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Review

Nanoarmoured α -amylase: A route leading to exceptional stability, catalysis and reusability for industrial applications



Nisha Gupta ^a, Esmil Beliya ^{a,b}, Jai Shankar Paul ^{a,*}, S.K. Jadhav ^a

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ABSTRACT

Enzymes are tremendous bio-product for nature whose absence can make a remarkable difference in the 21st century. Amylases have attracted a lot of industries due to their several applications. α-Amylase (EC 3.2.1.1, endo-1,4- α -D-glucan glucanohydrolases) is a crucial enzyme for various industries. It selectively hydrolyzes the α -1-4 glucosidic bonds of α -polysaccharides to generate glucose, maltose and short-chain oligosaccharides. The only limitation associated with the applicability of enzymes is their non-reusability and instability in extreme conditions. Immobilization is a technique to offer easier recovery and several additional benefits to the enzyme by using appropriate support or carrier. Nanotechnology is the rapidly growing area of research dealing with the various biological disciplines at the molecular level. A duet of nanotechnology and immobilization can generate robust nanobiocatalyst explicating potential benefits. The most exciting properties of NMs is their high surface to volume ratio, easier fabrication and good dispersibility attracting the scientific community to utilize them for producing sturdy nanobiocatalysts. The present review evaluates the recent research and development undergoing in the field of nanoarmoured α-amylase. It deals with the various NMs like metallic nanoparticles, nanostructured metal oxide, nanofibers, nanotube and graphene-based nanocomposites used as excellent support for α-amylase immobilization along with its bottlenecks. Our study potentially delivers the measures for immobilizing α -amylase on a nanosupport without compromising with its catalytic performance. There are prospective strategies highlighted in the review dealing with the obstacles hampering the α -amylase immobilization procedure with several illustrations for easier understanding.

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RESEARCH ARTICLE



Production and Assessment of Stick-Shaped Spawns of Oyster Mushroom from Banana Leaf-Midribs

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Abstract *Pleurotus ostreatus* is generally known as oyster mushroom that comprised in the category of edible mushroom. Various grain spawns were chiefly utilized for its commercial production. However, these spawns have several limitations such as high production cost and more contamination rate. Henceforth, the current study dealt with the development of stick-shaped spawns as an alternative to solid spawn. In the present study, banana leafmidrib sticks were submerged in the liquid mycelium culture of P. ostreatus for the production of spawn. The efficiency of developed spawns were examined by the cultivation process and compared with the wheat spawn or mixture of wheat and cocopeat spawn. In term of mycelium accumulation stick spawn and wheat spawn show higher accumulation efficiency. The stick-shaped spawn exhibited significant mushroom production; its biological efficiency was 30.83% and 34.57% for both 1st and 2nd harvesting, respectively, when the stick-shaped spawn was used while it was comparably lowest for mixed spawns. Similarly nutritional content was also higher in stick and wheat spawn. Besides, it was cost-effective along with easier maintenance and handling. Thus, the banana leaf-midrib stick-shaped spawn developed in the present investigation

Significance statement Stick-shaped spawn produced by using submerged liquid mycelium culture. It unveiled high productivity, cost effective and easier to handle and is first report of using banana leaf-midrib for preparing stick-shaped spawns.

was comparable to wheat spawn with a promising alternative in industrial application and is reported the first time for mushroom cultivation.

Keywords Cost-effective · Lignocellulosic waste · Liquid submerged culture · Oyster mushroom · Stick spawn

Introduction

The demand for mushrooms has increased due to its nutritional, medicinal, and pharmacological properties [1]. Pleurotus ostreatus is commonly known as oyster mushroom, which is one of the widely cultivated mushrooms worldwide followed by Agaricus bisporus [2]. It requires cheap and easy artificial conditions for its cultivation [3]. P. ostreatus well documented for lignocellulosic biodegradation potential and utilization as agro-waste management [4]. Biologically active molecules reported in this mushroom are different, such as exopolysaccharides, β-D Glucan, Lectin, Lovastatin, Ubiquitin-like protein, hydrophobin like proteins and Proteoglycans. This bioactive compounds exhibited various biological activity like; anticancer agent, antioxidant, antibacterial, anti-hypercholesterolic, antiviral, and anti-arthritic [5-7]. P. ostreatus can be cultivated in various lignocellulosic materials and agro-wastes such as banana leaves waste [8], eucalyptus waste [9], rice/wheat straw [10], date-palm leaves [11], and sugarcane bagasse [12]. Spawns are the viable material used for mushroom cultivation, and they are commonly known as mushrooms seeds [13]. The quality and production of mushrooms is directly influenced by the spawn used for its cultivation [14]. For the commercial cultivation of mushroom both solid and liquid spawns are frequently used [13]. Solid spawns are made via various grains such as



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Review Paper:

Interaction between Nitric Oxide and Hydrogen Sulfide in Abiotic Stress Challenged Plants

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Abstract

Nitric oxide (NO) and hydrogen sulfide (H₂S) are two versatile gaseous molecules which play myriad roles in the growth and development of plants. They play an important role in signal transduction process in plants exposed to various environmental stresses. Signal transduction and various antioxidant strategies are vital for the management of abiotic stress imposed alterations in plants. These two secondary messengers neutralize the cell perturbations caused by stress-triggered over produced reactive oxygen species. Study of crosstalk between NO and H₂S reveals the functional importance of proteins regulated during S-nitrosylation and S-sulfhydration respectively, the two major signal-dependent post-translational protein modifications.

Also, NO and H₂S decrease the toxic impacts of reactive species by triggering the signal transduction process, enhancing antioxidant enzymes, stimulating other signaling molecules and regulating the transcript levels of different stress-responsive genes. This review mainly emphasizes on the roles of NO and H₂S in responses of plants to abiotic stresses and reveals the crosstalk involving NO and H₂S in stress tolerance mechanisms.

Keywords: Hydrogen Sulfide, Nitric Oxide, Oxidative stress, Reactive oxygen species, Signal transduction, Signaling molecules, Stress tolerance.

Introduction

Abiotic stresses such as heat, cold, salinity, drought, metal/loid, ultraviolet (UV) radiation etc. adversely affect the rate of germination, development and yield of economically essential crop plants and more than 50% yield losses are direct result of these stresses^{23,26}. One of the most common phenomena taking place during the plant responses to these abiotic stresses is the oxidative explosion illustrated by the uncontrolled production of reactive oxygen species (ROS) such as singlet oxygen (¹O₂), hydroxyl radical ('OH), hydrogen peroxide (H₂O₂) and superoxide (O₂·⁻)⁴¹.

These elevated levels of ROS are severely injurious to plant cells as they directly oxidize the lipids, proteins and amino acids, inactivate enzymes and damage pigments and nucleic acids^{6,17}. Condition of oxidative stress triggers a series of

detrimental impacts in plants including reduced germination score, biomass, root and shoot length, reduction in the number of leaves and leaf area, curling, wilting and necrosis of leaf blades, disturbed cellular osmotic balance, alteration in flow of energy, interference with minerals and ions uptake, losses in the mineral contents, inhibition in the rate of photosynthesis, chlorophyll biosynthesis, enzyme activities and cellular metabolism^{4,37}. These damaging effects of oxidative stress hamper / hinder the growth and development and ultimately lead to death of plants.

The effectual control and rapid removal of ROS is essential for the proper functioning and survival of the plants. Thus, to counterbalance the environmental stresses, plants store multiple groups of compatible solutes such as proline, glycinebetaine, sugars etc. together with defensive enzymes and non-enzymatic components³⁶. Enzymatic components include superoxide dismutase (SOD), catalase (CAT), peroxidases such as ascorbate peroxidase (APX), guaiacol peroxidase (POD) and glutathione peroxidase whereas flavonoids, glutathione (GSH), ascorbate (AsA) and αtocopherol constitute non-enzymatic components which protect the plants against ROS-induced oxidative damage^{28,35}. Thus, understanding the mode of action of some of the molecules applied exogenously that can improve the defensive system of plants, could help in the mitigation of detrimental effects of abiotic stress-induced oxidative burst.

The two important gaseous molecules viz. nitric oxide (NO) and hydrogen sulfide (H₂S) have crucial roles in several developmental processes of the plants and are also involved in their protection against various abiotic stresses²⁹. In plants, both of these molecules are key signal messengers involved in various developmental processes such as seed germination and root organogenesis. Also, these signaling molecules elicit the antioxidant defensive mechanisms of plants to reciprocate the oxidative damage to cellular structures³³. The interactions of NO and H₂S have also been used in awarding plant tolerance to various stresses such as aluminum, arsenic (As), cadmium (Cd), salinity and heat in plants^{11,16,23,32,33}.

Being a ubiquitous, gaseous bioactive molecule and a secondary messenger, NO has gained an increasing attention of scientific research in plant cells. It is well known that NO has significant role in the management of plant growth, development, interaction with other signaling molecules and in the adaptive responses to the abiotic stresses¹⁵. In addition, its role is evident in seed germination, root formation and elongation, fruit yield, photomorphogenesis,

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Ethnobotanical Survey of Medicinal Plant Species used by Tribal Communities Around Katghora Tehsil of Korba District

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The traditional knowledge about plants and their uses in India is disappearing in recent years because the new generations of villagers migrate to cities for better life and jobs. Katchora tehsil is located at 22.50 N 82.550 E and has an average elevation of 293 meters above the sea levels in Korba district of Chhattisgarh State, India. The ethnobotanical information was obtained through interviews using semi-structured questionnaires of 32 traditional healers of 14 villages. Details of plant species, part(s) used and remedy formulations were also collected for the treatment of different health problems.

A total 52 species in 35 families and 51 genera were reported in the treatment of various health conditions. Family Fabaceae was dominant of the plant species documented. Roots (38%) were the most frequently used

parts in preparing herbal remedies. Decoction and oral administration were commonly used method of herbal

medicine preparation. 26 health conditions were treated using medicinal plants.

This study highlighted the closed relationship between people of the area and plant species especially when faced with frequent diseases. Many plant species are used as remedies for multiple ailments. However, most of the species used were collected in the surrounding of the villages.

