



## *Well-being and tolerance of ambiguity in times of Covid19.*

### Transcript of webinar:

KAREN

So, I think we'll make a start. Hello everybody, welcome to our next event in the ASMEBITESIZE series. The series is designed to offer supportive educational opportunities and it's really designed to connect ASME members and increase communication particularly over the past six months, and particularly in the absence of our Annual Scholarship Meeting which is usually in July each year. My name is Karen Mattick I'm on the Board of Directors at ASME and I'm specifically responsible for the ASME awards portfolio. So, I can't resist a quick plug for that first, please do look at the ASME awards website. We've got about 20 awards overall so there's really something for everybody. And there's several deadlines coming up. We've got the ASME/GMC Excellent Medical Education Award which is about £5,000, we've got Educator Development Awards, and we've got the ASME PhD and Doctoral Grants deadline coming up. So, if you're not an ASME member already it's worth signing up even just for the awards, so that's my awards plug over. I'm also Professor of Medical Education in Exeter where I've worked since 2002. My main research interests there are the experiences of junior doctors particularly their responses to clinical practice and I've been very interested in high-stakes activities like prescribing and looking at the implications of clinical practice for example on doctors' mental health. And so, I've followed up many of those interests over the past nearly 20 years and had the opportunity to work with some really fantastic people. So, I'm really delighted today to be able to host this session which is entitled 'Well-being and tolerance of ambiguity in times of Covid19'. And in just a minute I'm going to introduce two really excellent colleagues that I've got a privilege to work with in Exeter; Jason Hancock and Daniele Carrieri. And they each lead a programme of research made up of multiple projects and each of them have been working on these topics for nearly a decade themselves so these are programmes of work that were well-established before the Covid pandemic but are absolutely timely and relevant now. So, before I hand over to our two speakers, I'm going to just give a little bit of housekeeping information. The session is going to last about 45 minutes. If you want to ask questions please use the chat field and you'll be able to find that, I can see many of you have found it already which is great but if you haven't found it yet it's at the bottom of your screen. If you click on the chat then you'll be able to interact, you'll be able to ask questions, give us feedback, things that you'd like us to explain more. If at the end of the session we haven't had a chance to answer all your questions we are going to compile them and we will answer those questions afterwards and post up as a document on the ASME website afterwards. So, everybody's question will get answered eventually if not in the session. It is possible that we might invite one or more participants to expand on their comments and we might ask their permission to make their audio and video live, and if we were wanting

to ask you to do that we would ask you via the chat feed if you would be happy to do that, happy for us to add you as a temporary panellist which would allow you to expand on your comments. So, do say no if you don't feel comfortable with that and we may not do it at all but just to let you know in advance. The webinar is being recorded and the webinar will be made available on the ASME website along with any other materials. So, for example if we talk about a particular paper or something like that, we might put other resources there as well. And if you're having any technical problems during the webinar if you could email [events@asme.org.uk](mailto:events@asme.org.uk) they will help and sort you out so there's people waiting there to help you if you need it, rather than adding it into the comments field. So that's the housekeeping over. So, we're going to be hearing two short presentations. Firstly, we're going to hear from Jason Hancock on his work on tolerance of ambiguity and the implications for psychological well-being. And then we're going to hear from Daniele Carrieri who's going to talk about the care under pressure work we've been doing which is an NIHR funded programme of work focusing on doctors' mental ill health. They're each going to tell you a little bit more about their roles at Exeter before their presentations but the reason for bringing these presentations together is that you'll see that these two programmes of research are very interrelated and both topics have extreme relevance to the current Covid context. So, we hope and think that these two short presentations will set up a really interesting conversation for the second half of the webinar, so we plan to leave lots of time for questions and discussion. So, without further ado I'm going to handover to Jason.

