

Anshu Rana Report

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Dissertation Internship

¹ National Institute of Public Cooperation and Child Development (An autonomous organization under the aegis of Ministry of Women and Child Development)

¹ **Training on Ensuring Food Safety and Maintaining Food Safety Standards in Supplementary Nutrition in ICDS**

Organized by NIPCCD, New Delhi, 16^h to 18th April, 2018

Dissertation Report on

“A study to evaluate the perception of District Child Protection Officers and Health Officials regarding training programme on Training on Ensuring Food Safety and Maintaining Food Safety Standards in Supplementary Nutrition in ICDS”

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PG/16/07

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¹
Evaluation of Training on Ensuring Food Safety and Maintaining
Food Safety Standards in Supplementary Nutrition in ICDS

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Introduction of the study

Sustenance dealing with, nourishment planning, and capacity of sustenance in legitimate way frames the premise of nourishment security which makes it sheltered and worthy for our consumption. The factors, for example, awful individual cleanliness, wellspring of sustenance which is perilous, or traded off ecological cleanliness prompts tainting of the sustenance. Natural, physical and concoction specialists cause sustenance borne sickness if not controlled. It additionally prompts looseness of the bowels, sickness, regurgitating, fever and disease and now and again demise in. Pregnant moms, newborn child and youthful youngsters are the most inclined to these sort of contamination and one should dependably deal with their nourishment and sustenance wellbeing.

Sustenance shapes the premise of the profitability of a population. 'Wholesomeness' of nourishment is extremely important. It has two primary measurements. One, nutritive estimation of the sustenance ought to be great so body can play out its different body capacities; furthermore nourishment ought to be rejected of any pollution and organisms with the goal that its consumption does not bring on any illness or contaminations.

At the point when nourishment is arranged or put away in the unhygienic conditions or bug or contagious defilement of the sustenance amid capacity or mechanical contaminations contaminating the food, modification of the food, use of insecticides or

pesticides in an uncalled for way are some the significant dangers to our sustenance wellbeing.

As indicated by The World Health Organization measures foodborne and waterborne dysenteric sicknesses altogether influence around 2.2 million people each year. Foodborne sickness is awesome wellbeing peril everywhere throughout the world uncommonly in the creating nations, for example, African nations..

Care in treatment of sustenance and water is a pre-fundamental to ensure better prosperity. The nourishment borne infection can develop as a result of various reasons like silly practices in agriculture, transportation and its stockpiling, nonappearance of neatness, sanitation and uncalled for control system amid sustenance stockpiling or prepration. It ought to be done in a most ideal manner so the sustenance should be commendable and ok for human use.

This is extensive of various institutionalized frameworks that ought to be taken after in order to avoid distinctive nourishment borne ailment. Polluting of sustenance may happen in light of poor individual cleanlinesscompromised enviormental conditions, or in light of poor common neatness. Natural, physical and compound substances can cause nourishment borne sickness if not controlled.

Tainting particularly organic incorporates microbes, infections or parasites that are available in air, nourishment, water, soil, creatures and people. Remote bodies which frames the kind of physical pollution are happens because of unplanned tainting and/or poor dealing with hones. (it can seen from the stripped eye illustrations : stones, metal, glass, wood, creepy crawlies, soil, earth, hair, fingernails and so forth.)

Chemicals utilized for sanitation and cleaning shapes the synthetic contaminant.

On the off chance that the nourishment is defiled it prompts conditions of detachment of the entrails, vomiting, queasiness, fever and infection and even end in genuine cases, in this way sustenance ought to be free from creation, microbiological, biologic toxins, pesticides, steady stores and allergens is required. In ICDS there is course of action of supplementary sustenance for adolescents a half year to 6 years of age and for pregnant and lactating women.

The principles issued by Government of India as for security and nature of supplementary sustenance (dated 24.2.2009) endorses that the supplementary support should fit in with ²⁷ Prevention of Food Adulteration Act 1954 now disavowed as ¹⁸ Food Safety Standards Act 2006, Food Safety and Standards Authority of India headings 2011.

Bring Home Ration (THR) is obligatory for kids a half year to 3 years and pregnant and lactating women, while naturally cooked hot nourishment and a morning snack is given to youths 3-6 years who go to the Anganwadi focus step by step, for 300 days consistently. Pregnant mothers, child and energetic adolescents are especially vulnerable against malady in this manner most extraordinary care should be taken at all periods of regulating supplementary food.

The nourishment gave from ICDS incorporates both nearby arrangement and handling, it is fundamental that watchful advances are grasped at different levels. Quality affirmation of supplementary support and nourishment prosperity should be an essential bit of supply change administration at AWCs.

The sustenance given through these AWC should be supplement thick free from support adulterants, pathogens, sustenance tints, added substances and stick to nourishment security and quality guidelines.

There are a couple of confinements in ICDS like no consistency in plan of Anganwadi center, nonattendance of room, high rent for AWC's in urban regions, nonappearance of water and sanitation workplaces et cetera., however central sustenance prosperity models ought to be taken after. A couple of States/UTs have adequately ventured up with respect to make sustenance security rules for ICDS. Operational assortments exist

in the transport of supplementary sustenance, the country over; this administer focuses in giving the extensive states of Food Safety measures in ICDS. .

