Observational Study on Knowledge, Attitude & Practices Among Health Care Providers Regarding Hand Hygiene at District Hospital Samastipur, Bihar (Care India)

By

Harkirat Kaur

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2017-2019

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IIHMR UNIVERSITY

TO WHOMESOEVER MAY CONCERN

This is to certify **Dr. Harkirat Kaur,** student of **MBA Hospital and Health management** from The IIHMR University, Jaipur has undergone dissertation at Care India Bihar from Feb 4'2019-May 4'2019.

The candidate has successfully carried out the study designated to her during dissertation and her approach to the study has been sincere, scientific and analytical.

The dissertation is in fulfilment of course requirement.

I wish her all the success in her future endeavor.

Col (Dr.) Ashok Kaushik
Dean, Academics and Student affair
The IIHMR University, Jaipur
16 May 2019

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CERTIFICATE

The certificate is awarded to

Dr. Harkirat Kaur

In recognition of having successfully completed her
Internship in the department of

Bihar Technical Support Program,
and has successfully completed her Project on

CROSS SECTIONAL STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICES OF HAND HYGIENE AMONG HEALTHCARE PROVIDERS AT DISTRICT HOSPITAL, SAMASTIPUR

Date: 09/05/2019

CARE INDIA, BIHAR

She comes across as a committed, sincere & diligent person who has a strong drive and zeal for learning
We wish her all the best for the future endeavors.

Deputy Director-Human Resources

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that dissertation title **" An Observational Cross sectional Study to access the Knowledge, Attitude and Practices among Healthcare Providers regarding Hand Hygiene in District Hospital of Samastipur, Bihar** and submitted by Dr. Harkirat Kaur, Enrollment Number 0569 under the supervision of Dr. Alok Mathur for award of MBA in Hospital and Health management of The IIHMR University carried out during the period from Feb 4 ,2019- May 4,2019 embodies my original work and has not formed the basis for the award of any degree, diploma ,associateship , fellowship, title in this or any other similar institution of higher learning.

Harkirat Kaur

Dr Harkirat Kaur

ACKNOWLEDGEMENT

I would like to express my sincere gratitude towards **Care India Bihar** for selecting me as a management trainee and giving me an opportunity to work in this esteem organization, and for providing a good working ambience for successful completion of this project.

I would also like to express my sincere gratitude towards my Mentor **Dr. Alok Mathur** for helping me in my project His guidance and teaching have been of a great help during my project. Finally, I would like to express special word of Gratitude towards **Dr Prashant Eswal – District Team lead at Care India Bihar** Without his guidance it wouldn't have been possible for me to look in to niche opportunities in my project.

Last but not the least; I would like to express my sincere thanks to my Institute **IIHMR** for providing me all kind of support in my dissertation project.

Abbreviations

1)	DTL -	District Team Lead
2)	DTO F	District Facility Officer
3)	DTO ON	District Outreach & Nutrition Officer
4)	DPO	District Program officer
5)	VL	Visceral Leishmaniasis
6)	BM	Block manager
7)	BMLE	Block monitoring learning Evaluation
8)	BC	Block Coordinator
9)	ICDS	Integrated Child & Development System
10)	WHO	World Health Organisation
11)	KAP	Knowledge , Attitude & Practices
12)	GOI	Government of India
13)	GOB	Government of Bihar
14)	BMGF	Bill and Melinda gates Foundation
15)	NMT	Nurse Mentoring Team
16)	BTSP	Bihar Technical Support Program
17)	IRS	Indoor Residual Spray
18)	RMNCH+A Aldolscent	Reproductive Maternal New-born Child Health+
19)	NNM	National Nutrition Mission
20)	IFHI	Integrated Family Health Initiative

Table of Contents

ORGANIZATION PROFILE :

CARE International is a leading humanitarian organization fighting global poverty. It places special focus on working alongside poor women because, equipped with the proper resources, women have the power to help whole families and entire communities escape poverty. Women are at the heart of their community-based efforts to improve basic education, prevent the spread of diseases, and increase access to clean water and sanitation, expand economic opportunity and protect natural resources. The organization also delivers emergency aid to survivors of war and natural disasters, and help people rebuild their lives.

In the fiscal year 2015, CARE worked in 95 countries around the world, supporting 890 poverty-fighting development and humanitarian aid projects to reach more than 65 million people.

CARE International is a global confederation of 14 National Members and one Affiliate Member with the common goal of fighting global poverty. Each CARE Member is an autonomous non–governmental organization and implements program, advocacy, fundraising and communications activities in its own country and in developing countries where CARE has programs. At the beginning, there was a package: a CARE package, aimed to reduce hunger and show solidarity with the people of war-torn Europe.

At the end of World War II in 1945, twenty-two American charities, a mixture of civic, religious, cooperative and labour organizations got together to found CARE. Originally known as the *Cooperative for American Remittances to Europe*, it began to deliver millions of CARE packages across Europe. This was basically a small shipment of food and relief supplies to hungry recipients - with a huge impact on people's lives.

During the next three decades, CARE shifted its focus from helping Europe to delivering assistance in the developing world. It started programs in the areas of education, natural resources management, nutrition, water and sanitation, and healthcare in Southern Africa, South Asia and South America. Broadening the geographic focus and expanding beyond the original food distribution programs, CARE started to assist people affected by major emergencies – from famine in Ethiopia to hurricane recovery in Honduras.

Over the previous decades, Care has continuously developed its approach to reducing poverty. In 1945, CARE was established on the premise that poverty was mainly due to a lack of basic goods, services, and healthcare. As the organization grew, so did their understanding of poverty. CARE's scope widened to include the view that poverty is often caused by the absence of rights, opportunities and assets, largely due to social exclusion, marginalization, and discrimination. In the early 1990's, its work grew into what they call a 'rights based approach' to development.

In 1993, in an effort to reflect the wider scope of its programs, vision and impact, CARE changed the meaning of its acronym to *"Cooperative for Assistance and Relief Everywhere".* By 2007, it started focusing on women's empowerment realizing that women are the key: by empowering women entire families can be lifted out of poverty.

Some key networks in which CARE is involved or is a signatory to are:

- Code of Conduct for the International Red Cross & Red Crescent Movement at NGOs in Disaster Relief
- The Sphere Project
- Humanitarian Accountability Partnership International (HAP)
- Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP)
- People in Aid
- INGO Accountability Charter
- CARE is a signatory to and holds itself accountable to internationally accepted humanitarian standards and codes of conduct, and works with other aid organizations and United Nations agencies to improve humanitarian action and to influence policy.

CORE VALUES

Respect: Affirm the dignity, potential and contribution of participants, donors, partners and staff.

Integrity: Actions consistent with the mission. Being honest and transparent in what they do and say, and accept responsibility for their collective and individual actions.

Commitment: Work together effectively to serve the larger community.

Excellence: Constantly challenge themselves to the highest levels of learning and performance to achieve greater impact.

CARE INDIA

CARE has been working in India for over 65 years, CARE'S operations in India are governed by the INDO – CARE Agreement signed between Government of India and CARE on March 1950 , . In India, CARE focuses on the empowerment of women and girls because they are disproportionately affected by poverty and discriminations; and suffer abuse and violations in the realization of their rights, entitlements and access and control over resources. They do this through well planned and comprehensive programmes in health, education, livelihoods and disaster preparedness and response

History of CARE INDIA

CARE has been working in India since 1946, it formally arrived in the country in 1950, through the signing of the Indo-CARE Bilateral Agreement. Over the years, CARE India has actively contributed to the country's overall social development through various interventions. A brief glimpse of this journey shown below.