JASON

Thank you, Karen, and thank you ASME for the opportunity to speak today and for setting up these wonderful sessions. I've really enjoyed them so far and I'm sure a lot of you have too. I'm just going to share my screen quickly here, and talk first of all a little bit about my role and then I'll just talk you through this brief presentation. And you may see that our pictures, our faces are obstructing the slides so it might be that you want to minimise the thumbnails if you want to see the full slides and these will be available for you afterwards. So, my name is Jason Hancock I'm a Consultant Liaison Psychiatrist in Devon Partnership Trust and I work in Exeter. Clinically my interest is in liaison psychiatry and medically unexplained symptoms but as Karen says I've been working on this project with Karen and with colleagues for almost a decade which is amazing really to think about that. This is something that I have been interested in for a really long time. The topic of tolerance of ambiguity and how we as doctors tolerate ambiguity and tolerate uncertainty. And as I'll briefly explain in a second, it's something that I came across quite a lot as a foundation doctor and it's something I believe is present throughout all of medicine. I'm also, as well as working as a Liaison Psychiatrist, currently working on a PhD by publication which has allowed me to bring together all of my work over the last ten years and I'm going to talk a bit about the project so far, the work so far and how it may be relevant to the current Covid 19 pandemic. So, before I start, I just wanted to touch on definitions. We often hear people talking about ambiguity, uncertainty and often though people talk about this but they often use those terms interchangeably and I think it's important just to be clear on what we mean when we talk about uncertainty or ambiguity. And this field has been really helped recently by the work of Paul Han and colleagues in clarifying these definitions. So, when I talk about uncertainty as a doctor in clinical medicine I'm talking about a situation where I am consciously aware that I do not know what the outcome will be. And uncertainty itself can be caused by many things including probability, ambiguity and complexity and when I say ambiguity, I'm talking about there being a clinical situation where there may be imprecise misting or conflicting information. So,

while I could give you lots and lots of examples of this within psychiatry to go back to a more, I guess an example I came across quite a lot when I was a junior doctor, if you take something that you may think is quite simple so for example prescribing medications like insulin, now that's something that junior doctors do every single day so it would be something I did many times a day, but if you think about the process of prescribing insulin or any medication, particularly insulin, you're often prescribing that in a situation where there may be incomplete information. So, you might not know what a person's insulin dose usually is, it might be that there's conflicting information so it might be that the person is telling you one thing or is isn't able to tell you at all what their usual dose is, their GP or their primary care provider is telling you something else, and collateral history is giving you different information. So, there may be conflicting information. In addition, you then have a patient in front of you often with great complexities, there may be other medications that have been recently introduced, there may be something else physiologically going on that are impacting on the way that the insulin is working. So, even if you take something such as the prescribing of insulin it's clear to see that often making those decisions as a junior doctor and in your clinical career you're doing so when there is significant uncertainty or ambiguity. So much so that we know that the ability to tolerate ambiguity or uncertainty seems like a really positive thing for doctors and the GMC set out in their guidelines tomorrow's doctors that it's important, it's crucial for doctors to be able to recognise uncertainty and clearly communicate this with patients and with relatives. We also know that being unable to tolerate ambiguity or uncertainty, so being intolerant of those things, are associated with significant cognitive, emotional or behavioural outcomes. And that's where some of my interest has progressed more recently and I'll talk a bit more about that in just a second. But as Karen has already said this has been a long body of work and is something that has gradually progressed over the last ten years. So, this work started when I was an F3 doctor on a medical education role in Exeter developing or producing a scale to measure levels of ambiguity tolerance in junior doctors. So, there's something called the TAMSAD that we published a number of years ago and we feel that this is a scale that's validated for use in medical students and doctors to examine levels of ambiguity tolerance. I've also had the opportunity to work with colleagues from Glasgow with veterinary students and to develop a validated scale in our population. And more recently we've also worked on a systematic review to examine the potential association between ambiguity tolerance and reduced psychological well-being. So, this has been a systematic review that has allowed us to evaluate and to review all of the literature that's out there and more importantly bring that together in a proposed conceptual model which I'll talk a little more about. I'm not going to talk about the details or the methodology of that paper that's something that was published in Medical Education this year and if you wanted to link to a podcast where I talk about that a bit more that link will be available to you at the end of this presentation. I think at the time even in February when this was published it was clear that intolerance of ambiguity could well be associated with reduced psychological well-being, and that was important at the time and I think that's something that is becoming even clearer now that that's something we should pay attention to as educators. Now what I'm going to do here is talk through some of the output of that paper. So the paper was systematic in its view, it examined all of the existing literature to see if there was evidence of an association between reduced ambiguity tolerance and reduced psychological well-being in practitioners or in medical students and doctors, and we found that on those studies that had been published there appeared to be an association between intolerance ambiguity and reduced