Keywords: Ethnobotany, Tribal community, Katghora, Medicinal plants.

INTRODUCTION

be used therapeutically, or can be used as raw material for chemical /pharmaceutical synthesis* is classified as drugs.

14

Fungal Microbial Fuel Cells, an Opportunity for Energy Sources

Current Perspective and Future Challenges
Sudakshina Tiwari¹, Deepali Koreti¹, Anjali Kosre¹, Pramod Kumar Mahish²,
S.K. Jadhav¹, and Nagendra Kumar Chandrawanshi¹

14.1 Introduction

Recently, fossil fuels are the main energy sources; however, this source is limited and also extensive use of this causes many types of the environmental issues including global warming, pollution and instability of economy and biodiversity, which stimulate the research for alternative resources of energy that overcome this drawback (Khan and Hussain 2017). The production of energy by the current method is not sustainable, causes global warming that directly affects humankind, plants and animals etc. To overcome this global problem, there is a need to search for new, renewable, sustainable and green energy. In the present scenario, various alternative energy sources are available. Among these alternatives, microbial fuel cells (MFCs) are gaining much interest in recent years because they produce renewable energy forms such as bioelectricity, without combustion and wastewater generation (Kaushik and Jadhav 2017; Meshram and Jadhav 2019). MFCs are a hybrid bioelectrochemical system that converts chemical energy into electrical energy via microbial catalysed redox reaction under an ambient temperature (Beyene et al. 2018). In this redox reaction, electrons and protons produce anodes that are transferred to the cathode through the outer circuit and proton exchange membrane (PEM). This electrical energy is also called bioelectricity; it can be used as sustainable green energy (Cheng et al. 2006). Mostly bacterial-based MFCs were used because their electron transfer mechanism is known. Low power production and less knowledge about electron transfer mechanism in fungi-based MFCs led to lower interest. However, fungi can act as both anode catalyst and cathode catalyst and also is not pathogenic and is easy to handle; therefore many researchers are working on these fungi-based MFCs. The recent output suggests that the electron transfer mechanism in fungi is similar to bacteria when lactate dehydrogenase or ferricyanide reductase redox protein is present in the cell membrane of fungi (Sekrecka-Belniak and Toczylowska-Mamińska 2018). Furthermore, lithium-based batteries are a more attractive

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"Design and modelling of nanostructured surfaces for improved light absorption"



A Dissertation Submitted in Partial Fulfilment of the requirements

For the degree of

MASTER OF TECHNOLOGY

in

Optoelectronics and Laser Technology
Submitted by

K Anil Kumar (2010196002)

Under the Supervision of

Dr. Rahul Prajesh

Senior Scientist CSIR-CEERI, Pilani Rajasthan

Work carried out at



CSIR-Central Electronics Engineering Research Institute
Pilani – 333031
Rajasthan

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Pilani – 333031
Rajasthan

June 2022



CSIR-Central Electronics Engineering Research Institute

Pilani – 333031 Rajasthan

CERTIFICATE

This is to certify that the dissertation work entitled, "Design and modelling of nanostructured surfaces for improved light absorption" submitted by K Anil Kumar, is a credible work carried out by him at CSIR-CEERI, Pilani during the period 21 January 2022 to 30 June 2022. The work has been presented in a manner suitable to affirm acceptance towards in the partial fulfilment of the requirement for the degree of Master of Technology in Optoelectronics and Laser Technology, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, is candidate's own work carried out by him under my supervision. His dedication and sincerity are praiseworthy.

Date: 29/06/2022

Place: CSIR-CEERI, Piloni

Signature of Supervisor

Dr. Rahul Prajesh

Senior Scientist

Senior Scientist CSIR-CEERI,Pilani Rajasthan

हा शहुल प्रजेश / Dr Rahul Prajesh वरिष्ठ वैज्ञानिक / Senior Scientist 'अप्रदेशार-केदीव इतेक्ट्रॉनिकी अभिवानिकी अनुसंबान संस्था 'entral Electronics Engineering Research Institut 'त्या) शासा / Pilani (Raj.) India - 33303



School of Studies in Electronics and Photonics

Pt. Ravishankar Shukla University Raipur - 492010 Chhattisgarh

DISSERTATION APPROVAL

This is to certify that the dissertation work entitled, "Design and modelling of nanostructured surfaces for improved light absorption" submitted by K Anil Kumar is a credible work carried by him at CSIR-CEERI, Pilani during the period 21 January 2022 to 30 June, 2022. The work has been presented in a manner suitable to affirm acceptance towards in the partial fulfillment of the requirement for the degree of Master of Technology in Optoelectronics and Laser Technology, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh.

EXTERNAL EXAMINER

Mr. H.S. Tewan

Place: 20

INTERNAL EXAMINER

Dr. Sanjay Tiwari

Professor and Course-Coordinator SoS in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur, Chhattisgarh; 492010

Dr. Kavita Thakur

Head of Department SoS in Electronics and Photonics Pt Ravishankar Shukla University, Raipur, Chhattisgarh; 492010

Dr. Sanjay Tiwari Professor & Head

School of Studies in Electronics & Photonics Pt. Ravishankar Shukla University, Raipur (C.G.)

DECLARATION

I hereby declare that the dissertation entitled "Design and modelling of nanostructured surfaces for improved light absorption" submitted to the School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh for the degree of Master of Technology in Optoelectronics & Laser Technology is an original record of work done by me at CSIR-CEERI, Pilani under the guidance of Dr. Rahul Prajesh, Senior Scientist, CSIR-CEERI, Pilani. I also declare that I have adhered to all principles of academic honesty and integrity.

I further declare that to the best of my knowledge my dissertation does not contain any part of any work which has been submitted for the award of any degree either in this institute or in any other university without proper citation.

101/07/

K Anil Kumar

Roll No: 2010196002 Enrollment No: AF/00809 School of Studies in Electronics and Photonics Pt. Ravishankar Shukla University

Raipur-492010, Chhattisgarh

REPORT OF PROGRAMME

Activities Performed by the Centre for Women's Studies

No. 3.7.1

PROGRAMME ORGANIZED BY THE CENTRE FOR WOMEN'S STUDIES DEPARTMENT

	Strategic	Target			
S.No.	Goal	Participants	Action Plan	Elective Date	Events
1	Gender Sensitization & Equality	Students and Staff	Lectures on various issues related to gender Interaction with expert on gender issues Activity based interaction Program planning for gender sensitization for college students and teachers.	16 th August, 2021	Discussion on when and how action should be taken in Police Station, Court and Women's Commission
2	Gender Health & Equality	Students and Staff	To promote health education & nutrition of girl child spread awareness about the right of girl child	30 th September, 2021	National Webinar on "Holistic Nourishment for Women" on the occasion of Rashtriya Poshan Maah 2021: in collaboration with National Commission for Women.
3	Gender Health & Equality	Students and Staff	Inculcation of gender just behaviour through participation in the activity organised.	18 th November, 2021	Awareness Program on Polycystic Ovarian Syndrome (PCOS) in collaboration with AMIIS, Raipur
4	Women Empowerment	Students and Staff	Motivational lectures on building confidence among girls and women.	9 th December 2021	State – Level Convention on #EMPOWERMENTNOTAGE #" in collaboration with Oxfam India
5	Gender Equality	Students	To Recognize girls rights and challenges girls face globally	24 th January, 2022	Online Essay, Writing, Poem And Poster/Painting Competition on The Occasion National Girl Child Day Themes HOW DO YOU LIKE TO SEE GIRLS OF 21 ST CENTURY (21वींसदीकीलड़िकयोंकोआपकै सेदेखनापसंदकरतेहैं)
6	Gender Health & Equality	Students and Staff	To promote COVID- 19 VACCINE	4 th March, 2022	Webinar on ADDRESSING GENDER-BASED COVID-19 VACCINE HESITANCY in collaboration with MOMENTUM- Routine Immunization Transformation and Equity Project as the part of the International Women's Day Celebration
7	Women Empowerment	Students and Staff	To bring into discourse the challenges faced by women to different sectors	8 th March, 2022	International Women's day celebration in collaboration with NSS, State Women Commission & MOMENTUM- Routine Immunization Transformation and Equity Project

DISCUSSION ON WHEN AND HOW ACTION SHOULD BE TAKEN IN POLICE STATION, COURT AND WOMEN'S COMMISSION

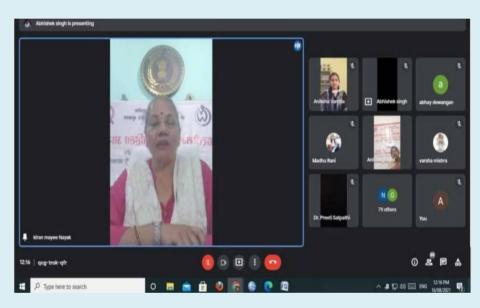


ORGANIZED BY

CENTRE FOR WOMEN'S STUDIES,
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR
&
CHHATTISGARH STATE COMMISSION FOR WOMEN,
INDIA

GLIMPSE OF THE WEBINAR











REPORT OF NATIONAL WEBINAR

ON

RASHTRIYA POSHAN MAAH 2021: HOLISTIC NOURISHMENT FOR WOMEN

DATE – 30TH SEPTEMBER,2021 TIME – 12.00 NOON TO 03.30 PM

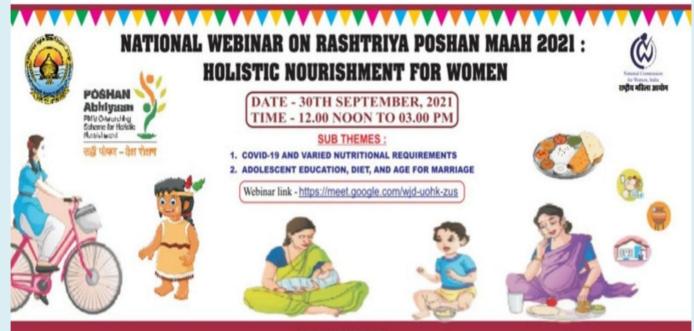


ORGANIZED BY

CENTRE FOR WOMEN'S STUDIES,
PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

SPONSORED BY

NATIONAL COMMISSION FOR WOMEN (NCW),
NEW DELHI



:: ORGANIZED BY ::

CENTRE FOR WOMEN'S STUDIES, PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR & NATIONAL COMMISSION FOR WOMEN((NCW), NEW DELHI



REPORT SUMMARY ON POSHAN MAAH

NATIONAL WEBINAR ON RASHTRIYA POSHAN MAAH 2021: HOLISTIC NOURISHMENT FOR WOMEN was organized by Centre for Women's Studies, Pt. Ravishankar Shukla University, Raipur in joint collaboration with National Commission for Women (NCW), New Delhi, on 30thSept, 2021. The sub themes for the presentations included -

- 1. COVID-19 AND VARIED NUTRITIONAL REQUIREMENTS
- 2. ADOLESCENT EDUCATION, DIET, AND AGE FOR MARRIAGE

Ravishankar Shukla University, Raipur in her welcome address introduced the need for nutrition for women and adolescents and highlighted the motive behind celebrating *Poshan Maah*.

