

Internship Training

at

Sitaram Bhartia Institute of Science and Research

Reducing the visits of nurses to patient room during Covid-19 and assess the knowledge and psychology of the nurses concerning COVID-19

by

Ms. Harsheen Kaur Arora

PG/18/023

Under the guidance of

Dr. Pradeep K Panda

Post Graduate Diploma in Hospital and Health Management

2018-20



International Institute of Health Management Research
New Delhi

Internship Training

at

Sitaram Bhartia Institute of Science and Research

To Reducing the visits of nurses to patient room during Covid-19 and assess the knowledge and psychology of the nurses concerning COVID-19

by

Ms. Harsheen Kaur Arora

PG/18/023

Under the guidance of

Dr. Pradeep K Panda

Post Graduate Diploma in Hospital and Health Management

2018-20



**International Institute of Health Management Research
New Delhi**

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **MS. HARSHEEN KAUR ARORA** student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at Sitaram Bhartia Institute of Science and Research, New Delhi from 03rd February 2020 to 15th May 2020.

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all his/her future endeavors.

Dr Pradeep K Panda
Dean, Academics and Student Affairs
IIHMR, New Delhi

Mentor
IIHMR, New Delhi

The certificate is awarded to

Ms. Harsheen Kaur arora

in recognition of having successfully completed his/her internship in the department of

Quality and Training

She has successfully completed his/her Project on

Reducing the visits of nurses to patient room during Covid-19 and assess the knowledge, attitude, and psychology of the nurses concerning COVID-19.

03/02/2020 to 15/05/2020

Sitaram Bhartia Institute of Science and Research

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish her all the best for future endeavors.



Training & Development



Head-Human Resources



Certificate of Approval

The following dissertation titled “**Reducing the visits of nurses to patient room during covid-19 and assess the knowledge and psychology of the nurses concerning covid-19**” at “**Sitaram Bhartia Institute of Science and Research**” is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Signature

Dr S B Arora

Dr Pradeep K Panda

Dr Vinay Tripathi

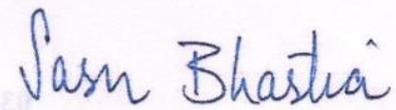
Dr Nishikant Bele

Certificate from Dissertation Advisory Committee

This is to certify that **Ms. Harsheen Kaur Arora**, a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He/ She is submitting this dissertation titled **“Reducing the visits of nurses to patient room during Covid-19 and assess the knowledge and psychology of the nurses concerning COVID-19”** at **“Sitaram Bhartia Institute of Science and Research”** in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Dr Pradeep Panda,
Dean Academics and Student Affairs,
IIHMR, New Delhi



Mrs. Saru Bhartia
Head- Quality & Training
Sitaram Bhartia Institute of
Science and Research, New Delhi

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,
NEW DELHI**

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Reducing the visits of nurses to patient room during Covid-19 and assess the knowledge and psychology of the nurses concerning COVID-19** and submitted by **HARSHEEN KAUR ARORA** Enrollment No. **PG/18/023** under the supervision of **Dr Pradeep K Panda** for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 03rd February, 2020 to 15th May, 2020 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.



Signature

FEEDBACK FORM

Name of the Student: Ms.Harsheen Kaur Arora

Dissertation Organisation: Sitaram Bhartia Institute of Science and Research

Area of Dissertation: Quality and Training

Attendance: 100%

Objectives achieved: Yes

Deliverables:

- Exposure of handling team as well as individual projects having fruitful impact on quality improvement
- Role in preparedness of COVID 19 in hospital to ensure patient as well as staff safety
- Major project- Reducing no. of visits by nursing staff in patients room to minimize their exposure during interim period of COVID 19
- Hands on experience on various digital marketing tools

Strengths: Disciplined, always on time, never leave early and adhere to all other organization rules. Always deliver work before deadline. Detail - oriented. Good grasping power. Has willingness to learn more.

Suggestions for Improvement:

Being new in organization she has done pretty good when it comes to gaining trust of colleagues and other members. With time and experience people management skills will get better.

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

NA



Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 26th June, 2020

Place: New Delhi

Acknowledgements

I express my gratitude and sincere thanks to **Mrs. Saru Bhartia (Quality Head)**, at Sitaram Bhartia Institute of Science and Research, New Delhi for her valuable guidance and co-operation in my endeavour.

I wish to express my sincere gratitude and heartfelt thanks to **Ms. Yashika Malhotra (Senior Executive- Quality and Taring)** for her foresight and full support, without which I wouldn't have been able to set my objectives for the project. Her mentoring and guidance during the Internship provided me with an opportunity wherein I improved my understanding of Nursing department at Sitaram Bhartia Institute of Science and Research. I also take immense pleasure to thank Ms. Pradaya Wahi Kakkar (Project Manager), Ms. Rakhi Wadhvani (Project Manager), Ms. Sandhya Sachdev (Project Manager) and Ms. Himanshi Bakshi (Senior Executive- Quality and Training) to guide me throughout my dissertation and always being there to help and motivate me during three months training. The training schedule ensured that there was adequate in-build flexibility provided to me to understand the functioning of the organization in a better way.

My special thanks to **Dr. Pradeep K Panda (Dean, Academics Research)** and my mentor at IIMR, Delhi for his continuous support and guidance.

Table of Contents

| | | | |
|------|---|---------|-------------------------------------|
| 1.0 | ABSTRACT..... | Page 12 | Error! Bookmark not defined. |
| 2.0 | INTRODUCTION..... | Page 14 | |
| 3.0 | REVIEW OF LITERATURE | Page 19 | |
| 4.0 | AIMS AND OBJECTIVES | Page 26 | |
| 4.1 | Project goals and measures | Page 26 | |
| 4.2 | Rationale | Page 27 | |
| 4.3 | Research Questions | Page 27 | |
| 5.0 | METHODOLOGY..... | Page 28 | |
| 6.0 | RESULTS | Page 31 | |
| 7.0 | DISCUSSION..... | Page 42 | |
| 8.0 | CONCLUSION..... | Page 46 | |
| 9.0 | LIMITATIONS..... | Page 47 | |
| 10.0 | REFERENCES | Page 48 | |
| 11.0 | ANNEXURES | | |
| | Annexure A (Format for tracking number and purpose of visits) | Page 51 | |
| | Annexure B (PDSA Cycle) | Page 52 | |
| | Annexure C (Questionnaire for Nurses regarding Covid-19) | Page 55 | |

List of Tables:

Table 1: Current V/S Proposed visits

Table 2: Change Ideas and Benefits

List of Figures:

Figure 1: Age profile of the respondents

Figure 2: Concern regarding going back home after shift hours?

Figure 3: Issues in wearing Personal protective Equipment

Figure 4: Issues faced while commuting to hospital

Figure 5: Family support in case nurse get sick

Figure 6: Level of stress after Covid-19 pandemic

Figure 7: Comfortable with shift hours

Figure 8: Difference in work before and after pandemic

Figure 9: Support provided by stress management committee of the hospital

Figure 10: Factors for feeling stressed

Figure 11: Mental health and well-being support

Figure 12: Specific concerns related to specific specialities working in

ABSTRACT:**Keywords:** COVID-19, Reducing visits, Anxiety, Stress, Exposure

Globally, the position of the nursing profession has been redefined over the years, but it ranges widely across countries. Unlike the medical profession, the nursing profession has various sub-components performing specific functions. Across the continuum of life, from birth to death, a nurse is a constant figure providing compassionate care.(1) The work of nurses has been further focused on by COVID-19 as carers, healers, educators, leaders and advocates, nurses are important to the delivery of healthy, effective and affordable care. Today and every day, nurses around the world carry out their vital work in the care of patients, regardless of the very real personal risks they face.(2) This research was done with the purpose of reducing the visits of nurses to patient rooms to prevent exposure of nursing staff and to assess their psychology during this time based on their stress level and knowledge. An observational study was conducted to track the number and purpose of visits to patient room by nurses. After inspecting the reasons few visits were clubbed and nursing staff was sensitized to follow the same in order to limit the contact with patient and attendants. Also, a qualitative descriptive survey was conducted on Nursing staff of Sitaram Bhartia Institute of Science and Research. A sample of 11 nurses were selected as sample size. Respondents answered the questionnaire telephonically in the form of interview. A modified and structured questionnaire was adapted to collect information regarding the stress level of nurses. The instrument comprised 17 questions divided into demographic details and stress level questions. Also, during the interview few general questions related to COVID-19 were asked. Once they expressed their views, the data was entered and analyzed using MS Excel. After clubbing the visits, the number of visits significantly reduced from 16 to 6. It was found that with the combined efforts of the management and nursing staff we were able to achieve the desired number of visits in 2 weeks. It was

also inferred that the nursing staff at Sitaram Bhartia institute of science and research is not much stressed. The only factor contributing to their stress is their concern for their family and friends when they go back home after shift and also, they expressed that working in 12 hours shift is quite tiring for them that has resulted in change of routine. It was observed during the study that nurses at such times have mixed emotions i.e. they have positive as well as negative emotions during this pandemic time. Negative emotions pertain only when there is concern for family but otherwise nurses were full of positivity and hope that this critical time will pass and everyone will get better. Our study showed that various visits to patient room by nursing staff can be clubbed and prevent the staff from unnecessary exposure. This provides hospital with information about the aspects of continuing with the reduced number of visits in future as well that will promote more positive nurse outcomes and satisfaction. Overall stress level of respondents was not high and a stress management committee is established in hospital to cater towards need and concerns of nurses and various measures can improve the concerns that were encountered and in turn would increase nurse satisfaction thereby decreasing stress level.