psychological well-being. But what we actually felt would be really important would be to try and pull this together into a conceptual model to help guide future research and help guide future research questions. So, in that paper we proposed a model where, which I'll talk through briefly now and this is a modification of that model, where it appears that intolerance of ambiguity may be associated with increased risk of stress, burnout or mental health disorders. But then there do appear to be mediating or moderating factors that may influence the relationship between those things. So, how likely an individual is to progress from intolerance of ambiguity to stress, burnout or mental health disorders for example. And one of the things that was really clear to us was that a lot of the research so far has focussed on the individual factors of doctors such as resilience rather than looking at the wider work place or the wider cultural factors that may influence. Firstly, how tolerant of ambiguity a doctor may be but also how likely a doctor may be to progress from intolerance of ambiguity to reduced psychological well-being. And in February that was really, really important and with the advancement and with the development of the Covid pandemic that now, those wider workplace and cultural factors appear even more relevant than they have ever been potentially. So, if I think about how my practice has changed since the Covid pandemic has developed I'm aware that for example I've been surrounded by doctors with brand new roles that didn't exist a couple of months ago. So, the interim F1s for example that started to work in the midst of the pandemic. I think about the systems within my own practice so the new emergency psychiatric departments that have been opened at very short notice for example. The changes to policies around healthcare, the changes to the workforce, there's been massive levels and degrees of uncertainty associated with that. And we really don't know how that will impact on our own ability to tolerate ambiguity and how that may be associated with our own risk of stress, burnout or mental health disorders. And so thinking about how we progress the research from here, for me personally I'm at the stage where I'm writing up this existing work as a PhD by publication but I think as educators and also personally I think it's really important to now consider how we can use this conceptual model not as an end point but as a starting point for future research. And to guide future interventions, medical education interventions that may support us in the midst of a Covid 19 pandemic to either enhance our own levels of ambiguity, tolerance to uncertainty or reduce the impact of being intolerant of ambiguity or uncertainty on our own psychology well-being. And for me personally I'm hoping that will take the form of an NIHR post-doctoral fellowship but certainly there are lots of opportunities to progress this research. I'm going to stop sharing these slides now and I think just to finish off some of those things that I've talked through they will be available at the end, the conceptual model for example and the links to the podcast. I'm aware that I've talked for a couple of minutes so I'm going to stop now unless Karen has any immediate questions, I'm going to turn off my microphone and then pick up further questions at the end, thank you.

KAREN

Thanks Jason that was a brilliant summary of an awful lot of work and I'm sure we'll delve into some particular aspects of that in more depth. And we haven't got any specific questions in the chat that I've seen so far so what I suggest we do is move on now to our second presentation and we take some questions and discussion together because I think the programmes of work are so interrelated. That might be a more productive way of doing it anyway. So, it gives me great pleasure now then to invite Daniele to introduce himself and give his short presentation too, and if the audience, if

there are questions arising as you listen please do feed them into the chat box and we'll pick those questions up straight after the next presentation. Over to you Daniele.

