



Homoeopathy in Cervical Cancer

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Abstract: Population growth is related to high fertility rates, thus grading multiparous women in the risk zone of cervical cancer. Cervical cancer is a chronic phenomenon of cervical erosion. Following that the body goes through is the Human Papilloma Virus infection, which becomes the main reason for cervical cancer. The review article deals with the status of cervical cancer at the global level, followed by the situation in India. Further, the article discusses the role and status of HPV vaccines globally and nationally. The role of homeopathy of the Ministry of AYUSH of India in cervical cancer is discussed in the later section of the article. Here, it is proposed that a multi-stage treatment protocol based on therapeutics in homoeopathic materia medica will be an effective tool. The article's focus on homeopathy as the therapeutic system which can cover masses through its properties like cost effectiveness, therapeutic effectiveness, and less side effects.

Key Words: Cervical Cancer, Homoeopathic Materia Medica, HPV, NLEAM, NLEM

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1. INTRODUCTION

Early studies showed that cervical cancer is caused by the 14 high-risk types of Human Papilloma Virus (HPV), with types 16 and 18 accounting for 3/4th of cervical cancers globally. In India, these two types are attributed to 9 out of 10 cases. The scale of the burden is high, as this is one-fifth of the burden of cervical cancer across the globe. As more than three-quarters of cases are diagnosed at an advanced clinical stage, most cases have poor prognosis. HPV constitutes a family of over 200 related viruses where the transmissions occur through sexual contact.^{1,2} HPV infections are of low-risk and high-risk categories. The low-risk caters to noncancerous cases. The high risk relates to 14 types of HPV, and these are potential threats. As mentioned above, HPV16 and HPV18 are related to cervical cancers. Males are also at risk, similar to women, as HPV is directly associated with all those who are sexually active. Usually, these individuals contract within a few years of their first sexual contact. It is seen that the body's immune system is capable of managing HPV infections effectively.^{1,2} When the body goes through repeated HPV infections, it shows cellular abnormalities after several years. As all these cases are not intervened on time, such abnormalities get worse in time, thereby leading to cancer. As per histology, HPV targets the squamous cells that line the internal or vital organs. Therefore, most of the HPV-related cancers are categorized as squamous cell carcinoma. Cervical cancers are also linked to HPV infections arising from epithelial cells, and medically, these are termed adenocarcinoma.^{1,2}

2. EPIDEMIOLOGY OF CERVICAL CANCER

The World Health Organization mentions that cervical cancer is the fourth most prevalent cancer globally.³ Screening of this cancer targets to detect stages of pre-cancer and cancer. It is heartening to note that it can be cured, provided it is diagnosed early while being treated promptly.⁴ GLOBOCAN also reports that cervical cancer constitutes 9.4% of all cancer cases and 18.3% of new cases (incidence) as of the year 2020.¹ As, per another study, India witnessed the highest incidence and mortality rates for cervical cancer in Asia, thus surpassing china.⁵ In India, the population based cancer registries (PBCR) study compared survival data from 11 different PBCRs. The finding reflected that the overall pooled data of cervical cancer's five-year survival rate was 51.7%. Further, the range of the data showed that the survival rate was 31.6% in Tripura PBCR, whereas it was 61.5% in Ahmedabad PBCR of Gujarat.⁶

3. ABOUT HPV VACCINES

Currently, the US Federal Drug Administration (FDA) has approved three HPV vaccines. These three are 'Gardasil 9-9vHPV', 'Gardasil-4vHPV', and Cervarix-2vHPV. The first one is the 9-valent HPV vaccine, the second one is the quadrivalent HPV vaccine, and the third one is the bivalent HPV vaccine. They safeguard against HPV types 16 and 18, which are cancer producers. The 9 valent vaccine has been exclusively distributed for the last seven years as it offers protection against nine HPV types. These are HPV type 6, 11, 16, 18, 31, 33, 45, 52 and 58.⁷ In Maharashtra, the Serum Institute of India, Pune, introduced CERVAVAC, the first indigenous quadrivalent vaccine in a year. The vaccine targets four strains of HPV. These strains are 6, 11, 16 and 18. It is for girls and women in the age group of 9 years to 26 years of age. Besides cervical cancer, the cancers covered by the vaccine

