Causes for Less Optimal Adherence of Employees to the COVID-19 Work Place Safety Guideline and Suggestions for Improvement; Employees' Perception

J. L. Himali R. Wijegunasekara, R. M. Sujeewa S. Ratnayake

Abstract: *Abstract Adherence to covid 19 work place safety guidelines needs to be optimal for the control of disease transmission among employees in work places. However, the results of an audit showed that the compliance of employees to this guideline is less optimal in a busy work place in Sri Lanka, named Suwasiripaya which is situated in a highly populated city. Therefore, this research study was conducted to identify the causes for this less optimal adherence and to provide recommendations from employees' perspective. Single day descriptive cross sectional study was conducted with 10 % of the total population taken as a convenient sample (N – 135). It was divided among staff categories, using quata sampling. Data was collected using a Self – Administered Questionnaire with both closed ended questions and open ended questions. Only 56.9 % of participants said that the information regarding the guideline was formally delivered to them. 49.2 % were aware of the facts in the guideline only to some extent. The reasons for any poor adherence to work place guideline (from employees perspective), categorized into 08 main themes and placed according to descending order of impact are as follows; 1. Limited resources (83 %) 2. Management issues (48.9 %) 3. Transport problems (36.2 %) 4. Poor attitudes (35.1 %) 5. Wrong practices (34 %) 6. Inadequate knowledge (17 %) 7. Perception of No gaps (5.3 %) and 8. Physical problems (4.31 %). Suggestions from employees to improve adherence to work place guidelines, categorized into 07 main themes and placed according to descending order of impact is as follows; 1. Managerial changes (45.4 %) 2. Personal measures (43.2 %) 3. Staff education (43.3 %) 4. Change duty rosters (39.2 %), 5. Supervision (35.1 %), 6. Law enforcement (13.4 %) and others (3.1 %). Answering to this questionnaire itself seems to be an eye opener to the employees to identify the areas they should focus more at this critical period.*

1. Introduction

Novel beta – corona virus (2019 – nCoV) or Covid-19 is the pandemic out - break of Severe Acute Respiratory Syndrome Coronavirus - 2 (SARS-CoV-2) respiratory illness [1]which has infected more than 40 Million peopleand caused more than 01 million deathsin more than 200 countries all over the world since 31st of December[2]and still continue to spread further, resulting in a devastating public and occupational health crisis[3].

WHO and many other relevant authorities are providing with necessary technical guidance in the form of guidelines, protocols, policies and procedures to instruct the countries and the people for the control of disease transmission, control of patient load and the increasing number of deaths. These technical guidance provideswith accurate information to enhance the required knowledge to translate to essential practice[3,5,6,7,8,9].

Worldwide, all the countries are practicing these guidelines, developed internationally and nationally according to the need of the country.New guidelines are expected to change the human behavior and they are critical to success. However, there are possible gaps in the implementation process in almost every country explaining the existing failure to control the disease as expected [2].

Sri Lanka too has been combating with the disease for the whole period using numerous infectious disease control measures in a very systematic manner.[10]. Subsequently, lock down was released for employment,still trying to ensure strict adherence to guidelines for work place safety for various sectors in the country issued by the directorate of environment and occupational health, Ministry of Health[12].

"Suwasiripaya" is the busy head - quarters of Ministry of Health and the focal point of the public health system in Sri Lanka. It liesin a highly populated location in the capital city, Colombo and more than 1000 staff members are employed in a very constrained infrastructure. With respect to COVID - 19 transmission, it is also another work place requiring good compliance among employees with work place safety guidelines. The image of behaving as a role model also needs to be safe guarded.

Results of an audit carried out in June 2020 in "Suwasiripaya" has identified less optimal compliance to work place guideline by the employees. Out of the administrative requirementsidentified in the guideline; availability of attendance schedule; attention on high risk when scheduling duties; and appointing special officers in units for supervision of covid preventive measures; have had only 52.3%, 43% and 30% compliance respectively. Only 26% were compliant with "different time intervals allocated for lunch" and only 40%, 35.4%, 27% and 20% compliance have been seen with hand washing after touching documents, hand washing after touching objects, social distancing and controlling outsiders visiting the place. Further, 18.5% were never compliant with maintaining social distancing while eating. With regard to the office cleaning measures described in the guideline; only 30% compliance was seen with washing office floors and office instruments at the expected frequency. Only 28.5% compliance was seen with maintaining proper ventilation. [13]

Therefore, this research study was conducted to identify the causes for this less optimal adherence of employees to COVID- 19 work place safety guidelineand to provide with recommendations from theirperspectiveto upgrade the situation. The results of the study will enable to map a way forward so as to improve worker practices resulting in improved work place safety.

