



PSYCHOLOGICAL DEFENCE MECHANISMS DURING THE COVID-19 PANDEMIC: A CASE SERIES

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INTRODUCTION

- 11th of March 2020- WHO declared COVID-19 at a pandemic level across the world
- Unusual time, in that most of world population has been affected by an outbreak of disease simultaneously
- Social distancing has been one of the primary mitigation strategies used across the World

SOCIAL MEDIA ANALYSIS



■ Twitter analysis

- posts related to implementation and negative emotions around social distancing largely dominated
- combined with topics of social disruption and adaptation

■ Weibo posts (Chinese equivalent to twitter)

- suggested that negative emotions (for example anxiety, depression and indignation) and sensitivity to social risks increased
- scores of positive emotions (for example Oxford happiness) and life satisfaction decreased
- Those affected concerned more about their health and family
 - less about leisure and friends

CAUSES OF DISTRESS

- Recent observational cross-sectional study conducted amongst anaesthesiologists and nursing staff at a tertiary academic medical centre in Singapore
 - Psychological distress - 37.4% of participants
 - At least moderate anxiety- 30.7%
 - Depression-30.0%
- Psychological distress was significantly associated with
 - presence of multiple co-morbidities in staff
 - direct involvement in COVID-19 patient care
 - receiving a quarantine order
 - redeployment outside normal professional boundaries

CAUSES OF DISTRESS

- Top 2 concerns
 - Perceived risks of infection- 83.6%
 - infecting family members- 78.0%
- Further studies have shown similar negative impacts on the mental health of healthcare workers
- Both individual and wider working team, can experience psychological stress and react to that perceived threat in different ways from one another
 - depending on a variety of factors including psychological reserve and supervision support
 - Eg elderly or vulnerable family members, area of healthcare worked in (ICU v psychiatry)
 - Bio/ psycho/ social model impacts response

DEFENCE MECHANISMS

- Any perceived stress to an individual can provoke psychological defence mechanisms
- Using psychoanalytic theory, a defence mechanism is described as;
 - an unconscious psychological strategy,
 - with or without resulting behaviour,
 - which aims to reduce or eliminate anxiety arising from unacceptable or potentially harmful stimuli
 - can result in healthy or unhealthy consequences depending on the circumstances and frequency with which the mechanism is used

DEFENCE MECHANISMS

- The construct of defence mechanisms initiated in the psychoanalytic field but in recent years has been used increasingly in various psychological and psychiatric approaches
- Defined in DSM5- 'Mechanisms that mediate the individual's reaction to emotional conflict and external stressors'
- Supports argument that defence mechanisms are not only a psychoanalytic concept
 - not just theoretical

DEFENCE MECHANISMS

- Can become pathological when persistent use leads to maladaptive behaviour
 - resulting in an adverse effect on an individual's social functioning, physical or mental health
- Defence mechanisms protect the mind, self and/ or ego from perceived negative consequences
 - provide protection from a situation with which one cannot currently cope
- Vaillant proposed that response to stress can be viewed from two vantage points
 - pathological or coping

STRESS

- Pathological responses to stress
 - impairment of brain function via chemical or structural changes
 - possibly leading to diagnosable conditions such as post-traumatic stress disorder
- Coping responses to stress can be more within control of the experiencing individual-
divided into three broad categories
 - voluntarily eliciting help from appropriate others (e.g. by seeking social support)
 - voluntary strategizing (e.g. by gathering information, anticipating danger, and rehearsing responses to danger)
 - involuntary defences (similar to fever and inflammatory response in physical health) which involve unconscious homeostatic mechanisms that reduce the disorganizing effects of sudden stress

INVOLUNTARY DEFENCES (VAILLANT)

- Generally not conscious (with the exception of some mature responses)
- Reduce distressing effects of both emotional and cognitive dissonance
- To the unaware individual, defences can be unnoticeable, but to the observer they can appear odd or even irritating
- Can be defined discreetly from one another, in four different categories
 - Psychotic, immature, neurotic, mature

INVOLUNTARY DEFENCES (VAILLANT)

■ **Psychotic defences**

- allow the individual to reconstruct external experiences and eliminate the need to cope with reality
- Eg delusional projection, denial, distortion

■ **Immature defences**

- lessen distress and anxiety produced by a perceived threat or an uncomfortable reality
- Eg Acting out, hypochondriasis, projection

INVOLUNTARY DEFENCES (VAILLANT)

■ **Neurotic defences**

- allow an individual to avoid feelings of guilt and anxiety, particularly in relation to aggressive tendencies and sexual desires
- can facilitate short-term advantages in coping with stress
- longer term implementation can lead to issues within both intimate and more formal relationships
- Eg Displacement, dissociation, reaction formation, repression

■ **Mature defences**

- more conscious processes which enhance pleasure and feelings of control
- These defences are proposed to be dynamic and reversible
- Not necessarily negative to an individual
 - Can be adaptive or creative, but can also be harmful and pathological
- Eg altruism, humour, sublimation

DEFENCE MECHANISMS RATING SCALES (PERRY)