DANIELE

Thank you, Karen. Hello everyone. I'm just going to share my screen. So, thank you again for this opportunity and as Karen was saying I'm going to talk about care under pressure which is a project that, it's a programme of research that's been going on for a few years and I've been involved for I think it's been five years or more since I joined the medical school. And as a background, I have a mixed background medical sociology, philosophy and I'm currently starting a position as a lecturer in public health. And I'm going to talk about the completed arm of this programme of research which has been funded by the NIHR a collaboration between Exeter, Oxford and Hull Universities, and I'm going to reflect about the implications of this research particularly now in light of Covid. Similar to what Jason was saying we had a kind of similar starting point. So, of course doctors' and medical students' well-being is a vested issue and was also before Covid 19 and one of the issues that we identified quite early on was how complex the problem is but there was like a tendency to focus on the individual dimension of the problem so did he have resilience? And this can work sometimes but it does not take into account the other dimension of the problem and I just caught a few here like organisational, learning, social culture, professional and training and it can also potentially aggravate the pressure that the individual medical student or doctor may experience at work. So, to address the problem from a more holistic, multi-dimensional perspective we designed the first realistic review of intervention so we were looking at all the interventions that have been developed to address the problem of mental ill health in doctors and medical students. And I can't talk too much in detail about the methodology but what is important to note for this presentation is that this methodology allowed to look at a different body of literature and involve different stakeholders and trying to merge and combine different perspectives on the issue. So, in a way to give more justice to the complexity of the problem and trying to develop recommendations that would be more sensitive to this complexity. And I'm just going to give you a very, very brief overview of the main findings. So, in terms of the causes leading to mental ill health the main ones appear to be isolation, feeling to be unable to do the job that doctors have trained for, and fear of repercussions of seeking help. So, those were the main causes that emerged from different bodies of literature and engaging with stakeholders. In terms of interventions, interventions that emphasise relationships and belonging, belonging to teams, the profession and creating a people-focussed working culture can help to promote doctors' and patients' well-being. And another important component of intervention is anything that can help promote cultures that enable learning from balancing both positive and negative performance. There is a lot of learning from what goes wrong with the NHS but not necessarily as much about what is going well. So, doing this kind of balance of positive and negative can really help and the last bullet point is a very simple but very important implementation point. So, whoever is supposed to receive any intervention so, doctor, medical student, you need to trust the intervention and people who are delivering it. And the more trust there is the more likely the intervention is going to be effective. So that's a very, very simple summary of the findings and just to let you know because we are very interested in forming practice, we translated our findings for those who are refining or designing interventions into like distilled them into ten principles. We also distilled them into recommendations for employers, doctors, patients also for academia so on top you'll see the NIHR report which was published in April 2020 and more like a summary of the main findings that have been published in BMC magazine a

few months before anyway, they are both available open access. But we also worked with GP and comic artist Ian Williams to translate our findings into cartoons. So, today I'm going to discuss some of these cartoons because I think they can really help to convey some of the findings and also to help with the discussion later on. So, this is the first one, I'm going to very quickly read it so there is a doctor or a medical professional saying I don't feel very well, do I have a fever. Let's see. Checking the temperature is meh, it's just 38.2, let's go back to work we'll worry when it gets to 39. What I find interesting about this, this cartoon of course it was developed before Covid and I think it may look quite, how can I say, strange to see something like that right now, and this goes back to the point that both Karen and Jason were making earlier this point of self-care was relevant before Covid but now something like that wouldn't even be conceivable. So, in a way Covid is making some of these points much more relevant. And the second one is also quite interesting so it's just like a kind of surgery scene that is like somebody could be a GP or medical professional and a mother with two children. So, hello doctor. Hi, how's it going? And the mother answers oh you know never stops, just keep my head down and plod on. How are you? The mother asks the doctor. Oh, you know, it never stops. I just keep my head down and plod on. And the mother responds; well you need to take care doctor, as my midwife keeps telling me looking after you is looking after them. So, I chose this one because amongst other things I think it shows the reciprocity between the relationship between patient and doctor and it kind of reminded me of what for example was happening when patients were clapping the NHS and the idea of caring about the well-being and the health of the healthcare professionals. And this is the last one so there is another healthcare professional who is asking how do I enrol for the stress control session? And the person in charge says please fill in this questionnaire, so they fill in the questionnaire and the person responsible says you're one point short of eligibility, come back when you're more stressed. So, again this was quite interesting before Covid and the idea of how the system can be very reactive. But now I looked at it again in light of what was happening especially during the first phase of the pandemic when the well-being of healthcare professionals was not necessarily from a ground finding point of view, for example from NIHR and other funders there was much more emphasis on more immediate urgent issues and the well-being of the healthcare workers was not seen as immediate. And I just want to finish with this last slide which kind of links to earlier we were talking about at the beginning on resilience with the more recent idea of heroism. So, talking about the healthcare professionals as being heroes. And I think like in a way what the, the tweet in the middle by Linda Gask who is a psychiatrist sums up very nicely the problem with the idea of being resilient. So, you're so resilient is just a code for you're on your own, sorry. And it's quite striking if you look on I don't know if you can see my point there but if you look on the left bottom of the slide, this is a BBC article that is based on some photos that a nurse in Italy took in the phase 2 of the pandemic to try and convey how the whole of Italian health professionals were looked at as heroes during the first wave but then they just felt that they were being forgotten. And on the top right there is an interesting article; healthcare heroes' problem with the media focus on heroism from healthcare workers during the pandemic. And this article argues that it's much more useful to think about feelings of reciprocity between patients and healthcare professionals rather than calling them heroes. And it also struck me a couple of days ago I saw the ASME webpage on 31st August; it's National Hero Day does the hero narrative in medicine whether you're referring to doctors or patients do more harm than good? And I was just looking at some of the answers. And apart from if you're interested some people shared very