First Step – 1946

Care co founder Lincoln Clark signed the CARE basic agreement in Delhi at the office of Foreign Affairs

Second Step -1949 Development of CARE Food package for India

The first chief of mission , Melvin Johnson , arrived in India November 1949 to establish operations . Subsequently on the invitation of the president of India , he developed CARE food package for India

Third step – 1950 The First Shipments of CARE Packages arrives in India

The First CARE package shipment was sent by student of Vassar college , New York for various Indian Universities Students

Fourth Step – 1950 CARE Finally arrived in India Finally Indo care Agreement Bilateral between Government of India & CARE

Fifth Step in 1950 's The Formative Decade

Provide assistance to educational , hospitals & set up relief camps . Provide food based relief to victims of Kashmir Floods , Assam Earthquake & Uttar Pradesh Famine

Sixth Step in 1960's – The Decade of Expansion

Started Food for work programme in 11 states and expanded other food based programmes. It also delivered food commodities during the Bihar famine of 1960

Seventh Step in 1970-1980 Two Decade of Consolidation

Started supporting of portion of ICDS through its Nutrition programme and also explained its agriculture development and modernization of programme

Eight Step – 1990 Decade of Change and Expansion

Starting implementing the Integrated Nutrition and Health Project and piloted the Girls Primary education project . In 1994 it expanding its focus on women and girls issues

Ninth step- 2000- 2008 New Millennium, New Vision

While working on health and economic empowerment , CARE India made fundamental shift and decide to work on underlying cause of poverty and social injustice thereafter .

Tenth Step -2008-till date – Locally Governed Globally connected

CARE in India Register itself as national entity -CARE India solution for sustainable development (CISSD) Its accountability to an Indian Board and it became permanent member of care management

PROGRAME GOAL

Women and girls from the most marginalised communities are empowered, live in dignity and their households have secure and resilient lives. CARE India aims to accomplish this goal by working with 50 million people to help them meet their health, education and livelihoods entitlements and aspirations.

VISION

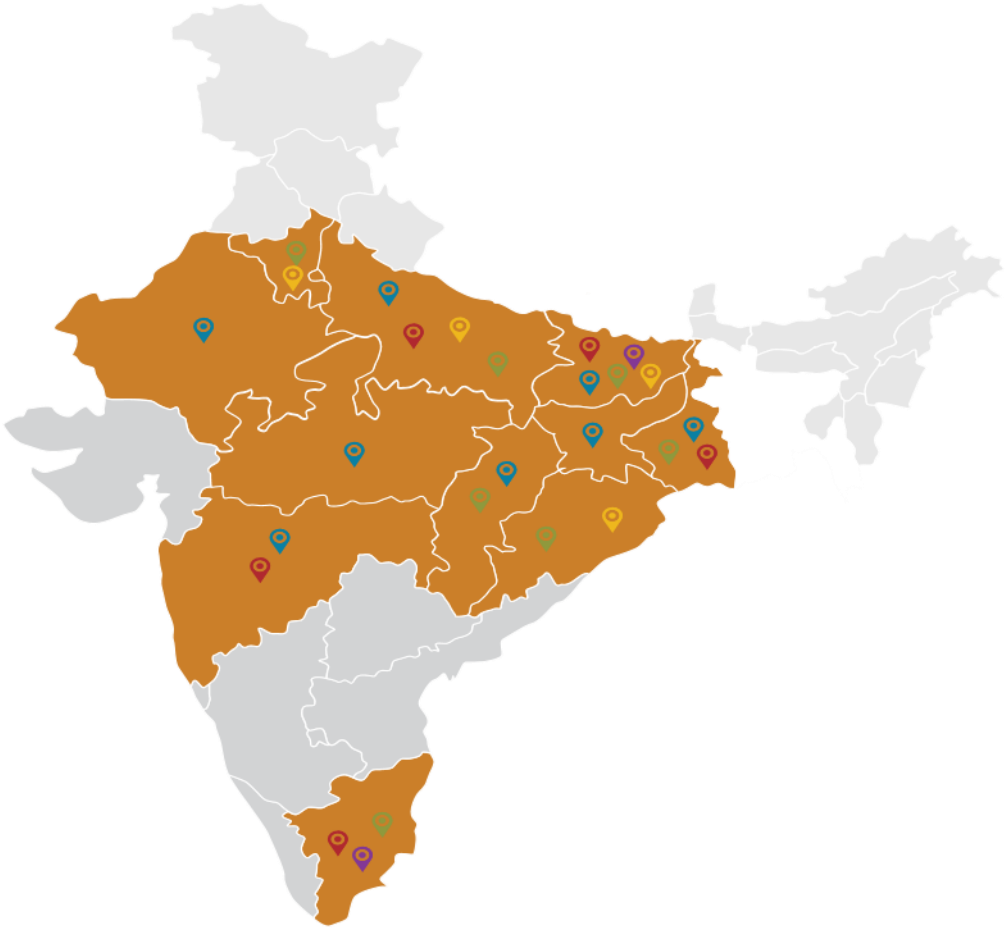
We seek a world of hope, tolerance and social justice, where poverty has been overcome and people live in dignity and security.

MISSION

CARE India helps alleviate poverty and social exclusion by facilitating empowerment of women and girls from poor and marginalised communities

CARE INDIA works in this area across all over India

- **Health Programmes**
- **Education Programmes**
- **Livelihood programmes**
- **Disaster preparedness**
- **Gender Transformative Change – others**
- **Inclusive Governance others**
- **Building resilience -others**



PROGRAMES WHERE CARE INDIA WORKS

HEALTH PROGRAMES –

- Kanya Sampurna
- Bihar Technical support Programme
- Strengthening health and Nutrition strategies in community platforms
- Axshya project
- Strengthening the Integrated Child development Services programme
- Improving Maternal Health through Engaging Family and Community

- Madhya Pradesh Nutrition Project
- ICDS System strengthening and Nutrition Improvement project

EDUCATION PROGRAMES-

- Kanya Sampurna
- Sampurna – Life cycles Intervention for Adolescent girls and Women
- Udaan – Special Residential learning for out of school girls
- Be the Change
- Maitri – Regional Advocacy on Safe and Secure education
- Read and Lead
- Khushi – Early Childhood Care & Education
- Promoting Age & Grade Appropriate Training Intervention

DIASTER PREPAREDNESS

- Relief from Tamil Nadu Floods
- Building Resilient communities
- Emergency Preparedness Project
- CARE India response to floods in Uttarakhand.
- Cyclone Phailin hit on the Eastern Coast of India.
- Tsunami relief programme

LIVELIHOOD PROGRAMMES

- Women + Water
- Switch Asia II – Evolving a women – Centred Model of Improved cook stoves for sustained adoption at scale
- Pathways India
- Kanya Sampurna
- Enhancing the Sustainable Farming Initiatives by Integrating Gender and Nutrition
- Where the Rain falls
- Technical Assistance and Research for Indian Nutrition and Agriculture
- Women ‘s leadership in Small and Medium Enterprises

LOCATIONS

CARE India has been working extensively in different parts of India. They work with grassroots initiatives, state and district governments, and communities and individual from all over the Country. As of now, CARE India is present in 14 states of India, with the head office being in Delhi.

Please see the below for the list of 14 States

BIHAR TECHNICAL SUPPORT PROGRAMME

Bihar Technical Support Programme finds roots in CARE India's Integrated Family Health Initiative (IFHI) project that was first launched in 2011, as part of the Ananya program,

with support from the Bill and Melinda Gates Foundation (BMGF) . The goal was to increase the coverage and quality of life-saving interventions and improve the health, survival and nutrition of women, newborns and children during the first 1,000 days – from conception to the child's second birthday. CARE India interventions focused on better counseling and emergency preparedness for the mother and newborn, building Basic Emergency Obstetric and Newborn Care (BEmONC) capabilities, improved management of neonatal infections, early initiation and exclusive breastfeeding, complimentary feeding, increased immunization, and expanded access to quality family planning services and birth spacing methods. These solutions were implemented universally across 137 blocks of eight focus districts over 3 years, to potentially reach a population of over 25 million. To tackle the menace of Kala Azar disease, a separate program was launched in 2012 as a special effort to eliminate the disease from Bihar by 2015. The elimination of Kala Azar follows a two-pronged approach – Indoor Residual Spraying (IRS) and Case Identification & Treatment. Intensive support and supervision of IRS, joint monitoring of spraying including case detection and tracking was initially provided in 8 districts and then scaled up to all 33 endemic districts since 2013. The efforts have shown positive results with a steady decline in the no. of reported cases over the years.