Besides there is an action by the GOI is being endeavored for discretionary quality checks of supplementary sustenance through National Accredited Board for Laboratories. It is appealing that each State/UTs draw solitary State specific operational principles nearby watching and supervision at different levels and do test checking of SNP to ensure plan of protected and clean supplementary food through ICDS.

Remembering these imperative parts of sustenance security and to ensure that supplementary nourishment under ICDS is of best quality which is given to our future age of our nation a preparation program was led at NIPPCD which ensured that DPO/CDPO's ought to know about safe sustenance taking care of and should legitimate models in supplementary nourishment. ¹ ICDS functionaries especially the District Level Officers like DPOs/CDPOs is exceptionally essential and huge in guaranteeing wellbeing of supplementary nourishment at all levels of acquirement, transport, taking care of, capacity and dispersion. ¹ It is basic that these ICDS functionaries are very much sharpened and furnished with learning about sustenance wellbeing measures and laws controlling the nourishment security at AWCs.

Keeping in see the difficulties in dealing with SN under ICDS conspire, the preparation program on "Guaranteeing Food Safety and Maintaining Food Safety Standards in

Supplementary Nutrition in ICDS" is proposed to be sorted out at NIPCCD, New Delhi from 16-18 April 2018. After the finishing, it was normal from the members that they would have improved their comprehension of nourishment wellbeing, sustenance security, sustenance fortress and their part in advancing sustenance wellbeing benchmarks in supplementary nourishment. This reports assesses the preparation program for the same and assess the view of District Child Protection Officers and Health Officials with respect to preparing program. This reports additionally delineates the fulfillment level of the of DCPO/Health Officials on preparing program.

Contents of the training

- ▶ The training included
 - 1 Concept of food safety and hygiene and its importance in SNP of ICDS,
- ▶ Food borne illnesses and their causes, Safe procurement and 1 storage of food,
- ▶ Safe food handling practices, Personal hygiene and sanitation,
- ▶ Water quality and purification, Sources of nutrients and their conservation,
- ▶ Laws and standards,
- ▶ Food Fortification and 1 development of action plan and Role of ICDS functionaries in ensuring food safety measures

Food safety control

Investigations of general medical issues and their relationship to the food supply, have achieved the sentiment in numerous a legislature(government) that our present food supply is presumably more secure than any time in recent memory. Considering the colossal volume of food that, on a worldwide scale, is delivered and expended securely, this obvious certainty is justified. All things considered, the insights demonstrate that even in industrialized nations one out of each three individuals has food borne microbial ailment occasion each year (WHO, 2002). We perceive that food safety isn't a flat out. It is a continuum of pretty much wellbeing. At an administrative level, nourishment security control for general wellbeing assurance by need covers the scope of various evolved ways of life applicable to a specific food item or item gathering, including every single food producer, manufacturing sites and others who are importing into the country. FAO and WHO have called upon nations to apply modern universal food safety and quality benchmarks to ensure shopper wellbeing.,. Mostly through the exercises of Codex Alimentarius and specially appointed master meetings, FAO and WHO have built up a progression of rules and reports that detail out the different strides in Risk Analysis, to be specific Risk Management, Risk Assessment and Risk Communication.

To sum up the food safety we can further dwell upon the the basic foundations of food safety which are discussed below and food laws which are covered in different subtopic.

These are the foundations of Food Safety are :

- 1) Infrastructure and hygiene : The good infrastructure with basic facilities ensures proper storage of food and food preparation leading to the safety of food. Another component which is very important is hygiene which includes personal hygiene and contamination free zone goes hand in hand with food safety.
- 2) Quality of raw materials and production process, storage, packaging and delivery: The quality of the raw materials provided for food preparation also influences the safety of food. Good quality of raw material will only lead to good quality of food being prepared. The production process, storage of raw materials its packaging and delivery which is free from any chemical, physical or biological contamination can only ensure food safety.
- 3) Improvement and maintenance training : There is always a scope of improvement and continuous evaluation of the various processes and infrastructure will make sure that food safety is not at risk. Proper regular training at regular intervals will help us to educate and motivate various personnel to secure food safety at various levels.

There are various methods which can be followed to ensure food safety at AWC's

The Methods of monitoring food safety at AWCs are as follows:

- i. By spot checking the date of manufacture and expiry of food at the AWCs
- ii. Amount of food provided to the beneficiaries

- iii. To know the opinion of the children and mothers regarding food quality
- iv. Obtaining information regarding supplementary food from records and registers maintained at AWCs
- v. Counterchecking the rejected food packets, which may have expired food
- vi. Enforcing general cleanliness of AWCs.