INTRODUCTION:

“Nurses have historically been a great symbol of health care. Their skills and knowledge make them one of the most important pillars of our healthcare industry. A nurse's role is more vital than ever, given that new technology is rapidly entering the industry and driving it to constantly evolve and improve.

There is no doubt that nurses are becoming much more influential when it comes to the medical industry, so there's an argument that they will also become one of the key drivers for the future transformation of healthcare

ICN defines nursing as “Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles” (3)

It is the responsibility of nurses to provide a connection between the patient and their primary medical practitioner. They end up spending a lot of time with the patients in the course of their visits, not just developing links with the patients, but also their family members in the process(4).

Learning patient interaction trends has significant consequences, not only for the prevention of infection, but also for other health and safety interventions such as patient

decline. The purpose of this study was to determine the frequency and reasons for nurses' visits using direct observation.

Out of many responsibilities one of the most crucial responsibility of an Inpatient department nurse is to visit patient in room on regular basis in order to maintain continuity of care. There are many reasons for which a nurse visits the room of patient in a day which are listed below:

1. Checking vitals of the patient on regular intervals.
2. Giving medication as and when suggested by the treating doctor.
3. Visits in relation to special care provided ((Example: Surgery patient, critical patient etc.).
4. IV Cannula and IV fluid checking.
5. Room orientation
6. On- call visits
7. Visits during doctor's round and
8. Any other administrative visits as well (Example: - getting some signatures on form etc.)

Therefore, nurses are the main contact of the patient with hospital. The moment patient is admitted till he/she gets discharged it is the nurse who provides regular care and support to the patient clinically as well as emotionally. It is critical to reduce these visits to patient room not only to prevent cross infections but also giving time to patient for resting and recovering soon.

COVID-19 has recently been described that ends up in acute and extreme respiratory syndrome in humans. Since then, 2019-nCoV has spread rapidly to other countries by various means, such as airline travel, and now COVID-19 is a global pandemic problem. This spreads rapidly, adding stresses and threats to healthcare staff, including nurses.(5)

Extreme acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a newly discovered ribonucleic acid coronavirus isolated and found in patients with unexplained pneumonia in Wuhan, China, in December 2019. 2 with symptoms ranging from mild self-restraint to severe pneumonia, acute respiratory distress syndrome, septic shock, and even systemic multiple organ failure. Asymptomatic infected patients can have become the source of infection, primarily through aerosols from the respiratory tract, but also through direct contact. (6)

The pandemic has created a lot of havoc but hospital and its staff are the premium institutions that ought to provide care at such crucial times especially the nurses who are at the frontline. Since, it has been reported that asymptomatic patients can also spread coronavirus infection so it becomes crucial to protect healthcare staff when the number of staff getting affected by the disease is increasing day by day.

According to a report by the Hindu “At least 412 medical workers have tested positive for COVID 19 out of which 156 are nurses who have tested positive for COVID-19 across India as of April 22.” Which is approximately 40 % of the total medical force affected. (7)

Health workers must be covered because they are out there protecting their lives. Nurses are at the frontline of the COVID-19 response, working diligently to care for

loved ones, even when their own lives are at risk. "As nurses are highly vulnerable to COVID-19, it is important to develop hospital-specific protocols to minimize the risk of infection by nurses when communicating with patients in general IPD rooms during this interim period of time.

It is necessary to ensure the safety of nurses who are taking care of other patients (non-COVID patients) as well not only the nurses who are taking care of covid-19 patients. The only way to reduce the exposure of nurses at such times are by following the norm of social distancing to some level by reducing general visits to patient rooms as by this way nurse and patient would come in less contact than usual. this practice can be followed for stable patients like normal delivery cases etc.

One more important aspect that needs to be looked upon is the stress level of nurses during covid-19 times. Whole country is under lockdown but hospitals have to work, healthcare staff has to come, especially nurses have to work tirelessly in order to give best care to their patients at such difficult times as well. It is very usual at such times nurses can experience negative emotions along with positive ones since "Nurses take risks every day because they're willing to do that, they're called to do that, and they want to do that,"

Nurses would be in a state of physical and mental stress and feel isolated and helpless in the face of health threats and pressure from the high-intensity work caused by such public health emergencies. So, it becomes of utmost importance to understand what they are going through, what are they thinking and what are their concerns.

According to a published study, the nurses caring for COVID-19 patients felt extreme physical fatigue and discomfort caused by the outbreak, intense work, a large number of

patients, and lack of protective materials. Physical fatigue, psychological helplessness, a danger to health, lack of information, and interpersonal unfamiliarity under the danger of infectious disease have contributed to a significant loss of knowledge and lot of negative emotions like fear, anxiety, and helplessness.

LITERATURE REVIEW:

1. “A Qualitative Study on the Psychological Experience of Caregivers of COVID-19 Patients”(6) - Niuniu Sun, Suling Shi, Dandan Jiao

- (i) They enrolled 20 nurses who provided treatment for COVID-19 by using a phenomenological approach. Patients in the First Associated Hospital of Henan University of Science and Technology. The interviews were performed face-to - face or by telephone and were analyzed by Colizzi’s 7-step method.
- (ii) The emotional experience of nurses caring for COVID-19 patients was outlined in four themes. First, the early-stage negative emotions of exhaustion, discomfort, and helplessness were triggered by high-intensity work, fear, and anxiety, and consideration for patients and families. Second, self-coping types included psychological and life change, altruistic behavior, team support, and moral cognition. They have seen growth under pressure, including increased affection and appreciation, the creation of professional accountability and self-reflection. Finally, it was proofed that positive emotions have occurred at the same time as negative emotions.
- (iii) During the epidemic, the optimistic and negative feelings of the front-line nurses were interweaving and coexisting. During the early stages, negative emotions were dominant and positive emotions slowly arose. Self-adhesive styles and psychological growth have played an important role in maintaining the mental health of nurses.

2. **“Frequency of Patient Contact with Health Care Personnel and Visitors: Implications for Infection Prevention”-(8) Bevin Cohen**

- (i) Patients were seen in seven units of three academic hospitals, recording each occurrence of someone entering the patient's room. The role of the health care worker, the duration of the visit and the highest level of patient contact was noted. Staff were also surveyed to determine their perception of how many patients come into contact with each hour, how long they spend with each patient and what is the level of contact with each patient.
- (ii) Given the value of regular HCW – patient interactions to ensure safe, consistent treatment, communication restriction is definitely not in the best interests of the patient or the care team. Studying contact patterns, however, can potentially improve understanding of how transmission occurs and play an important role in alleviating the risk of infection by changing workflow patterns to reduce opportunities for transmission, stressing the importance of keeping with standard precautions and insulation measures, and informing the structural and staffing infrastructure in hospitals.

3. **“Assessment of Iranian Nurses’ Knowledge and Anxiety Toward COVID-19 During the Current Outbreak in Iran”(9) - Marzieh Nemati , Bahareh Ebrahimi , Fatemeh Nemati**

- (i) To stop the 2019-nCoV outbreak by droplets and touch, online software was used to develop an automated web-based questionnaire for data collection over 80 hours (March 4, 2020 to March 8, 2020). The

questionnaire was made available to participants via social media (WhatsApp and Instagram).

- (ii) The study subjects included nurses working in hospitals dedicated to the admission and hospitalization of COVID-19 patients. Participation in this study was optional and the identity of participants was not reported anywhere on the questionnaire.
- (iii) This study revealed that this sample of Iranian nurses was well aware of COVID-19 infection during the current outbreak, since more than half (56.5 per cent) of the nurses had detailed understanding (more than the cutoff point) of the disease and, interestingly, most of them rated their information as high as 6.12 (range 1-10). Providing full knowledge may reflect the successful dissemination of information on COVID-19 by different media. In this regard, widespread over breaking and high-speed transmission of COVID-19 in the world may have increased the nurse's attention and knowledge of this pandemic disease.

4. **COVID-19 Are you Ok?** (10) – Nursing Times

- (i) 3,500 nurses were surveyed by nursing times and it was inferred that almost all nurses felt more depressed and nervous than normal, with a third defining the state of their mental health as poor during the Covid-19 crisis.
- (ii) The campaign, launched in April, will highlight the mental health challenges and needs of nurses during and after the coronavirus pandemic and will serve as a forum from which to respond.

- (iii) Half of the nurses who replied to the survey found that the overall level of assistance given to health and social care workers for mental wellbeing and well-being was insufficient. But the third one told the Nursing Times that they wanted help and felt powerless to ask for it.
- (iv) 87 % of respondents classified themselves as either "a lot" or "a little" more depressed at work than normal, while 90% said they were "a lot" or "a little" more nervous than before the outbreak. More than 50 percent described themselves as “a lot” more anxious or stressed than usual.