FOCUS ON 5 KEY FACTORS

1) launch of Manav Vikas Mission under the chairmanship of Chief Minister of Bihar

(2) launch of the GoIs RMNCH+A strategy in February 2013

(3) success of the Ananya program in identifying strategies and solutions that support these goals.

(4) The World Bank assisted ICDS Systems Strengthening and Nutrition Improvement (ISSNIP) initiative with half of Bihar's districts falling under the project.

(5) The request to the Foundation from Govt of Bihar for support in the areas of nutrition and family planning, created a pivotal opportunity to accelerate progress toward achieving

Government of Bihar's (Govt of Bihar) 2017 targets for reductions in rates of mortality, fertility and malnutrition, and increased immunization coverage.

.

The Bihar Technical Support Programme, supported by Bill & Melinda Gates Foundation, provides catalytic support to the Health and Social Welfare Departments of the Government of Bihar in achieving their goals of reducing rates of maternal, new-born and infant mortality, total fertility, anaemia and malnutrition, improving family planning services, and increasing immunization coverage in the state.

The programme helps the two departments in transforming capabilities and behaviors, build ownership towards health programmes, and unlock the potential of both public and private sector providers to effectively improve the quality and coverage of maternal and child health, family planning and nutrition interventions.

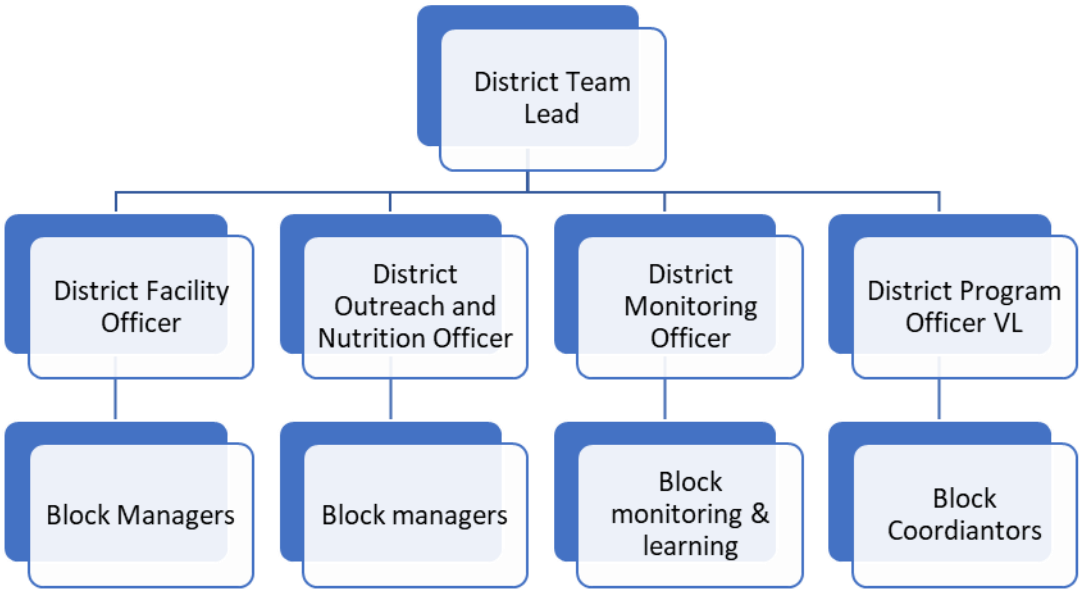
The scale and scope of this CARE India intervention is enormous- covering all 534 blocks in 38 districts of Bihar and involves at least 400 public sector hospitals and 200,000 frontline workers– to cater consistently and reliably to over 10 million mothers and their babies till 2017.

Certain Health Innovations done under BTSP Bihar

- Mobile Nursing Mentoring Team Program – name as AMANAT JYOTI
- Early Initiation of Breast Feeding
- ICT
- Home based new born care
- Tracking weak new born / Pregnant women

- Establishment of Family Planning corner and dedicated Family planning Counsellor
- Enhance Complimentary feeding practices
- Maternal death review meeting

Hierarchy of BTSP at District level



DISTRICT SAMASTIPUR - PROFILE

- POPULATION – 4,254782
- LITERACY RATE – 63%

- MUNCIPALITY -3
- SUBDIVISION -4
- BLOCK -20
- PANCHYAT 381
- VILLAGE 1260

District Hospital Profile

Profile of District Hospital	
Name of District:	SAMASTIPUR
Name of DH:	SADAR SAMASTIPUR
Contact number of DH:	9470003681
Total population of District:	5.5 LAKH
Catchment area with population catering by DH:	1.10 LAKH
Any award won by DH (Kayakalp/ISO/LaQshay/etc): if yes mention the year	NONE
Total number of ambulance available at DH:	4
Name of Farthest facility from DH with time taken to reach DH:	SINGHIA Took 3 and half hour
Location of DH (placed centrally; more or less equal distance from all facilities or situated in a corner of District)	Centrally situated
Nearest Referral point for DH	Darbhangha Medical college - 42 kms
Time takes to reach the referral point	45mins to 1 hour
Total BEmONC Facilities in district:	18 facilities
Is there any other CEmONC facility in District apart from DH (if yes please name it):	SDH Rosera , SDH Dalsinghsarai

Total Bed Strength – 500 sanctioned in 2008 + 100 bed sanctioned for MCH

but functional only 80

PROJECT REPORT

Title: An Observational Cross Sectional Study to the assess Knowledge, Attitude & Practices level among Health care workers regarding Hand Hygiene at District Hospital Samastipur , Bihar

Background

Hand Washing in patients care was came into existence in early 19th century. Semmelweis conducted study in 1846 on maternal Mortality rate on Purpureal fever in two clinics and suspected that some unexpected cadaveric thing was caused puerperal fever so he insisted the physician to wash their hands with chlorinated lime water in clinic (1)in between two patients then he observed that maternal mortality rate 1975& 1985 CDC recommended that antimicrobial products were used before & after performing invasive procedure . In 1988& 1995 Alcohol based Hand rub used in situation where water and sink is not available WHO launched the Hand Hygiene campaign , In 2005, it introduced the first Global Patient Safety Challenge "Clean Care is Safer Care (CCiSC). Globally Handwashing Day were celebrated on October 15, 2008.On May 5, 2009, the WHO highlighted the importance of hand hygiene and launched guidelines and tools on hand hygiene, based on the next phase of patient safety work programme "SAVE LIVES: Clean Your Hands ".

Introduction : According Global Burden of Disease thousands of people around the world die because of Hospital acquired Infection. Health care providers are mainly exposed to various infectious agents. Hands are the main culprit for germ transmission during health care .Contaminated hands are the major cause for transmission of micro

organism which are multidrug resistant providers need to revising back the basics of infection prevention by Hygiene of Hand

Hand Hygiene Definitions

Hand Washing –Hands should be washed with running tap water or antimicrobial soap and water

Antiseptic Hand Wash– Hands should be washed with running water and soap or other detergents containing antiseptic agents

Alcohol Based Hand rub – An alcohol containing preparation designed for application to the hands in order to reduce the number of viable organisms and temporarily suppress their growth with maximum efficacy and speed**.**

Antiseptic Hand rubbing –Apply an antiseptic hand rub to reduce or inhibit the growth of micro -organism without the need of water and requiring no rinsing or drying.

WHO recommended 5 moments of Hand Hygiene

1. Before touching patient
2. Before Cleaning Aseptic Procedure
3. After Body Fluid Exposure Risk After Touching patients
4. After Touching patients
5. After touching patient's surroundings

Literature Review

1) A Study to Assess Knowledge and Attitude Regarding Hand Hygiene amongst Residents and Nursing Staff in a Tertiary Health Care Setting of Bhopal City-by Veena Maheshwari , Navin Chander M Kaore , Vijay Kumar Ramnani , Sanjay Kumar Gupta & Rituja Kaushal

- Cross Sectional study done to assess the KAP level amongst the health care workers and to identify areas of gaps in their knowledge and attitude. Total 160 respondents (nurses / doctors / HCW 's) were taken for KAP study towards hand hygiene practices and significant change of p value would be observed and found out that germs are the major cause for hand associated infections among docs and staff . The attitude study showed that

hand hygiene practices to be followed at all times was found to be better among nurses (62.5%) as compared to residents (21.3%) .Hence this study revealed that there was need for regular training session among doctors and nursing staff too .