Guidelines for an ideal AWC

- A separate sitting room for children
- A separate sitting room for women
- A separate kitchen
- Store for storing food grains
- Child friendly toilets
- Space for playing of children (indoor and outdoor activities)
- Safe drinking water facility
- To meet the above requirements AWC must be constructed in a covered area of not less than 600 sq feet

Role of Supervisors in ensuring Food safety at AWCs

- a. Food supply to AWC in a month
- b. Number of visits made to the AWC in a month
- c. Food safety aspects supervised
- d. Personal hygiene of food handler
- e. Cleanliness of cooking area
- f. Water used for cooking
- g. Safe storage & disposal of left over cooked food
- h. Cleanliness during food service and using food within its safety period
- i. Method of monitoring food safety of supplementary food.(Quantity and type of food to be given, providing guidance regarding cleanliness, checking the date of manufacture
- j. Quality of water used for cooking
- k. Safe handling of food

Role of CDPOs in ensuring Food Safety

- ✓ Checking the date of manufacture and expiry of premixes at the time of arrival at CDPO office
- ✓ Method of storing the premixes /grains bags arrived at the CDPO office.
- ✓ Frequency of supply of food to the AWC in a month
- ✓ Assurance of the safety of food during transportation and supply to AWC
- ✓ Measures taken to ensure the safe handling of the premixes/food grains
- ✓ Methods of monitoring food safety at AWCs

✓ Indicators of safe food

Food Adulteration

³ Sustenance corruption is the methodology in which the nature of support is cut down either by the extension of inferior quality material or by extraction of significant fixing. It not simply consolidates the consider extension or substitution of the substances however common and compound sully at the season of improvement, amassing, taking care of, transport and scattering of the nourishment things, is furthermore mindful of the cutting down or defilement of the nature of sustenance items..
³ Adulterants are those substances which are used for making the sustenance items not ok for human utilization. Under the past sustenance laws nourishment item with brought or tainted quality used down to be described as Adulterated Food yet under the new laws (⁷ FSS Act, 2006), the word adulterated sustenance has been named as Substandard Food, Unsafe Food or Food containing the superfluous(extraneous) matter. Contaminated in sustenance has been a stress since the beginning of advance, as it lessens the nature of nourishment and also brings about different sick effects on prosperity. Genuine ⁴ testing of nourishment and adulterant revelation of various sustenance items is required for regard assessment and to ensure client confirmation against counterfeit activities. Through this study we intend to total differing sorts of pollutions made in different nourishment things, the prosperity perils constrained by these adulterants and identification methods open for them.

⁴
Stresses over sustenance security and direction have ensured the headway of various techniques like physical, biochemical/immunological and nuclear frameworks, for adulterant ID in nourishment. Nuclear procedures are all the more best concerning revelation of organic(biological) adulterants in sustenance, albeit physical and biochemical frameworks are best for area of various adulterants in nourishment.

³
Nourishment things are said to be tainted if their quality is antagonistically impacted by including of any substance which is destructive to prosperity or by abstracting a nutritious substance.

A nourishment thing is said to be polluted if:

□ A substance which is incorporated is harmful for human use.

□ An sub standard substance substitutes totally or for the most part.

□ A fundamental or essential has been separated from the sustenance thing, totally or to a constrained degree.

□ Various sorts of adulterants found in the sustenance things are according to the accompanying:

□ ³ Intentional adulterants: like shading pros, starch, Pepperoil, injectable hues and others.

□ Incidental adulterants: like pesticide developments, hatchlings in sustenance, droppings of rodents.

□ Metallic contaminants: like lead, arsenic, exuding from mixture undertakings et cetera.

"As per the arrangements of Food Safety and Standards Authority of India, if any individual imports or produces available to be purchased, or stores or circulate any adulterant, without anyone else or by some other individual for his sake, might be obligated

1. For a punishment up to Rupees two lakhs, if the adulterant isn't harmful to wellbeing.

2. For a punishment up to Rupees ten lakhs, if the adulterant is harmful to wellbeing.

Advance it is given that, in a procedure under the arrangements of Food Safety and Standards Authority of India, it's anything but a safeguard that the blamed was under lock and key for an adulterant for the benefit of some other individual."

⁵ Kinds of Food Adulteration

The Ministry of Health and Family Welfare is subject to give ²⁶ safe nourishment to natives. The Prevention of Food Adulteration Act, 1954, set down rules to give unadulterated and healthy nourishments to customers. The Act was last altered in 1986 to make disciplines more stringent and to engage purchasers further.

Sustenance corruption is the expansion or blending of mediocre, hurtful, substandard, pointless or superfluous substances to nourishments. This crown jewels the nature and nature of sustenance things and is thought about nourishment debasement.

1. Drain Adulteration:

In India, which is the place where there is bovines, huge amounts of drain are defiled. Drain debasement includes adding water to drain and expelling the gainful fats from drain. Frequently soya drain, starch, groundnut drain, and wheat flour are added to drain. This makes the drain less nutritious and it brings about drain being futile for the shopper.

2. Contaminated of Fats and Oils:

It is anything but difficult to contaminate oils and fats. In any case, it is hard to distinguish such corruption. Ghee is regularly blended with hydrogenated oils and creature fats. Manufactured hues and flavors are added to different fats to influence them to seem like ghee.