5. The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study- (11) -The Lancet

- (i) A qualitative study was conducted using an empirical phenomenological approach. Nurses and physicians have been recruited from five COVID-19-designated hospitals in Hubei Province using purpose and snowball sampling. They used semi-structured, in-depth telephone interviews from Feb 10 to Feb 15, 2020. Interviews were transcribed and analyzed using Haze 's adaptation of Colizzi's phenological method.”
- (ii) Intensive work has drained health care providers physically and emotionally. Health-care providers have shown their resilience and a spirit of professional dedication to overcoming difficulties.

Comprehensive resources should be given to safeguard the well-being of health care providers. Daily and rigorous preparation for all health care professionals is important in order to encourage preparedness and effectiveness during crisis.

6. **COVID-19 and mental health** - (5) Ravi Philip Rajkumar

- (i) The COVID-19 pandemic is a global health epidemic affecting many nations, with more than 720,000 cases and 33,000 confirmed deaths reported to date. Such widespread outbreaks have adverse mental health consequences. With this in mind, the current literature on the outbreak of COVID-19 applicable to mental health was collected via a literature search in the PubMed database.

- (ii) “Though there are few large-scale observational studies available in this field to date, it is clear that the COVID-19 pandemic has led to a vigorous and multifaceted response from psychiatrists and allied professionals, and that mental health is clearly being taken into consideration at multiple levels – in the general population, among healthcare workers, and in vulnerable populations. Though the quality of evidence in the available literature is relatively low, it still contains numerous valuable observations and suggestions for all professionals working in this field, whether they are associated with psychiatric or general hospitals or working in the community.

- (iii) Mental health interventions need to be developed that are time-limited, culturally sensitive and that can be taught to health care workers and volunteers. Once established, these approaches should be tested so that

knowledge on successful therapeutic strategies can be widely disseminated among those employed in this area.

7. Special attention to nurses' protection during the COVID-19 epidemic- (12)

Lishan Huang

- (i) Novel coronavirus disease of 2019 (COVID-19) caused 80,815 human infections and 3073 deaths in China, including more than 3000 infections among medical staff as of March 8 2020. As nurses are highly vulnerable to COVID-19, hospital-specific protocols need to be established to reduce the risk of infection by nurses when interacting with COVID-19 patients.
- (ii) The following are the key measures implemented in the hospital:
 - (a) Provide training and intensive education to nurses
 - (b) Establish a scientific, appropriate schedule of shifts
 - (c) Use infection control system to utmost maximum.
 - (d) Psychological counselling provision
 - (e) Unnecessary contact must be avoided

8. How many doctors and nurses have tested positive for coronavirus in India?

(7) - The Hindu

- (i) As of April 22, at least 96 physicians and 156 nurses tested positive for COVID-19 in India. As most of these infections were transmitted by patients in hospital settings, at least 826 physicians in contact with infected personnel had to be quarantined and at least 20 hospitals had to be fully or partially closed.
- (ii) Nearly 10 hospitals in Maharashtra had to be completely or partially shut down after many of their staff had quarantined following exposure to

COVID-19 patients. Closures have also been reported from West Bengal, Delhi, Karnataka and Tamil Nadu.

9. Covid-19 hits doctors, nurses and EMTs, threatening health system (13) -

Lenny Bernstein

Lots of health-care workers have fallen ill with covid-19, and more are quarantined after exposure to the virus, an expected but worrying development, as the U.S. health system is girding with an expected increase in infections. "The risk to our health-care workers is one of the major vulnerabilities of our health-care system in an epidemic like this," he said. "Most ERs and health care programs are in operation.

AIM: To reduce the visits of nursing staff to patient's room during Covid-19 by 62.5 % and to explore and assess the knowledge, attitude, and psychology of the nurses concerning COVID-19 to upgrade the prevention and control in hospital wards.

Project goals and measures:

- **Outcome measure:** To ensure that total no. of visits by nursing staff does not exceed by 6 in each 12- hourly shift per day
- **Balancing measure-** Assess the knowledge, attitude, and psychology of the nurses concerning COVID-19.

OBJECTIVES:

- (1) To understand the purpose of all visits by nurses to patient room.
- (2) To reduce nurse visits to patient rooms from around 16 to 6 without hampering the patient care
- (3) To club few visits of nurses to patient room in order to minimize the exposure with everyone getting the healthcare they need.
- (4) To explore and assess the knowledge, attitude, and psychology of the nurses concerning COVID-19.

RATIONALE:

Reducing the visits of nurses in patient room means to avoid unnecessary contact of between nurse and patient to eliminate the chance of cross infection. This will benefit both to the nurses as well as to patients. Especially during COVID-19 pandemic times such measures would help to reduce the transmission rate and our nurses who are the

backbone of hospital can be safeguarded against the virus and hence can provide long-term care to patients.

This study was in this manner ready to feature how significant it is for a hospital, to safeguard or protect their staff nurses during COVID-19. It is along these lines noteworthy for them to realize how nurses evaluate their stress level what they can do to make nurses feel safe.

Therefore, the purpose of the study is to reduce the contact of nurses in the hospital by reducing their visits to patient rooms which can be continued after the pandemic also. Along with understanding the individual knowledge and thinking of nurses during COVID-19 pandemic through semi-structured interviews and questionnaires providing fundamental data for the psychological experience of nurses.

Research Questions

- (1) What are the current number of nurse visits in IPD Room for non-covid patients (Both on-call and general visits)?
- (2) What is the purpose of each visit to patient's room in a day?
- (3) Can we reduce these visits? If yes, how?
- (4) Are nurses able to provide right amount of care without hampering the care of the patient?
- (5) What is the psychology/ stress level of nurses at this time?
- (6) Are nurses aware of the prevention protocols during this time?

METHODOLOGY:

(i) Study Design:

Reducing the number of visits - Observational study

To assess the stress level, knowledge and attitude of nurses during covid-19-

Qualitative Study

(ii) Study Area: Nursing Department

(iii) Study population: Ward Nurses of Sitaram Bhartia Institute of Science and Research

(iv) Data collection: Meetings, feedbacks, Questionnaire and interviews.

(v) Study period: 18th, April, 2020 to 25th, May, 2020

(vi) Sample size:

(i) For reducing visits - We tested it through a PDSA with 2 nurses initially and then implemented on the entire Sitaram Bhartia's IPD nursing staff.

(ii) For assessing the stress level and knowledge: 11 nurses were made to participate in the survey. A structured questionnaire was made and interview of nurses was taken telephonically.

(vii) Sampling Technique: Convenience sampling

Before pandemic, nurses used to visit patient's room on 1-hourly basis to assure that the patients are doing fine by providing them the required care, but due to increase in feedbacks of excessive visits, a project was taken up to reduce the visits of staff in patient's room, wherein, not only nursing, but visits by staff of other departments were

also relooked at. For nurses, the visits were scheduled from 1 hourly to 2 hourly after consensus of nursing and management.

But due to the highly contagious nature of Covid-19 it was proposed to reduce the nurse visits to patient rooms without compromising the quality of care. For example, for obstetric patients the obstetricians standing order was a nurse visit every 6 hours along with other visits for medication and vitals.

The study was carried out as per the following steps:

1. Meeting was done with Nursing Head of the hospital on 18th April 2020 to discuss the reasons for nurse visits to patient room in a day and discussed regarding how we can reduce the visits by clubbing them.
2. After discussing the visits that can be clubbed, staff was sensitized to club the same and record their visits and reasons for visits. (*Table 1*)
3. A format for data collection was made so that it is easy for nurses to collect the data. (*annexure A attached*)
4. We ran a PDSA cycle on 28th April 2020 “To test the impact of proposed changes for nursing staff to minimize their contact with patients. (*annexure -B attached*)
5. After discussing with nursing head, we identified two nurses of morning shift (8AM-8PM) to test the proposed change.
6. Feedback from nurses, also the supervisors were taken at the end of the cycle.
7. It was observed that after implementing the proposed changes, the general visits of nurses gradually came down to 6 from 16 by April end.

Table 1: Current V/S Proposed visits

| Nursing | |
|---|---|
| Current Visits | Proposed visits |
| 16-17 (Mid-April) | 6 (April End) |
| 1. 2 Hourly rounds to check if patient is fine. 2. Nurses accompany doctors during their rounds. 3. IV Fluid checking 4. Separate visits for vital checking 5. Separate Visits for medication 6. Nursing Supervisor rounds- twice a day. | 1. Visit patient's room after every 6 hours instead of 2 hourly visits 2. During doctors round now the nurses perform other tasks too which otherwise required a separate visit. 3. Combine visits for medication administration and vitals checking 4. Nursing Supervisor now visit once a day. |

8. A structured questionnaire was prepared to assess the stress level of nurses during such times and interviews were taken telephonically. (annexure -C attached)

9. 11 nurses filled up the questionnaire and gave the interview.

10. The data collected was analyzed using MS Excel.

- This Qualitative descriptive survey was conducted with nurses of Sitaram Bhartia institute of Science and Research. A convenience sample of 11 nurses was taken. In this project questionnaire used contained 17 questions contrasting demographic details and stress level of nurses. Nurses were approached to finish the study telephonically. The data acquired in this project were dealt privately.