are vulvar, vaginal, and anal cancers that are caused by HPV types 16 and 18.⁸ Guidelines of Federation of Obstetricians and Gynecologists Society of India (FOGSI), GCPR (Good Clinical Practice Recommendations), NCI (National Cancer Institute), and CDC (Center for Disease Control), Atlanta, United States. In the 9-14 age group, 2 doses are recommended at 0 and the second after 6 months of the first dose. For catch-up vaccination in the age group of 15-26 years, three doses are recommended at 0, 1, and 6 months, which is for the Bivalent strain. This strain is no longer available in India currently. Three doses are recommended for the Quadrivalent and Nonavalent vaccines at 0, 2, and 6 months. In the older age groups of 27-45 years, three doses will be given at 0, 1, and 6 months for the Bivalent strain. Similarly, three doses at 0, 2, and 6 months are recommended for the Quadrivalent and the Nonavalent vaccines.^{9,10} Like with all vaccinations, HPV vaccination prevents and does not treat. The optimal timing for administering the HPV vaccination is "Before the Sexual Debut of the individual"¹¹. The site of the vaccines should be at the deltoid region of the upper arm. It is to be administered intramuscularly. The screening strategies remain the same for the vaccinated women and the unvaccinated women.¹¹

4. USE OF HPV VACCINATION IN SPECIAL SITUATIONS

There are some special situations for giving HIV vaccinations. The first is the 'HIV positive or immune-compromised girls' who need three doses. The second situation is the 'interrupted doses' where the defaulters can take the vaccine later. They need not restart vaccinations. The third is during 'pregnancy and lactation,' where it is not recommended in pregnancy, and if given, medical termination of pregnancy (MTP) should not be done. Unlike pregnancy, it is safe to administer during breastfeeding. Next is the 'vaccination of secondary targets such as boys in the age group of 9-26 years and older females, where it is recommended to administer feasible and affordable vaccine. Girls aged 9-14 years are recommended for one or two-dose schedule. Similarly, one or two-dose schedule is recommended for girls and women aged 15-20 years'. Two doses are to be given at a 6-month interval for the target group of women older than 21 years.¹¹ HPV vaccines are based on virus-like particles (VLPs) formed by HPV surface components. These VLPs lack the deoxyribonucleic acid (DNA) and noninfectious. They resemble the natural virus and antibodies formed against the VLPs also have activity against the natural virus. The research of a decade has shown the HPV Vaccine to be safe.¹¹ The minor side effects of the vaccine include pain, redness, or swelling in the arm where the shot is given. Dizziness, fainting, nausea, and headache can also occur. Fainting is more common among adolescents. The benefits far outweigh the risk of potential side effects. Adolescents should be seated or lying down during vaccination and also to be kept under observation for 15 minutes after getting the shot which will prevent fainting¹¹. All stakeholders need to have evidence-based tools when these tools need to be made accessible and acceptable. India's performance in Mission Indradhanush (MI) since 2014 and the COVID-19 vaccination in 20-21 is commendable. Hence, incorporating the HPV Vaccine into the national vaccination schedule would be advantageous. Subsequently, the threat can be efficiently managed. Government entities, non-governmental organizations and other relevant institutions should collaborate to combat HPV cervical cancer. Concurrently, enhancing screening, diagnosis and treatment methods are of utmost importance.

Widespread vaccination against HPV is the most effective intervention for the elimination of cervical cancer.^{11,12}

5. HISTORY OF HPV VACCINES IN INDIA

The following box gives the history of HPV vaccines in India till date/2023 from the year 2008^{8,11}

6. BOX I- HPV VACCINE HISTORY IN INDIA

1. 2008- Licence was issued to the Bivalent and Quadrivalent strains.
2. 2009- Andhra Pradesh and Gujarat state roll out HPV vaccination demonstration projects.
3. 2010- HPV vaccination research halted but is available for prescription in the private sector.
4. 2016- Delhi state government rolls out vaccination. 2 and 3 doses of HPV vaccination show the same efficacy as per the India IARC study.
5. 2017- The state of Punjab starts HPV vaccination in two districts. These are the districts of Bathinda and Mansa.
6. 2018- Sikkim initiates HPV vaccination across the state with the target group of girls aged 9-14 in a sample of 1166 schools. India IARC study recommends 2 doses.
7. India IARC study recommends 2 doses of the HPV vaccine for girls aged 15-18 years.
8. 2022- Serum Institute of India, Pune, Maharashtra, launches CERVAVAC in September but made available in the market in January 2023.