interesting additional resources either academic papers or news articles but the overwhelming answer to this question seemed to be yes from those who were engaged and I thought this could be an interesting point to discuss later. And just to finish if you are interested there are all the resources like academic outputs and more publications, and also like a film and short video on the web page and this is also the Care Under Pressure Twitter handle and just to acknowledge the sponsor the NIHR. And I think that's it from me. I'll stop sharing the screen.

KAREN

That was great, well done Daniele. Again, a huge amount of work done very quickly, so that's a great job and I was really interested in the same ASME Twitter conversation because that really did seem to provoke a lot of strong and interesting reactions so I think that was a good debate to be having. There's a really good question in the chat that I'll ask you in a minute Daniele so I'll give you a moment just to read that and think about it. But perhaps first because we hoped that the question and answer session, so we've got about 15 minutes to do some question and answer or until the questions dry up whichever comes sooner. I thought we'd start with a question for Jason more from your clinical experience about perhaps what you're seeing in terms of ambiguity, uncertainty, mental ill health kind of pre-Covid and during the Covid pandemic. So, if you were to do a bit of a compare and contrast exercise what have been your experiences?

JASON

Oh, that's tricky. I think there are probably lots and lots of questions wrapped up in one question there. I guess the first thing to say is that clinically as a psychiatrist the first thing I'm seeing is anecdotally the anticipated surge is here, is coming that lots of people have really, really struggled in the communities. Lots of patients have really struggled with lockdown and everything that comes with that. I guess bringing back to as a psychiatrist and a medical educator I think things change so rapidly and so quickly that it's already quite hard to put ourselves back in that position of how rapidly things changed and how bizarre the situation was initially. You know I recall that period of a couple of days where the world just changed as a clinician and it wasn't quite clear what we were going to be doing about it. As a psychiatrist am I going to be intubating people in ICU in a couple of months and you know what on earth is going to happen for me? My wife is a dermatology doctor was trying to work out am I going to be here doing these other things? I mean there was just uncertainty at every single possible level in the system. It was quite incredible to see the change and the uncertainty and the ambiguity and how rapidly that happened. And how on the whole people just kind of put their head down and got on with it as best they could. And now coming through the other side taking a really long time to process what happened and still what happens next. You know we're still in the middle of that it doesn't feel like it necessarily because we've been through such dramatic changes already. But I guess just the uncertainty at every single possible level of the system in terms of roles and policies, and protocols and standard operating procedures, and my own role and what I'm able to achieve or not achieve, and what patients I'm going to be looking after. Just everything was, yeah, I'm sure we've all experienced it in different ways. Unprecedented I think we've already said.

KAREN

Thanks Jason that's really useful. So, Daniele I hope you've had a bit of a chance to read Clare's question she says she's fascinated by the system level influences on well-being or otherwise, have you come across interventions that can tackle issues of work place culture at a collective rather than individual level?