RESULTS:

The research findings and analysis are discussed below:

I. Reducing number of visits to patient room

Table 2: Change ideas and Benefits

| # | Change Ideas | Current scenario | Improvements intended | Benefits |
|---|--------------------------------|---|--|---|
| 1 | <u>Do tasks in parallel</u> | The schedule for checking vitals is of 2-hourly basis and visits for medicine administration are different. | Visits have been rescheduled and instead of 2 hourly, 6 hourly visits have been started for checking the vitals of patient. Combine the visits for checking vitals with medicine administration. | 5 additional visits by nursing staff is eliminated. |
| 2 | <u>Format</u> | No particular format to note down the purpose and number of visits. | A new format was made so that nurses can write down the purpose of their visits to room. | Easy for nurses to keep track of the visits and for data collection purposes. |
| 3 | <u>Room Orientation on</u> | Room orientation is done by nursing staff in the room. | Room orientation can be done by nurse/executive outside the room only. Patient/attendant can be explained things and in case of any doubt clarified. | One additional visit by nursing staff is eliminated |
| 4 | <u>Do tasks in parallel</u> | Nurses were checking patient after small intervals to see if patient was comfortable or not ending up on an average of 2-3 visits a day | Additional visits to look if patient is fine are reduced and clubbed. | 2-3 additional visits by nursing staff is eliminated |
| 5 | <u>Analysis and monitoring</u> | Nursing Supervisor visits twice a day. | (I)Nursing Supervisor visits once a day supervisor visits once a day (ii)Nursing supervisors can analyse the visits | (i) One additional visit by nursing staff is eliminated. (ii) It can be analyzed that due to reduction of general visits |

| | | | | |
|--|--|--|----------------------------|---|
| | | | form at the end of the day | whether on-call visits are increasing or not. |
|--|--|--|----------------------------|---|

In the shift of 12 hours, average general visits are **6**. Rest all visits are on call basis. Previously based on 2 hourly visit system, there general visits were 14-16. So, we have been able to reduce general visits from 14-16 to average of 6.

II. PART A: Demographic details of respondents

Figure 1: Age profile of the respondents

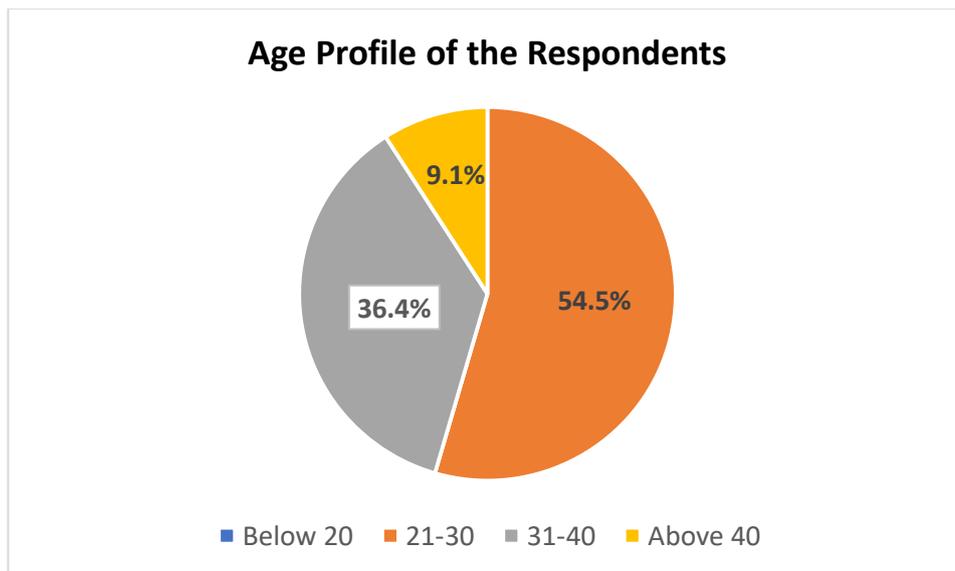


Figure 1 represents the age profile of respondents (Nurses). 54.5% (6) of the nurses belong to the age group of 21-30 years, 36.4 % (4) belongs to the age group of 31-40 years, 9.1% (1) belong to the age group of above 40 years and 0% belongs to age group of below 20.

PART B: Level of stress

Figure 2: Concern regarding going back home after shift hours?

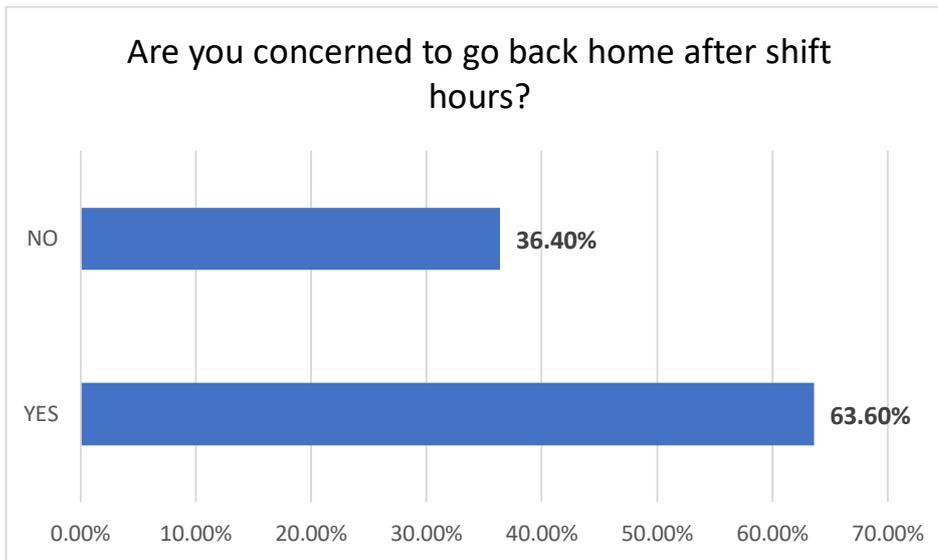


Figure 2 represents the concern of nurses to go back home after shift hours. 63.6% (7) of nurses feel concerned to go home after their shift hours and 36.4% (4) have no concern while going to home after shift hours.

Figure 3: Issues in wearing Personal protective Equipment

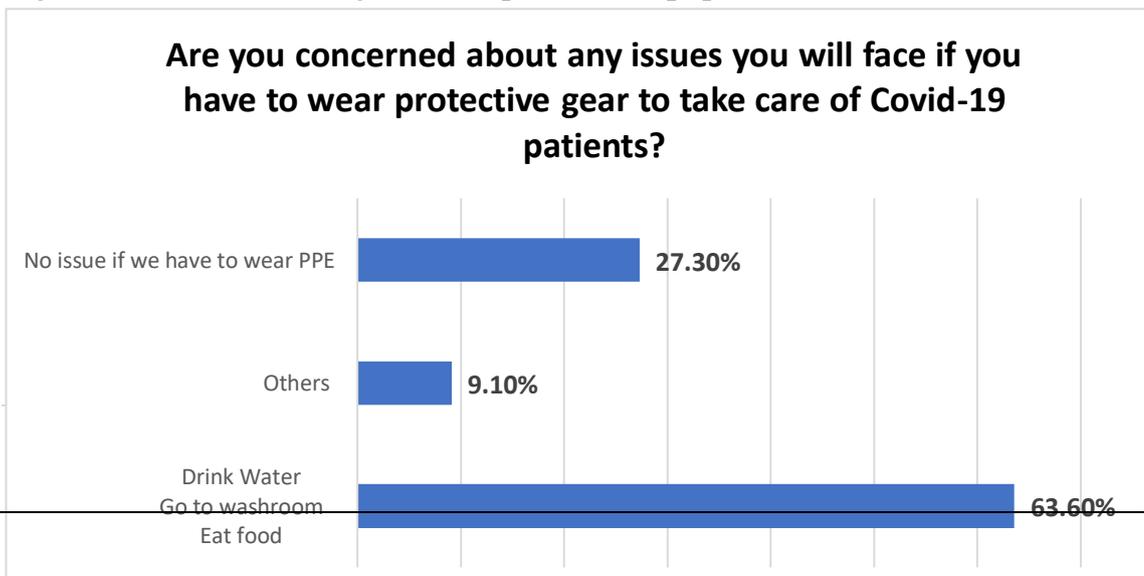


Figure 3 represents issues that nurses think they might face if they have to wear PPE. 63.6% (7) nursing staff have a question that how will they drink water, eat food and go to washroom while they are on PPE. 27.3% (3) staff has no issue or question if they have to wear PPE. Other 9.1 % (1) staff have other concern like ... in wearing PPE.