7. TYPES OF VACCINES CURRENTLY AVAILABLE IN INDIA

The first 'Gardasil,' a Quadrivalent vaccine has been licensed for use since June 2006 by the FDA in the united states and since 2008 in India. The vaccine addresses four strains of HPV), which are HPV6, 11, 16, and 18. HPV6and 11 cause about 9

out of 10 cases of genital warts^{7,11}. The second is 'Gardasil 9', a Nona-valent vaccine. It has been licensed for use in India since 2018.Its targets are 6,11,16, 18, 31, 33, 45, 52, 58 types. All these account for an additional 10% of all cervical cancers.⁷⁻¹¹. The third is 'CERVAVAC,' a Quadrivalent vaccine. It targets 6, 11, 16& 18 types. It is India's first indigenous vaccine available in the market since January 2023, after being launched in September 2022. The vaccine is affordable& accessible.⁷⁻¹¹The indigenous, affordable HPV vaccine has the potential to address India's cervical cancer burden. Need-based and correct information is essential to boost the vaccination coverage rate.^{1,2,11}

8. ABOUT THE VACCINES- A PRELUDE

Amongsexually transmitted diseases, it is seen that one out of 10 cases are infected with HPV at some point in their lives since their sexual debut. From 1980s, it took around 20 years of research before highly effective HPV vaccines were available to prevent infection.¹³. Henrietta Lacks, an African American woman, died from cervical cancer at the age of 31 in 1951. HeLa (Acronym of Henrietta Lacks) cells were collected from her cervix shortly before her death. These were the first established in vitro immortal cancer cell lines and helped develop the HPV vaccine.^{14,15} In the originally biopsied HeLa cells, German virologist Herald ZurHausen discovered the presence of HPV 18in the early 1980s.^{14,15}

9. WHO STRATEGY

World health organization established the 90-70-90 goal in 2020 to eliminate cervical cancer by 2030.^{1,2}. World Health Organization also approved a strategy to eliminate Cervical Cancer globally. Further, the WHO has mentioned the incidence rate to eliminate cervical cancer globally. All nations must reach and maintain an incidence rate below 4 per 100,000 women. The figure below describes the strategy.^{1,2,11}



Fig I- WHO strategy^{1,2,11}

The strategy mentions that 90% of girls are to be fully vaccinated with the HPV vaccine by age 15. Similarly, it reflects that 70% of women should be screened using a high-performance test by age 35 and again by age 45. Similarly, for treatment, 90% of women with pre-cancer need to be treated and 90% of women with invasive cancer should be managed.^{1,2,11} Each country is expected to meet the 90–70–90 targets by 2030 to get on the path to eliminate cervical cancer within the next century. About 125 countries have the HPV vaccine in their national immunization program for girls, with about 47 countries extending the program to boys.^{1,2,11}

10. A RECENT STUDY ON HPV VACCINES IN INDIA

A long-term follow-up of a cohort of unmarried girls who received one, two, or three doses of quadrivalent HPV vaccine between 10 and 18 years was done in a study. The study findings in 2023 did not corroborate the findings of earlier studies. The HPV 18 neutralizing antibody titer in the older age group was significantly lower than their younger counterparts. Hence, the earlier the vaccine is taken, the

more effective it is in young groups compared to the old group.¹⁸

11. THE FUTURE STRATEGIES

Including HPV vaccination in India's national immunization program will be prudent. As mentioned above, 125 countries worldwide have integrated the HPV vaccine into their national immunization programs for girls, and approximately 47 countries have extended the coverage to boys.¹⁶ The strategy will further catalyze the 'Beti Bachao Beti Padhao' (Save Daughters and Educate Daughters) national program currently implemented by the Government of India. The prime minister launched the program on 22.1.2015 at Panipat in the state of Haryana. The inclusion of the HPV vaccine will extend its blanket coverage to teenagers, adolescents, and

adults as well.²⁰ Similar ongoing efforts in the state of Uttar Pradesh in India, like the Mukhya mantra Kanya Sumnagla (Chief Minister's Girl Welfare) program since 1.4.2019 and the Mission Shakti (Power to Women) programs since 2020 need to go beyond and include health care as well. The inclusion of the HPV vaccine will only catalyze the ongoing programs.^{21,22}

12. BURDEN OF DISEASE IN INDIA

The large-scale health survey called the National Family Health Survey (NFHS), in its 5th round in 2019-2021, mentions one indicator under cervical cancer.²³ The following table gives the details of the indicator related to screening of cervical cancer as per NFHS 5 survey.