2). Knowledge, Attitude, and Practice of Hand Hygiene among Medical and Nursing Students at a Tertiary Health Care Centre in Raichur India by -Pooja Raghunath , SreejithSasidharan.

Hand cleanliness is perceived as significant strategy counteract cross-transmission of microorganisms. About emergency clinic procured contaminations, the consistence of attendants with hand washing rules is by all accounts imperative in anticipating the infection transmission among patients. Methods.A cross-sectional examination was led among 98 therapeutic and 46 nursing under tertiary care hospital in India. Information was evaluated utilizing WHO hand cleanliness poll. Frame of mind and practices were assessed by utilizing another self-organized poll. Z test was utilized to look at the level of right reactions among therapeutic and nursing understudies. A "P" esteem: under 0.05 was viewed as huge. Results. Just 9% of members (13 out of 144) had great information with respect to hand cleanliness. Nursing understudies learning , frame of mind , and practices were essentially superior to restorative understudies

3) **Does the use of a theoretical approach tell us more about hand hygiene behavior? The barriers and levers to hand hygiene by-** Judith Dyson Rebecca Law Regardless of numerous procedures " utilized to improve hand cleanliness, consistence stays low at around half. Two reasons have been distinguished for this First, usage techniques are once in a while customized by evaluated boundaries and switches to best practice. Besides there is an absence of express hypothetical reason for the appraisal of these hindrances and switches to rehearse. Point: This paper reports obstructions and switches to hand cleanliness and an assessment of the utilization of hypothesis in evaluating hindrances and switches to hand cleanliness. Techniques: Identify the problems and switches happened thru meetings, polls and center gatherings. For each situation two distinctive inquiry plans were utilized, one dependent on mental hypothesis and the other with no express hypothetical supporting. Results: Although there was extensive cover in the hindrances and switches distinguished utilizing the two timetables there were additionally stamped contrasts. Ends: Distinguishing proof of further obstructions and switches may enable us to address absence of consistence with hand cleanliness. Utilizing a hypothetical structure may incite the distinguishing proof of boundaries that individuals may not commonly report but rather which importantly affect conduct.

Rationale

According to Global burden of disease 85% of disease among due to Hospital Acquired infections, health care providers are very prone to infections so need to do the study to assess the KAP of Hygiene of Hand . This study helps me to understand the Knowledge level, barrier of behavioural change and what are reasons for partial- compliance of the Hand Hygiene practices.

Research Question:

What is the Knowledge, Attitude & Practices level among Health care Providers regarding Hand Hygiene at District Hospital Samastipur, Bihar?

Objective

1) To Assess the Knowledge, Attitude & Practices level among Health care providers regarding Hand Hygiene.

2) To Assess the reason for non-compliance or partial-compliance in Hand Hygiene practices

Research Methodology

Study design – Cross sectional Observational study

Place of Data Collection: District Hospital Samastipur, Bihar

Duration of Study – 3 months (Feb – May)2019

Study Population –

- ✓ **Inclusion criteria –** All technical staff who consented for the study
- ✓ **Exclusion criteria –** all non-technical staff & who don't consented
- ✓ **Respondents of study**

S.No	Designation	Numbers
1	. Nursing staff	49
2	Doctors	3
3	3. Feeding Demonstrator	1
4	4.Family Planning counsellor	1
5	5.OT tech	2
6	6.Blood Bank Tech	1
7	7.Emergency Tech	1
8	8.Hospital manager / Block Manager	2

Sample Size – 60

Sampling technique – Convenient sampling

Ethical Considerations: Written Informed consent

Data Collection Tool: Questionnaire reference taken form WHO guidelines and research papers

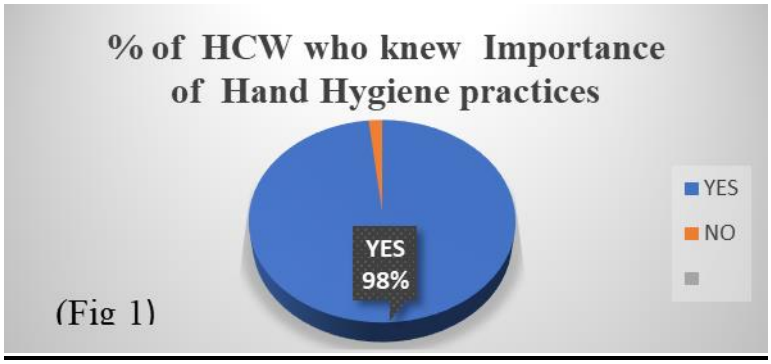
Data collection Method: Questionnaire interviewed with Direct observation

Data Analysis: with the help of Microsoft excel and % calculated

Results

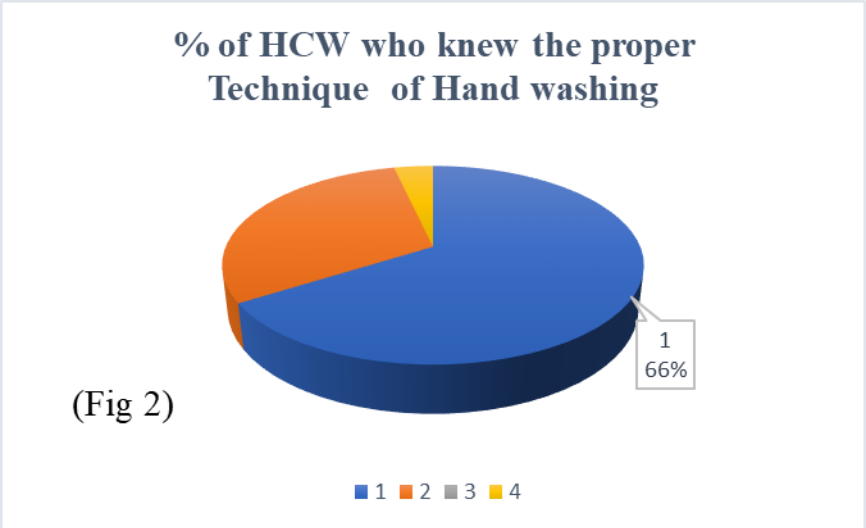
Knowledge level Findings

(I) 100 % Staff knew the term Hand Hygiene ,but only 98% knew the importance of Hand hygiene (see in fig 1)



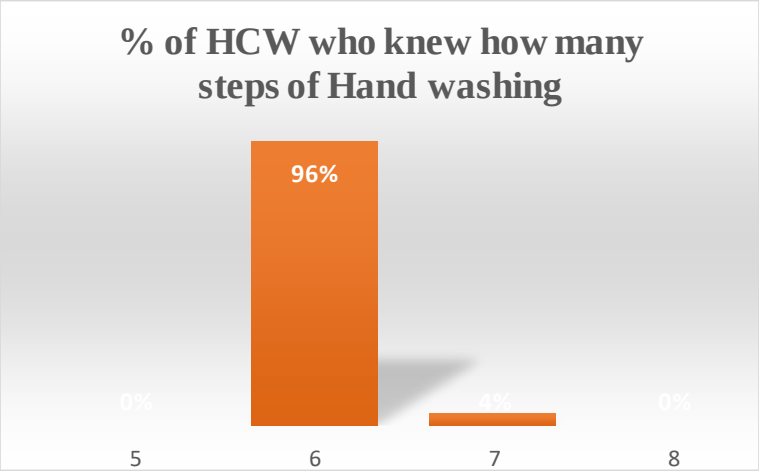
(Fig 1)