2. Objectives

To identify causes for less optimal adherence of employees to the COVID -19 work place safety guideline and suggestions for improvement, according to the perception of employees in 'Suwasiripaya", Colombo, Sri Lanka.

3. Methodology

It is a descriptive cross sectional study conducted in "Suwasiripaya" i.e. head quarters of Ministry of Health, Sri Lanka.

There are number of basic units; namely, office of the Minister, office of the Secretory to the Health, offices of 07 Additional Secretaries,10 Assistant Secretaries,11 Deputy Director Generals, and finally 32 Directors.

The total population of 1350 staff members, permanently employed in these units can basically be categorized into eight categories namely, administrative staff (60), accountants (10), medical officers (48), development officers (277), public/health management assistants (348), karyalakaryasahayaka (office assistants) (55), saukyakaryasahayaka (health care assistants) (362) and drivers (191).

The total population of 1350 staff members who are currently working at the premises of "Suwasiripaya" was taken as the study population.Units and employees in active operation on the day of the survey period were included.Employees who were on distant working on the day of the survey were excluded.10 % of the total population was taken as a convenient sample size because the findings were urgently sought to identify results to take corrective measures. Calculated sample size (N = 135) was divided among staff categories,in proportion to the number of staff working in each category using quata sampling technique.

Data was collected using a Self – Administered Questionnaire. It consisted of both closed ended questions and open ended questions. It was a single day survey.Care was taken to involve all the categories of staff representing almost all the units in "Suwasiripaya."Data was collected from consented participants. Confidentiality and data security was maintained.

Answers for closed ended questions were quantitatively analyzed and answers for open ended questions were thematically analyzed.

4. Results

Table 1: Distribution of demographic characteristics of employees

Characteristic (N = 130 responded)	Frequency	Percentage %
Staff category		
Manager	11	8.5
Medical Officer	11	8.5
Development Officer / Management Assistant	65	50.0
KaryalaKaryaSahayaka	9	6.9
SaukyaKaryaSahayaka	14	10.8
Driver	20	15.4
Gender		
Female	74	56.9
male	56	43.1
Age Category		
20-30	31	23.8
31-40	53	40.8
41-50	38	29.2
51-60	6	4.6
>60	2	1.5
Education level		
O/L	19	14.6
A/L	53	40.8
Graduate	58	44.4
Service period		
<10	80	61.5
11-20	29	22.3
21-30	20	15.4
>30	1	0.8
High risk conditions		
Diabetes	3	2.3
Heart disease	3	2.3
Lung disease	0	0
Kidney disease	0	0
Other immune deficiencies	1	0.8
Not belong to any above	123	94.6
Risk assessments done on you		
Yes	11	8.5
No	119	91.5

Table 2: Delivery of information stated in the work place safety guideline

Characteristic (N =130 responded)	Frequency	Percentage %
Formal delivery of information regarding the disease		
Yes	74	56.9
No	56	43.1
Awareness of the facts in the work place safety guideline		
Very clearly	58	44.6
To some extent	64	49.2
Not at all	8	6.2
Channel/s of receiving this information		
By self reading	77	59.2
From peers	18	13.8
From superiors	18	13.8
From head of the unit	9	6.9
In a special meeting	3	2.3
By many ways	5	3.8
Adequacy of knowledge about the facts in the guideline		
Very adequate	32	24.6
Adequate	52	40.0
Moderately adequate	29	22.3
Not adequate	17	13.1

Only 56.9% said that the "information regarding the guideline was formally delivered to them".49.2% were aware of the facts in the guideline "only to some extent". 59.2% had received information "by reading themselves" and only 13.8% had received "from the heads of units". Knowledge about the guideline was "only moderately adequate or not adequate" in total of 35.4%.

Reasons for any less optimal adherence to the work place safety guideline according to perception of employees
The responses were categorized into 08 themes. The number and the percentage of respondents who have given different responses under each theme were calculated and summarized in the table below.

