



SADVRITTA - PREVENTION FROM COMMUNICABLE DISEASE

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ABSTRACT

Despite modern medical science has decline the threat of death and disability from infectious diseases through vaccination, and antibiotics. But all these things having their side effects as well as costly. Ayurveda is the science of life with the primary aim of maintenance of health. Health of a person means health of physical & mind together. '*Sadvritta*' i.e. code of conduct for keeping good or balanced condition of body & mind explains certain rules for maintaining a healthy state of body & mind like Ethical, Social, Mental, Moral and Physical conduct. A good personal conduct awards us good health and a control over our senses and desires. It includes a regime of bathing, cleaning of eyes, nose, ears, teeth, oral cavity, nails etc. Among these rules hygiene, care of sense organs, proper food and clothing etc helps person to avoid having communicable disease as *sadvritta* rules prevent infection to be transmit from one person to another.

KEYWORDS: Sadvritta, infectious disease, code of conduct.

INTRODUCTION

Sadvritta define as *Sad* means good and *Vritta* means regimen.^[1] This is code of conduct for the keeping good or balanced condition of body & mind. *sadvritta* not only includes mental faculties, but also rules related with general hygiene, food consumption, sexual intercourse & exercise, following which leads to prevention of psychological, physical & psychosomatic disorders. This also can be called as health promoting conduct. And all over, *sadvritta* play a vital role in preventing communicable diseases.^[2]

MATERIALS AND METHODOLOGY

Literature of Ayurvedic and modern science available from Vedic era to present era. Methodology used is comparing observation studies of both distinct sciences ie modern science as well as Ayurveda.

OBSERVATIONS

Communicable Disease- An illness due to a specific infectious agent or its toxic products capable of being directly or indirectly transmitted from man to man, animal to animal, or from the environment (through air, dust, soil, water, food, etc.) to man or animal. Communicable disease may spread from the reservoir to the susceptible host in many ways.

Modes of transmission

- 1) Direct transmission
- a) Direct contact

- b) Droplet infection
- c) Contact with soil
- d) Inoculation into skin or mucosa
- e) Transplacental (vertical)

- 2) Indirect transmission
- a) Vehicle -borne
- b) Vector-borne
- c) Air borne
- d) Fomite-borne
- e) Unclean hands and

Sadvritta v/s Direct Transmission

Direct Contact (AIDS) – Infection spread by direct contact from skin to skin, mucosa to skin or mucosa to mucosa of same or another person Ex: STD, AIDS, leprosy, leptospirosis, skin & eye infection.^[3]

Sadvritta- One should not sleep or sit together and should not perform sexual intercourse with a woman having menses or some disease, impure, inauspicious, and other's women or in female organ of other than human being or other than female vagina.^[4]

Explanation- For vaginal sex the risk is greater when a woman is menstruating. Anal intercourse carries a high risk of transmission than vaginal intercourse because it is more likely to injure tissues of the receptor partner. Direct contact if an STD, such as syphilis, chancroid or herpes, causes ulceration in the genital or perineal region

of the uninfected partner, it becomes far easier for HIV to pass in to his or her tissues.

Exposed adolescent girls and women above 45 years of age are more prone to get HIV infection. In teenagers the cervix is thought to be less efficient barrier to HIV than in mature genital tract of adult women. The thinning of mucosa at menopause believed to lessen the protective effect. The production of mucus in the genital tract of adolescent girls and in postmenopausal women is not as prolific as in women between these life stages and this may also enhance their susceptibility to HIV infection. Chances of transmission of HIV infection from male to female is twice as likely as from female to male. Generally, women are more vulnerable to HIV infection because larger surface is exposed, and semen contains higher concentration of HIV than vaginal or cervical fluids.^[5]

Droplet infection- This is direct projection of a spray of droplets of saliva and naso-pharyngeal secretions during coughing, sneezing or speaking and spitting, talking into the surrounding atmosphere.^[6]

Sadvritta- One should not yawn, sneeze, and laugh without covering the mouth.^[7] Person should not urinate on road, in crowded place and while taking food. One should not let out mucous nasal excreta at the time other than cleaning of face or bath.^[8] And also person should keep far away from other persons to prevent inhalation of expired air from them.

Explanation- Sadvritta describes **Respiratory hygiene and cough etiquette**,^[9] which are infection prevention measures to decrease the transmission of respiratory illness as:-

- 1- Use of posted signs with instructions and pictures about how to cover cough and wash our hands.
- 2- Availability and use of tissues when coughing and sneezing, and reminders to dispose of used tissues properly.
- 3- Use of a mask (within 3 feet of the patient) for a person who is coughing.
- 4- Physical separation of the person with a respiratory infection from others.
- 5- Stressing hand hygiene after contact with respiratory secretions. This applies to the patient, family members, visitors, employees, and care providers.