DANIELE

So, local examples, so in the UK the two that came to my mind; Learning From Excellence which could be an interesting one also from a learning point of view. So, when I was saying about how the NHS seems to be very, tends to learn from mistakes I think there is a form as well, the incident, I forgot the acronym but there is this initiative that is called Learning from Excellence, it's been developed by a consultant I think in Birmingham. And the idea is simply to allow anybody in the Trust or in the workplace to acknowledge a colleague, could be a consultant, could be a nurse or whoever within the Trust who they think has done something excellent. And the person who nominate and the person who nominated are notified about that and then all these examples are discussed regularly by the management and they're also shared in newsletters. So, the idea is simply to share what goes well alongside what goes bad, and that's a very simple but quite interesting initiative. And another one is a colleague that Karen and I at the moment are privileged to, we're going to start collaborating for Care Under Pressure 2, which also answers another question by Patrick. So, Care Under Pressure 1 the person that I described was focussing only on doctors and medical students. That was just because of the sheer amount of literature and data available only for this population. But we are starting another programme that is called Care Under Pressure 2 that applies the same methodology but with nurses and allied care professionals so that will allow to look at different, to enlarge the scope and look at healthcare professionals. But the same colleague leading Care Under Pressure 2 who is Professor Jill Maben, finished I think it must have been maybe at the end of 2018, another NIHR project on Schwartz Rounds. And I think Schwartz Rounds could be another example of very kind of system-level intervention because very briefly, you probably know what Schwartz Rounds are but they are an organised opportunity for anybody within again a Trust or a workplace to present a complex case from an emotional, ethical, psycho-social point of view and then discuss it with anybody. So potentially anybody from the workplace can join from the CEO to I don't know the cleaning staff, the trainees and that in itself can be a very powerful opportunity to normalise some issues and to share and to create also a sense of belonging. So, I answered two questions.

KAREN

Two in one well done! So, I think Sheeba's question I'll perhaps put to Jason and Sheeba says I think we have to think about the mental health and well-being of medical students and their parents too and that's an interesting angle. I don't know if you'd like to pick up on that at all Jason?

JASON

Yeah, so, absolutely. So, in terms of medical students a lot of my research to date has been medical students and early career doctors so I may have used I guess the words interchange really throughout my presentation but the work so far has been mainly for medical students and Foundation Year 1 and 2 doctors, those have been the focus of my research. Parents, parents of medical students, so it's something I'll be honest and say I haven't really considered a lot until the last few weeks having seen the impact I guess on lots of parents of, having young children myself I'm not in a position where I'm supporting teenagers getting their GCSEs and A-Levels and going to University, and working in new interim-foundation roles that didn't exist a couple of months ago, so I can only begin to imagine what that must be like. So, it's something we haven't considered a lot I guess I'd be interested to think more about that potentially and if you have anything else to add to the comments, I'd be interested to hear that.

KAREN

Did you want to come in Daniele?
<p><b>DANIELE</b></p> <p>Just slightly tangential point related to that because one of our collaborators is Clare Gerada the Clinical Director of the PHP, that Practitioner Health Programme, which is one of the main providers for mental health for doctors and healthcare professionals in the UK. And it's interesting how some of the, so in over a few years of meetings and collaboration I've been hearing some of the data about people presenting and sometimes the parents would come in for some populations of doctors and trainees where for example being a doctor was something that they felt was imposed by the parents and that it could create some issues related to well-being. And then there is a lot of work that PHP and also, I think it's called the Sick Doctor, no Doctors in Distress, they're doing around bereavement so parents of doctors and healthcare professionals who have committed suicide. That's also quite interesting so I just thought I'd mention it if it's relevant.</p>
<p><b>KAREN</b></p> <p>Thank you. There's lots of questions flooding in now but there's a nice one from Lisi Gordon which I think I'd like to ask both of you to answer so it says the ongoing uncertainty (no sound) more now than during the acute emergency phase. So, I wonder if, I think you probably would both have quite a different angle on that perhaps again Jason particularly from the clinical experience point of view, but I know there's also some literature about this that you might want to pick up on, you or Daniele. So, I don't know who'd like to go first?</p>
<p><b>JASON</b></p> <p>I guess clinically, bringing the clinical angle I think I'd agree with that. So, I think Karen you cut out half way through the question and I think the question having read it was; does the impact of uncertainty appear to be having a greater impact now on doctors compared to in the acute phase back in March? Yeah, I certainly think it's having a different impact on doctors now compared to the impact it perhaps had earlier on. It's interesting I was speaking to some colleagues who are interested in this from a leadership perspective and I guess a lot of the challenges are greater now than they perhaps were back in March. From their perspective they would talk about you know in March when things really did progress rapidly they shifted much more to a command and control structure and had to make rapid decisions and people kind of knew what they were doing and they were getting on with it as best they could and whereas now things are changing in different ways in different teams, there's always a possibility of things changing again. So, I think it's having a different impact now. I think uncertainty seems to be, it's certainly here to stay and will be highly fluctuant and variable and will affect people differently. So, I'd agree with the comment I'm sure.</p>
<p><b>KAREN</b></p> <p>Yeah, Daniele do you want to say something because I know you've been following the Italian doctors where it's played out a bit ahead of us.</p>
<p><b>DANIELE</b></p> <p>So, I've been following that but also that article that I mentioned, the BBC article, is quite an interesting one and also quite vivid because of the picture that this nurse has been taking of hospital wards. I think, I couldn't find the exact article but I think in the kind of disaster and military post traumatic stress disorder literature like Simon Wessely and other psychiatrists have been saying how the intensification of this stress could actually historically in other contexts tends to occur, it's kind of like a trend, it tends to occur from within four to six months after the peak event. So, in that case it</p>