Table 3: Reasons for any less optimal adherence to the work place safety guideline according to perception of employees under 08 themes

No	Response category / Responses (Number and Percentage) (N = 94)	Inadequate Knowledge	Poor attitudes	Wrong practices	Limited resources	Inefficient management	Physical problems	External environment	Perception of "No gaps"
	1. Inadequate Knowledge								
1	Ignorance	2(2.1%)							
2	Different knowledge levels among staff	3 (3.2%)							
3	Knowledge of security officials is low	2 (2.1%)							
4	Knowledge of cleaning personnel is low	5 (5.3%)							
5	Not understanding the risk	4 (4.3%)							
	Total	**16 (17%)**							
	2. Poor attitudes								
6	Carelessness		9 (9.6%)						
7	Not respecting instructions		7 (7.4%)						
8	Staff is not self - disciplined		5 (5.3%)						
9	Not big fear among people as patient load is low		3 (3.2%)						
10	Difficult to adopt to the new lifestyle quickly		2 (2.1%)						
11	Narrow mindedness regarding the disease		1 (1.1%)						
12	Dissimilarities in flexibility		4 (4.3%)						
13	Considering the guidelines as jokes		2 (2.1%)						
	Total		**33(35.1%)**						
	3. Wrong practices								
14	Unnecessary movements			14 (14.9%)					
15	Not fully conscious			7 (7.4%)					
16	High exchange of documents between units			7 (7.4%)					
17	Forgetfulness			4 (4.3%)					
	Total			**32 (34.0%)**					
	4. Limited resources								
18	Shortage of masks and sanitizers and sanitary items				4 (4.3%)				
19	Using common items				22 (23.4%)				
20	Crowded office rooms				18 (19.1%)				
21	Public transport is not adequately spacious				26 (27.7%)				
22	Staying in boarding places				8 (8.5%)				
	Total				**78 (83.0%)**				
	5. Inefficient Management								
23	Visitors are not controlled					16 (17.0%)			
24	Not enough instructions given					7 (7.5%)			
25	No correct monitoring					7 (7.4 %)			
27	Time management issues					3 (3.2%)			
28	Heavy work load					6 (6.4%)			
29	Theoretical instructions are not practical in work places					7 (7.4%)			
	Total					**46 (48.9%)**			
	6. Physical problems								
30	Difficult to breath while wearing masks						4 (4.3%)		
31	Frequent sneezing while wearing masks						1 (0.01%)		
	Total						**5 (4.31%)**		
	7. Transport problems								
32	Public transport is not adequately spacious							26 (27.7%)	
33	Staying in boarding places							8 (8.5%)	
	Total							**34 (36.2%)**	
	8. Perception of "No gaps"								

34	No deficiencies in adherence to instructions							5 (5.3%)
	Total							**5 (5.3%)**
	Total responses = 249 Total Number of participants who had answered the open ended question (1) = 94							

The reasons for any poor adherence to work place guideline (from employees perspective), categorized into 08 main themes and placed according to descending order of impact are as follows; 1. Limited resources (83%) 2. Management issues (48.9%) 3. Transport problems (36.2%) 4. Poor attitudes (35.1%) 5. Wrong practices (34%) 6. Inadequate knowledge (17%) 7.Perception of "No gaps" (5.3%) and 8. Physical problems (4.31%)

Very important reasonsidentified for poor adherence are;1. Public transport is not adequately spacious (27.7%) 2.Using common office items (23.4%), 3. Crowded office rooms (19.1%), 4. Visitors are not controlled (17%), 5. Unnecessary movements (14.9%) and 6.Carelessness (9.6%).

Some other important reasons mentioned are; 1.No correct monitoring (7.4%) 2. High exchange of documents between units (7.4%) 3. No fully conscious (7.4%) 4. Not respecting instructions (7%) and 5. Knowledge of cleaning personnel is low (5.3%).

A few said that there are no deficiencies in adherence to instructions (5.3%)

Suggestions to improve employee adherence to work place safety guideline according to perception of employees
The responses were categorized into 07 themes. The number and the percentage of respondents who have given different responses under each theme were calculated and summarized in the table below.