Contact with soil- The disease agent may be acquired by direct exposure of susceptible tissue to the disease agent in soil, compost or decaying vegetable matter in which it normally leads a saprophytic existence e.g., hookworm larvae, tetanus, mycosis etc.^[10]

Sadvritta- One should walk having umbrella, stick, turban and foot wear.^[11] Person should not scrap the earth, pluck the grass or weeds and nor should come in contact with mud or grind the mud lump.^[12]

Explanation- Many infectious diseases may be considered to be soil borne to some extent. Soil can also be a source of infection due to contamination with pathogens present in the urine or stools of either wild or domesticated animals. This can be orally as a result of inadvertent transfer through soiled hands, or via the skin as a result of abrasion or more traumatic wounds.^[13] Any activity which is associated with increased wind erosion, seem likely to increase the incidence of these diseases in the surrounding area. Such activities could include land use change, for example by ploughing grassland to make arable land, ploughing or tilling soil that is too dry, etc. These conditions may also increasingly occur under climate change, as that can lead to enhanced incidence of drought periods, besides periods with heavy rainfall.

Inoculation into skin or mucosa- The disease agent may be inoculated directly into the skin or mucosa e.g., rabies virus by dog bite, hepatitis B virus through contaminated needles and syringes etc.^[14]

Sadvritta- One should not go near snakes or animals with dangerous teeth & horns.^[15] One should avoid bones, thorns, impure piercing articles, hairs, chaff, and garbage etc.^[16]

Explanation- infection occurs by inoculation of virus onto susceptible mucosal surfaces (e.g., the oropharynx, cervix, conjunctivae) or through small cracks in the skin. Because some viruses readily inactivated at room temperature and by drying, aerosol and fomitic spread are unusual. Spread of infection from oral secretions to other skin areas is a hazard of certain occupations (e.g., dentists, laboratory workers, hospital and nursery workers).^[17]

Trasplacental (vertical) transmission- Disease agents can be transmitted transplacentally. Eg. TORCH agents, varicella virus, syphilis, hepatitis B, and AIDS. These produce malformations of the embryo by disturbing its development.^[18]

Sadvritta- One should not perform sexual intercourse with a woman having menses or some disease, impure, inauspicious, and not favorable in dawn & dusk, on prohibited days, while unclean, pressed with the urges of urine & faeces.^[19] Intercourse with lunatics, wicked & fetus killers also leads to fetal abnormalities.^[20]

Explanation- Transmission directly from the mother to an embryo, fetus, or baby during pregnancy or childbirth. It can occur when the mother gets an infection as an intercurrent disease in pregnancy. Prohibited time and days or pressing urges leads to *vata dosha* vitiation, which cause fetal deformities. The main routes of transmission of vertically transmitted infections are across the placenta (transplacental) and across the female reproductive tract during childbirth. Nutritional deficiencies may exacerbate the risks of perinatal

infection likely to be caused due to lunatic and fetus killer.^[21]

Sadvrita v/s Indirect Transmission

Vehicle-borne -This implies transmission of the infectious agent through the agency of water, food, ice, blood, or other biological products such as tissues and organs. Eg – acute diarrheas, typhoid, fever, cholera, polio, hepatitis A, food poisoning, etc.^[22]

Sadvritta- One should not eat in unclean utensil, nor eat dirty meal served by the unclean opponents and also without wearing gems on hand, without reciting mantras, in improper place where garbage accumulated on streets, places of worship, near water sources, public places like hospitals, parks, schools etc. and in crowded surroundings, nor should have stale things.^[23]

Explanation- Infection could spread through by using food in dirty or unclean utensils or either by served through dirty instruments. Stale food having great chance of infection as fresh food is warm so pathogens unable to grow but as soon food come to room temperature pathogens starts growing more vigorously.^[24] Along with this crowded areas having more chances of contamination of food, water etc, hence it should be avoided. Gems & mantras are as preventing measures from toxic food by indicating toxicity or neutralizing them.

Vector-borne -Vector is defined as an arthropod or any living carrier (snail) that transports an infectious agent to a susceptible individual. Transmission by a vector may be mechanical or biological.^[25]

Sadvritta- One should wash twice a day, cutting of hairs & shaving, one should always wear clean clothes and nor put on the same cloths after bath.^[26]

Explanation- Most agents regarded as vectors are organisms, such as intermediate parasites or microbes, that's why following ayurvedic regimen and sadvritta helps us in preventing from these vectors, as they attracted towards uncleanness, and make skin, hair clothes and other dirty material as their shelter and reservoir of infection. Cutting of hairs and moustaches, daily bath, cleanliness of personnel things prevent from vectors breeding such as ticks, bugs etc.^[27]

Airborne- Droplet nuclei are a type of particles implicated in the spread of airborne infection. They are tiny particles (1-10micron) that represent the dried residue of droplets. Some of large droplets which settle down by their sheer weight on the floor, carpet, clothes, bedding, etc.^[28]

Sadvritta- One should wear auspicious herbs; one should apply oil to head, ear, nose and feet daily, try to purify air and one should not scrap or broom the roof.^[29]

Explanation- Application of oil on body parts trap the droplet nuclei and prevent them from entering inside body tracts. Scraping and brooming leads to dried droplet nuclei to circulate in air and may cause airborne infection.^[30] Air purification is essential for removal of vitiated air containing droplet nuclei by exchanging with fresh air.