Figure 4: Issues faced while commuting to hospital

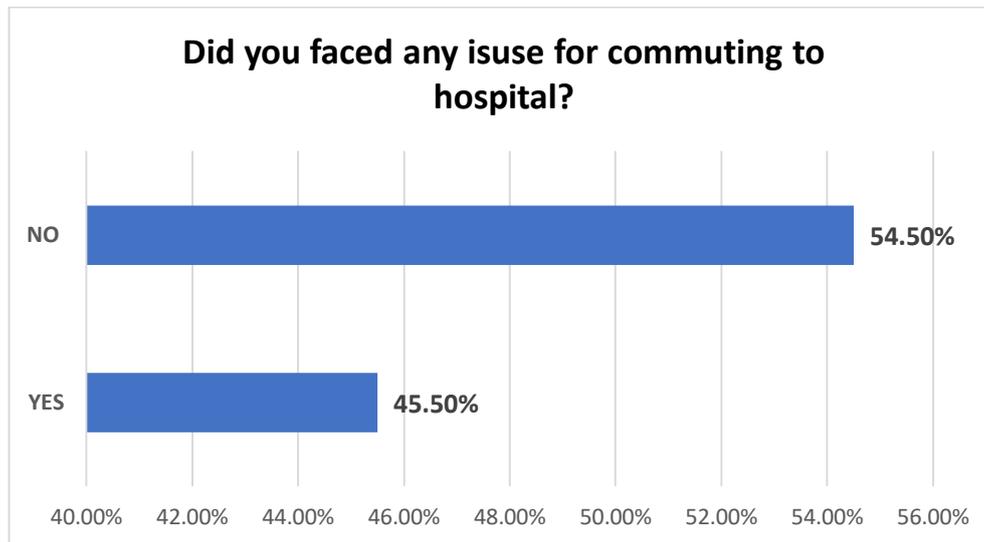


Figure 4 represents the difficulty (if any) faced by nurses while commuting to hospital during initial days of pandemic. 54.5 % (6) nursing staff faced no issues, they said hospital is providing transport to them. 45.5% (5) said that they faced a bit difficulty in commuting to hospital initially.

Figure 5: Family support in case nurse get sick

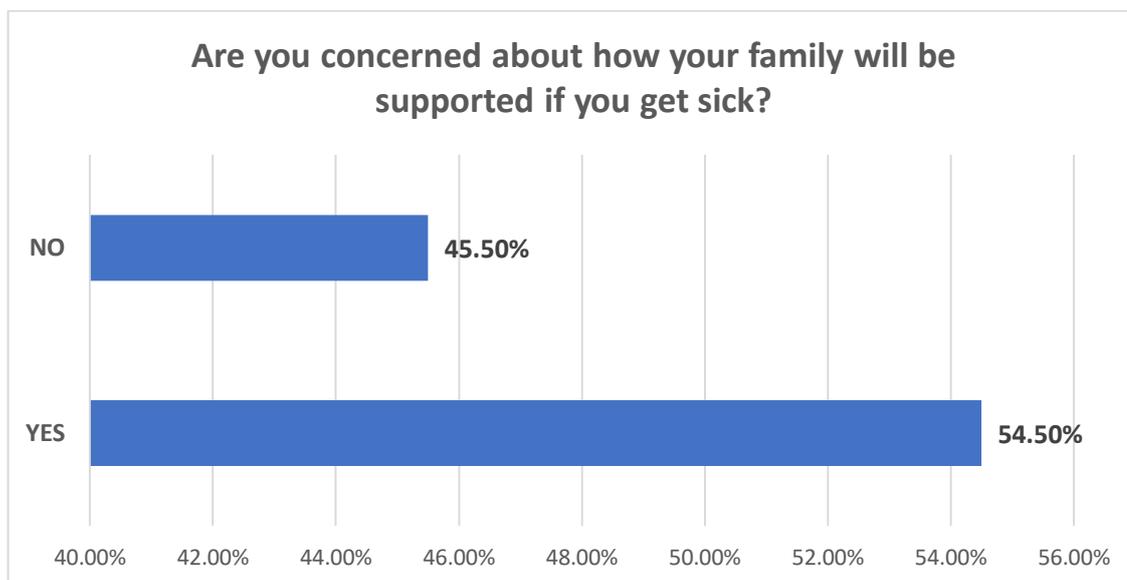


Figure 5 represents the concern in nursing staff minds regarding the support provided to their respective families if they get sick. 54.5% (6) nurses answered yes to the question that they are concerned about their family. 45.5 % (5) answered no to the question.

Figure 6: Level of stress after Covid-19 pandemic

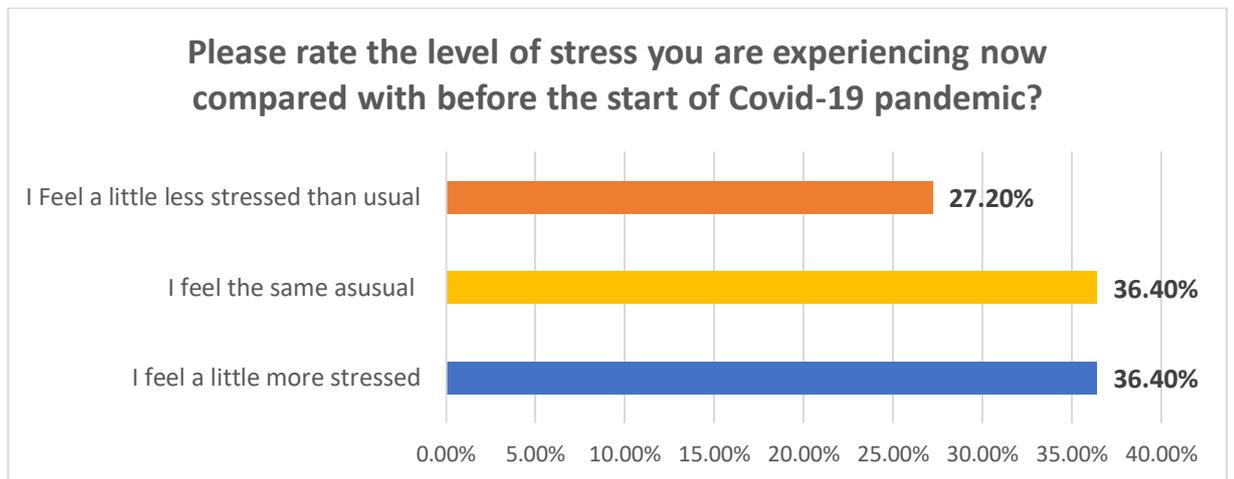


Figure 6 represents the level of stress nursing staff is experiencing now after covid-19 pandemic as compared to the level of stress before. 36.4% (4) respondents think that the level of stress is same as compared to before pandemic. 36.4% (4) think that they feel a little more stressed after the pandemic and other 27.2% (3) think that after the pandemic they feel less stressed.

Figure 7: Comfortable with shift hours

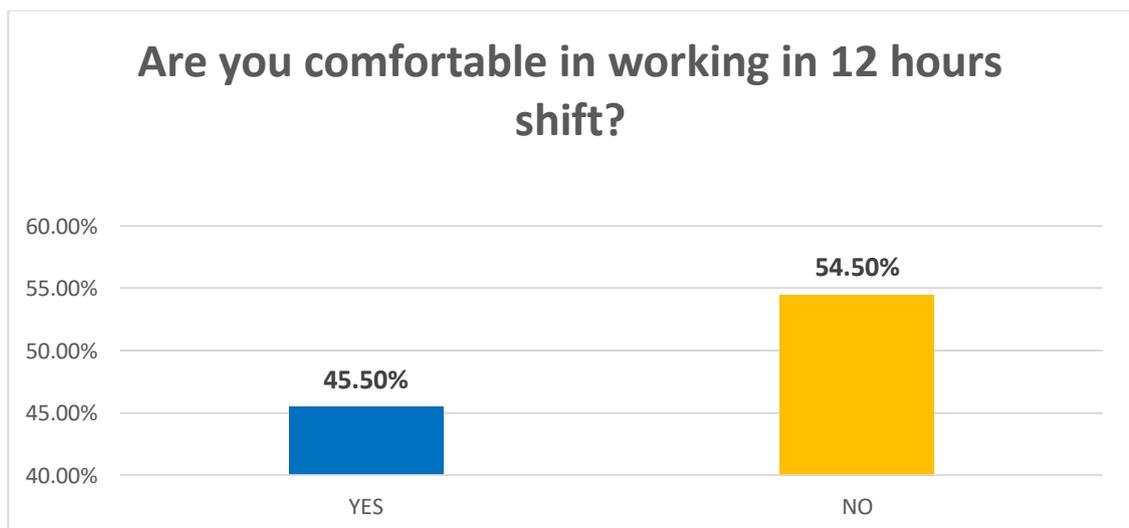


Figure 7 represents about the comfort level of nurses for working in a 12 hour shift. 54.5% (6) of nurses are not comfortable in working 12 hours shift as they think it gets very tiring for them, though they get 4 days leave after that but the schedule and routine has changed now. 45.5% (5) staff were totally comfortable in working 12 hours shift.