- 7-level hierarchical organization of defence mechanisms
- Inspired by Vaillant's work
- However used empirical validation and benefited from research perspective and consensus for definitions, functions and examples of specific defences
 - thus is considered the gold standard theory for the assessment of defence mechanisms
- Number of further clinically validated ratings scales derived from this

DEFENCE MECHANISMS DURING COVID PANDEMIC

- Proposed that defence mechanisms associated with the COVID-19 pandemic could be more typically immature
 - anxiety over the viral outbreak can be temporarily alleviated by alteration of painful mental contents and/or radical distortion of external reality
- Anxiety can reduce levels of work and functioning
 - much of the population stopped working in their regular jobs
 - therefore going back to a more immature level of existence
- The extent of psychological symptoms presenting in individuals seem to be proportionally related to the extent of employed defence mechanisms

DEFENCE MECHANISMS DURING COVID PANDEMIC

- Psychological health is closely related to the ability to appropriately use a variety of defences in challenging contexts
 - excessive use of immature defences is a risk factor for the development of psychopathology
- Despite these described negative impacts of defence mechanisms, they have also played an important role as protective factors against psychological distress during the COVID-19 pandemic
 - Utilisation of defence mechanisms can promote mental resilience
 - Higher overall defensive functioning was associated with lower levels of depression and post-traumatic stress symptoms in an Italian cohort

PERSONAL EXPERIENCE

- Involved in co-ordinating the 'on-call' rota for a large teaching hospital in Scotland
 - ST4-7s were joined onto CT1-3 rota
 - Temporary psychiatry specific assessment unit set up to take pressure of A&E

- Worked together with members of staff across MDT, including senior and junior medical staff, nursing staff, and administration support staff

- Staff redeployed to roles and departments they may not be routinely familiar with
 - Eg roles where they have to deal with acute medical issues, something that a number of staff members may not encountered on a consistent basis for a number of years

PERSONAL EXPERIENCE

- Further challenges presented by way of staff having to change their on call hours at short notice
 - anecdotal higher rate of staff sickness and isolation
 - disrupting regular routines and requiring flexibility
- Caused concerns for colleague's physical health
 - increased working hours for those having to cover for those colleagues
- Moved to Australia in August 2020
 - Encountered similar dynamics amongst staff
 - Complex and challenging behaviour rehab unit => quarantine unit

OBJECTIVES

- Using case series
 - aims to describe a range of psychological defence mechanisms encountered within colleagues in relation to the COVID-19 pandemic
 - these defence mechanisms are then explored in further detail

METHODS

- Author encountered varying psychological defence mechanisms, both within himself and in other members of the multidisciplinary team
- These have been illustrated in the attached clinical vignettes, which have been modified to protect anonymity
- Case series are uncontrolled study designs which have an increased risk of bias
 - Despite this, important influence on the medical literature
 - can form the foundations for more in depth, focused studies

METHODS

- Clinical vignettes were recalled several weeks after the author had witnessed the events of them
 - number of events were not directly witnessed by the author
 - nor were focused interviews or further qualitative research carried following these encounters
 - clinical vignettes given more to illustrate examples and promote further thinking in the reader of similar encounters they may have within their own practice
- acknowledged that the description of the cases may be influenced by the authors internal bias and own interpretation of events

CLINICAL VIGNETTES

- Denial
- Hypochondriasis
- Altruism
- Sublimation
- Humour

DENIAL

- As the frequency of news reports on the virus spreading across the world from Wuhan, China increased, a consultant psychiatrist did not want to accept the reality of this
- The reality of the situation was too threatening and anxiety provoking
- Therefore it was easier from a cognitive perspective to deny the virus being a real threat
- This caused the consultant to speak out to fellow staff about precautions being unnecessary
- This caused frustration and upset, amongst other members of the team, who could not understand why their colleagues were not taking this threat as seriously when starting to implement precautionary action

DENIAL

- When the virus was in its initial stages of spreading in Wuhan, China, there was widespread **denial** of the virus being a threat to life in the Western world
 - refusal to accept external reality because it is too threatening, which can reduce anxiety
- Can also involve lack of acceptance of internal reality
 - easier for some individuals to refuse to accept the virus was a threat, despite objective evidence to the contrary or indeed ignorance

HYPOCHONDRIASIS

- A psychiatry trainee started to think more and more about the impact of catching 'the virus'
- They had a had a diagnosis of asthma and several elderly family members in residential care
- They recurrently asked their peers about how to minimise the risk of catching the virus, and checked up on daily guidelines multiple times a day.
- Despite peers offering advice and support, the psychiatry trainee did not accept this advice
- It was perceived by the trainee that their colleagues were not being affected as much by COVID-19 as the trainee themselves, and therefore their advice was deemed not good enough
- The trainee did not follow advice given to them by colleagues, despite repeatedly asking for this
- Eventually, the stress levels became too high for the trainee to cope and they signed themselves off work with stress

