopt a risk management approach to ensure drinking-water is safe.</td>
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<td>Presence of residual disinfectant.</td>
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<td>Water safety plans in place.</td>
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<tr>
<td>Sanitation quantity</td>
<td>1 toilet for every 20 users for inpatient setting.</td>
<td>Sufficient number of toilets should be available for patients, staff and visitors.</td>
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<td>At least 4 toilets per outpatient setting.</td>
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<td>Separate toilets for patients and staff.</td>
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<tr>
<td>Sanitation access</td>
<td>On-site facilities.</td>
<td>Sanitation facilities should be within the facility grounds and accessible to all types of users (females, males, those with disabilities).</td>
</tr>
<tr>
<td>Sanitation quality</td>
<td>Appropriate for local technical and financial conditions, safe, clean, accessible to all users including those with reduced mobility.</td>
<td>Toilets should be built according to technical specifications to ensure excreta are safely managed.</td>
</tr>
<tr>
<td>Hygiene</td>
<td>A reliable water point with soap or alcohol based hand rubs available in all treatment areas, waiting rooms and near latrines for patients and staff.</td>
<td>Water and soap (or alcohol based hand rubs) should be available in all key areas of the facility for ensuring safe hand hygiene practices.</td>
</tr>
</tbody>
</table>
Water, sanitation and hygiene in ayush hospital

- Dispensary level
- Hospital level
  - Panchakarma
  - Ksharasutra
- Pharmacy
- Herbal Gardens
No one is healthy when the ecosystem is sick.

www.piecefit.com
WASH - Ayurveda

Description of Epidemic Diseases:
Charaka Samhitha Vimana sthana 3rd Chapter
“Janapadodhwamsaniyam”

Factors Responsible for Epidemics:
(Janapadodhwamsakara Bhava)

* Vayu – Air
* Udaka – Water
* Desa – Soil
* Kala – Season / Time

Lethal : Vayu < Jala < Desha < Kala
“Pure water is the world’s first and foremost medicine.”

Slovakian Proverb
WASH - Ayurveda

Water it self is life and it compared with Nectar (Amritham) (A.H.Su)

Description of pure water and Hamsodakam in sharad Ritu. Ushapaana Rasayanam (Ananda Kanda) for rejuvenation therapy

Quality: To improve quality of water- Boil with Ela, Ushira, Chandana etc

Quantity: Depending on Agni bala (No fixed quantity)

Consumption Time: related to food, day time and bed time
Sanitation - Ayurveda

Reasons for Sanitation issues - “Prajnaparadha”
Like Wars: Due to advanced weapons, it leads to –
Water pollution, Air pollution and soil pollution.

Food sanitation: Health & ill health depends on food
Ahaara is considered as Upasthambha for life.
Properties of food articles, various methods to procure,
store, process and serving of food discussed.
Boiling of milk before using
Procuring fresh, fully ripened fruits and vegetables is recommended.
Meat of sick and poisoned is prohibited.
Diet should be eaten freshly prepared.
Sanitation - Ayurveda

Personal hygiene along with the cleanliness of the kitchen and dining area are dealt in detail. To prevent contamination with heavy metals and also to enhance the properties of food, different utensils are mentioned. How to serve food is also explained. Viruddha ahaara (improper combination) concept is very unique in Ayurveda.

**Shoucha of chatuspaada**: is having major role in treating patients.

**Fumigation technique** in surgical procedures.

**Environmental sanitation**: Dhupana is indicated in case of contamination to maintain proper sanitation. Haridra, Tulasi, Triphala, Nimba, Agaru etc

Proper and timely **mala mutra thyaga**.
Hygiene - Ayurveda

- Oral Hygiene
- Personal Hygiene
- Social Hygiene
- Mental Hygiene

If the body requires hygiene, then hygiene is compulsory for the mind and soul

-- Dmitry Pisarev --
Oral Hygiene

• Dantha dhaavanam:
  • Brushing with twigs of Neem, Apamarga, Irimedha, Vata, Karanja etc
  • Kashaya(Astringent), Katu(Pungent), Tiktha(Bitter), Madhura(sweet)

• Jihwaa Nirlekhanam:
  • Tongue cleaning with gold, Silver, Copper, Brass, Zinc, Tree branches.

• Kavala and Gandusha:
  • with medicated oils and kashayas
Personal Hygiene

- Anti aging:
  - Abhyanga
  - Murdhni taila
  - Vyayaama
  - Udhwarthana
  - Snana
  - Ratri charya
    - 100 feet walk after dinner
    - oil application to soles
    - Pray before going to bed
Social Hygiene and Mental Hygiene

• **Social Hygiene:**
  • Sadvritham (Good conduct)
  • Achara rasayanam: Satya, Bhootha daya, daana, bali, devatharchana, Sadvrittha etc

• **Mental Hygiene:**
  • Satwavajaya – Counseling and consoling
  • Dharaneeya vega
Origin of Diseases

- **Satya yuga**: Like Gods
- **Krutha yuga**: Rich people-Heaviness-Over weight-Laziness-Accumulation & attachment to things- Greed
- **Trethayuga**: Krodha- kama, lobha, Bhaya etc.
  - Unable to handle emotions / Health/ Environment
  - 1/4\(^{th}\) of Dharma disappeared
  - 1/4\(^{th}\) of attribution of earth, 1/4\(^{th}\) quality of food, 1/4\(^{th}\) life span disappeared
  - Unusual changes in health leads to agni (Metabolic) vitiation
- Manifestation of diseases
Holistic Approach of Ayurveda

Ayurveda

Swasthya
(Healthy)
- Dinacharya
- RuthuCharya
- Sadvrittha

Atura
(Patient)
- Shodhana
  - Panchakarma
  - Rakthamokshana
- Samana
  - Ahara
  - Vihara
  - Oushadha

Rasayana chikitsa – kamya (promotive), Naimitthika (curative) and Ajasrika (daily)
Secret of Good Health

“Nityam Hitha Ahaara Vihaara Sevee Sameekshya karee Vishayeswasakthakah Daathaa Samah Satyaparah Kshamavaan Apthopasevee cha Bhavathyarogah” (A.H.Su)

He……
who indulges daily in healthy diet and life style
Who is in a position to discriminates the good and bad of everything and then act wisely
who is not attached too much to the objects of the senses
who develops the habit of charity
who considering all as equal
who is having truthfulness
who is having pardoning capacity
who is in company of good people
……….is the person who is always devoid of diseases.
Role of AYUSH in WASH Promotion

• **Communication:**
  - Working along with line departments like Education, Health and ICDS

• **Social Mobilization:**
  - By implementing effective sanitation and Hygiene promotion programs like celebrating Particular special days related to Water, Sanitation and Hygiene.

• **Community Participation:**
  - By identifying the problem and implementing the solution.

• **Individual level:**
  - Awareness on practices of principles of Ayurveda like pure water intake, food sanitation, oral hygiene, personal hygiene, Social hygiene and Mental hygiene in day to day life
WASH - AYUSH

*Intintiki AYUSH – awareness & distribution of preventive medicines.

*Badibadiki AYUSH – awareness programmes and medical camps at anganwadi centers, schools and colleges.

* AYUSH Mahila – Woman’s Day, Health awareness for self-help groups (podupu sangaalu).

* AYUSH Gramam (Village) – Adoption of SC/ST prominent Villages and conducting weekly twice awareness and medical camps.
“An ounce of prevention is worth a pound of cure.” – Benjamin Franklin
Much like charity begins at home,

Sanitation and hygiene starts with

You and Me.

Thank you!