Figure 8: Difference in work before and after pandemic

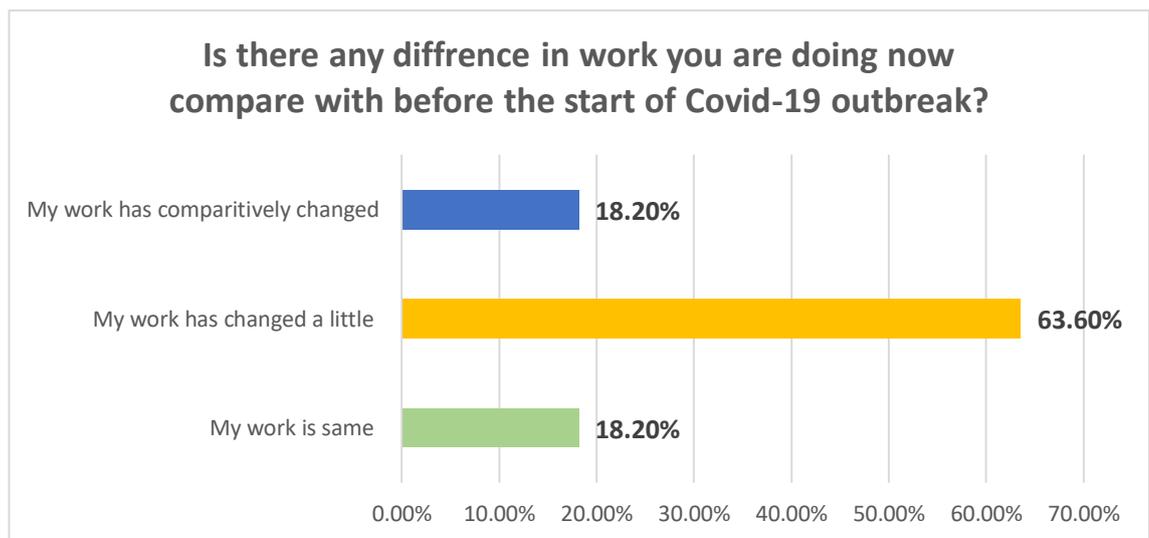


Figure 8 represents the comparison between the level of work nursing staff was doing before and after the covid-19 pandemic. 63.6% (7) of respondents think that their work has changed a little. 18,2 % (2) respondents think that their work has completely changed and other 18.2% (2) think that their work is same as compared to before the pandemic.

Figure 9: Support provided by stress management committee of the hospital

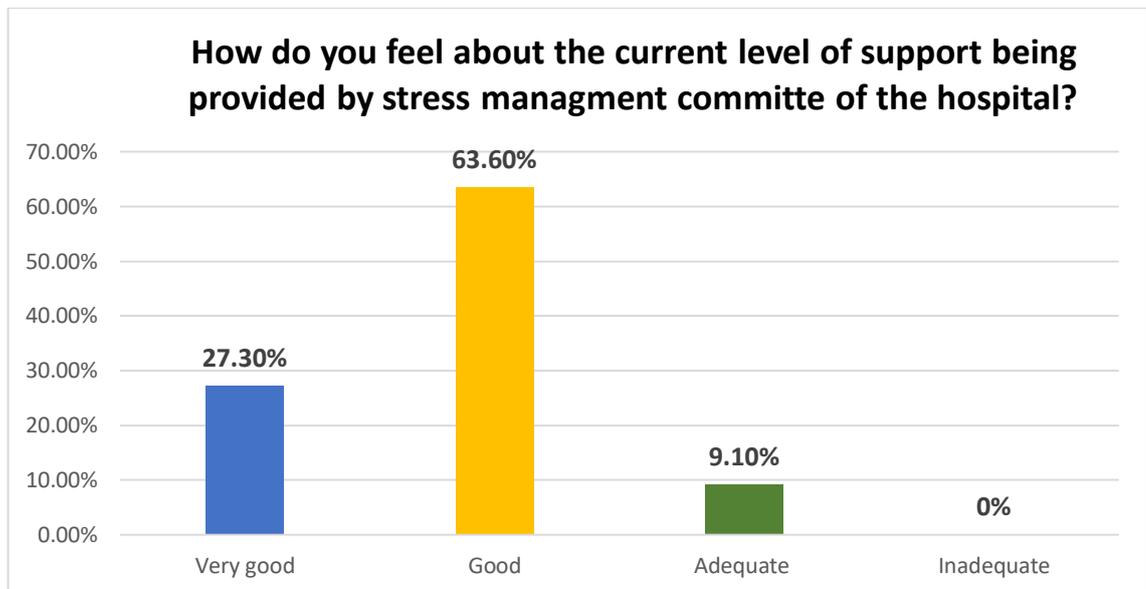


Figure 9 represents the thinking of nursing staff on the level of support provided by stress management committee of the hospital. 63.6% (7) staff felt that the support provided is good. 27.3% (3) staff felt that the support provided by hospital is very good. 9.1% (1) of staff felt that the support provided is adequate and no staff thought that the support provided by hospital is inadequate.

Figure 10: Factors for feeling stressed

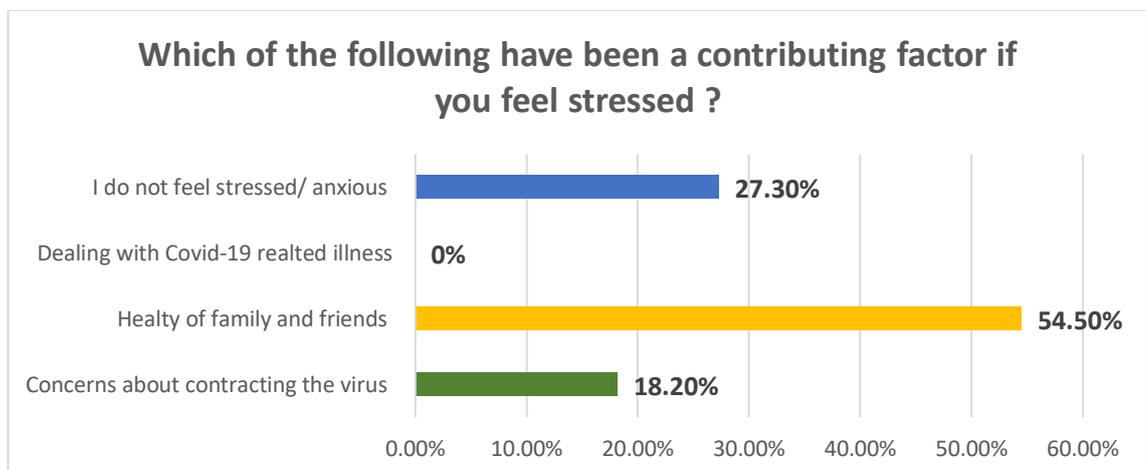


Figure 10 provides reasons for which nurse feel stressed. 54.5% (6) nursing staff felt stressed due to concern of the health of their friends and family. 27.3% (3) said that they do not feel stressed. 18.2% (2) concerned about contracting the virus and none was concerned for dealing with Covid-19 related illness.

Figure 11: Mental health and well-being support

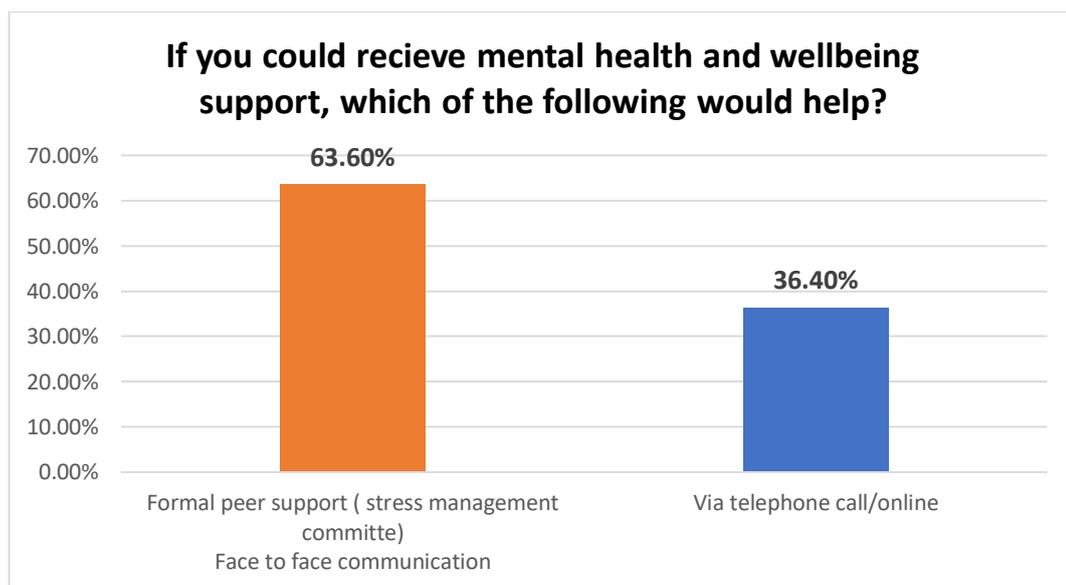


Figure 11 represents the medium of communication which nursing staff prefers if they face stress during such times. 63.6% (7) of nursing staff answered that they would prefer formal peer support face to face communication if they feel stressed or have concern. Other 36.4% (4) said that they are comfortable in online/ telephone means of communication specially at this time when social distancing measures needs to be followed.