Keynote address was given by Honourable Vice Chancellor, Prof. Keshari Lal Verma. He highlighted the necessity to take essential measures for holistic nourishment for women and young girls who will be the future mothers. Dr. Anuradha Chakraborty, Guest Lecturer, CWS, Pt. RSU was the moderator.

INVITED GUEST SPEAKERS WERE -

- Dr. Abhaya R Joglekar, Professor, Home Science Department, D.B. Govt. Girls College, Raipur, Chhattisgarh.
- Dr. Anup Adhikari Exercise Physiologist, Level 4 Anthropometric and Criterion Photoscopic Somatotype Rating, ISAK, Canadian Red Cross
 - Dr. Nutan, Assistant Professor, B.P.S. Institute of Higher Learning,
 Sonipat, Haryana

Once the experts shared their opinions on the topic and the participants presentations were over, an open discussion was held to exchange the learnings. The webinar was conducted on an online platform with more than 138

PROGRAMME SCHEDULE

12.00 to	Welcome	Prof. Reeta Venugopal, Director, CWS,		
12.05 PM	Address	Pt. Ravishankar Shukla University, Raipur		
12.05 to	Key Note	Prof. Keshari Lal Verma		
12.10 PM	Address	Vice Chancellor,		
		Pt. Ravishankar Shukla University, Raipur		
12.10 to		Dr. Abhaya R Joglekar		
13.00 PM		Professor, Home Science Department,		
		D.B .Govt. Girls College, Raipur		
13.00 to		Dr. Anup Adhikari		
14.00 PM		Exercise Physiologist, Level 4 Anthropometric and		
	Speakers	Criterion Photoscopic Somatotype Rating, ISAK,		
		Canadian Red Cross.		
14.00 to		Dr. Nutan		
15.00 PM		Assistant Professor,		
		B.P.S. Institute of Higher Learning,		
		Sonipat, Haryana		
15.00 to	Open Discussion			
15.10 PM				
15.10 to	Vote of	Prof. Aditi Poddar		
15.15PM	Thanks	Associate Director, CWS, Pt. Ravishankar Shukla		
		University, Raipur		

BACKGROUND

Abhiyaan or National Nutrition Mission, is Government of India's flagship programme to improve nutritional outcomes for children, pregnant women and lactating mothers. Launched by the Prime Minister on the occasion of the International Women's Day on 8 March, 2018 from Jhunjhunu in Rajasthan, the

POSHAN (Prime Minister's Overarching Scheme for Holistic Nutrition) campaign directs the attention of the country towards the problem of malnutrition and address it in a mission-mode. (https://www.niti.gov.in/poshan-abhiyaan)

POSHAN Abhiyaan is a Jan Andolan or "People's Movement" by incorporating inclusive participation of public representatives of local bodies, government departments of the States/UTs, social organizations and the public and private sector at large. In order to ensure community mobilization and bolster people's participation, every year, the month of September is celebrated as POSHAN MAAH across the country.

Month of September 2018 was celebrated as Rashtriya POSHAN MAAH. The activities in POSHAN MAAH focussed on Social Behavioural Change and Communication (SBCC). The broad themes were: antenatal care, optimal breastfeeding (early and exclusive), complementary feeding, anaemia, growth monitoring, girls' - education, diet, right age of marriage, hygiene and sanitation, eating healthy - food fortification. (https://www.niti.gov.in/poshan-abhiyaan)

More than 12.2Crore women, 6.2 Crore men and over 13 Crore children (male and female) were reached through the various activities undertaken during POSHAN Maah. It is worth mentioning that 30.6 Crore people were reached in 30 days. POSHAN MAAH has given a major impetus to the Abhiyaan. (https://www.niti.gov.in/poshan-abhiyaan).

The vision of National Commission of Women is to make every Indian woman secure in her home and outside, fully empowered to access all her rights and entitlements, with opportunity to contribute equally in all walks of life. With this aim and objective to make Indian women strong in every manner possible the NCW espouses the dream of Hon'ble Prime Minister Narendra Modi ji to be part of PM's Overarching Scheme for Holistic Nourishment (POSHAN).

This year, the COVID-19 pandemic has potentially reversed much of the progress made towards meeting the second of the Sustainable Development

Goals (SDGs): ending hunger, achieving food security, and improved nutrition. Budget 2020-218 witnessed an enhanced allocation of INR 35,600 crore for nutrition-related programs and an additional INR 28,600 crore for women-related programs.

NCW has planned to celebrate September 7-30th, 2021 as POSHAN Month in which several activities are planned to focus specially on the methodologies to be adopted for improving the nutritional outcomes for adolescents, pregnant women and lactating mothers by leveraging technology, targeted approach and convergence.

Keeping in mind the above said mandate, NCW has planned to organise webinars with the objective of creating awareness, getting an insight into the relevant subject and also throwing up recommendations for better implementation or even modification of the existing policies/ programmes/schemes/projects relating to nutritional needs of women. The topics/issues/thrust areas identified for conducting the webinar are as follows:

- 1. OVERALL NUTRITION
- 2. ADOLESCENT EDUCATION, DIET AND AGE FOR MARRIAGE
- 3. COVID-19 AND VARIED NUTRITIONAL REQUIREMENT.

ABOUT THE WEBINAR

A one-day national webinar on "Rashtriya Poshan Maah,2021: Holistic Nourishment for Women" was organized by the Centre for Women's Studies, Pt. Ravishankar Shukla University, Raipur under the umbrella of National Commission for Women, New Delhi on 30.09.2021 from 12.00 pm to 3.00 pm which was attended by more than hundred participants both males and females from different parts of Chhattisgarh, including assistant professors, research scholars, students of science and social science streams, and doctors.

Prof. Reeta Venugopal, Director, Centre for Women's Studies and Convener of the webinar welcomed the keynote speaker Prof. Keshari Lal Verma, honourable Vice Chancellor, Pt. Ravishankar Shukla University Raipur and the eminent speakers Dr. Abhaya R Joglekar, Dr. Anup Adhikari and Dr. Nutan. Sharing her views, on nutritional diet for women and girls in both the rural and urban areas, she emphasised on importance of balanced and nutritional diet for both women and girls. She urged the young mothers to incorporate food supplements rich in vitamins, minerals, proteins and carbohydrates in the diets.

The CWS has done various studies in Health and Nutritional Assessment or Study of Chhattisgarh's Urban, Rural and tribal area's child, adolescent girls and women. The nutritional level in children and women, it was discovered that malnutrition is very much prevalent among women and children in the tribal and rural sectors of the state. If Poshan Maah activities are taken seriously, this malnutrition can be effectively countered.

To remove malnutrition in rural and tribal areas Anemia Camp, Nukkad Natak / Folk Shows, Cycle Rally, Community Based Events (ICDS), Cooperative / Federation, Haat Bazaar Activities, Harvest Festival, Home Visits, Panchayat Meeting, Poshan Mela, Rally, Poshan Workshop / Seminar, Safe Drinking Water in Anganwadi Centers, Schools etc should be organized.

In his keynote address Prof. Keshari Lal Verma congratulate the Centre for Women's Studies for organising a fruitful webinar and shared his thoughts on curbing disease like anaemia and malnutrition amongst girls and women. He added that the university had previously organized health and fitness campaigns along with Covid vaccination campaignswithin the campus. He stated that benefits of the schemes should reach every nook and corner of the society, especially, the adolescent girls, pregnant and lactating women; in order to keep them healthier.

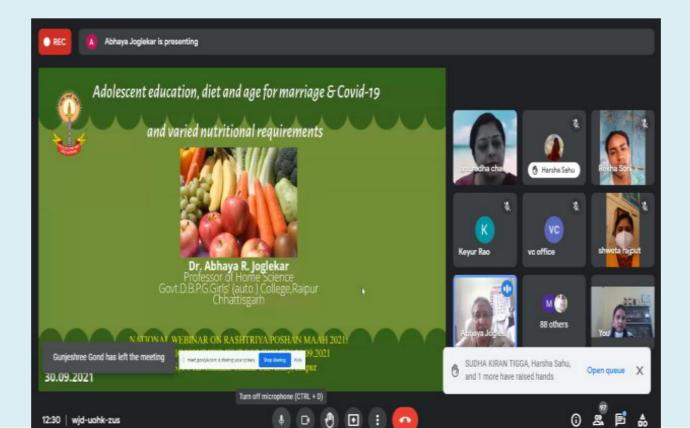
This year, as India celebrates the Azadi Ka Amrit Mahotsav, to ensure speedy & intensive outreach, the entire month has been subdivided into weekly themes for focused and assimilated approach towards improving Holistic Nutrition. The

Ministry of Women and Child Development has planned a series of activities throughout the month in tandem with the States/UTs.