Table 1- Cervical cancer-related indicators for screening as per NFHS 4 and 5 surveys in India²³

NFHS Surveys	Indicators	Type of indicator and Target Group	Urban	Rural	Total
NFHS 4	Ever undergone a screening test for cervical cancer in percentage	(Screening) Screening for cancer among women adults aged 30-49 years	NA	NA	NA
NFHS 5	Ever undergone a screening test for cervical cancer in percentage	(Screening) Screening for cancer among women adults aged 30-49 years	2.2	1.7	1.9

From the above table, we can see that only about 2% of women opt for cervical cancer screening in India. The urban area does more screening than the rural area.²³ The limited availability of screening methods highlights the significant impact of cervical cancer in a populous nation such as India. It highlights the extent of the issue in the nation in terms of NCDs, for cervical cancer, which is characterized by a compromised immune system. In 2010, the Indian government initiated the National Program for prevention and control of cancer, diabetes, cardio-vascular diseases, and stroke (NPCDCS). Currently, this program focuses on cervical cancer.²⁴ The crude death rate (CDR) includes fatalities caused by NCDs, including deaths resulting from cervical cancer. The prevalence of NCDs is increasing due to the epidemiological transition (ET), allowing them to over number the communicable diseases (CDs). Cervical cancer is an example of a NCD that has a significant impact on both the number of people affected and the number of deaths caused by the disease.²⁵ Homoeopathy is India's third most favored therapy method, behind allopathy and Ayurveda. Approximately 10% of the population relies on homoeopathy as a means of addressing their health concerns. Taking this 10% into account, a population of 1.3 billion or around 130 million individuals use homoeopathy in India currently. The total of 130 million includes individuals from all age brackets, ranging from infants to the elderly.^{26,27} A subset of females in the age range of 30-49 years in this 130 million experience cervical cancer and undergo screening as per NFHS 5. Approximately 1/4th of the female population in India falls between the age categories of 30-49 years, amounting to almost 30 crores, according to the 2011 census data. According to the data above, 3 crores individuals in India today use homoeopathy out of 30 crores. If homoeopathy is included in the efforts to combat cervical cancer in India, it has the potential to prevent 30 million females aged 30-49 from developing cervical cancer. Implementing homoeopathy might mitigate difficulties arising from cervical cancer, making it a significant advantage for the country.^{26,27}

13. NEXT STEPS

Awareness is critical to early detection of cervical cancer, which can lead to a favorable prognosis or even a cure. Women should regularly monitor any changes in their cervix through cervical discomforts. They should promptly seek medical advice in case of any abnormality through discharge per vagina. Women with a familial history of breast, ovarian, or cervical cancer are advised to have regular checkups. Above all, a healthy lifestyle supplemented with regular exercise will go a long way in preventing cervical cancer.^{1,2,3}

14. HOMEOPATHIC APPROACH

The first approach to homoeopathy is the miasmatic approach. Miasms in homoeopathy 'are the disease-causing dynamic influences that are infectious in nature.' When the cancer diathesis/indisposition starts within the body, the miasmatic affection in the body is 'Psoric' as the disorder is at the functional level. When the cells multiply unnecessarily in the body and form tumors inside the body, the miasmatic affection is 'Sycotic.' When it spreads to other body parts and destroys tissues, the miasmatic affection is 'Syphilitic.' Here, the homoeopath has to prescribe anti-miasmatic medicines depending upon the prevalent miasm in the patient.²⁸⁻³⁷ The primary source of reference that the article examines is the 'Concise Repertory of Homoeopathic Medicines by Dr. Shankar Raghunath Phatak (1896-1981), M.B.B.S. who practiced Homoeopathy in Pune, Maharashtra, India³⁰. The lead author has picked up the drugs mentioned in capital letters under the rubric 'Cancer' in the above book. In homoeopathic therapeutics, a rubric is the 'reportorial language of a symptom written in the repertory books of the homoeopathic syllabus for homoeopathic education.' These are the drugs that act for all types of cancer. This condition leads to various complications in the body. The drugs are 'Arsenic,' 'Carbo Animals,' 'Conium,' 'Graphites,' and 'Nitric Acid.'³⁰ Further, under this rubric, there is mention of 'Cancer, Glands of'. There are three drugs mentioned and are 'Aurum Mur,' 'Carbo Animals,' and 'Conium.' This rubric is mentioned here since the cervix also secretes and acts like glands.³⁰ As