3. Sustenance Grain Adulteration:

Sustenance grain defilement includes blending sand or squashed stones to expand the heaviness of nourishment grains. Oat grains and heartbeats are blended with plastic globules that look like grains in shading and size. All the time, water is additionally splashed on grains to build the weight.

4. Different Adulterations:

Bean stew powder is regularly blended with block powder, while tea leaves are frequently blended with utilized tea clears out. These contaminations are exceptionally hurtful to the purchaser and they ought to be tended to by buyer associations and buyers truly.

Food Fortification

Defination by WHO :⁸ "The process whereby nutrients are added to food (in relatively small quantities) to maintain or improve the quality of the diet of a group, a community or a population."

It includes expansion of supplements to the staples and food items.

Bio fortification is rearing crops to boost their nutritious value, which can incorporate both traditional specific breeding, and present day hereditary change.

¹³ Mass fortification

1. Salt
2. Fats and oils
3. Wheat flour
4. Rice
5. Milk

Directed fortification

1. Micronutrient Powders

2. Ready to eat sustenance (RTE)

Market driven

1. Wheat flour and wheat items
2. Beverages
3. Fortified dal simple
4. Others including RTE

Food Fortification

- Micronutrients inadequacies trade off personal satisfaction and effect improvement and efficiency.
- FSSAI has planned far reaching direction on "Sustenance Safety and Standards (Fortification of Foods) Regulations, 2016".

The Union government has influenced fortification of salt, wheat to flour and oil obligatory in nourishments served to kids in all anganwadi centres (mother and tyke mind focus) under the Integrated Child Development Scheme (ICDS) to control high commonness of lack of healthy sustenance among youngsters under six years

Schedule of the Training programme

1
NATIONAL INSTITUTE OF PUBLIC COOPERATION AND CHILD
DEVELOPMENT

Day-1, Monday , 16 April , 2018	
Time	Session
12 9.00 a.m. - 10.00 a.m.	Registration of participants
10.00 a.m. - 10.15 a.m.	Inaugural Session <ul style="list-style-type: none">• Shri M A Imam, Director, NIPCCD• Dr. P. Krishnamoorthy, Additional Director, NIPCCD• Dr. Suryamani Mishra, Joint Director, NIPCCD
10.10 a.m. - 12.00 noon	Food Safety in India, Food Borne Illnesses and Malnutrition - An Overview <ul style="list-style-type: none">• Dr. Rita Patnaik, NIPCCD
25 12.00 noon - 1.30 p.m.	National Food Security Act-2013 and Existing Food Laws & Standards <ul style="list-style-type: none">• Dr. Rita Patnaik , Deputy Director, NIPCCD
15 1.30 p.m. - 2.30 p.m.	Lunch

2.30 p.m. - 5.30 p.m.	<p>Bal Swachhta Mission & Operational Guidelines for Food Safety and Hygiene in ICDS & Supply Chain Management in Supplementary Nutrition Programme under ICDS</p> <ul style="list-style-type: none"> • Purnima Thakur , NIPCCD
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Day 2, Tuesday, 17 April, 2018

<div>24</div> 9.00 a.m. - 9.30 a.m.	Feedback Recapitulation of Day 1
<div>21</div> 9.30 a.m. - 11.30 a.m.	Food Safety through its Quality Control Labs and introduction to <div>5</div> National Accreditation Board for Testing and Calibration Laboratories (NABL)
<div>9</div> 11.30 a.m. - 1.00 p.m.	Techniques of Safe Handling of Food <ul style="list-style-type: none"> • ,Ms Meenakshi Jha , NIPCCD
<div>14</div> 1.00 p.m. - 2.00 p.m.	Lunch
2.00 p.m. - 5.30 p.m.	Food Fortification, Food Adulteration & Food labeling (Practical Demonstration Session on Food Adulteration) Dr. Rita Patnaik, , NIPCCD

Day 3, Wednesday 18 April, 2018

9.00 a.m. - 9.30 a.m.	<div>23</div> Feedback of Day 2
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9.30 a.m.- 10.30 a.m.	Poshan Abhiyaan /National Nutrition Mission • Dr. Rita Patnaik, NIPCCD
10.30 a.m. – 11.30 a.m	Personal Hygiene, Environmental Sanitation and Safe Drinking Water • Ms. Vandana Sharma , NIPCCD
9 11.30 a.m - 1.00 p.m	20 Junk foods and Addressing Consumption of Foods High in Fat, Salt and Sugar (HFSS) • Dr. Rita Patnaik , NIPCCD
17 1.00 pm - 2.00 pm	Lunch
2.00 p.m. – 2.45 p.m.	March towards food fortification • Ms. Meenakshi Jha , NIPCCD
9 2.45 p.m. – 3.45 p.m.	Roles and Responsibilities of ICDS Functionaries in Ensuring Food Safety • Dr. Rita Patnaik , , NIPCCD
19 3.30 p.m. - 4.00 p.m.	Evaluation and Concluding Session of the Course