- Plantation Activity as "PoshanVatika",
- Yoga and AYUSH for Nutrition,
- Distribution of 'Regional Nutrition Kit' to Anganwadi beneficiaries of High Burdened Districts
- Identification of SAM children, and distribution of nutritious food

FIRST SPEAKER

The first speaker of the session Dr.Abhaya R Joglekar, Professor, Department of Home Science, D. B Govt.Girls College, Raipur delivered her lecture on Adolescent education, diet and age for marriage; Covid-19 viz-a-viz nutritional requirements. Through PowerPoint presentation she discussed about the Sustainable Development Goals (SDGs)with specific emphasis on women and

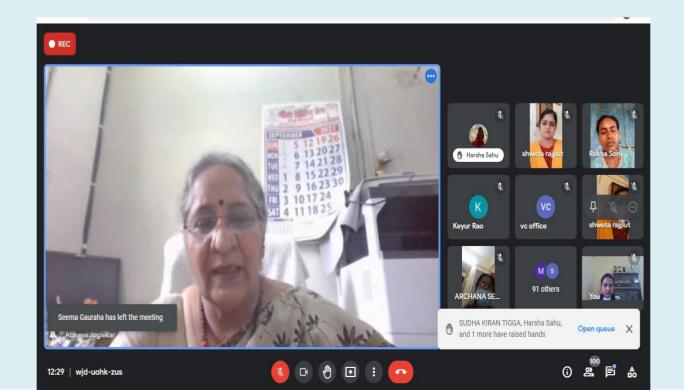


girls; and their health conditions which is to be achieved by 2030.

She also discussed the adolescents as a group of individuals who are often overlooked in health related discussions, despite the need to tackle the health challenges they face during a crucial period of transition from childhood to adulthood. The various aspects of their health and well-being (psychological, social, developmental and sexual) are impacted by a myriad of factors such as technology, poverty and, most recently, the COVID-19 pandemic.

Dr. Abhaya R Joglekar presented her thoughts on the impact of COVID-19 on adolescents in India. She shared that the major economic impact was poor families losing their only source of income due to lockdown measures. The demand and access to affordable goods and services were affected by the closure of informal markets and limited public transportation. The confined living spaces of populations in high risk settings increased the likelihood of contracting the virus and affected their physical and mental health.

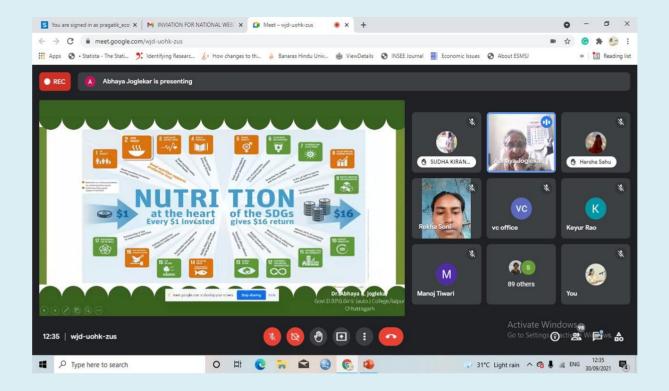
"Nutrition is the heart of all the SDGs", she said, adding, "A one dollar invested in nutrition, gave 16 dollars in return." Further, she discussed the diet of women in South Asia adding, "the diets of adolescent girls and women in South Asia are often too poor to meet the nutritional needs for healthy growth and development. Lastly, she beautifully explained the definition of POSHAN



stating, P stands forplant-based food, O means avoid oily and processed food, represents limit Salt and Sugar, High fibre diet was symbolised by H, Aresembles Active Life style and at last N stands for Nourish Well.

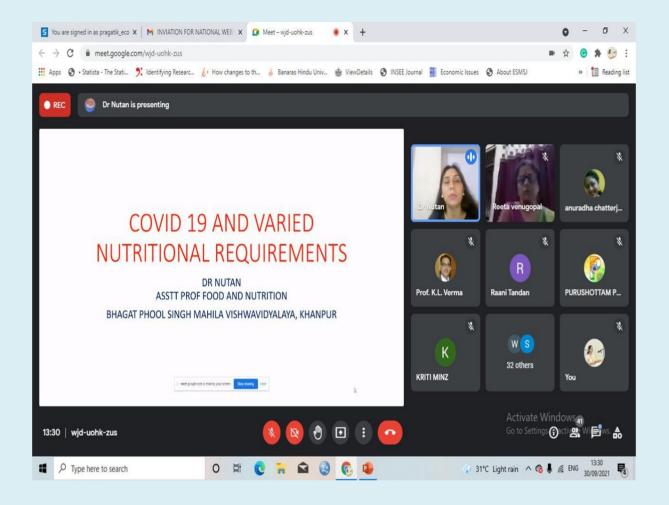
Fortified wheat flour and fortified edible oil can help to meet the nutritional requirements of adolescent girls and beneficial in preventions of the vitamins and minerals deficiencies.

She stated that as the COVID pandemic continues to run havoc with the economy and interventions related to children's education, health, nutrition, and protection are disrupted, the risk of child marriage is increasing with the increase in vulnerabilities of families and children and therefore their protection is an urgent necessary. "We need to change the perspective on child marriage. I believe focus should be on prevention and not on stopping it. To attain this, community-based sensitisation and initiatives is need of the hour. Instead of looking through the lens of law, we need to broaden our vision to address all the issues whether it is security, education, health, aspirations of the girl by listening and understanding perspective of the community and the family."



SECOND SPEAKER

Next speaker of the session, Dr. Nutan, Assistant Professor, Food and Nutrition, B.P.S. Institute of Higher Learning, Sonipat, Haryana, in her PowerPoint presentation, shed light on Covid-19 and varied nutritional requirements in the light of pandemic. She urged that maintaining a healthy diet during the pandemic not only cures the person but also, optimises the immune system of an individual.



She also discussed the nutritional requirements for Indians and recommended the WHO diet during the Coronavirus pandemic. She suggested that taking 2 cups of fruits, 2.5 cups of vegetables, 180 g grains and 160 g of meat and beans was endemic for every individual. Immune boosting foods like broth, citrus, garlic, lemon, tea, vitamin D, mushroom etc, along with wheat grass juice, raw foods, coloured fruits and vegetables, coconut water, fresh foods, locally grown foods were also excellent enabler of immunity as well as health enhancers.

- Healthy pattern of eating might not cure Covid-19, but it certainly optimizes
 the immune system
- So, Nutrutional status might have a far reaching link to Covid-19 deaths.
- Poor or bad diet causes more deaths globally than either smoking or hypertension.
- In 2017, the study of 195 countries linked poor diet to 11 million deaths globally. This is related to poor consumption of foods rich in Vitamins A,C,D, E and Magnesium. One in three Americans may be deficient in Calcium In Se Copper Trop Amino acids fatty acids and folds.

Maintaining a healthy diet during the Covid-19 pandemic is important

- Eat a variety of food, including fruits & vegetatbles
- Eat moderate amounts of fats & oils
- Stay hydrated : Drink enough water
- Cut back on salt/Limit sugar intake.

Wh

grains, 160 g meat and beans (red meat 1-2 times/week and pourltry or fish 2-3times/week)

- Snack of raw vegetables and fruit, rather than foods that are high in sugar, fat or salt content.
- Avoid overcooking vegetable and fruit to avoid the loss of important vitamins
- If using canned fruit or vegetables- choose wisely, avoid varieties with added salt and sugar

Tips for maintaining a healthy diet:

Eat a variety of foods: Every day, eat a combination of different foods including whole grains such as wheat, maize and rice, legumes like lentils and beans, fruit and vegetables and some foods from animal sources (e.g. meat, fish, eggs and milk).

Limit sugar intake :

- Limit intake of sweets and suagry drinks.
- Choose fresh fruits instead of sweet snacks such as coookies, cakes and chocolte.

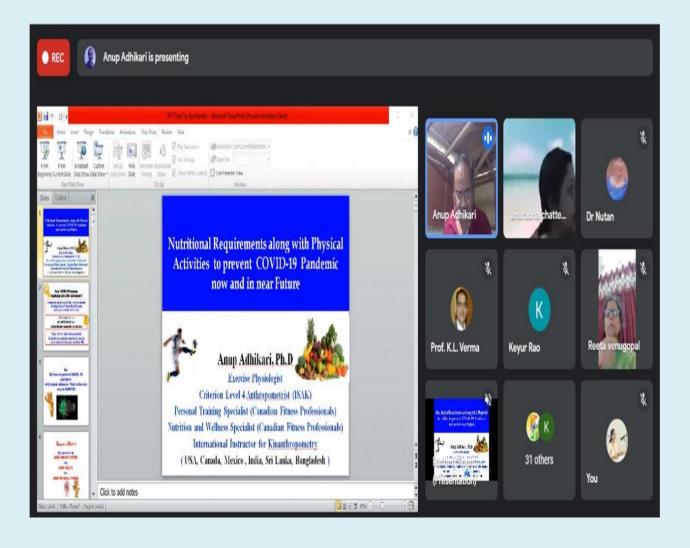
 When other dessert opions are chosen, ensure that they are low in sugar and consumed in small portions.

Immunity boosting formulas - Wheat grass juice, Raw food consumpion, Colored fruits and vegetables, Coconut water Fasting (Controlled), Locally grown foods. Its wise to grow fresh food and engage in kitchen gardening for organic food consumption.

THIRD SPEAKER

Dr. Anup Adhikari, Exercise Physiologist, Level 4 Anthropometric and Criterion Photoscopic Somatotype Rating, ISAK, Canadian Red Cross.

Dr. Anup Adhikari described about nutritional requirements along with physical activities to prevent Covid-19 pandemic now and in near future, while shedding light on the necessity of Paleo Diet and Aerobic exercises. The implication of moderate and extensive exercises, were also focal point of his lecture.



Dr. Anup Adhikari explain Good health and Types of Diet.

What is GOOD Health?

- According WHO, Health is a state of physical, mental and social well-being.
- So GOOD HEALTH means a good state of Physical, Mental and Social well-being.