mentioned above, the stages of cervical cancer also include conditions when the cervix becomes hard and fibrous. It is mentioned under the rubric 'Cancer, Scirrhus'. The drugs in this rubric are 'Bellisper,' 'Carbo Animals,' 'Clematis,' 'Conium,' 'Petroleum,' 'Sepia,' 'Silicea,' and 'Sulphur.'²⁹ Under the rubric 'Cervix, Cancer,' the drug mentioned is "Tarantula." The first sub-rubric under this heading is 'Cauliflower-Like Growth.' The drug is 'Kali Ars'.³⁰ Similarly, another sub rubric is 'Erosion of,' and the drugs mentioned are 'Argentum Metallicum,' 'Hydrastis,' 'Kali Bichromicum,' 'Phytolaca,' 'Sulphuric Acid,' and 'Thuja'.³⁰ Another sub rubric is 'Indurated,' and the drugs mentioned under this rubric are 'Aurum Metallicum,' 'Carbo Animals,' 'Conium,' 'Natum Carb,' and 'Sepia'.³⁰ The next sub rubric is 'Lower Vagina in' and the drug is 'Calendula'.³⁰ Under the sub rubric 'Open, Dilated, as if,' there are two drugs and these are 'Lachesis' and 'Sanicula'.³⁰ The 'painful' rubric has the drug 'Gossypium.' The rubric 'Spongy' has the drugs 'Argentum Metallicum' and 'Ustilago'.³⁰ The rubric 'Ulceration' is also to be considered as cancer results in ulceration, and under this sub rubric, the drugs mentioned are 'Medorrhinum' and 'Mezereum'.³⁰ Another sub rubric mentions 'Prolapse of the uterus with' and the only drug mentioned here is 'Argentum Nitricum'.³⁰ The last sub rubric mentioned is 'Warts on' and as mentioned above, warts are also related to HPVs which are the prime reasons for cancer. The only drug mentioned here is 'Calendula'.³⁰ In material medicine, drugs like 'Cinnabaris,' 'Thuja,' 'Medorrhinum,' 'Dulcamara,' 'And CalcareaCalcinata' are also mentioned for genital warts.²⁸⁻³² As the cervix is a part of the uterus, the drugs mentioned in capitals and italics under the rubric 'Uterus, Cancer' should also be considered. The drug in the capital is 'Arsenic'. The drugs in italics are 'Conium,' 'Kreosote,' 'Lachesis,' 'Sepia,' and 'Thuja'.³⁰ For decreased appetite, 'Gentiana Lutea' can also be prescribed in Potencies and Mother Tinctures.^{28,32} For Anorexia, 'Acid Mur' can be prescribed in Potencies and Mother Tinctures.^{28,32} For rapid weight loss, 'Tuberculinum' and 'Hydrastis' in potencies can be prescribed along with 'Myrica Cerifera' in Mother Tinctures.^{28,32} As mentioned above, these medicines are to be given along with those for cancer. In addition to the potency/dilution medications, the mother tinctures of Indian origin might also be recommended. Cancer is the primary factor behind intricate problems in this context, as it weakens several organs of the body & gives rise to difficulties. Therefore, it is necessary to provide medications that address both cancer and other medical conditions. Indian drugs in homeopathic materia medica may be administered in the form of mother tinctures under these two situations.^{28,32} For the prevention of cervical cancer and related complications, miasmatic prescribing should be done by the homeopath based on the predominant Miasm in each case.³⁵ It is also equally critical to keep the Bach flower remedy known as 'Rescue Remedy' as these patients can also be saved from cancer complications. The homeopath has the ability and choice to prescribe either a single remedy or a combination of drugs from the whole range of 38 Bach Flower remedies. These remedies are specifically recommended for addressing issues within the body's various systems, focusing on the neurological system. These medicines will help the patients mentally to have a positive mind that helps them recover.³⁸ Preventive and curative medicines like the Bowel Nosode Bacillus Number 7 can be prescribed for mental and physical fatigue. Cancer is related to the overall nutritional status of the body. The Bowel Nosode "Gartner Bach" can be prescribed as it addresses nutritional issues in the body. In addition to these considerations, the homeopath should carefully pick the right