Figure 12: Specific concerns related to specific specialities working in

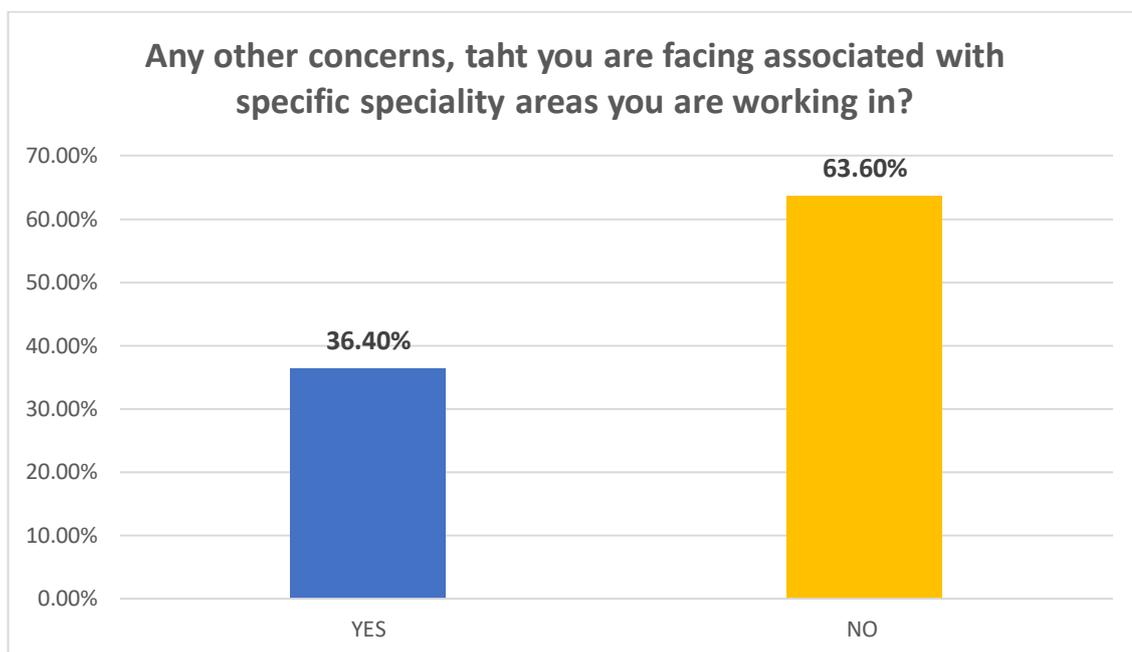


Figure 12 represents about the concerns of nurses (if any) related to special areas they are working in. 63.6% (7) nursing staff had no specific concern related to area of speciality, 36.4 % (4) of staff said that have few concerns.

What has changed in your life?

Nurses shared that now they have to stay extra precautions in order to protect themselves from Covid-19 virus. The work routine now has been changed; they have to take extra safety precautions while doing work. The shift hours are also longer now which has led to change in routine.

PART C: Knowledge of nurses regarding Covid-19

- Almost 82% (9) of the respondents knew the coronavirus family before the 2019-nCoV infection begins.
- Social applications were the first resources for 70% (8) of the respondents followed by other 30% (3) gathering information from World health organisation.
- All the respondents (100%) knew how to don and doff the personal protective equipment 2 and 3 both as they received training at the hospital for the same.
- 70% of the nurses knew about the incubation period of the covid-19 virus is 5-28 days virus i.e. 5-28 days participants had the best awareness of prevention methods.

DISCUSSION:

- The low frequency of patient contact observed in this study is encouraging for many measures of reducing the transmission of virus and patient safety. The project was dedicated to reduce the excessive and unnecessary visits to the IPD rooms by nursing staff. The need to trigger this initiative was based on the rise in cases of covid-19. It was done in order to protect the nursing staff from exposure and also to continue the same pattern of visits even after the pandemic.
- Given the fact that many hospitals take isolation measures for patients believed to be infected or colonized with epidemiologically harmful pathogens, facilities remain vulnerable to outbreaks for a variety of reasons. Since Covid-19 is known to be asymptomatic in many patients so it was crucial to safeguard the nurses and continuing the same number of visits afterwards can also be beneficial.
- The findings of this project have shown that earlier (up to mid-April) nurses used to visit patient rooms multiple times a day for various reasons such as drug administration, vitals check-up (2-hour visits), doctors round, room orientation check-up IV Fluid, etc. but after observing, running the PDSA cycle, the decision to club few visits, such as vitals check-up and medicine administration and by modifying the 2-hour vital checking system to 6-hour vital checking system for stable patients, the visits were substantially reduced from 16 to 6 (April end) fulfilling the objectives of the project.

The general research findings from the questionnaire are mentioned below:

- (i) Majority (54.5%) of the nursing staff that were interviewed were of the age between 21-30 years.
- (ii) Majority (63.7%) of the nursing staff are concerned when they go home after their shift hours as they fear that their family might get virus because of them.
- (iii) 63.6 % of the staff have few concerns like drinking water, eating food and going to washroom if they have to wear PPE. They shared that they have no problem in wearing PPE but are concerned about the basic necessities mentioned above.
- (iv) Majority (54.5%) of the nursing staff had no issue in commuting to hospital during initial days of pandemic. Initially others (45.5%) did face issues while commuting but the problem was resolved by the hospital.
- (v) Most of the nursing staff is concerned about family if they get sick. They are concerned for the financial support of the family specially for the nurses who have small children or younger siblings to take care of.
- (vi) 36.4 % of nurses said the stress they have is same as usual and other 36.4% of nurses shared that they feel a little more stressed than before as they have to be more precautious the whole day and concerned to go home after shift.

- (vii) Majority of nurses are not comfortable in working 12-hours shift as they said that the routine gets disturbed and they get really tired.
- (viii) 63.6% respondents said that they feel their work has changed a little after the pandemic as they have to be more cautious and maintain a distance from patient while not compromised on the quality of care delivered.
- (ix) 63.6% of nurses feel that the support provided by the hospital stress management committee is good. None of the participants thought that the support provided was inadequate.
- (x) Most common factor for nurses to feel stressed about was their concern that they will transmit the disease to their family and friends (54.5%)
- (xi) When asked about the means of communication they prefer if they want to share concern and feel stress at such times, they answered that they would prefer face to face communication by formal peer group. (63.6%)
- (xii) Majority of the nurses have no concerns related to their speciality areas they work in. They shared that there are as such no specific concerns but there is delay in provision of masks, gloves and sanitizer availability. One of the staff also shared the requirement of hand washing facility near to their work area and availability of few equipment's in isolation ward.
- (xiii) When asked about the change in their life after Covid-19 they answered that usually not much have changed but they have to be much more precautions and careful in doing their duties and use the

personal protection at each level to safeguard themselves and the patients they are treating.

- (xiv) Maximum number of nursing staff had knowledge pertaining to Covid-19 virus, its transmission and precautions to be taken in order to protect themselves from contracting virus.

CONCLUSION AND RECOMMENDATIONS:

Humanity is going through unprecedented times. The coronavirus outbreak along with the uncertainty is having negative impact on everyone. All essential workers, especially healthcare is playing a very important role in serving people's need. In this crucial time, it is important to be safe and keep people around us safer. Patient safety and in return safety of nursing staff was the major objective of this project. After brainstorming and putting in efforts we were able to reduce around more than 50% of general visits, i.e. from 16 to almost around 6. Since patient safety is our prime goal, we worked in such a way that patient care doesn't get hampered. In this way we can continue following the same schedule of visits even when the COVID-19 period is over. No doubt, there will be cases in which the visits might exceed depending upon the patient's condition, but it is something unavoidable. Our effort was majorly to minimize the contact with patients, and we were successfully able to figure out the way to achieve the same.

This provides hospital with information about the aspects of continuing with the reduced number of visits in future as well that will promote more positive nurse outcomes and satisfaction.

Most of the nurses in Sitaram Bhartia Institute of Science and Research are not stressed. The only factor of stress that is prevailing is the fear of giving the disease to family and friends and working 12 hours a shift regularly becomes tiring. But as the saying goes "Nurses are the heart of healthcare", in the study as well it was found that the nurses are not afraid for themselves, they just wished that all should get well and are ready to work 12-hours in a day. They faced mixed positive and negative emotions. Therefore, it

becomes the responsibility of the institution to take care and protect nurses at such times and provide measures and remedies to decrease the stress factor and concern that they are facing and may face. Stress management committee is established in hospital to cater towards need and concerns of nurses and various measures can improve the concerns that were encountered and in turn would increase nurse satisfaction thereby decreasing stress level. A focused approach at such difficult circumstances to manage the emotions of the nurses is critical.

LIMITATIONS:

It must be emphasized that the findings of the present study have some limitations: -

- (i) The sample size was small (11).
- (ii) The selection of sample was convenient. It should have been random sampling for better results.

REFERENCES:

1. COVID-19: Nursing countries to better health- The New Indian Express [Internet]. [cited 2020 May 27]. Available from: <https://www.newindianexpress.com/opinions/2020/may/19/covid-19-nursing-countries-to-better-health-2145142.html>
2. “Nurses’ vital contribution to tackling COVID-19 highlights the profession is ready to take giant step change” says ICN | ICN - International Council of Nurses [Internet]. [cited 2020 May 27]. Available from: <https://www.icn.ch/news/nurses-vital-contribution-tackling-covid-19-highlights-profession-ready-take-giant-step-change>
3. Shamian J. The role of nursing in health care. *Rev Bras Enferm.* 2014;67(6):867–8.
4. The Vital Role of Nurses in Transforming Healthcare [Internet]. [cited 2020 May 27]. Available from: <https://westcoastuniversity.edu/pulse/health-e-news/the-future-of-nursing-the-role-of-nurses-in-transforming-healthcare.html>
5. Rajkumar RP. Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ’ s public news and information . 2020;(January).
6. Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ’ s public news and information . 2020;(January).
7. Data | How many doctors and nurses have tested positive for coronavirus in India? - The Hindu [Internet]. [cited 2020 May 27]. Available from: <https://www.thehindu.com/data/how-many-doctors-and-nurses-have-tested-positive-for-coronavirus-in-india/article31410464.ece>
8. Cohen B, Hyman S, Rosenberg L, Larson E. Frequency of patient contact with health care personnel and visitors: Implications for infection prevention. *Jt Comm J Qual Patient Saf.* 2012;38(12):560–5.
9. Nemati M, Ebrahimi B, Nemati F. Assessment of Iranian Nurses’ Knowledge and Anxiety Toward COVID-19 During the Current Outbreak in Iran. *Arch Clin Infect Dis.* 2020;15(COVID-19).
10. Ok AY. Q1 How does the work you are doing now compare with before the start of the Covid-19 outbreak ? Select all that apply.