(II) In below figure only 66% staff knew about the Proper technique of Hand wash with soap and water rest 34 % staff still don't knew about which is the proper technique of hand washing (see in fig 2)

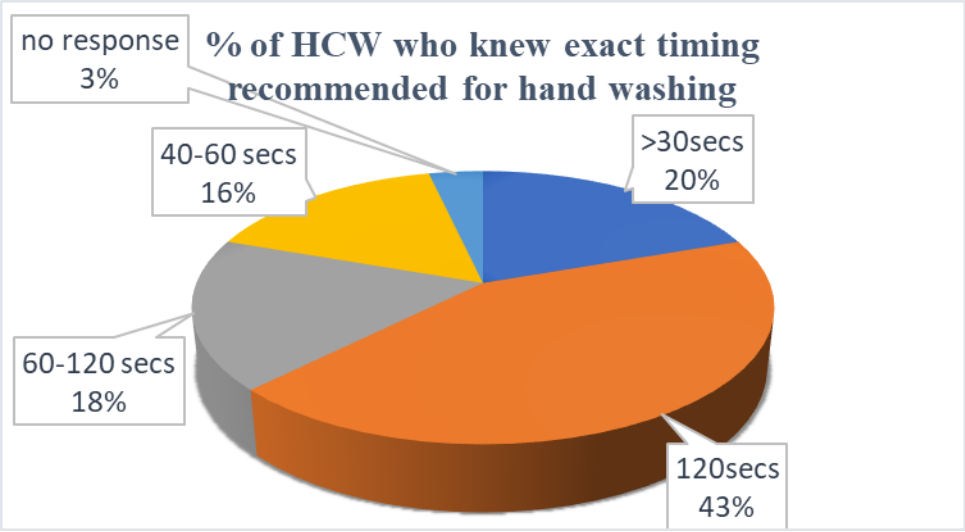


(Fig 2)

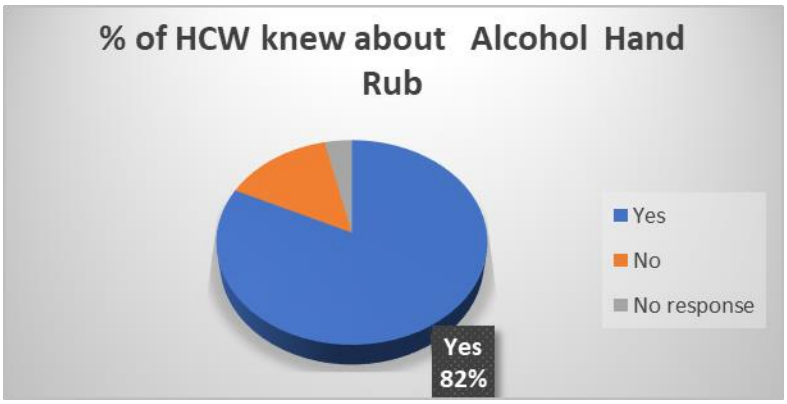
(III) 96% Staff knew the 6 steps of Hand washing guidelines See in fig (3)



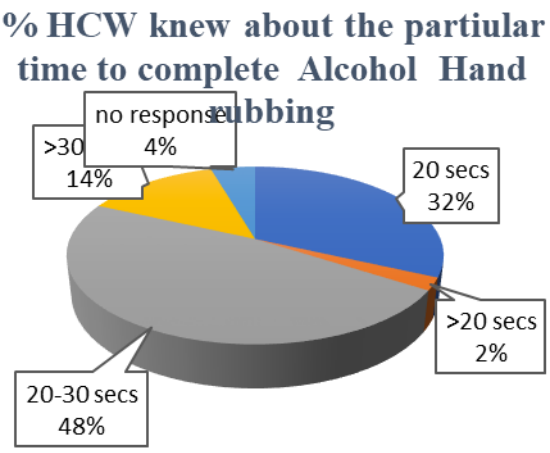
(IV) Only 43% staff knew about the exact time for Hand washing see in below fig



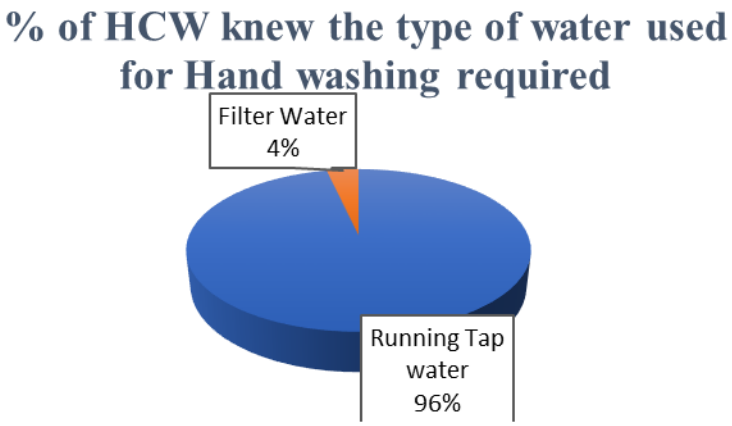
(V) In below 82% Hospital staff Knew about the Alcohol Hand Rub



(VI) In below figure 48% Health care providers knew the particular time required for Alcohol based hand Rubbing



(VII) In Below figure 96% Staff knew that Running Tap Water required for Hand washing .



(VIII) Soap and water is best means of killing germs scientifically proven but still health care providers don't knew about this . This figure showed 50% staff knew about soap and water germ killing capacity see in fig (8)

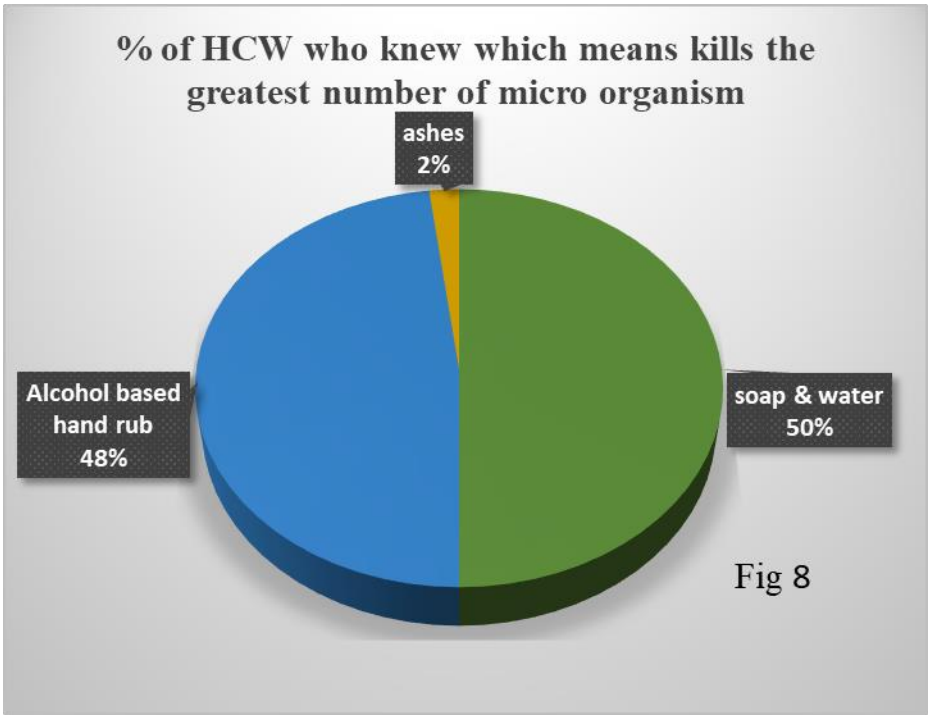


Fig 8

(IX) Only 62% staff received Hand hygiene education in last 1 year rest 32% didn't receive any education on Hand Hygiene see in fig (9)

