| Facilitators Handout produced by Dr Robert Hirst  Roberts, T., Daniels, J., Hulme, W., Hirst, R., Horner, D., Lyttle, M., Samuel, K., Graham, B., Reynard, C. Barrett, M., Umana, E., Vinagre, J., Carlton, E., Trainee Emergency Research Network (TERN), Paediatric Emergency Research Network UK and Ireland (PERUKI), Research and Audit Federation of Trainees (RAFT), Irish Trainee Emergency Research Network (ITERN), Trainee Research in Intensive Care (TRIC). *Psychological Distress and Trauma in Doctors Providing Frontline Care During the COVID-19 Pandemic in the United Kingdom and Ireland: A Prospective Longitudinal Survey Cohort Study.*  Available at SSRN: <https://ssrn.com/abstract=3760472> | |
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| Background and rationale | * Clinicians working across emergency medicine, anaesthetics & intensive care have been central to treatment of patients with COVID-19. * Pandemic has imposed unprecedented demands to workload intensity & personal health risks to clinicians. * Exposure to infectious disease outbreaks & elevated psychological distress is associated with increase rates of sickness, absenteeism, impaired work performance and development of physical and mental health problems. * Most data collected has been snapshot data – there is little longitudinal data examining the evolving and cumulative effects on the psychological wellbeing of frontline doctors. |
| Aims and objectives | * Assess prevalence & degree of psychological distress and trauma of doctors during the acceleration, peak, and deceleration phases of the first wave of the COVID-19 pandemic. * Establish which personal & professional factors were significantly associated with psychological distress & trauma. |
| Methods | * Prospective online longitudinal survey of all doctors working in EM, Anaesthetics or ICM during acceleration invited. * Distributed through training networks, training faculties or Royal College Networks via email & instant messaging groups at acceleration, peak, and deceleration phase (30 days post-peak). Avoided social media to preserve data purity. * Determination of peak for timing of peak survey determined by national case & death rates. * GHQ-12 to assess distress (all 3 surveys), IES-R to assess trauma (last 2 surveys) * Collected personal & professional factors previously associated with these factors or thought contributory by study team. |
| Inclusion and exclusion criteria | *Inclusion*:  Doctors of all grades working in EM, Anaesthetics or ICM during the acceleration phase across the UK & Ireland were invited to participate. |
| Statistics | * GHQ-12 was collected during all three surveys, IES-R collected at peak & deceleration. * GHQ-12 score for distress was >3 (using 0,0,1,1 scoring). IES-R score for trauma is >24, with probable PTSD >33. * Final analysis cohort was the group of those completing all three surveys. * Change over time in scores was examined using a repeated measures linear mixed-effect model, with survey phase as fixed effect & participant level as a random-effect. * To identify modifiers of GHQ-12 or IES-R, further models with each personal / professional factor added as a single covariate were constructed to measure the proportion of the outcome variance accounted for by that factor alone. |
| Findings | * Of 34,188 doctors working across EM / Anaesthetics / ICM in UK, the acceleration survey received 5440 responses (15.9% response rate). Follow-up responses during peak were 3896 (71.6%) and 3079 (56.6%) during deceleration. * Of final cohort, 54.8% were EM, 36.2% were Anaesthetics and 17.2% in ICM (with some working multiple specialties). * Prevalence of distress 44.7% at acceleration, 36.9% at peak, 31.5% at deceleration. Median scores higher in Anaesthetics & ICM during acceleration phase. * Prevalence of trauma 23.7% at peak & 17.7% at deceleration. Prevalence of probable PTSD was 12.6% at peak & 10.1% at deceleration. Prevalence of trauma and probable PTSD highest in EM & ICM compared to Anaesthetics. * Factors most strongly associated with distress were worry of infecting family members, worry of personal infection. * Factors most strongly associated with trauma were worry of infecting family members, exacerbation of established mental health condition, personal infection and ethnicity. * 6.9% of respondents had been diagnosed with COVID-19 by the deceleration, which was not predictive of trauma. |
| Conclusions | * Figures for distress & trauma substantially higher than for general population. * There is a degree of natural recovery, but still significant minority with residual distress * Personal factors most powerful predictor of distress & trauma – familial & personal safety & worsening established mental health conditions * Harm associated with familial & personal safety might be related to perceptions of inadequacy of PPE provided to frontline workers. * Ethnicity identified as a novel predictor of trauma. * Vulnerability to poorer psychological may be predicted by certain characteristics and potentially mitigated through targeted intervention. * As well as basic psychosocial interventions, access to appropriate psychological support is imperative. |
| Limitations | * Variations in regional peaks may have influenced accurate capturing of distress & trauma. * Could be other unaccounted for factors that have not been interrogated. * Online surveys often prone to self-selection bias. |
| Real world application | * Provides valuable longitudinal data about the impact of the pandemic. * Reveals need for further action in significant minority of doctors. * Prompts discussion around this issue. |

**Discussion Points**

1. Do the results surprise you? Why/why not?
2. What factors do we have some control over in our department?
3. Do you think the situation has changed from the first wave?
4. What barriers are there to change here? How could these be overcome?

**Facilitator “how to” guide**

**Equipment**

1. (This) Facilitator handout
2. Participant sheets (and pens / papers) (or digitial)
3. Electronic access to, or hard copies of, the paper
4. Tea, coffee, a variety of sweet-treats.

**Session plan**

1. 30-45 mins
2. Read through paper individually
3. Clarify any general questions from the group
4. Participants fill in box 1, then discuss as a group
5. Expand number of boxes per round as group get the hang of it
6. Once all boxes done, check if anyone has any further questions about the paper or the process
7. Discussion points if time

Results of discussion might inform presentation of local wellbeing initiatives or generation of ideas

Additional resources linked to EM wellbeing:

* Emergency Medicine Trainees Association Rest and Rota Charter <https://www.emtraineesassociation.co.uk/rest-rota-charter>
* Royal College of Emergency Medicine Sustainable Working resources <https://www.rcem.ac.uk/RCEM/Professionals/Professional_Development/Sustainable_Working/RCEM/ForProfessionals/Professional_Development/Sustainable_Working.aspx?hkey=2a6c65f5-6d43-4aae-9677-2c5a51506216>

Participants sheet

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