11. Liu (Q, Yang J, Liu Q, Luo D, Wang XQ, Phd Y, et al. The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. *Lancet Glob Heal* [Internet]. 2020;(20):1–9. Available from: www.thelancet.com/lancetgh
12. Huang L, Lin G, Tang L, Yu L, Zhou Z. Special attention to nurses' protection during the COVID-19 epidemic [Internet]. Vol. 24, *Critical Care*. BioMed Central Ltd.; 2020 [cited 2020 May 27]. p. 120. Available from: <https://ccforum.biomedcentral.com/articles/10.1186/s13054-020-2841-7>
13. Coronavirus among health workers: Exposure, lack of testing, threatens health system - *The Washington Post* [Internet]. [cited 2020 May 27]. Available from: https://www.washingtonpost.com/health/covid-19-hits-doctors-nurses-emts-threatening-health-system/2020/03/17/f21147e8-67aa-11ea-b313-df458622c2cc_story.html

Annexure B:



Learning and Improvement Cycle – PDSA Form

Team: Mr. Abednego Johnson

Date: 28.04.2020

Nr. Soumya Mohan

Nr. Renju

Nr. Manju

Ms Yashika Malhotra

Ms Harsheen Kaur



Cycle #: 1

Name of test: To test the impact of proposed changes for nursing staff to minimize contact with patients

1. Visit patient's room after every 6 hours instead of 2 hourly visits
2. Combine the visit for medicine administration and vitals checking together
3. Try clubbing as many visits with the mandatory ones

The objective of this cycle is to:

Collect Data

Develop a change

Test a change

Implement a

change

PLAN

What is the objective for this cycle?

To test the impact of proposed changes for nursing staff to minimize contact with patients

What questions do you want to answer with this PDSA cycle?

- 1) Will the call bell visits increase if general visits are reduced?
- 2) Will nurses be able to provide appropriate care if the general visits are reduced?
- 3) Will nurses face any issues/ hurdles if they combine few visits together?
- 4) Will nurses face any problem in filling up the format given for data collection?

Predictions (for questions above based on plan):

- 1) There is a probability that the on-call requests might increase if the nurses are making fewer general visits in room
- 2) There is no chance that the care provided by the nurses after reducing visits will be hampered, as there has been no interference with the required/ mandatory visits
- 3) There is a possibility that nurses may face difficulty in going inside the room to complete multiple tasks.

4) There is a less chance of nurses facing the difficulty in filling the format.

List tasks required to set-up this test: Who, What, When, Where?

| What – tasks | Who | When | Where |
|--|---|------------|-------|
| 1. Create the format for tracking nurse visits Discuss the format with Mr. Johnson. (<i>Annexure I- Proposed format for tracking nurse visits</i>) | Mr. Abednego Johnson, Ms Yashika, Ms Harsheen | 22-04-2020 | NA |
| 2. Implement the tool and sensitize nurses to fill in the data and club the visits as suggested | Mr Abednego Johnson | 25-04-2020 | NA |
| 3. Data filled up by the nurses on 28 th April, 2020. | Nr Renju, Nr Manju | 28-04-2020 | NA |
| 4. Checked the data filled up by the nurses and take the feedback from nurses. | Ms Yashika, Ms Harsheen | 29-04-2020 | NA |

Plan to collect data to answer your questions: Who, What, When, Where?

| What Data? | Who Collect ? | When collect? | Where collect ? | How collect? |
|--|-------------------|---------------|-----------------|--|
| 1) Staff feedback about their point of view regarding the suggested changes in their visit schedule | Yashika, Harsheen | 29.04.2020 | NA | Verbal interaction with nurses, Nursing visits tracking tool |
| 2) Collect NPS feedbacks and check if anybody has complained for improper in care provided by nurses | Yashika, Harsheen | 29.04.2020 | NA | Telephonic conversation with patient |

DO

What did you observe when the test was carried out?

Following was observed after the test was carried out:

- 1) The nursing staff was briefed about the PDSA by HOD- Mr. Abednego Johnson, about the changes that have been planned for their visits in the patient's room.

2) Two identified nurses went to their respective rooms for visits as suggested. General

| S No | Nurse on Duty | CR No. | Admitting Doctor | Purpose of admission | Date | No. of regular visits | No. of call bell visits | Total Number of visits |
|------|---------------|--------|--------------------|----------------------|--------|-----------------------|-------------------------|------------------------|
| 1 | Nr Manju | 370700 | Obs Unit | Cesarean | 28'Apr | 4 | 5 | 9 |
| | | | | | | | | |
| 2 | Nr Renju | 261982 | Dr Anita Sabherwal | Cesarean | 28'Apr | 3 | 2 | 5 |
| | | 329248 | Obs Unit | NVD | 28'Apr | 4 | 3 | 7 |

visits were made as per the revised plan given, whereas on call visits were made as per patient's request.

3) Total of 3 patients were covered under PDSA cycle

STUDY

Analyze your data and describe the results. How do the results compare with your predictions?

- As per the staff's feedback, and analysis of the visits done, there has been no increase in the number of on call visits.
- As predicted, patient care has not been hampered with the less no. of visits by nurses. Staff is taking care of patients properly
- Mostly general visits by nurses are to check vitals and medicine administration. They didn't face any issue in combining this sort of visits. Sometimes if any special order is given by doctor, only then additional visits are made by nurses
- As predicted nurses were comfortable with filling the new format given for tracking the visits.
- No complaints/ feedback has been received regarding improper care by nurses.

What did you learn from this cycle?

- As per the feedback, nurses shared that "they don't think there are any more visits that can be clubbed till now and they feel that reducing the visits is helpful not only for patients but for them as well."
- The quality of care can be achieved by proper planning. Brainstorming helps team to generate a ideas, which can be refined and merged to create the ideal solution

ACT

Are you ready to implement? (Feel confident in change, have tested under different conditions and have no more questions)

yes no

Plan for the next cycle (Have more questions, need to make adjustments) – N.A

Describe the objective for your next cycle: N.A

ANNEXURE C:

Questionnaire for Nurses regarding Covid-19

* Required

Demographic information:

1. Name (Optional):

2. City (Optional):

3. Age:

Below 20

21-30

31-40

Above 40

Stress Level:

4. Are you concerned to go back home after shift hours? *

Yes

No

5. If yes, what are your major concerns? *

6. Are you concerned about any issues you will face if you have to wear protective gear to take care of Covid-19 patient? *

Check all that apply.

- Drink water
- Go to washroom
- Eat food
- Any other (please specify) rink water

7. Did you faced any issues for commuting to hospital? *

(ii Are you concerned about how your family will be supported if you get sick? *

- Yes
- No

9. Please rate the level of stress you are experiencing now compared with before the start of the covid-19 pandemic? *

Check all that apply.

- I feel a little more stressed than usual
- I feel the same as usual
- I feel a little less stressed than usual

10. Are you comfortable working in 12- hours shift? *

- Yes
- No

11. Is there any difference in work you are doing now compare with before the start of the Covid-19 outbreak? *

Check all that apply.

- My work is same
- My work has changed a little
- My work has completely changed

12. How do you feel about the current level of support being provided by stress management club for mental health and wellbeing? *

- Very good
- Good
- Adequate
- Inadequate

13.If you feel more stressed and/ or anxious, which of the following have been a contributing factor.

Check all that apply? *

- Concerns about contacting the virus
 - health of family and friends
 - Dealing with Covid-19-related illness and/or death of a colleague
 - I do not feel more stressed and/or anxious
 - Other (please specify)
-

14. If you could receive mental health and wellbeing support, which of the following would help? *

Check all that apply.

- Formal peer support organized by hospital (stress management club)
 - Via telephone call
 - Online
 - Other (please specify)
-

15. What has changed in your life? *

16. What are your thoughts and feelings about this pandemic?

17. Any other concerns, that you are facing associated with specific specialty areas you are working in?

Harsheen Kaur D report 2

ORIGINALITY REPORT

15%

SIMILARITY INDEX

11%

INTERNET SOURCES

8%

PUBLICATIONS

7%

STUDENT PAPERS

PRIMARY SOURCES

| | | |
|---|---|----|
| 1 | cdn.ps.emap.com Internet Source | 2% |
| 2 | sites.kowsarpub.com Internet Source | 2% |
| 3 | hqolc.ca Internet Source | 2% |
| 4 | Ravi Philip Rajkumar. "COVID-19 and mental health: A review of the existing literature", Asian Journal of Psychiatry, 2020 Publication | 2% |
| 5 | www.thehindu.com Internet Source | 1% |
| 6 | Submitted to Boston University Student Paper | 1% |
| 7 | doaj.org Internet Source | 1% |
| 8 | Submitted to Heriot-Watt University Student Paper | 1% |