<u> 1 Abez oi piet</u>

- Ketogenic Diet
- Vegan Diet
- Paleo Diet
- Balance Diet





Dr. Anup Adhikari enlisted the benefits and pitfalls of incorporating Vegan Diet. As we know, any person that does not eat any food derived from animals is known as Vegan. A vegan diet contains only plants (such as vegetables, grains, nuts and fruits) and foods made from plants. Vegan diets lack certain nutrients like Protein, Calcium, Iron, Zinc, Vitamin B12, Vitamin D,Omega-3 fatty acid. Vegans are also at a high risk of developing a vitamin-B12 deficiency that, if untreated, can cause neurological effects that are irreversible.

BALANCE DIET

A balanced diet is simply a variety of foods which supply all of the nutrients

needed for good health and supply these nutrients in their proper amounts and in proper relation to each other. A diet should be balanced because it provides better nutrition. A Balance Diet have balanced amounts in proper proportions of carbohydrate, Protein, Fat, Vitamins, Minerals and water.

"So, Balance Diet is the perfect Diet for improving immune system and Physical Fitness"

Dr. Anup Adhikari explained the correlation between Functional Foods and Immune System - Functional foods are ingredients that offer health benefits that extend beyond their nutritional value.

Conventional foods are natural, whole-food ingredients that are rich in important nutrients like vitamins, minerals, antioxidants, and heart-healthy fats. Modified foods have been fortified with additional ingredients, such as vitamins, minerals, probiotics, or fibre, to increase a food's health benefits.

Anaerobic exercise is a type of exercise which is performed in absence of Oxygen. The required energy for doing exercise comes from either ATP-CP cycle or Anaerobic Glycolysis (Lactacid system) or from both.

Indian conventional functional foods which Boost Immune system

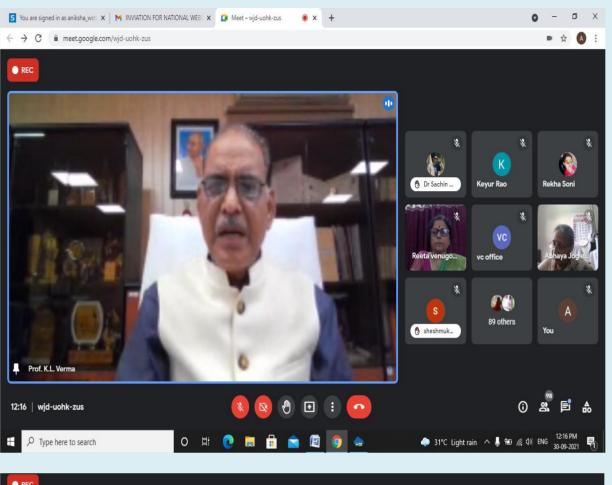
- Lentil broth : Sambhar
- Breads from whole grain: Chapati and Paratha
- Finger millet dumpling of South India
- Sprouted legumes as salads
- Fermented foods from cereals and legumes like Idli, Dhosa, Vada

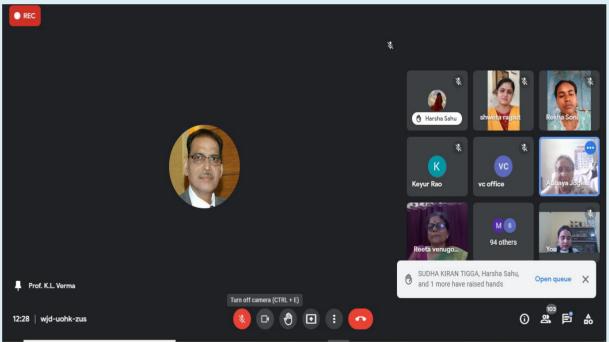
Dahi Pickles and Chutney

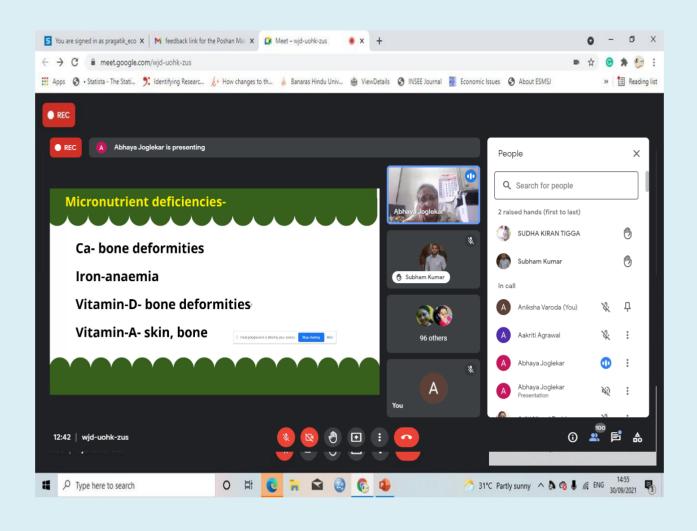
Food acidulants such as lime, Emblica, Tamarind, Kokum (Malabar Tamarind)
 , Emblica fruit extract like Amla, Aamchur, etc

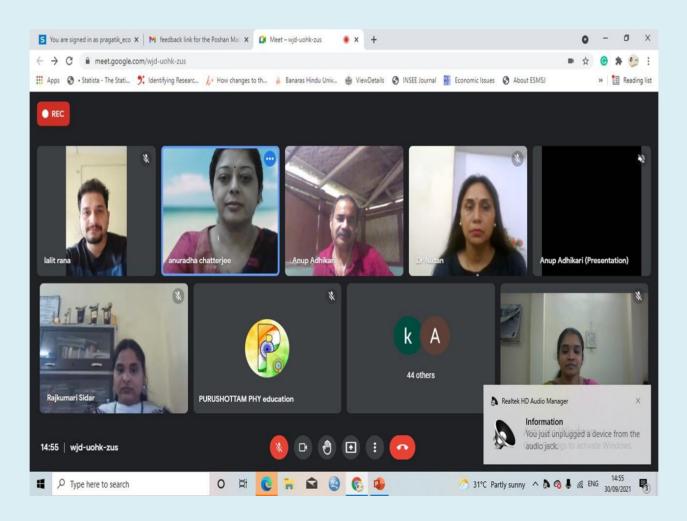
After the deliberative lectures by the distinguished guests, the Q and A session followed by a group discussion was held, in which everyone participated enthusiastically. All the questions raised by the participants were adequately answered by the speakers. Dr. Anuradha Chatterjee hosted and proposed the vote of thanks while the technical support was given by Ms AnikshaVaroda and Ms Pragati Krishnan.