Fomite-borne- Fomites are inanimate articles or substances other than water or food contaminated by the infectious discharges from a patient and capable of harboring and transferring the infectious agent to a healthy person. Eg -soiled clothes, towels, handkerchiefs, glasses, spoons, etc.^[31]

Sadvritta- One should always wear clean and untorn clothes, and should not have food in unclean plates, along with wearing dress, garlands and unguents used by other person before.^[32]

Explanation- Fomite transmission occurs when viruses or bacteria that remain on surfaces cause infections. These inanimate objects carry germs that cause infection, acting as one of the most common ways that people get sick. An inanimate object or substance, such as clothing, creams, or soap, that is capable of transmitting infectious organisms from one individual to another. Skin cells, hair, clothing, and bedding are common hospital sources of contamination.^[33]

Unclean hands and fingers -Hands are the most common medium by which pathogenic agents are transferred to food from the skin, nose, bowel, etc as well as from other foods. The transmission takes place both directly (hand-to-mouth) and indirectly.^[34]

Sadvritta- One should not eat without wearing gems on hand, without taking bath, without washing hands, feet & face, with unclean mouth, having unclean attendants. One should not let out mucosa nasal excreta at the time of having food. One should clean excretory passages and feet frequently.^[35,36]

Explanation- Handwashing is often cited as the primary weapon in the infection control arsenal. The purpose of handwashing is microbial reduction in an effort to decrease the risk of infections^[37]. Hands must be washed in following processes:-

1. Before preparing or eating food
2. After going to the bathroom.
3. After blowing your nose, coughing, or sneezing
4. After handling animal waste or garbage.

DISCUSSION

Three main measures which are adopted for prevention or control of infectious disease by modern science in the same way *Sadvritta* may also be applicable in three ways:

1. **Controlling reservoir or source of infection:-** *Sadvritta* described many ways of controlling source of

infection as person should not urinate on road, in crowded place and while taking food. One should not let out mucous nasal excreta at the time other than cleaning of face or bath. And also person should keep far away from other persons to prevent inhalation of expired air from them. One should avoid bones, thorns, impure piercing articles, hairs, chaff, and garbage etc. One should not eat in unclean utensil, nor eat dirty meal served by the unclean opponents and also in improper place where garbage accumulated on streets, places of worship, near water sources, public places like hospitals, parks, schools etc. and in crowded surroundings, nor should have stale things. One should bath twice a day, cutting of hairs & shaving, one should always wear clean clothes and nor put on the same cloths after bath. One should wear auspicious herbs and gems on hand.

2. By interrupting route(s) of transmission:- *Sadvritta* described many ways interruption of route of transmission as of One should not sleep or sit together and should not perform sexual intercourse with a woman having menses or some disease, impure, inauspicious, and other's women or in female organ of other than human being or other than female vagina. Should not yawn, sneeze, and laugh without covering the mouth. And also person should keep far away from other persons to prevent inhalation of expired air from them. Person should not scrap the earth, pluck the grass or weeds and nor should come in contact with mud or grind the mud lump. One should not go near snakes or animals with dangerous teeth & horns. One should not eat in unclean utensil, nor eat dirty meal served by the unclean opponents. One should apply oil to head, ear, nose and feet daily, try to purify air and one should not scrap or broom the roof. One should not have garlands and unguents used by other person before. One should not eat without washing hands, feet & face, with unclean mouth, having unclean attendants.

3. Immunizing the susceptible host:- *Sadvritta* works more widely and effectively than immunization with respect to prevention from communicable diseases as it is cheap and easy to follow. Physical health by procedure called as *ACCHAAR RASAYAN* which give all qualities of *RASAYAN*^[38] and *VAJEEKARAN* qualities gained by following *VYAVYAY SADVRITTA (BRAHMACHARYA)*. By applying *AHARA*, *VYAVYAY* & *HYGIENE SADVRITTA* person can prevent from disease & attain good health.

This shows that *sadvritta* is not limited up to only mental hygiene, but it has much more wide spectrum of benefits, and among them one is prevention from communicable diseases.^[39]

CONCLUSION

Rules regarding study, rules regarding worship, rules regarding social relation & other behavior give mental satisfaction & improve willpower. Obeying the rules & regulations mentioned in *Sadvritta* play major role in

preventing transmission of infections along with improving immunity power by other regimen & one can achieve long and healthy life which prevents them from becoming source as well as host of infectious disease in terms of physical, psychological and social aspect. Implementation of regimens of *Sadvritta* gives us new aspect to look, behave and think at the world which can results in decrease in transmission of infection and we can have a society which is really healthy by all means.

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