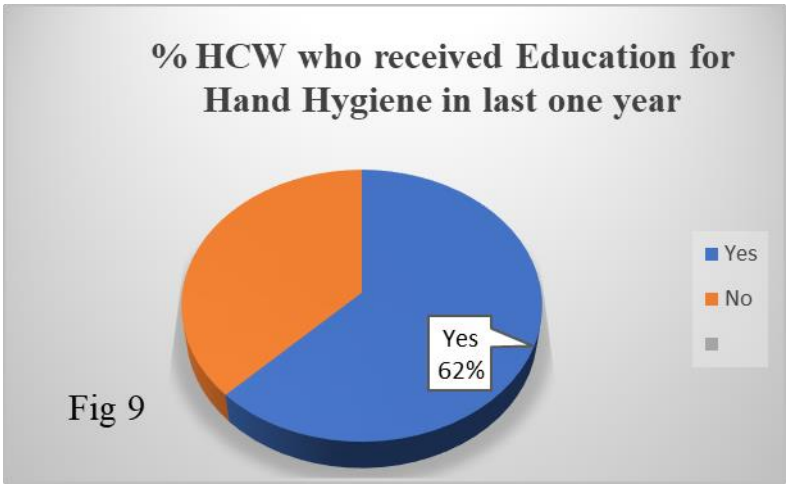
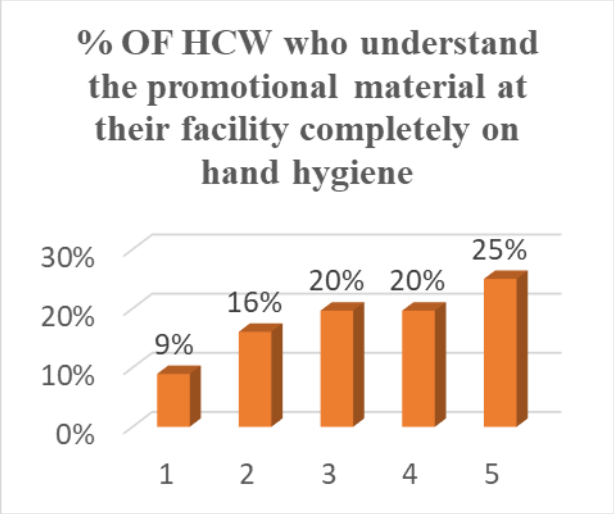


Fig 9

(X) In Below figure 25% HCW fully understand and satisfied with IEC material displayed at their facility .



Attitude Level Findings

(I). In below Figure 30% Staff fully satisfied with product used at their facility .

(II) 37% Staff have issue of lack of timings the barrier for Hand Hygiene see in fig (12)

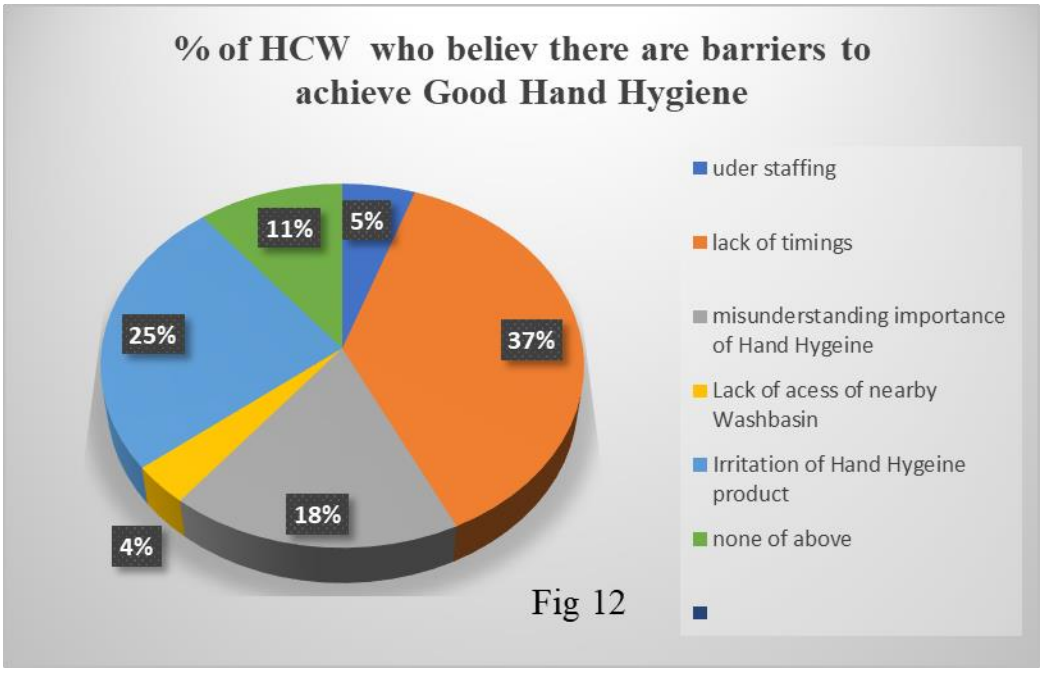
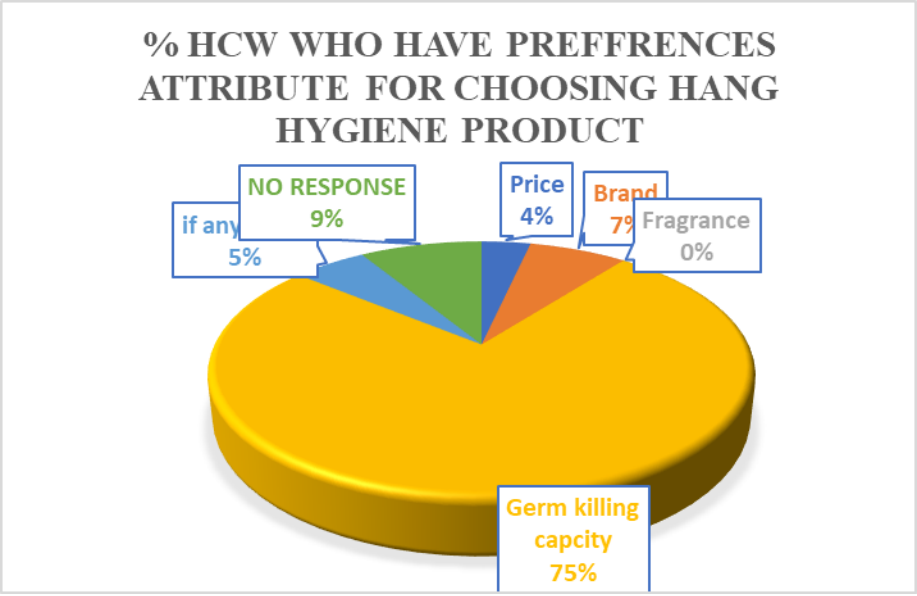


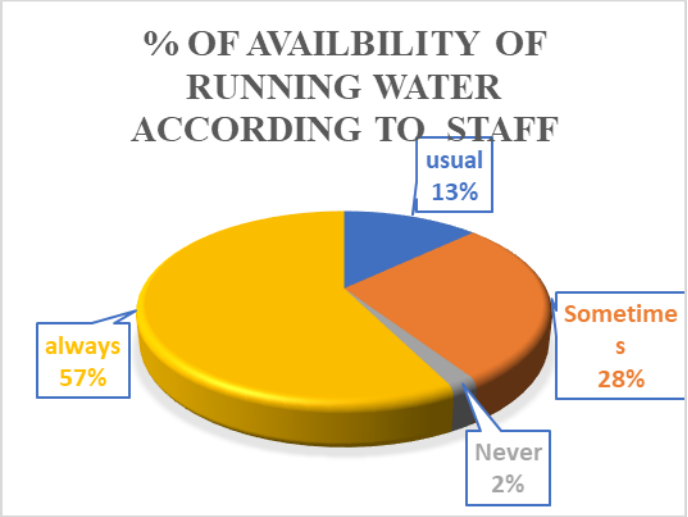
Fig 12

(III) I n below 75% staff choose germ killing capacity for Hand Hygiene product see in (13)

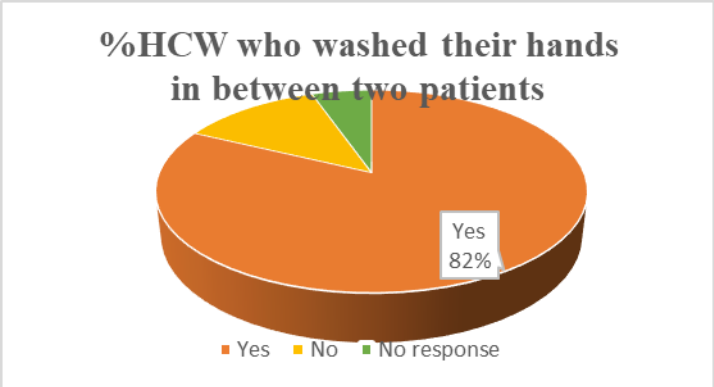


Practices Level Findings

(I) In below figure No shortage of running tap water once in past 2 months tank was need to repair that time hospital required tanker from outside .