1 Training on Ensuring Food Safety and Maintaining Food Safety Standards in Supplementary Nutrition in ICDS

Date: 16-18 April 2018

Venue: NIPCCD, New Delhi

Objective

- A study to evaluate the perception of District Child Protection Officers and Health Officials regarding training program on Training on Ensuring Food Safety and Maintaining Food Safety Standards in Supplementary Nutrition in ICDS
- To know the satisfaction level of DCPO/Health Officials on training program

Literature review

Status of Food safety measures In ICDS – A study

This was the study conducted by NIPCCD (Dr. M.S.Tara et al,2014) after the universalization of the Icds programme it was imperative to review and assess food safety component of the ¹ supplementary nutrition programme of ICDS . the pattern of SNP being unique in the state of Karnataka, it was necessary to understand the food handling procedure to ensure food safety.

This study was conducted ¹ to review the food safety measures adopted under SNP component in context of existing food laws and food standards at the AWC in the state of Karnataka .The food handlers being the key service provider at AWC their knowledge ,attitude , practice on food safety and hygiene was assessed. This study was conducted to understand the food safety measures adopted in food handling at AWC. In this study it was observed that 62.2% of AWCs had average rating of the surrounding and 13.3% were rated as very poor. Only 30% of surveyed AWCs the place of cooking was satisfactory, 53.3% rated as average. 85.6% of AWWs responded that they receive adequate quantity of food. It was found that concept of hand washing during food handling was absent in majority (80%) of food handlers .A majority of children rated the cooked products as good (67.8%) and very good(22.2%)while only 9.4% rated as average and 0.6% poor. As per the observations revealed that practices were rated good to average .It was noted that the level of the knowledge and quality of practice on all the attributes of importance of personal hygiene in ensuring food safety was found to be

varying from good to average but the attitude of food handlers was highly positive on all these issues.

From the above stated study it was found that more emphasis should be given a priority in AWCs in view of the direct contact of food handlers. The AWCs should be made aware about the guidelines and standard of the food safety.

The article “Food Safety: A Public Health Priority” written by Chaudhuri D. ²² **Indian** **Journal of Public Health, Volume 59, Issue 2, April-June, 2015.** This article talks about the foodborne diseases reasons and factors contributing to it. It stated that Factors that play important roles in the epidemiology of emerging foodborne diseases include the following Changes in the pathogens, Microbial adaptation through natural selection ;Introduction of new foods through longer and more complex food chains, increasing opportunities for contamination, Lack of safe food preparation facilities; Dietary habits, Travelers can rapidly spread disease to new and distant environments; Trade in food, animal feed, and animals: ¹⁶ **Rapid movement of foods of plant and animal origin contributes to the spread of foodborne diseases to new areas.** the article also highlighted that While the most prominent causes of foodborne diseases are of microbial origin, other biological as well as

Chemical agents are also a cause of concern.

In the end the article give insight about the WHO in 2010 started a strategic plan ¹¹ **for taking action on priority issues in the area of food safety and foodborne zoonoses for the period 2013-2022.** In ⁶ **the end it concludes as food safety is thus a prerequisite for food and nutritional security and an area of public health action aiming to protect consumers from the risk of food poisoning and foodborne diseases.** It talks about how

important is to decrease the incidences of foodborne illness, realizing the importance of providing safe food to the consumers.

This article talks about the importance of food safety by discussing various causes of food borne illness. It discuss about the importance of providing safe food to public health.

FACILITATORS GUIDE BOOK ON FOOD, FOOD SAFETY AND HYGIENE MEASURES IN ICDS- 2016

The facilitators guide book (2016) issued by NIPCCD covers various topics of food safety and hygiene measures in ICDS.

The book highlights that food provider under SNP is required to provide food of good quality ,safe and free from contamination. Safety issues in handling food at various AWS and schools. NIPCCD documented FACILITATORS GUIDE BOOK ON FOOD, FOOD SAFETY AND HYGIENE MEASURES IN ICDS in order to enhance the role of functionaries in ensuring food safety and hygiene at AWC. The book covers the important aspects of food security and the importance of balanced diet. It gives detailed description on food safety.

It also elaborates various food hazards and food borne diseases. It further give details of food borne illness , it tells infants, old age and pregnant women are more prone to food borne illness. It states the details symptoms and signs of the food borne illness and the diseases caused by them. It states different kind of food allergens. It gives the definition and types of food adulteration and how one can check if the food is adulterated. It further discuss quality management system explaining good hygiene practices, good

manufacturing practices and hazard analysis critical points. It then stated the various food laws and quality management. The book also give details about supplementary nutrition in ICDS. It further explains the good hygiene practices and Bal Swachhta Mission. It then covers the food handling and safety measures in supplementary nutrition programme. Then discuss its various steps such as purchasing or Procurement, food processing and packaging of Take Home Ration (THR), transportation of raw ingredients/ processed, distribution of raw ingredients at AWC, preparing and cooking and distribution of supplementary nutrition, at last disposal of Leftovers). The books states various roles and responsibilities of ICDS functionaries in ensuring food safety and handling emergencies. It also give insight about food analysis and role of Food and Nutrition Board in ensuring food safety in ICDS.