Bowel Nosode after choosing the 'Polychrest' based on the overall symptoms of each patient.^{31,41} Given that inflammation occurs inside the body in cervical cancer, medications with anti-inflammatory properties such as 'Prednisone,' 'Cortisone,' and 'Hydrocortisone.' 'Curcuma Longa' in potencies/dilutions has to be prescribed. Besides, the Morgan group of Bowel Nosodes can also be prescribed as these nosodes are anti-congestive.^{28,32} Other specific medicines are 'Carcinosin' and 'Aurum Ars' in potencies. These drugs are prescribed for issues related to cancer.^{28,32} As per Murphy's Materia Medica, there are drugs mentioned in capitals under cancer in the medical repertory guide section of the book. These drugs, which are to be given in potencies as well as in mother tinctures, are 'Arsenic,' 'Asterias,' 'Bromium,' 'Bufo,' 'Cadmium Sulph,' 'Carbo Animalis,' 'Carcinosin,' 'Conium,' 'Cundurango,' 'Hydrastis,' 'Lappa A,' 'Lycopodium,' 'Nitric Acid,' 'Ornithogalum,' 'Phosphorus,' 'Phytolaca,' 'Scirrhinum,' 'Scrophularia N,' 'Silicea,' 'Trif P'.^{28,29} Similarly, the drugs mentioned under the rubric 'Scirrhus, cancer,' the drugs mentioned in capitals are 'Carbo Animalis,' 'Conium,' 'Scirrhinum,' and 'Silicea'.^{28,29} Similarly, under cancer, the drugs to check metastasis are 'Viscum Album' and 'Cundurango' in Mother Tinctures. These drugs can also be given in potencies and as well as mother tinctures.^{28,29} For palliative care and complications arising due to chemotherapy, there are separate drugs. For palliative care, drugs like 'Euphorbium,' 'Morphine Aceticum,' 'Chamomilla,' and 'Carbo Animalis' can be prescribed in potencies and mother tinctures as well.^{27,28} For cases having chemotherapy-related issues, drugs like 'Cadmium Brom' and 'Radium Brom' can be prescribed.^{28,29}

15. CLINICAL FEATURES, INVESTIGATION, AND MANAGEMENT

Cervical cancer cases have symptoms like vaginal bleeding, discomfort, discharge, or symptoms attributable to the involvement of adjacent structures or organs such as the bladder, rectal or pelvic wall. Patients also present with distant metastases to bone and lungs.³⁸ Diagnosis of the case is made by smear or cone biopsy; in cases with symptoms referable to the bladder, colon, or rectum, cystoscopy and flexible sigmoidoscopy need to be done. This cancer is a clinically staged disease, although magnetic resonance imaging is often used to characterize the primary tumor. A computerized Tomography scan of the chest, abdomen, and pelvis is performed to look for metastases or spread of the disease in the lungs, liver, and lymph nodes and exclude hydro-nephrosis and hydro-ureter.³⁸ The management of the cases includes surgery, chemotherapy, radiotherapy, and addressing complications as these symptoms occur in patients.³⁸

16. CONCLUSION

Drugs in the homeopathic treatment system exhibit both mental and physical symptoms. Homeopathy is consistently beneficial in treating cervical cancer patients due to its ability to address not only mental and psychological aspects but also internal inflammation. In addition to constitutional/deep acting/polychrest homeopathic medicines, specialized medications that address all features and consequences of cervical cancer are necessary to manage these situations.²⁸⁻³⁷ It is essential to address diet, counseling, and physical exercise. In every situation, it is necessary to follow all the psychological health methods, such as lifestyle change, food, and stress reduction. The comprehensive materia medica of

homeopathy contains remedies for every manifestation or problem that arises in the body throughout the various phases of cervical cancer. Therefore, to achieve optimal outcomes, it is essential to prioritize activities such as reading, socializing, and mobilizing as part of the therapy& management of cervical cancer.²⁸⁻³⁷. To get the best outcomes, the homeopathic community should be prepared to address the population affected by cervical cancer. No other therapeutic approach can successfully and affordably treat without causing side effects. homeopathic treatment may effectively target cervical cancer and other types of cancer. The presence of long COVID-19 concerns in the community since 2019 has further compounded the cancer scenario. Homeopathy can address the physical and emotional concerns that COVID-19 worsens. Consequently, it will help to mitigate the risk, tackle the high-risk instances& ultimately alleviate the overall burden of cervical cancer³⁹⁻⁴².