(II) In below figure is fully compliant and wash the hands between two patients see in fig (15)



(III) 82% HCW stop the running water with elbow see in fig (16)

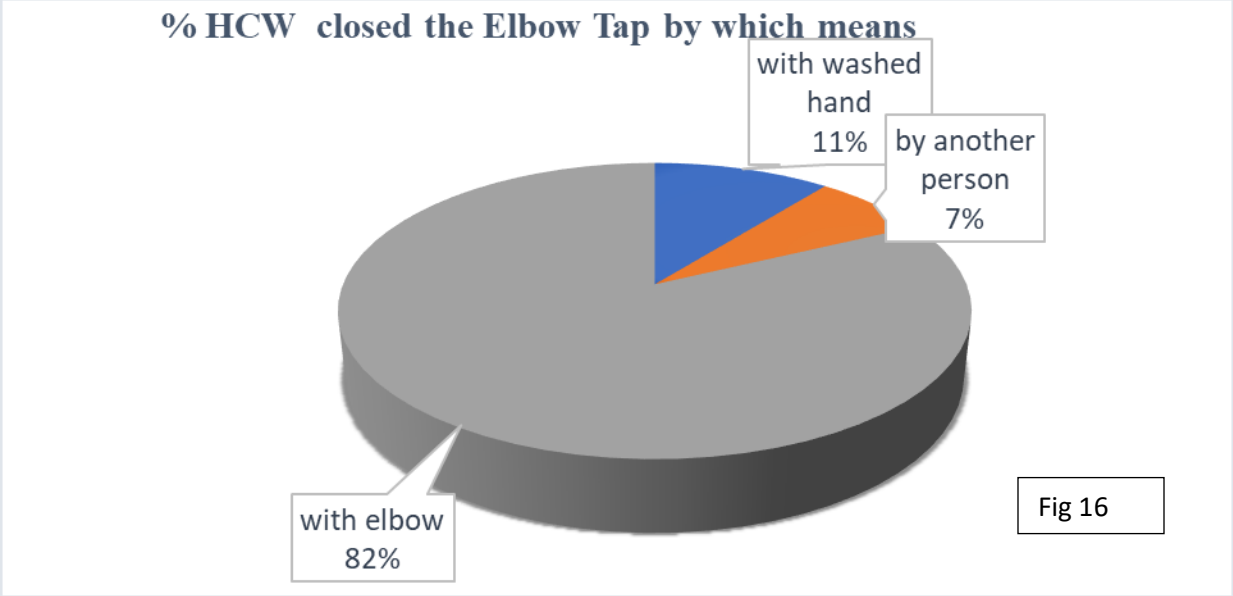


Fig 16

(IV) 43% HCW dry their hands with naturally (see in fig (17)

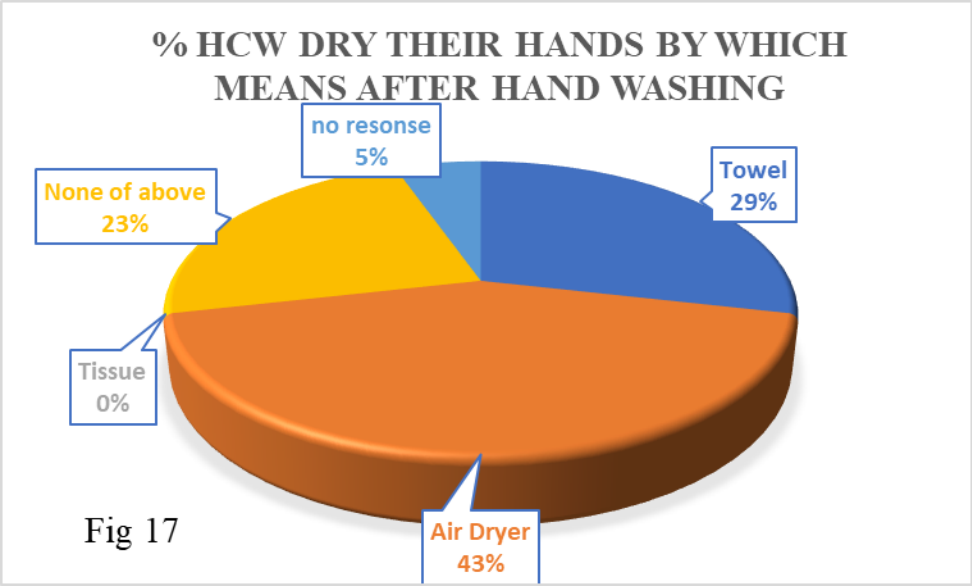
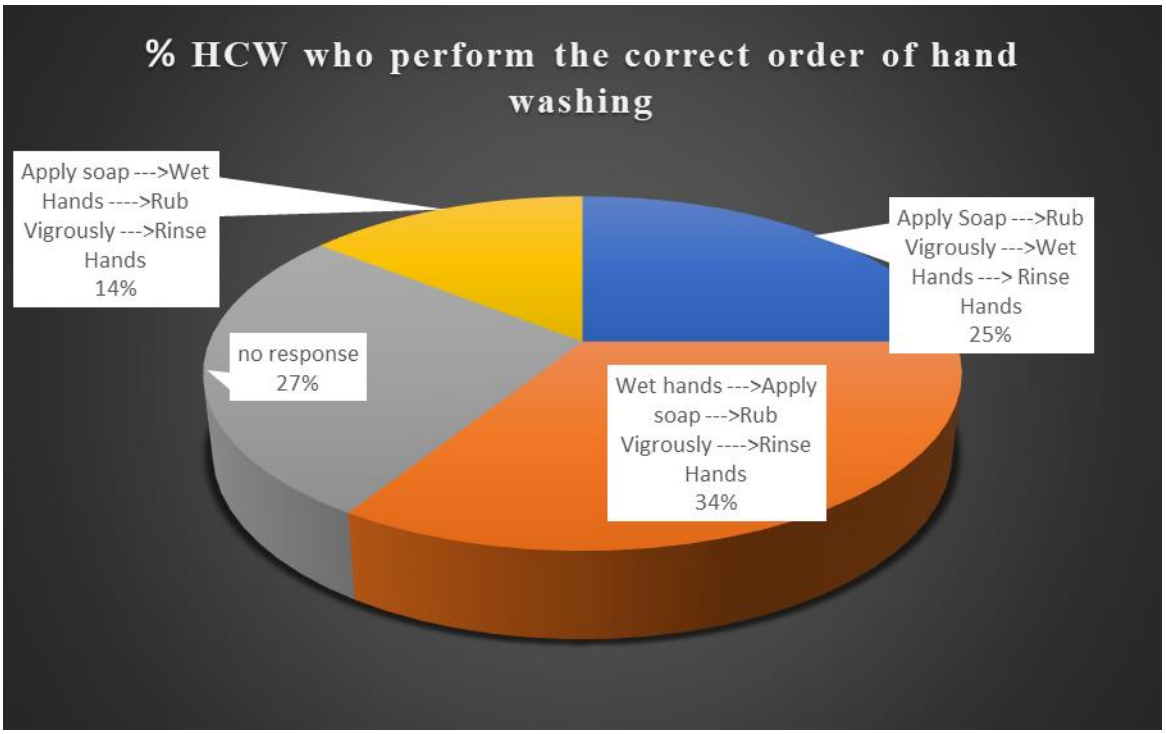


Fig 17

(V) In below 34% HCW Perform the correct order of Hand washing Technique .