Table 4: Suggestions to improve employee adherence to work place safety guideline according to perception of employees under 07 themes

No	Responses (Number and Percentage) (N = 97) / Response category	Individual measures	Staff education	Super-vision	Law enforcement	Change duty rosters	Managerial changes	Other comments
1.	**Personal measures**							
1	To adhere with instructions	2 (2.1%)						
2	To implement these suggestions	2 (2.1%)						
3	Self - discipline and individually follow safety measure	8 (8.2%)						
4	To improve self - interest and commitment to safeguard own safety	5 (5.2%)						
5	Be alert and suspicious	4 (4.1%)						
6	Keep an instant sanitizer with us	11(11.3%)						
7	To change masks every 5 hours	3 (3.1%)						
8	Take natural food only	7 (7.2%)						
	Total	**42(43.2%)**						
2.	**Staff education**							
9	Staff education regarding the disease		14(14.4%)					
10	Health education regarding food safety		5 (5.2%)					
11	Educate the staff on social distancing and sanitation		8 (8.2%)					
12	Sent written information to every unit separately		3 (3.1%)					
13	Educate heads of units to strengthen health security		5 (5.2%)					
14	Display correct use of masks in vedios and leaflets with a projector in canteen and in reception		2 (2.1%)					
15	Frequent reminders regarding hand washing and distancing		5 (5.2%)					
	Total		**42(43.3%)**					
3.	**Supervision**							
16	Recruit supervising officers			8 (8.2%)				
17	Higher ranked officials should be appointed for monitoring			5 (5.2%)				
18	Increase supervision			7 (7.2%)				
19	Daily progress review			6 (6.2%)				
20	Frequent evaluation of performance			3 (3.1%)				
21	Supervision by external party			2 (2.1%)				
22	Supervising staff should make social distancing compulsory and stop ill people to come for work			3 (3.1%)				
	Total			**34(35.1%)**				
4. Law enforcement								
23	Enforce a law to adhere to guidelines				8 (8.2%)			
24	Implement a punitive procedure				4 (4.1%)			

25	Higher authority should issue orders to the immediate supervisors to implement these measures				1 (1.0%)			
	Total				**13(13.4%)**			
5. Change duty rosters								
26	Limit the staff to attend work					12(12.4%)		
27	Change office work to work from home					13(13.4%)		
28	Bring down staff for work in a systematic way, in a time table					6 (6.2%)		
29	When preparing rosters distance from home should be considered					4 (4.1%)		
30	At present all the staff has to report for duty daily					3 (3.1%)		
	Total					**38(39.2%)**		
6. Managerial changes								
31	To improve space in work environment						3 (3.1%)	
32	Provide adequate supplies of sanitizers, face masks and gloves						8 (8.2%)	
33	Make face masks freely available at a low cost						4 (4.1%)	
34	Provide better quality face masks						2 (2.1%)	
35	Implement a program to improve attention						1 (1.0%)	
36	Take measures regarding cleaning the unit						5 (5.2%)	
37	To reduce the service recipients to enter units						12(12.4%)	
38	Provide necessary forms for visitors to collect them selves						2 (2.1%)	
39	Develop a transport system with office vehicles						6 (6.3%)	
40	Take practical decisions						1 (1.0%)	
	Total						**44(45.4 %)**	
7. Other comments								
41	As the condition is under control, implementation is adequate							3 (3.1%)
	Total							**3 (3.1%)**
	Total responses = 216 **Total Number of participants who had answered the open ended question (1) = 97** **Responses given by one respondent = 2.23**							

Suggestions from employees to improve adherence to work place guidelines, categorized into 07 main themes and placed according to descending order of impact is as follows; 1. Managerial changes (45.4%) 2. Personal measures (43.2%) 3.Staff education(43.3%)4. Change duty rosters (39.2%), 5. Supervision (35.1%), 6. Law enforcement (13.4%)and others (3.1%).

Very important suggestions to improve adherence are; 1. Staff education regarding the disease (14.4%) 2. Change office work to work from home (13.4%) 3. Limit the staff to attend work (12.4%) 4. To reduce the service recipients to enter units (12.4%) 5. Keep an instant sanitizer with them (11.3%) 6. Recruit supervising officers (8.2%) 7. Self - discipline and individually follow safety measure (8.2%) and 8. Educate the staff on social distancing and sanitation (8.2%).