HYPOCHONDRIASIS

- Individual repetitively voices a complaint or series of complaints, apparently to seek help
- Despite this, covert feelings of, hostility or resentment towards a potential help provider are expressed simultaneously by the subject's rejection of the suggestions, advice, or other offerings
- The complaints may consist of either somatic concerns or life problems
- Despite the individual being offered a potential helpful response from those they are seeking it from, they will reject this

HYPOCHONDRIASIS

- Many health professionals and their family members have become unwell with COVID-19
- Ranged from minor symptoms that can be managed at home in isolation, to more serious and potentially life threatening symptoms that require hospital admission
- Some individuals have perceived symptoms consistent with COVID-19 and therefore have had to take time off work to isolate as per government guidelines

HYPOCHONDRIASIS

- Whilst repeatedly seeking reassurance from colleagues regarding physical health and recovery from the resulting illness
 - some individuals have harboured resentment towards those who have not fallen ill personally
 - others do not have vulnerable relatives who are more likely to become seriously ill
- These individuals may reject advice from those they resent on recovering from COVID-19
 - not follow guidelines with regard to reducing spread of the virus
 - behave in a more hostile manner towards an intended helpful responder

HYPOCHONDRIASIS

- Hypochondriasis is positively correlated with development of depression and anxiety symptoms
- Development of features of hypochondriasis has specifically predicted COVID-19 pandemic-related psychopathology in adults

ALTRUISM

- A psychiatry trainee took it on themselves to take on multiple extra shifts to cover for colleagues who were self-isolating
- His planned holiday to Europe had been cancelled so he had time to allocate to work and did not over-exert himself
- He gained satisfaction knowing that he was able to help out others by working during the outbreak and combatting the virus

SUBLIMATION

- A psychiatry trainee felt irritated at the fact that he had to go into work to do excessive hours whilst his partner has been placed on furlough and was getting paid to sit at home and play computer games
- Instead of letting this bring his spirit down however, he volunteered to create the new rota for trainees during COVID-19 to cover for staff shortages
- This converted some of his negative energy into more positive thoughts as he felt he was making a difference to others
- Another example
 - myself getting irritated at colleagues behaviour and then writing this paper!

HUMOUR

- A member of nursing staff donned full PPE to demonstrate the current guidelines to other members of staff
- She had an unusual appearance, and when walking down the corridor did a dancing motion
- Whilst the reasons for wearing this equipment were very serious, some laughter enhanced the mood in what could have been otherwise a very sombre occasion

ALTRUISM/ SUBLIMATION/ HUMOUR

- There has also been evidence of defence mechanisms during the COVID-19 pandemic that have provided more benefit to the local service
- Staff members have channelled their energy in **altruism** or **sublimation**, where they have focused their energy on getting involved in stretching their skills and physical resources in face of challenge
- This has included getting involved in additional services
 - PPE mask fitting
 - working extra on call shifts to cover for colleagues who are off sick
- **Humour** has also been implemented during working hours to help mentally deal with very stressful and challenging environment of day to day work

ALTRUISM/ SUBLIMATION/ HUMOUR

- Altruism, sublimation and humour are examples of high adaptive defences
 - maximize gratification
 - allow more conscious awareness of feelings, ideas, and their consequences
- In a population of cancer patients;
 - implementation of these defences correlated positively with physical and emotional functioning
 - reduced levels of anxiety and depression

PENETRATION OF DEFENCE MECHANISMS

- Defence mechanisms can be penetrated in many ways, including by confrontation and highlighting of them
- Particularly true for psychotic, immature and neurotic defences
 - mechanisms are less conscious
- Wide variety of psychological therapy methods, including psychodynamic psychotherapy
- Recent research has also shown a role for medication in managing defence mechanisms, in combination with psychotherapy

CONCLUSION

- Partial range of psychological defence mechanisms associated with the recent pandemic presented
- Likely that viewers will be able to think of other defence mechanisms that they have encountered in their own practice or within teams involved with
- Whilst these defence mechanisms are discussed in many texts as something to be learned for examinations
 - it is important to acknowledge their existence and consider their implications on day to day practice

CONCLUSION

- Whilst defence mechanisms can have a number of negative consequences as described in this article
 - they also have an important role, particularly in the case of mature defence mechanisms
 - protective factors against psychological distress and symptoms formations
- Requirement for deeper knowledge of gold-standard hierarchical organization of defence mechanisms, which considers all defences in a continuum that goes from immature to mature defensive strategies
 - Future study could objective scoring tools rather than subjective observation
- Could help increase utilisation of specific therapeutic interventions for enhancing changes from immature to mature defensive responses to stressful experiences as the COVID-19 pandemic progresses

FREE PAPER AVAILABLE ONLINE

- Walker, G. and McCabe, T., 2021. Psychological defence mechanisms during the COVID-19 pandemic: A case series. *The European Journal of Psychiatry*, 35(1), pp.41-45.
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DISCUSSION

- Any questions?
- Have people encountered similar dynamics in their own teams across the world?
- Have people encountered similar feelings within themselves?
- How have others experienced redeployment and what effect has this had on you?
- Thoughts on the concept of the unconscious?