The Research paper on Food safety research in India: a review was wriiten by

Sudershan et al which was published in ⁴ [Asian Journal of Food and Agro-Industry](#) 2009.

It stated that ² food safety has emerged as an important global issue. This research was an done to study the food safety research in India in the past ten years during 1995-2005. It included many studies which were focused on detection of pathogenic microorganisms, adulterants and contaminants in food. It was found out that ² there is a striking paucity of reliable data on important issues like evaluation of risks through adulterants, additives and contaminants. Consequently, it concluded that the protection of diets from these hazards must be considered one of the essential public health functions of any country, which emphasizes the need for total diet studies.

Methodology

This study was an evaluation of the training received by CDPO'S and Health officials, to know about their perception regarding ¹ training programme ensuring food safety and maintaining food safety standards in ICDS. The sample size of the participants of training was 30 (n = 30). The time period of the training was three days (16-18 April 2018) and of the study period was one month.. The study is descriptive qualitative study and the study area is ⁵ National Institute of Public Cooperation and Child

Development (NIPCCD), New Delhi. I have followed purposive sampling so samples were selected as the participants of the training. The data was collected in the form of the questionnaire (open ended questions). The data were collected from primary sources as questionnaire was distributed among the DCPO & Health officers and thereafter data is analyzed.

Research Question: What is the perception of District child protection officer and Health Officials regarding ¹ training programme ensuring food safety and maintaining food safety standards in supplementary nutrition in ICDS on held at NIPPCD, New Delhi ?

Study Period: April-May 2018

Study Design: Descriptive Qualitative study

Study area: ⁵ National Institute of Public Cooperation and Child Development (NIPCCD), New Delhi

Study Group: The sample for the present study comprises of 30 DCPO, DPO & Assistant Director & DPO, Deputy Director/DPO, Grade-I Supervisor belonging to Kerela, Nagaland, Sikkim, Delhi, Haryana, Tamil Nadu, Himachal Pradesh, Meghalaya, West-Bengal, Rajasthan.

The study was carried out with the deputy director (Trainer of the programme) consent and cooperation.

Type of sampling: Purposive sampling

Tools applied: The data was collected from the participants of the training in the form of open ended questionnaire It was used as a tool to know the perception of various CDPO's and health officials regarding the training programme.

Data Collection: Qualitative study design was followed to collect the information on evaluation of the training programme. Data were collected from primary sources as questionnaire was distributed among the DCPO & Health officers.

Data Analysis: The data obtained was compiled and interpreted using the SPSS software

Findings And Results

Characteristics of the Respondents

Characteristics	Number of Respondent (N=30)
Age of DCPO/Health Officer	
30-39	16
40-49	10
50-59	4
States of DCPO/Health Officer	
Kerala	
Nagaland	
Haryana	4
Tamil Nadu	4
New Delhi	3
Himachal Pradesh	4
Sikkim	3
Meghalaya	3
West Bengal	2
Rajasthan	3
	2
	2

Gender of DCPO/Health Officer	
Male	10
Female	20

1.Methodology of Training

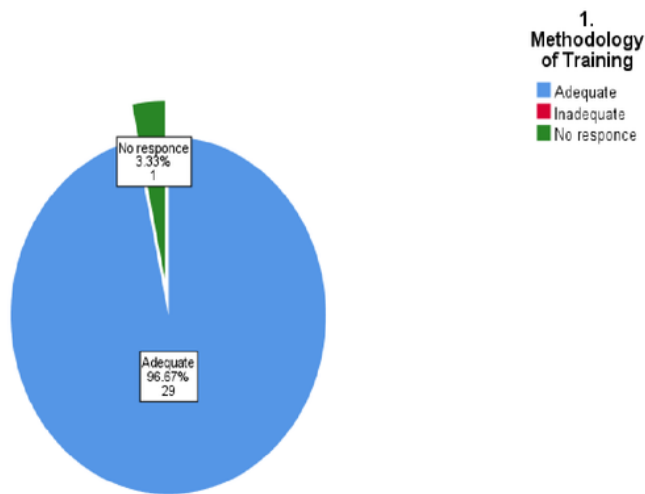
Out of the 30 participants most of the participants responded that methodology of the training was adequate whereas one of the participant feels that more time should be incorporated for training. One of the participant also stated that software practical

session are not effective at all because solution for complicated data entry is not done effectively.

The pie chart below depicts that 96.67% of the respondents feel that methodology of the training was adequate and around 3.33 % respondents did not respond to the question.