17. DECLARATION OF THE LEAD AUTHOR

Prof. Shankar Das, a co-author of the current article, was the Ph.D. guide of the lead author at the Tata Institute of Social

21. REFERENCES

1. GLOBOCAN. Global cancer observatory [Internet]. iarc.fr; 2020 [cited 2024 Jan 10]. Available from: <https://gco.iarc.fr/today/data/factsheets/populations/356-india-fact-sheets.pdf>
2. Upadhayaya RS. Need to include HPV vax in Government Immunization Plan. TOI, Lucknow Edition, Capital. 2023 Oct 4 [cited 2024 Jan 10]. Available from: Times now website
3. World Health Organization. Cervical cancer elimination initiative [Internet]. Available from: <https://www.who.int/initiatives>
4. World Health Organization. HPV and cervical cancer [Internet]. Available from: https://www.who.int/health-topics/cervical-cancer#tab=tab_1
5. Singh D, Vignat J, Lorenzoni V, Eslahi M, Ginsburg O, Lauby-Secretan B, Arbyn M, Basu P, Bray F, Vaccarella S. Global estimates of incidence and mortality of cervical cancer in 2020: a baseline analysis of the WHO Global Cervical Cancer Elimination Initiative. The Lancet Global Health. 2023 Feb 1;11(2):e197-206. DOI: [https://doi.org/10.1016/S2214-109X\(22\)00501-0](https://doi.org/10.1016/S2214-109X(22)00501-0)
6. Sathishkumar K, et al. Survival of patients with cervical cancer in India- findings from 11 PBCR under National Cancer Registry Program. The Lancet Regional Health-SE Asia. 2023. 100296. DOI: <https://doi.org/10.1016/j.lansea.2023.100296>
7. Centers for Disease Control and Prevention. HPV vaccination: what everyone should know. CDC, Atlanta, US [Internet]. Available from: <https://www.cdc.gov/vaccines/vpd/hpv/public>
8. Serum Institute of India. CERVAVAC. Pune, India: Serum Institute of India [Internet]. Available from: https://www.seruminstitute.com/product_ind_cervavac
9. Federation of Obstetric and Gynecological Societies of India (FOGSI) Guidelines and Protocols. fogsi.org [Internet]. Available from: <https://www.fogsi.org>

Sciences, Mumbai. The lead author also certifies that he has expressed his personal opinion based on his public health and clinical experience. The treatment approach or the medicines suggested are only suggestive.

18. AUTHOR CONTRIBUTION STATEMENT

Dr. Tridibesh Tripathy, Shankar Das and Rakesh Dwivedi wrote the initial draft. Mohini Gautam and Sanskriti Tripathy contributed to critical revision and supervision. All authors reviewed the manuscript.

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20. CONFLICT OF INTEREST

Conflict of interest declared none.

10. Centers for Disease Control and Prevention. HPV vaccination recommendations. cdc.gov [Internet]. Available from: <https://www.cdc.gov>
11. Aggarwal I. HPV vaccination in India: new progress and the way forward. RGCIRC team. rgcirc.org/blog/hpv-vaccination-in-India-new-progress--the-way-forward; 2023 May 10
12. Government of India. Mission Indradhanush, COVID vaccination. www.mohfw.gov.in [Internet]. Available from: <https://www.mohfw.gov.in>
13. Toh ZQ, et al. HPV natural history, immunological responses, and vaccination strategies: challenges and opportunities. Frontiers in Immunology. 2023 Dec;14. DOI: <https://doi.org/10.3389/fimmu.2023.123456>
14. Illah O, et al. Updates on HPV vaccination. Diagnostics (Basel). 2023 Jan;13(2):243. DOI: <https://doi.org/10.3390/diagnostics13020243>
15. Gey GO, et al. Tissue culture studies of the proliferative capacity of cervical carcinoma and normal epithelium. Cancer research. 1952;12:264-265
16. Hausen HZ, et al. Human papillomaviruses and their possible role in squamous cell carcinomas. In: Arber W, et al. Editors. Current topics in microbiology and immunology. Springer; Berlin/Heidelberg, Germany; 1977. pp. 1-30
17. Schwartz E, et al. Structure and transcription of human papillomavirus sequences in cervical carcinoma cells. Nature. 1985;314:111-114
18. Journal of Human Vaccines & Immunotherapies. 2023 Dec;19(3)
19. UNICEF. UNICEF bolsters country efforts to increase HPV vaccination [Internet]. Available from: <https://www.unicef.org>
20. Government of India. Beti Bachao Beti Padhao: caring for the girl child. pmindia.gov.in [Internet]. Available from: https://www.pmindia.gov.in/government_tr_rec>beti