would be you know it peaked at the end of February, beginning of March, and this is something quite interesting to consider so there is, especially could be exacerbated if the healthcare workforce feels that it's been going from - again it's kind of ambiguity there - from being heroes to being forgotten as well. It kind of intensifies potentially the uncertainty also about their own role and how they are seen. I think there were different challenges. I remember when in the beginning of the pandemic there was the uncertainty for example of being called heroes and then not having PPE. Now I think there is a big uncertainty that is about what's going to happen, so there is a huge backlog of old and un-Covid related issues and then this could be intensified if there is a phase two or just a flu over the autumn and this also is quite unclear and there is a lot of, in a way linking to what Jason was saying, from a leadership level there is a bit of uncertainty about whether the NHS is going to do the same thing that they did in March so becoming mostly a Covid service and close all the other, most of the other services. Or whether they will have to keep delivering non-Covid care as well.

KAREN

Thank you. We've got lots of questions now so I'm not going to send them to both of you I'm going to divide and conquer a bit. So, Jason there's a question here about what your view is on how well medical students and other healthcare professional students if you teach them are prepared for uncertainty and ambiguity by their curriculum. And there's kind of a follow up bit which was about or alternatively how we prepare managers and senior doctors to support these sorts of liminal experiences.

JASON

Wow, I mean we could talk about this for hours alone. How well prepared are medical students? I think that's a really great question and I would suggest there's lots of evidence to suggest they're variably well-prepared to experience or to tolerate ambiguity and uncertainty. I think looking at this I guess scaling it down to a kind of slightly smaller scale, one of the challenges that I have seen that medical schools can face is often that there is so much to pack into a curriculum that you need to justify all of your content and therefore meet lots and lots of different needs, and in doing so you perhaps are then often teaching or going through if it's problem-based learning or simulation cases, or similar cases that are pretty much text book because you need to demonstrate so clearly that you've covered, so many different aspects of the curriculum that the time to sit and reflect on the ambiguity of uncertainty of those cases can sometimes not be prioritised for obvious reasons or I can see the justification. There are ways of tackling that and different medical schools I think do different things so around whether that's effectively using community as a practice or writing simulation sessions differently or trying to integrate that within PBL. I don't know how to succinctly answer the question but I think there's a lot of evidence that students are variably prepared. There is a lot of work to do I think would be the fairest thing to say. I'm not sure Karen if you have anything to add to that?

KAREN

I think it's a big question I agree. I think variably is a good summary. I think there's a lot more we should be doing and I think there may be some things that we can only do in the clinical environment as well. So, I mean it's certainly something that we need to think and talk a lot more about. And I think you're right it requires time and that's often at a premium in the curriculum. There's a question for Daniele for you about coaching and mentoring but I think we could pick that up well afterwards because it's quite a specific one so I wonder Daniele if you'd like to have a go at the one from Anita; how do we tackle the cultural stigma relating to seeking help for mental well-being

issues in doctors, and pointing out that this seems to be present in medical students and possibly even sooner.