96.67%	ADEQUATE
3.33%	NO RESPONSE

Pie Chart Count of 1. Methodology of Training



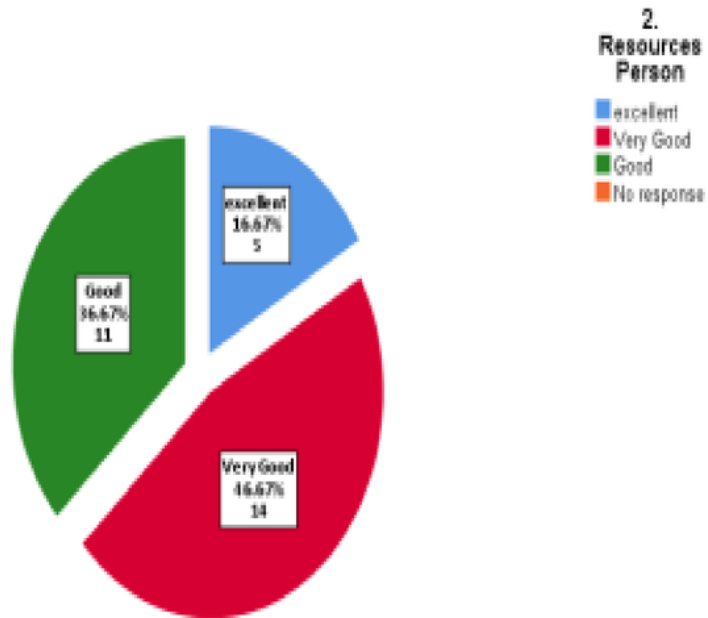
2. Resource Person

Most of the participants feel that the resources person was good and excellent. The pie chart below depicts 16.6% said that resources person was excellent, 46.67% said that it was very good and 36.67% said it was good.

46.67%	VERY GOOD
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36.67%	GOOD
16.6%	EXCELLENT

Pie Chart Count of 2. Resources Person

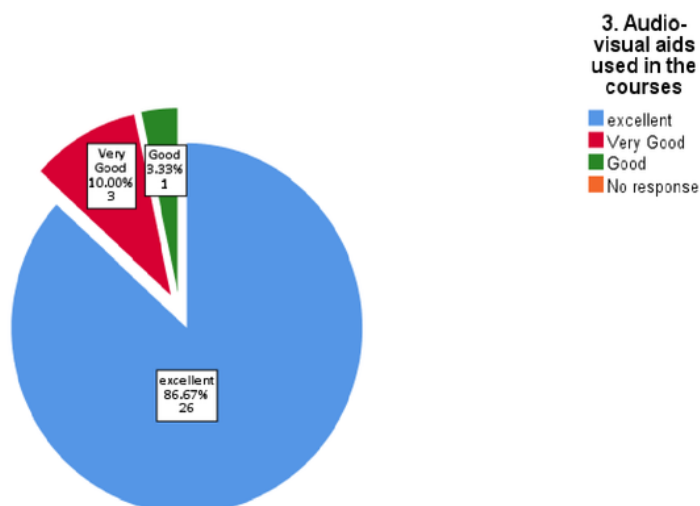


3.Audio Visual aids Used in the Course

Most of the the participants answered this question as excellent or good and only one participant responded that objectives were fulfilled .The pie chart below depicts that 86.67% said that audio visual aids used during training were excellent, 10% said they were very good and only 3.33% said it was good.

86.67%	EXCELLENT
10%	VERY GOOD
3.33%	GOOD

Pie Chart Count of 3. Audio-visual aids used in the courses



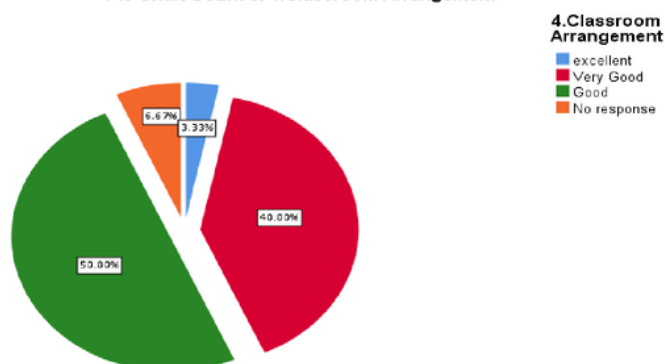
4. Classroom Arrangement

Most of the respondents responded to the question as good and very good and few said it was excellent whereas some also didn't respond to the questions. The pie chart below depicts that 50% respondents said the classroom arrangement was good, 40% said that it was very good, 3.33% said it was excellent and 6.67% didn't answer the question.

50%	GOOD
-----	------

40%	VERY GOOD
6.67%	NO RESPONSE
3.33%	EXCELLENT

Pie Chart Count of 4.Classroom Arrangement

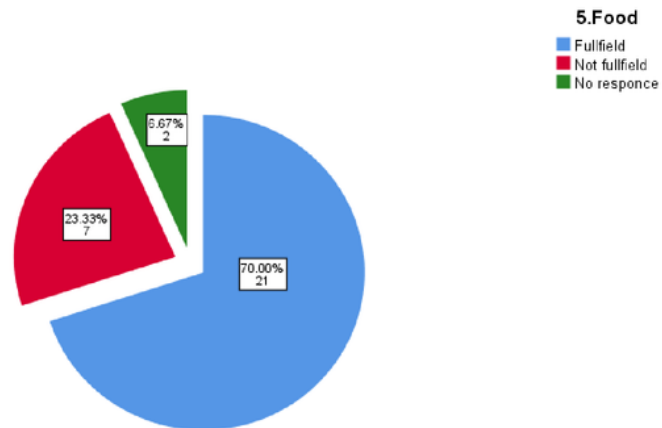


5.Food

Most of the respondents (21) said that food was fulfilling while some of the respondents, (7) also said that it was not fulfilling and very few, (2) respondents didn't answer the question. the graph below depicts that 70% said food was fulfilling, 23.33% felt it was not fulfilling and 6.67% didn't answer the question.