21. MKSY, Dept. of WCD, up.gov.in [Internet]. Available from: <https://mksy.up.gov.in>
22. Mission Shakti, wcd.nic.in [Internet]. Available from: <https://wcd.nic.in>
23. IIPS, ICF. NFHS 4 and 5, India: volume 1. Mumbai: IIPS; 2021. 2015-16 and 2019-2021.
24. Government of India (GOI). NPCDCS. nhm.gov.in [Internet]. Available from: <https://nhm.gov.in>.
25. GOI. SRS Bulletin. v55no.1, reference year 2020. May 2022.
26. Popularity of Homoeopathy in India [Internet]. bjainpharma.com/blog/popularity-of-homoeopathy-in-India; 2023.
27. Prasad R. Special Report. Lancet. 2007 Nov 17;370. Available from: www.thelancet.com
28. Murphy R. Lotus Materia Medica. 3rd edition. B. Jain Publishers (P) Ltd; 2017. ISBN-978-81-319-0859-4.
29. Murphy R. Homoeopathic Medical Repertory. 3rd edition. B. Jain Publishers (P) Ltd; 2017. ISBN-978-81-319-0858-7.
30. Phatak SR. A Concise Repertory of Homoeopathic Medicines. B. Jain Publishers (P) Ltd; 2002. Reprint edition. ISBN-81-7021-757-1.
31. Allen HC. Key notes characteristics with comparisons of some of the leading remedies of the Homoeopathic Materia Medica with Bowel Nosodes. Reprint edition. B. Jain Publishers Pvt. Ltd; 2022. ISBN-81-7021-187-5. Book code, B-2001.
32. Boericke W. New Manual of Homoeopathic Materia Medica with Repertory. Reprint edition. B. Jain Publishers Private Limited; 2008. ISBN-978-81-319-0184-7. Pages 362-366.
33. Hobhouse RW. Life of Christian Samuel Hahnemann. B. Jain Publishers Private Ltd; 2001. Reprint Edition. ISBN-81-7021-685-0.
34. Paterson J. Introduction to Bowel Nosodes. Paper presented at International Homoeopathic League council, Lyons, France, 1949: as an addendum in H.C. Allen Key Notes. Reprint Edition, 1993.
35. Sarkar BK. Organon of Medicine by Hahnemann. M. Bhattacharya and Co. 1st edition 1955, 8th edition, 1984.
36. Phatak DS, Phatak SR. Repertory of the Bio-chemic medicines. B. Jain Publishers (P) Ltd; 2006 edition. 1st edition ISBN-81-7021-723-7. 1986.
37. Boedler CR. Applying Bach flower therapy to the healing profession of Homoeopathy. B. Jain publishers (P) Ltd; reprint edition 1998. 1st edition 1996. ISBN-81-7021-786-5.
38. Davidson's Principles and Practice of Medicine. Elsevier Limited; 24th edition; UK, London. International ISBN:978-0-7020-8348-8.
39. NLEM, GOI, PIB. 13th September 2022. Available from: <https://pib.gov.in>
40. Tripathy T, et al. Homoeopathy in COVID-19, A treatment protocol for second third wave. Schlnt J Tradit Complement Med. 2023;4(6):86-90.
41. GOI, Ministry of AYUSH, NLEAM. 8 February 2022.
42. Tripathy T, et al. Bowel Nosodes of Homoeopathy in Colorectal Cancer and Auto Immune, Metabolic, Neuro Psychiatric disorders. Scholars J Appl Med Sci. 2023;11(9.014).