DANIELE

That is why our interest was to look at doctors from medical school onwards and across specialties because the medical school is a very important site where a lot of, well you now lead and curriculum and other issues stigma. It's a very broad question and how can I, again it will require something you know if you recall the second slide in my presentation you know there was like individual, organisational learning so it would require to do as many things as possible. Addressing as many different levels as possible so I can just give you an example I've been involved in some medical, like a workshop for medical students - 4th year medical students - where there was a very senior and a less senior doctor who shared their experience very, very candidly of stress at work with the students. And then we divided into groups and did some kind of art-based activity where the students were just making, like using crayons to draw something that was related to a very impactful, significant experience they had to do with their training and then discuss it using two groups. Very, very simple activity but I think it was very well received so there was a lot of students talking to especially the senior and less senior doctor who shared their experiences afterwards. And it is a way to normalise the fact that burnout or stress or any kind of difficulty at work is probably going to happen. It's normal, there's nothing necessarily wrong with it and it can be very powerful to see different like senior, less senior colleagues openly sharing that. But just an example there are so many different things.

KAREN

We've got lots and lots of questions flooding in now so I think we are going to have to answer some of these in a Word format rather than within the Webinar. So I'm going to pick just one more question each for Jason and then one for Daniele before we close up because I know we've got very busy people on the line. But Jason the one I can't resist for you is; is there something about chronic uncertainty versus acute uncertainty? That one sounds right up your street.

JASON

Again, great question. So yes, I would imagine that there is something about acute versus chronic uncertainty. I guess what is clear is that to date, I touched on some of the kind of conceptual models really or our current conceptual model, but there have been lots of different proposed conceptual models for uncertainty, and one of the challenges with this field is that obviously it isn't just medicine and medical education that talks about this it's business, it's everywhere really, and it's really difficult as I think Paul Han in a recent commentary said; it's difficult, it's possibly impossible to bring together all of the different conceptual models and really understand what is out there so far. I guess clinically I see acute versus chronic uncertainty in the form of how that can play out in people who present with mental health conditions and disorders. And that the role of chronic uncertainty and how that can cause stress, or continue to cause stress and increase the risk of developing mental health disorders, I think the kind of short answer is I'm sure there is something in that. That's something that needs to be thought about a lot more and probably requires its own thinking within the current frameworks and conceptual models that we have. And how empirically we can test that I'm not sure but I'm sure it sounds like a very valuable piece of work and something that I think we should try to do and prioritise particularly in the current climate.

KAREN

I must say these are incredibly high-quality questions. I wish this was kind of a conference workshop because this would be a great discussion and maybe we should put something forward for next year's ASME conference. So the last one I've picked for you Daniele was the one from Sheeba about kind of different cultures, so perhaps in the hospital scenario there may be command control leadership but in med schools in may be more of a sympathetic collaborative leadership so I just wondered if through the Care Under Pressure project there was much about sort of leadership, cultures and climates and how that played out for individuals.

**DANIELE**

From what I've heard I think I would just point to the overarching idea of whatever helps to instil a sense of belonging, not only to things but also to the profession. So, I think that would be something that ideally should be the case both in a medical school and in a workplace type thing so having a sense of connectedness. And in a clinical setting that might also imply more contact with patients if that's part of the profession as well and so it's a very, very broad, again a very broad question and I don't know if my attempt to answer makes any sense but I would just point to the idea of a leadership that is a community and team-based leadership in both environments if possible.

**KAREN**

Yes, that makes absolute sense to me. So, thank you all for your amazing questions. I'm so sorry we haven't managed to finish all of them but we will get back to them through the website. And we know they're good questions because they're making Daniele and Jason who've been working on these topics for nearly a decade, you're making them think so that's absolutely fantastic. So, thank you all for participating in the session today and giving up your valuable time to do so. As mentioned, the session has been recorded so it will be available on the ASME website in a few days. There are more ASMEBITESIZE sessions coming up. So, the next one is on Wednesday 9th September 11.45am and that's a follow up of a first session that was really well received and I was at that first session, it was on patient narratives and it's with Selina Robertson and Jayne Garner and Roshni Beeharry and hosted by our JASME, which is the juniors at ASME Chair which is Ryan Devlin. So, that's the next one but there's a series of these so please do look out for them it's great to have you here and there's more detail on the ASME events page. So, thank you very much and enjoy your evenings. See you soon.

**ENDS**