Some other important suggestions mentioned are; 1.Enforce a law to adhere to guidelines (8.2%) 2. Daily progress review (6.2%) 3. Provide adequate supplies of sanitizers, face masks and gloves (8.2%) 4. Develop a transport system with office vehicles (6.3%) 5.Higher ranked officials should be appointed for monitoring (5.2%) 6. Frequent reminders regarding hand washing and distancing (5.2%) 7. When preparing rosters distance from home should be considered (4.1%) and 8. Frequent evaluation of performance (3.1%)

A few had said 1. At present all the staff has to report for duty daily (3.1%) and 2. As the condition is under control, implementation is adequate (3.1%)

5. Discussion

Compliance to guidelines in response to covid- 19 pandemic reduces the likelihood of both contracting the virus and infecting others. To implement full compliance to guidelines is doubtful in a democratically adopted society. However, it is in managers hands to maximize the effectiveness of the implementation process of guidelines.

Managers should be well aware of the technical facts explained in the guideline, should make the responsible personal educated, provide adequate resources for implementation, motivate the responsible people to comply with the guideline, frequently reminding and monitoring their compliance and take corrective actions where the compliance seems to be poor.
Most of the above deficiencies would have been not there if the employees had been well educated regarding the facts in the guideline. This suggests that guideline had not been well communicated with the employees. Communication could have been further limited by poor literacy of English language among employees. Therefore, addition effort needs to be made to translate guidelines to Sinhala and to educate them in Sinhala, the native and the only language they are fluent in reading. In addition, this guideline could have been prepared at several levels targeting different categories at different levels of understanding.

In particular, Guidelines should be considered as very important documents to guide people in the expected direction. Attention should be paid on each and every

instruction given, especially in infection control measures because one instruction not followed could act as the sole source of disease transmission. Further, if guidelines for work place safety are not fully practiced, there is a very high chance of breaching social distancing in this congestedstudy settingwhich can lead to easy person to person transmission of the disease and creation of a cluster even if a single person happens to contract the disease.

Inadequate knowledge, poor public transport, using common office items, crowded office rooms, visitors are not controlled, unnecessary movements,carelessness, poor monitoring, high exchange of documents between units had been identified as causes for less optimal adherence to the Covid 19 work place guideline.

Strengthening personal protective measures, staff education, strengthening supervision, law enforcement, preparation of suitable duty rosters, strengthening crowd control measures, had been identified by the employees as recommendations to improve compliance with this guideline. Answering to this questionnaire itself seems to be an eye opener to the employees to identify the areas they should focus more at this critical period.

References

[1] Health circular by DGHS on 2020.01.26, Ministry of Health, " Interim summary guidelines for clinical management of patients with novel corona virus 92019 – n CoV"

[2] European Centre for Disease Prevention and Control, an Agency of the European Union, Daily Epidemiological update.

[3] In the face of a pandemic: Ensuring safety and health at work- Geneva: ILO 2020.

[4] "Sri Lanka Preparedness & Response Plan, COVID-19", April 2020, Ministry of Health and Indigenous Medical Services, Sri Lanka, Version 1: 9th April 2020.

[5] World Health Organization, "Critical preparedness, readiness and response actions", 19 March 2020.

[6] World Health Organization, "Getting your workplace ready for COVID-19", 20 March 2020.

[7] World Health Organization, "Consideration for public health and social measures in work place in the context of COVID- 19", 10 May 2020.

[8] World Health Organization, "Responding to community spread of COVID – 19", 7 March 2020.

[9] World Health Organization, "COVID-19 Technical Guidance: Guidance for schools, workplaces & institutions"

[10] "Combatting covid – 19; Sri Lankan approach", researched and conceptualized by State Intelligence Service, Presidential task force on covid 19, The Ceylon chamber of commerce; 10 May 2020.

[11] Circular on 28.05.2020 by DGHS, Ministry of Health, "Towards a new normal - Instructions for selected public activities/work settings for the prevention and control of COVID -19.

[12] Health Circular on 02.04.2020, "Guidelines on COVID-19 preparedness for workplaces", DDH (EOH & FS), Ministry of Health.

[13] Audit "To assess the compliance of adherence of employees working in 'Suwasiripaya to work place safety guideline"; Office of the Deputy Director General (Dental Services); Ministry of Health; in June 2020.