

COMPLIANCE OF HEALTH CARE WORKER TOWARDS PPE (PERSONAL PROTECTIVE EQUIPMENT) IN DEPARTMENT OF PSYCHIATRY DURING COVID-19 PANDEMIC – A CROSS SECTIONAL SURVEY

Dr Vekneswaran Devadas¹, Jasmin Singh¹, Ronan Byrne², Andreaa Oana Bucur³, Gomalata Devadas⁴, Colin O'Donnell¹,

¹Department of Psychiatry, Letterkenny University Hospital, Letterkenny, Co Donegal

²Adult Mental Health Unit, Sligo University Hospital

³CAMHS, Linn Dara, Kildare ⁴MAHSA University, Malaysia

BACKGROUND:

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), cause COVID-19 (Coronavirus Disease), a respiratory illness that presents with cough, fever and usually accompanied by pneumonia. The initial outbreak took place in Wuhan, China in December 2019. Then it rapidly spread throughout the world, whereby World Health Organization (WHO) declared outbreak end of January 2020 and pandemic on the 11 March 2020. It transmits mainly through droplet produced by infected person (symptomatic or asymptomatic) in close contact. Hence, there are various safety measures placed globally to stop the spread. As a result, PPE become the prime safety measure for HCW (Health Care Work).

OBJECTIVE

Measuring the compliance and identify the barriers for use of appropriate personal protective factor.

METHODS

Convenience sampling/Cross sectional survey – a set of questionnaires was given to all HEALTH CARE WORKER (HCW) in the Department of Psychiatry. Based on age group the compliance was measured by identifying possible barriers. The results were compared with ECDC guidance.

COMPARISON STANDARD

ECDC (European Centre for Disease Prevention Control) Guidance for wearing and removing personal protective equipment in healthcare settings for the care of patients with suspected or confirmed COVID-19

Audit Commenced: April 2020 Re-Audit :April 2021

RESULTS

20 questionnaires were distributed in Department of Psychiatry, but only 15 returned during each cycle.

PRE-INTERVENTION COMPLIANCE

AGE/CATEGORY	A	B	C	D	E	F	G
	Y/N						
18-25	2/1	2/-	1/1	1/1	1/-	1/1	-/2
26-44	6/1	5/3	9/2	7/3	-/8	3/5	-/8
45-64	5/-	5/-	2/-	3/-	-/6	1/4	-/5
65>above	-/-	-/-	-/-	-/-	-/-	-/-	-/-

A: PPE Training

B: Reuse of PPE

C: Access to sufficient PPE

D: Uncomfortable

E: Adverse reaction to PPE

F: Therapeutic Relationship

G: Purchasing own PPE

During the first cycle of the audit in the beginning of the pandemic, most of the HCW manage to accomplish PPE training except for two. Three of the HCW reuse the PPE and did not have sufficient access to PPE. Eleven of the HCW reported uncomfortable wearing the PPE. One of the HCW reported to have adverse effect, and in addition five of the HCW reported to have affecting their therapeutic relationship with the patients. However, none of the HCW had to buy the PPE.

INTERVENTION:

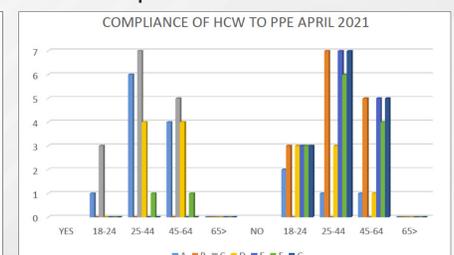
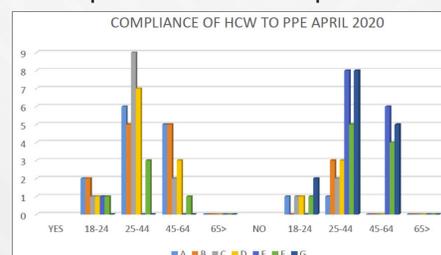
Ward manager were contacted, recommended the following;

- To ensure all HCW attended PPE training
- To supply sufficient PPE and also facilitate screen for therapeutic intervention
- To ensure, leaflet and poster on using PPE is placed in common area, assessment room and clinical room.

POST INTERVENTION COMPLIANCE

AGE/CATEGORY	A	B	C	D	E	F	G
	Y/N						
18-25	1/2	-/3	3/-	-/3	-/3	-/3	-/3
26-44	6/1	-/7	7/-	4/3	-/7	1/6	-/7
45-64	4/1	-/5	5/-	4/1	-/5	1/4	-/5
65>above	-/-	-/-	-/-	-/-	-/-	-/-	-/-

When re-audit a year later, four of the HCW did have PPE training. Nevertheless, no one re-used the PPE. All of them has sufficient access to PPE. Only seven of the HCW reported uncomfortable wearing the PPE and none reported to have adverse reaction to PPE. Two of the HCW still reported that, the PPE is affecting their therapeutic relationship. None of the HCW purchased PPE.



CONCLUSION

Overall, the HCW in Department of Psychiatry has been compliant to PPE use. Although in the beginning of the pandemic, they had to re-use the PPE which is due to insufficient supply. However, after recommendation upon completing the first cycle of audit, significant result noticeable. None of the HCW had to re-use the PPE. Although there was a surge that HCW did not get PPE training at the time of the re-audit, (possibly attributed by new recruitment of staffs) the nurse manager and clinical director ensured the HCW get their PPE training soon. There is drop in 'therapeutic relationship' from five down to two on re-audit. This was due to the availability of screen between the HCW and the patient that lead to establish a better therapeutic relationship.

REFERENCES

- The Doctors Guide on Critical Appraisal – Fourth Edition, Narinder Gosall & Gural Gosall
- Guidance for wearing and removing personal protective equipment in healthcare settings for the care of patients with suspected or confirmed COVID-19
- <https://www.ecdc.europa.eu/en/publications-data/guidance-wearing-and-removing-personal-protective-equipment-healthcare-settings>
- Investigation of a COVID-19 outbreak in Germany resulting from a single travel-associated primary case: a case series (M Bohmer et al)
- [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30314-5/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30314-5/fulltext)
- High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice – Skagit County, Washington, March 2020 – (L HAMNER et al)