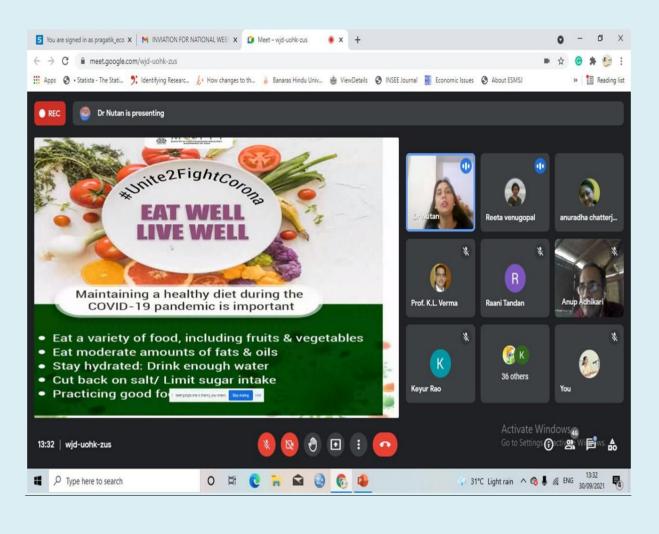
GLIMPSES OF THE WEBINAR

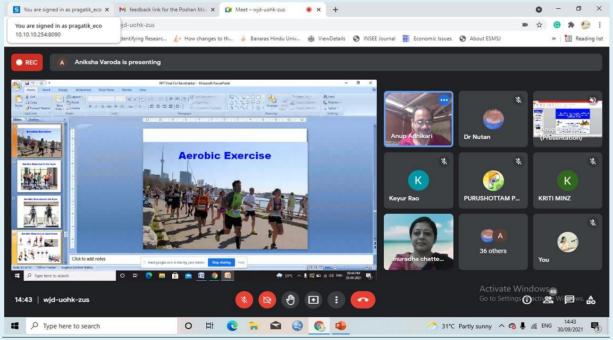


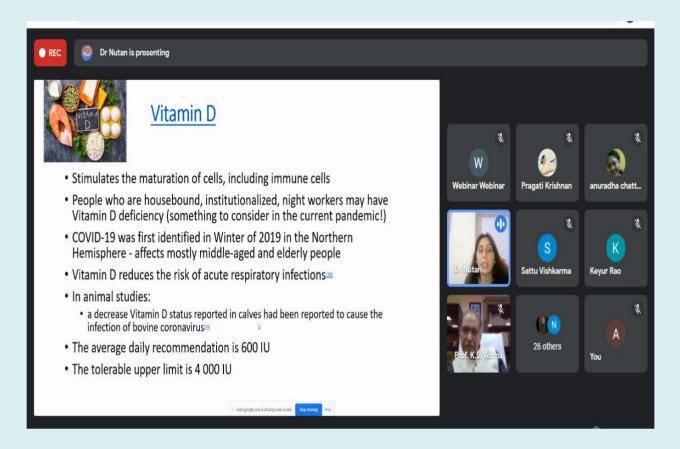


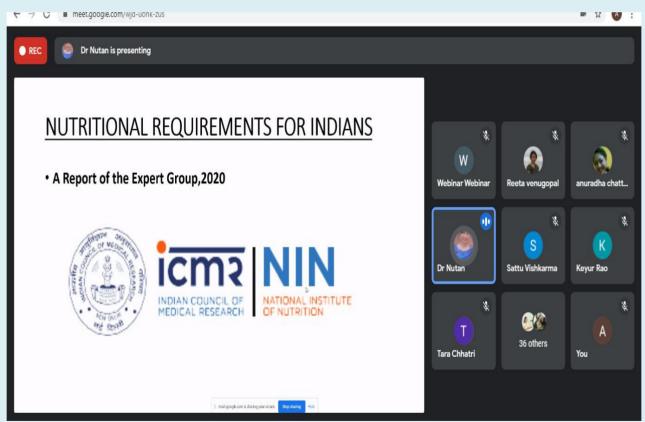


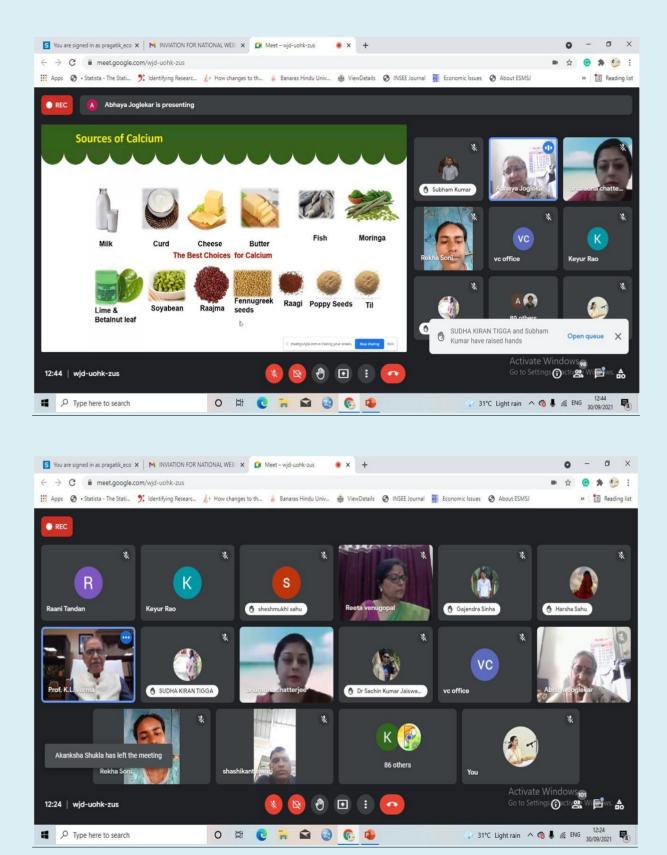








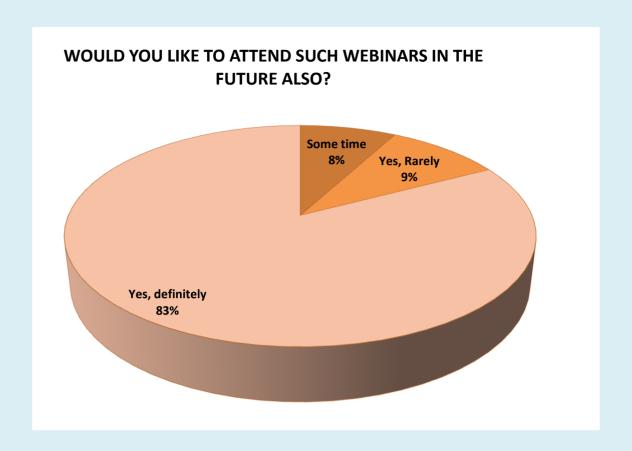




REMARKS OF PARTICIPANTS







SUGGESTIONS/ RECOMMENDATIONS

- There should be more seminars on women's nutrition particularly highlighting the long term health hazards cropping from vitamin D deficiency.
- The webinar proved to be an enriching experience as I learnt which food is good and why some food habits are bad.
- Would like to attend some more webinars relevant to the present global scenario.

AWARENESS PROGRAM ON POLYCYSTIC OVARIAN SYNDROME (PCOS) IN COLLABORATION WITH AMIIS, RAIPUR









STATE – LEVEL CONVENTION ON #EMPOWERMENTNOTAGE#" IN COLLABORATION WITH OXFAM INDIA







State-level
Convention
on

EMPOWERMENT

(Under 16 days of Activism on Ending Violence against Women and Girls)

Date: 09 Dec 2021

Venue: Seminar Hall, Arts Block, Pt. Ravishankar Shukla University, Raipur

9TH DECEMBER 2021

PROGRAMME AGENDA- 9TH DECEMBER, 2021 STATE LEVEL CONVENTION

#EmpowermentNotAge, #BanoNayiSoch, #BunoHinsaMuktRishte,

Time	Session	Facilitator/ Speaker
11.00 am	Registration	
11:40 am – 11:45am	Lighting of Lamp, Kulgeet, Presentation of Bouquets	Guests
11:30 am to 11:40 am	Welcome of guest	Prof. Reeta Venugopal, Director, CWS, Pt. RSU, Raipur
11:45 am – 11:55 am	Setting of Context- #EmpowermentNotAge, Oxfam's stand on the subject, how it started.	Mr.Anand Shukla, Regional Manager, Oxfam India, Raipur
11.55 am to 12:10 pm	Inaugural speech	Chairperson- Prof. Keshari Lal Verma, Vice- Chancellor, Pt. Ravishankar Shukla University, Raipur.
12:10 pm to 12:25pm	Key note address	Chief Guest-Ms. Himani Khanna (IPS), DIG, CID, Raipur
12:25pm to 12:40	Address by special guest	Ms. Melina Kurre (IPS) AIG, CID, Raipur
12:40 pm to 1:00 pm	Screening of movie and discussion	Ms. AmitaPitre- Lead Specialist- gender justice- Oxfam India
1:00 pm to 1:30pm	Speech-Guest Speaker	 Dr.Mitashree Mitra, Retd. Professor, SOS in Anthropology, Pt. Ravishankar Shukla University, Raipur Dr. Neha Thakur, Obstetrics & Gynecology, Dr.Bhim Rao Ambedkar Memorial Hospital, Raipur Mrs. Jyoti Sharma Counsellor, Family High Court Raipur
1:30 pm to 2:00 pm	Pandwani #EmpowermentNot Age	Ms. Chandrika and team
2:00 pm to 2:25 pm	Skit on the theme #EmpowermentNotAge	PurnakshiSahu and Team
2:25 pm to 2:40 pm	Skit on the theme Child Marriage	Student of University ,School of Studies in Sociology & Social Work, Pt. RSU, Raipur
2:40 pm to 2:50 Pm	A brief presentation on online course	Rani- Oxfam India
2:50 pm to 3:00	Vote of thanks	Prof. Priyamvada Shrivastava, Associate

pm		Director, CWS, Pt. RSU, Raipur
3:00 pm	Lunch	

Every year, a 16-day campaign against violence against women is celebrated internationally from November 25 to December 10. This 16-day campaign was started in 1991 by women global leadership institute, Centre for Women's Global Leadership.In this, individuals and organizations work together to bring awareness among people to end violence from the society.

This one-day state-level convention on the theme #EmpowermentNotAge, #BanoNayiSoch, #BunoHinsaMuktRishte, has been jointly organized by the Centre for Women Studies, Pt. Ravishankar Shukla University, Raipur and Oxfam India on 9th of December 2021 at Pt. Ravishankar Shukla University, Raipur. Prof. ReetaVenugopal, Director and Prof. PriyamvadaShrivastava, Co- Director, Centre for Women Studies welcomed the guests. The Chief guest of the occasion was Prof. K.L. VermaVice Chancellor, PRSU. In his presidential address sir has first of all congratulate the organisers for organising such a beautiful event and appreciate the theme of the convention and thrown light on the fact that in order to bring awareness in the society first of all we have to bring awareness among ourselves, then he has pointed that in order to bring equality between men and women we have to fight against the ill practices of the society such as child marriage, eve teasing etc. The keynote speaker of the convention IPS Ms. Himani Khanna, D.I.G, C.I.D Raipur has very rightly said that, by merely making the laws are not enough, we have to change our mind set. She insisted on establishing a violence free society.

Our special guest IPS Ms. Melina Kurre A.I.G, C.I.D in her speech emphasised that A women's decision should completely be her own decision. Further she urged that our worries should not became a barrier for our daughters and sisters. We have to make them and feel them free. The first speaker of the convention Dr. Neha Thakur has highlighted about the importance of Women's age from social and biological perspectives. She further advised to break the hierarchical chain of early marriages in the family so as to stop the problem of Anaemia and teenage pregnancies.

Counsellor of Family High Court Smt. Jyoti Sharma mam hasdiscussed about child marriage and the laws related to it in her lecture. Shri Anand Shukla sir from Oxfam India has given concept note on the theme of the convention and also about the launching of online classes on gender sensitization. Apart from those various cultural activities such as Pandawani on women empowerment, Skit on child marriage has been performed by the Pandawani artists and students of Social work and Sociology, PRSU, Raipur. The program has been anchored by Dr. Anuradha Chakraborty and Vote of Thanks by Ms. Pragati Krishnan, Centre for Women Studies, PRSU, Raipur.

GLIMPSE OF THE PROGRME













NEW PAPER CATTING



Rajdhani - 10 Dec 2021 - 10raj3

पं. रविशंकर शुक्ल विश्वविद्यालय में एकदिवसीय सेमिनार का आयोजन

समानता लाने लड़ना होगा कुरीतियों से

■ **जवभारत ब्यूरो । रायपुर.** www.navabharat.news

पं. रविशंकर शुक्ल विश्वविद्यालय और ऑक्सफैम इंडिया के संयुक्त तत्वाधान में सशक्तिकरण नहीं उम्र, बनो नई सोच, बुनो हिंसा मुक्त रिश्तें विषय पर एक दिवसीय राज्य स्तरीय सम्मेलन का आयोजन किया गया. इसमें कहा गया कि पुरुषों और महिलाओं के बीच समानता लाने के लिए हमें समाज की कुरीतियों जैसे बाल विवाह, छेड़खानी आदि के खिलाफ लडना होगा, आयोजन



के मुख्यअतिथि पं. रविशंकर शुक्ला विश्वविद्यालय के कुलपति प्रो. के .एल. वर्मा थे. उन्होंने सम्मेलन के विषय की सराहना की और इस तथ्य पर प्रकाश डाला है कि समाज में जागरूकता लाने के लिए सबसे पहले हमें आपस में जागरूकता लानी होगी. प्रो. रीता वेणुगोपाल, निदेशक और प्रो. प्रियंवदा श्रीवास्तव, सह-निदेशक, महिला अध्ययन केंद्र ने अतिथियों का स्वागत किया.