70%	FULLFILLING
23.33%	NOT FULLFILLING
6.67%	NO RESPONSE

Pie Chart Count of 5.Food

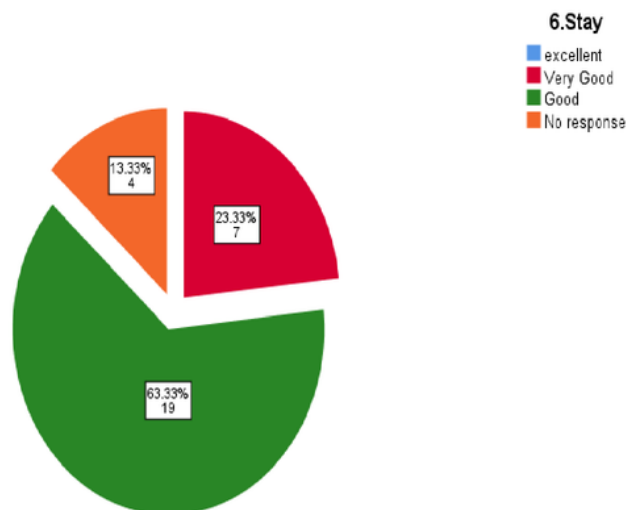


6.Stay

Most of the respondents (19) responded that stay was good, some of them (7) said that it was very good while only few (4) didn't answer the question. The pie chart below depicts that 63.33% said stay was good , 23.33% said stay was very good and 13.33% didn't response to the question.

63.33%	GOOD
23.33%	VERY GOOD
13.33%	NO RESPONSE

Pie Chart Count of 6.Stay



Conclusion and Discussion

The training programme conducted at NIPCCD for CDPO's and health officials was a successful event. My report evaluates their perception on the training ¹ on ensuring food safety and maintaining food safety standards in supplementary nutrition in ICDS.

The training helped them to understand the importance of food safety and nutrition, it also made them aware about various food laws which needs to followed. The training also discussed about the guidelines or the responsibilities they have to ensure food safety at their centers. It also discussed about the standards and guidelines they should follow which will help them to provide quality nutrition to the children.

One of the main conclusions, which can be drawn from this study, is the fact that the training day was a great success. The result shows that participants were content and satisfied with the resource person, content of the programme and audio visual aids

used, some of the participants even though felt that time period of the training was less. Most of the participants felt that objectives of the study was fulfilled.

88% respondents said that the objectives were fulfilled. 83% respondents felt that the duration of the training programme was adequate.

As far as methodology of the programme is concerned it was found out that 75% of respondents perceived methodology of training as good whereas 21% respondents said very good for the same. Regarding the perception about content of the programme, 71% respondents felt positive about it and 50% respondents said that they learned salient features & implementation of the programme and 17% mentioned about maintaining of data as a new concept to them during the training programme. Moreover 50% respondents said the classroom arrangement was good, 40% said that it was very good, 3.33% said it was excellent which shows that infrastructure was good. The food provided during training was fulfilling as the results shows that 70% said food was fulfilling, 23.33% felt it was not fulfilling. The stay of the participants was comfortable and the evaluation shows that 63.33% said stay was good, 23.33% said stay was very good while some the participants didn't answer the question.

The lack of time was one of the major concerns which got surfaced during the evaluation. The resources, content and other aids were good. The participants had a good and comfortable stay. This evaluation recommends that training should be conducted for five days rather than three days. It is also advised that there should be a visit to the any AWC so that participants can be demonstrated the food safety standards. It is also recommend that more interactive sessions should be conducted during the training and after completion of the training the health officials should be evaluated for

the guidelines and standards they are following at various centers. The Government of India should conduct more training like this and help the nation to build healthy and safer environment for all.

A study to evaluate the perception of District Child Protection Officers and Health Officials regarding training programme on Training on Ensuring Food Safety and Maintaining Food Safety Standards in Supplementary Nutrition in ICDS"

Appendices

Course Evaluation Proforma

Q1. Do you feel that objective of the course were fulfilled? Please elaborate your answer.

Q2. Comment on the duration of the programme: Adequate/Inadequate

Q3. How you learnt anything new during the training programme? If yes, elaborate

Q4. Comment on the contents of the programme

Q5. Provide comments or suggestions:

- a) Methodology of training
- b) Resource persons
- c) Audio visual aids used in the course
- d) Logistics arrangement
 - i. Classroom arrangement
 - ii. Food
 - iii. Stay
 - iv. Any other aspect of the course

Q5. Give suggestions , if any

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