Conclusion :

- 100% HCW knew the term Hand Hygiene but only 98% knew the importance of Hand Hygiene
- Out of 98% only 64% HCW knew the proper technique Hygiene of Hand , that is, Soap and water , rest 30% still believe alcohol hand rub is proper technique for Hygiene of Hand
- 96% HCW knew the steps of Hand washing through Workshops / Training / Books / but only 43% HCW knew the mandatory time required to complete Hand washing steps
- 82% HCW worker knew the Alcohol Hand Rub and out of 43% knew the exact time required for complete Hygiene of Hand with Alcohol based Hand Rub .
- 50% HCW knew that Soap & water is best mean to kill bacteria rest still believe Alcohol based hand rub have more germ killing capacity .
- 62% HCW receive the Education on Hand Hygiene and only 25% HCW understand the IEC material used at their facility because its not written in their own language . Barriers such as 37% HCW do not wash their hands. For example, according to LaQshya Guidelines total delivery load of Hospital is 800 average in month which requires the 16

staff nurses in Labor room but we have only 11 nurses in roaster so one of reason is also the under staffing , 35 % reason just because of Product quality at their facility .

- 75 % HCW choose the Germ killing capacity nature for product rest some of still give preference brand , price & fragrance
- 82% HCW stopped the Tap with help of Elbow & 43% HCW dry their hands naturally rest are using newspaper / Tissue paper/ Towel.
- 34% HCW performing exact order of Hand washing in proper manner .

Recommendations

- Regular training should be organized for Health care providers in regular interval of time for updating the knowledge level of Health care providers.
- More manpower is required to overcome the understaffing / lack of Timing barrier. Proper maintenance elbow taps / water tank should be done .
- District hospital required IEC material in their local language.
- Infection control Nurse will do regular audit and maintained the proper checklist.
- Liquid soap dispenser should be placed nearby basin so that cross infection form soap should be avoided

Before study Hand washing station

After study Hand washing station

References

- ✓ http://ajcc.aacnjournals.org/content/24/3/216.abstract
- ✓ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4640061/
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ANNEXURE

QUESTIONAIRE

QUESTIONAIRE ON HAND HYGIENE PRACTICES

Name of Facility: _____ Date :_____

Name of Staff: _____ Age & Sex :_____

Designation _____ Department _____

1. **Do you Know the term Hand Hygiene?**
   - i) **Yes**
   - ii) **No**
2. **Do you know about importance of Hand Hygiene**
   - i) **Yes**
   - ii) **No**
   - iii) **Don't Know/ No Response**
3. **Do You Know different method of proper Hand Washing**
   - i) **Only with Water and soap**
   - ii) **Use of Sanitizer**
   - iii) **Rubbing hand with Clothes**
4. **Do you know how many steps are the of Hand Washing**
   - i) **5**
   - ii) **6**
   - iii) **7**
   - iv) **8**

5. **Do you know Alcohol Rub/ Hand Sanitizer is also used as Hand Hygiene**

    a. **Yes**

    b. **No**

6. **From where do you get the information regarding steps of Hand Hygiene**

    i) **Books**

    ii) **Watching colleagues**

    iii) **Mass media**

    iv) **Workshops / Training programs**

    v) **Articles**

7. **Do you know How much time required to complete six steps of hand washing**

    i) **>30 sec**

    ii) **40-60 secs**

    iii) **60-120 secs**

    iv) **> 120 secs**

    v) **Don't know / No Response**

8. **Do You Know how much time required for Alcohol based Hand Rub / Hand Sanitizer?**

    i) **> 20 secs**

    ii) **20 secs**

    iii) **20-30 secs**

    iv) **>30 secs**

9. **Do you know Alcohol based hand rub / Hand Sanitizer is also used when hands are not visibly soiled**

    i) **True**

ii) **False**

10. **What type of water used for hand hygiene?**
    (i) **Running tap water**
    (ii) **Well water**
    (iii) **Filter water**
11. **Which means kills the greatest number of microorganisms on the skin?**
    i) **Soap & hot water.**
    ii) **Alcohol-based hand rubs.**
12. **Which of the Statement is False**
    i) **The use of gloves does not eliminate the need for hand hygiene.**
    ii) **The use of hand hygiene can replace the need for gloves.**
    iii) **Gloves reduce hand contamination by 99%, prevent cross-contamination, and protect patients and health care personnel from infection.**
13. **What type of Hand Hygiene promotional / communication material being used at your facility**
    i) **Posters**
    ii) **Badges**
    iii) **Stickers**
    iv) **Brochures**
    v) **None of above**
14. **Which of the following actions prevents transmission of germs to patients**
    i) **Before touching patients**
    ii) **Immediately after risk of body fluids exposure**

iii) **After exposure to immediate surroundings of patients**

iv) **Immediately before clean / aseptic procedure**

v) **All of the above**

15 Do you know when Global Hand washing day celebrated

a. **8 March**

b. **1 December**

c. **15 october**

15. Do you receive any kind of education in hand hygiene in the last 1 years

i) **Yes**

ii) **No**

16. Do you feel each health care providers understand the hand hygiene posters

i) **Yes**

ii) **No**

17. Do you Clearly understand the instructions on hand hygiene poster at your facility

i) **Yes**

ii) **No**

18. The most preferred attribute in choosing hand sanitizer

i) **Price**

ii) **Brand**

iii) **Germ killing Capacity**

iv) **Fragrance**

v) **Other if any ____**

19. Is hand hygiene really necessary in day to day life

i) **Strongly Agree**

ii) **Agree**

iii) **Disagree**

iv) **Strongly Disagree**

20. Please rate satisfaction level with promotional materials for hand hygiene currently at your facility

1 2 3 4 5

Not satisfied extremely satisfied

21. Please rate your satisfaction level with hand hygiene products currently used at your facility

1 2 3 4 5

Not satisfied extremely satisfied

22. What are barriers to Good Hand Hygiene

ii) **Lack of timing**

iii) **Under staffing**

iv) **Lack of Access to nearby Wash basin Sink**

v) **Misunderstanding of importance of Hand Hygiene**

vi) **Irritation of Hand Hygiene solution / soap**

23. Do you really recommend the Alcohol based Hand Rub over Hand Washing

i) **Yes**

ii) **No**

24. How frequently do you wash your hands

i) **Once in day**

ii) **Every time before touching patient**

iii) **Every time after completing procedure**

iv) **(ii) & (iii)**

25. Do you routinely use an alcohol based hand rub/ Hand Sanitizer for hand hygiene?

i) **Yes**

ii) **No**

26. Do you wash your hands in between two patients

i) **Yes**

ii) **No**

27. Do you have elbow handle on tap for hand washing

i) **Yes**

ii) **No**

28. How frequently running water available at your facility

i) **Never**

ii) **Always**

iii) **Usually**

iv) **Sometimes**

29. How is the tap closed after washing hands

a) **with elbow**

b) **with hands (washed hands)**

c) **by other person**

30. How do you dry your hands after hand washing

i) **Tissue paper**

ii) **Towel**

iii) **Air Dryer**

iv) **None of the above**

31. **After removing gloves hand washing is not necessary**

i) **Yes**

ii) **No**

32. **Which of the following is the correct order when performing hand washing**

i) **Wet hand → Apply soap -→Rub Vigorously-→ Rinse hands**

ii) **Apply soap -→ Wet hands --→Rub Vigorously -→ Rinse hands**

iii) **Apply soap --→Rub Vigorously --→ Wet Hands ---→ Rinse hands**

33. **When hands are visibly soiled and water is not available , how is hand hygiene performed**

i) **Using moist towelette**

ii) **Using alcohol based hand rub**

iii) **Using moist towelette followed by alcohol based hand rub**

iv) **Using disinfectant wipe**