हमें अपनी सोच बदलनी होगी : सुश्री खन्ना

सम्मेलन की मुख्य वक्ता आईपीएस सुश्री हिमानी खन्ना ने कहा कि केवल कानून बनाना ही काफी नहीं है, हमें अपनी सोच बदलनी होगी. उन्होंने हिंसा मुक्त समाज की स्थापना पर जोर दिया. उन्होंने कहा कि एक महिला का निर्णय पूरी तरह से उसका अपनानिर्णय होना चाहिए. इसके अलावा उन्होंने आग्रह किया कि हमारी चिंताओं को बेटियों-बहनों के लिए बाधा नहीं बनना चाहिए.

NATIONAL GIRL CHILD DAY

Submit your Essay, Poem, and Poster/Painting in the following mail cwsprsuraipur@yahoo.in

ONLINE ESSAY WRITING, POEM AND POSTER/PAINTING COMPETITION

THEMES

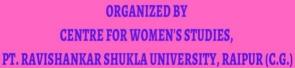
How do you like to see girls of 21st century (21वीं सदी की लडिकयों को आप कैसे देखना पसंद करते हैं)

Registration form link https://docs.google.com/forms/d/1sltmGWDJOJRf8fKMjGpWQ9DcuNOzy7ZrwBXPHohTDso/e

Visit the website https://www.prsu.ac.in/academic epartments/utd-departments/Centrefor-Womens-Studies/9



Submission Deadline January 31st 2022









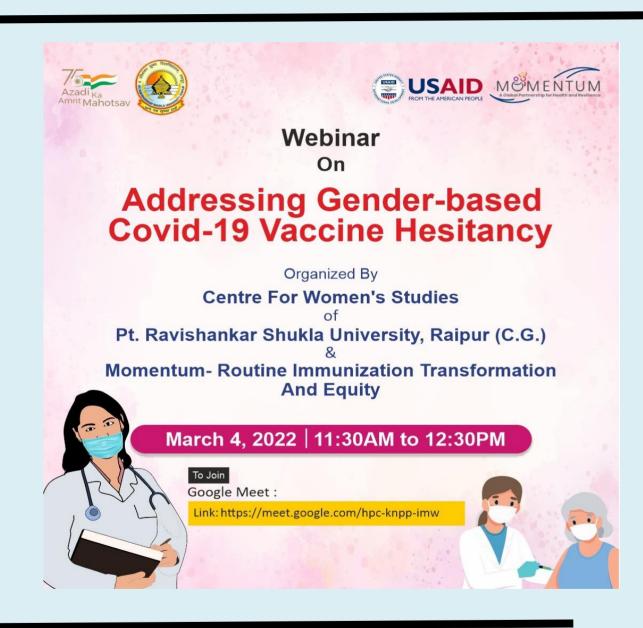








Webinar on Addressing Gender Based COVID-19 Vaccine Hesitancy



The Centre for Women Studies (CWS) Pt. Ravishankar Shukla University and MOMENTUM Routine Immunization Transformation and Equity project organized a webinar on "Addressing gender based Covid-19 vaccine hesitancy" as part of International Women's Day celebration. The webinar was attended by State Immunization Officer Dr Vishvanath Bhagat, Chief Medical and Health Officer Raipur Dr Meera Baghel, Dr Amita Pitre National Women's' Rights Champion and Prof Reeta Venugupal, Director of CWS among others. Welcoming the guests and attendees Urmimala Sengupta, Communication officer of the project stated that the objective of the webinar is to dispel gender related COVID-19 vaccination hesitancy.

Dr. Vishwanath Bhagat, Chief Guest on the occasion he stated that 100 % first dose, 80% second dose of adult population and 67% 15 to 18 years age groups and 32% precaution dose has been administered in Chhattisgarh. He thanked all health workers and society at large for their contribution and participation in world's largest vaccination campaign. He added that now people are more proactive in getting themselves vaccinated. He appealed to the organisers, participants and all citizens to champion the cause of COVID-19 vaccination specially for women.

Dr. Meera Baghel, stated that there are women who fear losing their fertility and other complications owing to the vaccines. She said that pregnant women are prone to Covid since their immunity is weak during the nine months, therefore they should take vaccine immediately. It is the duty of the peer group, family members and local influencers to mobilize these women and encourage them to get vaccinated.

Prof. Reeta Venegopal stated that owing to less studies in the field of Gender and Vaccinations, the myths continue to languish in the society. There is a need that more scientists and experts publish their findings on the topic of women vis-a-vis Covid 19 and vaccinations.

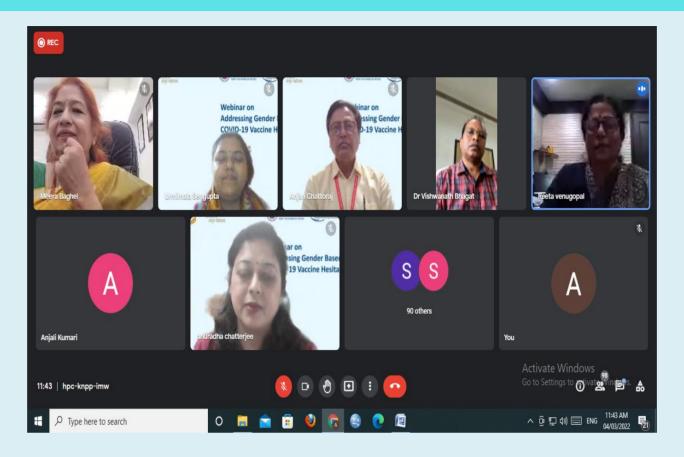
Dr Amita added that International Women's' Day is necessary because it keeps the dialogue on women's' rights and their struggles alive. There is very less research on women and their struggles with pregnancy, lactation, menstruation and vaccinations. These topics need to be widely studied and chronicled so that they can act as myth busters for the rest of the society.

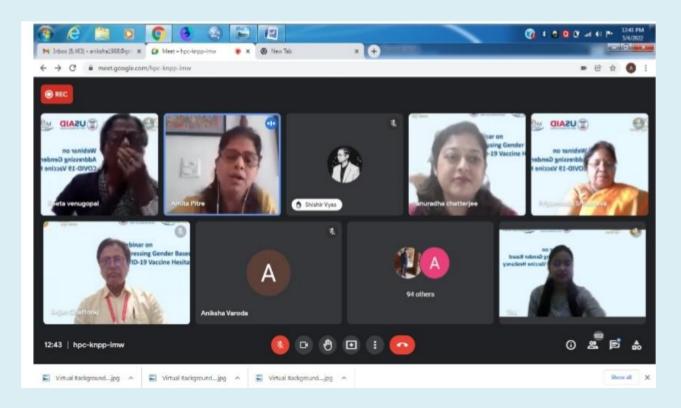
The webinar was attended by Prof. Priyamvada Shrivasta and Prof. Adity Poddar Associate director CWS, Ms. Anikha Varoda, Research Associate, CWS, Dr. Anuradha Chakrabarty, guest lecturer, CWS and Dr. Anjan Chattoraj, State Project Manager of the MOMENTUM Routine Immunization Transformation and Equity project and others attended the webinar.

Centre for Women Studies, Pt. Ravishankar Shukla University was established two decades back. It is one of 80 centers under the UGC. The centre is associated with UNESCO co-chair as Sangwari Hub.

The MOMENTUM Routine Immunization Transformation and Equity project is supported by USAID grant, John Snow India has been mandated to provide technical assistance to the Government of India and selected State governments including Chhattisgarh to identify challenges and facilitate feasible solutions to address them to rapidly ramp up COVID-19 vaccination in the state specially for the vulnerable and marginalized section of the society.

GLIMPSE OF THE WEBINAR





Gender based hesitancy of COVID vaccine addressed

■ Staff Reporter

RAIPUR, Mar 4

THE Centre for Women Studies (CWS) Pt Ravishankar Shukla University and Momentum Routine Immunisation Transformation and Equity project organised a webinar on 'Addressing gender based COVID-19 vaccine hesitancy' as part of International Women's Day celebration.

The webinar was attended by State Immunization Officer Dr Vishvanath Bhagat, Chief Medical and Health Officer Raipur Dr Meera Baghel, National Women's' Rights Champion Dr Amita Pitre and Director of CWS Professor Reeta Venugupal among others. Welcoming the guests and attendees Communication Officer of the project Urmimala Sengupta stated that the objective of the webinar is to dispel gender related COVID-19 vaccination hesitancy.

Chief guest Dr Vishwanath Bhagat stated that 100 per cent first dose, 80 per cent second dose of adult population and 67 percent 15 to 18 years age groups and 32 per cent precaution dose has been administered in Chhattisgarh. He thanked all health workers and society at large for their contribution and participation in world's largest vaccination campaign. He added that now people are more proactive in getting themselves vaccinated. He appealed to the organisers, participants and all citizens to champion the cause of COVID-19 vaccination specially for women.

Chief Medical and Health Officer Dr Meera Baghel stated that there are women who fearlosing their fertility and other complications owing to the vaccines. She said that pregnant women are members and local influencers to mobilise these women and encourage them to get vaccinated. Professor Reeta Venegopal sidd that owing to less studies in the field of Gender and Vaccinations, the myths continue to languish in the society. There is a need that more scientists and experts publish their findings on the topic of women vis-a-vis COVID 19 and vaccinations.

Dr Amita Pitre added that InternationalWomen's Day is necessary because it keeps the dialogue on women's rights and their struggles alive. There is very less research on women and their struggles with pregnancy, lactation, menstruation and vaccinations. These topics need to be widely studied and chronicled so that they can act as myth busters for the rest of the society.

The webinar was attended by Professor Priyamvada Shrivasta and Associate director CWS Professor Adity Poddar, Research Associate CWS Anikha Varoda. Dr Anuradha Chakrabarty, guest lecturer, CWS and Dr Anjan Chattoraj, State Project Manager of the Momentum Routine Immunisation Transformation and Equity project and others. Centre for Women Studies, Pt Ravishankar Shukla University was established two decades back. It is one of 80 centers under the UGC.

The centre is associated with UNESCO co-chair as Sangwari Hub. The Momentum Routine Immunization Transformation and Equity project is supported by USAID grant, John Snow India has been mandated to provide technical assistance to the Government of India. It has also selected State Governments including Chhattisgarh to identify challenges and facilitate

INTERNATIONAL WOMEN DAY CELEBTATION IN COLLABORATION WITH NATIONAL SERVICE SCHEME (NSS), STATE COMMISSION FOR WOMEN AND MOMENTUM Routine Immunization Transformation and Equity project



8THMARCH, 2022

CELEBRATING WOMEN POWER

In keeping with the norm of of | the ongoing pandemic times, the Centre for Women's Studies on (CWS), Pt Ravishankar Shukla University and National Service Scheme (NSS) in collaboration to with State Commission for Women and Momentum Routine Immunization Transformation and Equity Project decided to felicitate the frontline health workers and COVID warriors on the occasion of International Women's Day at a glittering ceremony held at Pt Deendayal Upadhyay Auditorium. More than 10 Mitanins and Auxiliary Nurse Midwives (ANM) were awarded for their exemplary courage displayed in the wake of ur COVID -19 Pandemic through, vaccinations and awareness building within the villages, inside forests and even in cities.

Chief guest on this occasion Governor Anusuiya Uikey stated that women are the pillars of strength and owing to misconceptions and bias within the family, they morph themselves in binaries. This not only creates hurdles for them, but also restricts the growth of society as a whole. She exhorted the students and advised them to stand their ground and struggle hard for their dreams. Taking a out of her own life, how she began her journey as a student leader in spire the students. "You are not alone in your struggle, I m you," Uikey said.

Vice -Chancellor Dr Keshari Lal Verma addressing the jubilant crowd said that the accomplishments of the health workers, is extraordinary give the geographical, demographic an political challenges in theterrains of Chhattisgarh. He congratulated the CWS and Momentum Routine Immunization Transformation and Equity for ideating the felicitation ceremony for the ANMS and Mitanins.

Welcoming the guests, Prof Reeta Venugopal, Programme Co-ordinator and Director CWS, at Pt RSS University, stated that 'one wonders why we need to celebrate the women is Dayal though everyday is a woman's day. "It is a day that recognizes the struggle of everyday women and gives a chance to the society as a whole to recognize their talents and contributions," she added. District Forest Officer, Raipur, Satovisha Samaddar highlighted there relevance of conserving environment through progress of 'women. "If you want to protect the forests and the environment Of this state, do not write essays "on the subject. Treat you women and girls with respect and let them pickup the profession they Jove. Do not force them to get 'married. This will help to con- serve the forests, stop encroach 'Auditorium, Following this, Dr Anjan Chattoraj, State **Program** Manager, Momentum Routine **Immunization** Transformation and Equity thanked the frontline health workers for their undeterred commitment to COVID- 19 vaccination programme and stated that without them the state could not have won the battle 'against COVID-19. He thanked all ANMS and Mitanins for their extraordinary feat. Headed that the battle is only half won and we need to gear up for the remaining vaccinations so that the last person in the queue is vaccinated and saved from the horrors of this disease.

At the end of the day, LHV Meena Das from Baloda Bazar, and ANMs Ruma Mashi from Mungeli, Divya Rai from Bilaspur, Kiran Singh from Mahasamund, Amrita Korram from Dantewada, Jashoda Sahu from Gariaband, Shahida 'Qureshi from Kawardha and were felicitated by Governor Vikey for vaccinating thousands of beneficiaries across the districts. 'Additionally Mitanins Pushp Jangre from Bilaspur, Jugri from Dantewada, Ana Verma from Raipur, Lalita Chandravanshi from Kawardha, Pushpa Nag from Mahasamund, Jageshwari from Mungeli, Sewti Sahu from Balodabazar, were also awarded. The venue was thronged by a large number of students, Mitanins, ANMs and NSS volunteers from across state.

GLIMPSE OF THE PROGRAMME

















PAPER CATTING

मुश्किल हालातों को किया आसान तो मिली संफलता,अब इनके काम को मिला सम्मान

ZOOM freide

mour somethis place lines to मूं तो हर महिला का सम्मान होता है त्वीकन ऐसा फार्सी मार हुआ है कि तीन संस्थाओं ने जिलका उन मिलाओं का सम्मन किया है रिल्लीने विवर्तत सालात का सम्मन करते हुए सरलाल प्रान्त की बुख प्रतिकाओं ने लोगों को वेकारित लाउने केंद्र (पं. पिकांका सूच्या विदेश), राज्य महिला उत्तयेष और राज्य परियोजन प्रयोजन मोमेटम कटीन हम्पुनद्वनेतन ट्रांगकार्नेतन एड इक्रांतिटी क्रेजेक्ट के प्रयुक्त संस्थानकान में यह सम्बान सम्बाह अपोर्शन हुआ। पं खेनरपन अवस्थाता हुआ। प. प्रान्तवात उपाध्यम सम्बद्धाः हुए इत सम्बन्धाः सम्बद्धाः में राज्याताः अराष्ट्रप्रेमा उद्धाने पुत्रसः अतिनि मी त्रिमित्र के सुरावति सेत्रेनार केतारे लाल भवां, रशिवादाः सी. निर्माण कांत्र पाण्येन, अस्थानगताला



इन संस्थाओं का हुआ सम्मान

पान्त्रान् । कार्य पार्टीका पर क्षांक्ष्म परिता पर वर्षी पार्टिका उत्तर परिता पार्टिका प्रिता पार्टिका पुरावतिक विद्वारी परिता परिता अपि परिता परिता अपि

सम्मान से मिलती है काम करने की ऊर्जा

हर एक घर के लिए नदी. पहाड पार करना पडा

पिछा छ । स्रोताक्ष के बोहर अंशरणी इस्ताबी में करा घरत कर स्थाने के लिए कड़ी की हो के में: पाली बार राजपुर उन्हें जुली बाई निकारित उन



जुल्ती बाई मितारित उन लीनों से बाजरी भी कि, मैं खुब फिक्ताफील की मरीज हूं लेकिन वेंब्सिन लाई हैं, जो हुब लीन बादी नहीं लग्बा सकते। जुल्ही को उन लीनों के घर जाने के लिए करें एक कर बूटी पर होने के कारण उक्को हर कर को के जिए सभी नहीं है जमी पहाड़ सो पह करण पंजर सा।

शराब पीने वालों को वैक्सीन लगाने तैयार किया



ा कार्य भा नवा करने करने लोग नेक्सीन की जनका पर्दे थी। नवा करने करने में प्रकारकार सीन कराओं थी। भी उन सीनी के पर एक में दिन में क जन्मी की एक हा तिन न कर कर जारी भी क्योंक शरकी पैने कते उसे अपने ग्रह से नगा नेते से, लेकिन पुन्दा ने भी सार करी मानी और लकतार उसके ग्रह जारत उन्हें वेक्सीय लगवाने के लिए गाड़ी करती पति । इस तरह सन्दी मेहनत वेळ लोग पानी कर।

वैक्सीन लगाने एक साल के बच्चे को लेकर जाती थी

क्रितासमूर की ग्रन्थम किया में शुरू से ही सेस करने का जन्म स्व इस कारण ही से अपने एक साल के सबसे को लेकर लोगों के



को लेकर लोगों के घर-दार जाकर कोनिड नेक्टीन लगती थी। कोरीया के समय इतने घोटे कार्य को साम ले ज्याना भी प्रका बरिक उसके इस कार्स में उसके परिचार का मी कानोत मिला। उसने 2 स्टार वेक्सीव डोल 2 स्वार वस्तान डोड लगाई : सम्बार घलर विभा को बहुत खुडी मिल रही बी :

60 साल की मीना ने गर्भवतियों को लगाया टीका

भीते 30 साली स्वास्थ्य सेवा कर रही कर्लीय बाजार की रहने बाली मेना सक की

बारते हैं। 60 पाल की ठढ़ में भी को पालपम का कार्य कर रही हैं।

गोना भान और उनके कार्यको रेखका सै उस श्रेत में रहने वाली गर्मको प्रतिकार कांबिड वेंबसीन लगाने के लिए डिवार हुई, क्योंकि अभी भी गर्भवती और वृध दिल्लने काली

के लिए तैयार नहीं होती है। उन्हें बेंबचीन लाउना आज भी एक जुनीती है।

Governor felicitates frontline workers, COVID warriors





Jhugri from Dantewada, who was awarded by the Governor for vaccinating more than 1,000 people.

(R) Governor Anusuiya Uikey addressing the huge gathering at the Pt Deendayal Upadhyay Auditorium.

RAIPUR, Mar 8

IN KEEPING with the norm of the ongoing pandemic times, the Centre for Women's Studies (CWS), Pt Ravishankar Shukla University and National Service Scheme (NSS) in collaboration with State Commission for Women and Momentum Routine and Equity Project decided to felicitate the frontline health workers and COVID warriors on the occasion of International Women's Day at a glittering ceremony held at Pt Deendayal Unadhown of Minima to film. More than the occasion of International Women's Day at a glittering ceremony held at Pt Deendayal Unadhown of Minima to film. More warded for their exemplary courage displayed in the wake of COVID -19 Pandemic through vaccinations and awareness building within the villages, inside forests and even in cities. Chief guest on this occasion Governor Anusulya Uikey stated that women are the pillars of strength and owing to misconceptions and bias within the family, and the strength and owing to misconceptions and bias within the family of the strength and strength the strength and owing to misconceptions and bias within the family, and the strength and strength and strength and owing to misconceptions and bias within the family of their dreams. Taking a page out of the own life, she stated how the began her journey as a stulent leader and gradually dimbed the ladder of politics to

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Ulkey said.

Vice - Chancellor Dr Keshari
Lal Verma addressing the jubilant crowd said that the accomplant crowd said

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The venue was thronged by a large number of students, Mitanins, ANMs and NSS volunteers from across State.