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Kent Journal of Psychiatry

Dedicated to Psychiatry trainees and trainers

Nurturing doctors: A systematic review of interventions to reduce stress and distress
Bradley et al

Crisis & Contingency Care Plans: An Evaluation of their Use in the Management of Mental Health Crisis
Isaac-Momoh et al

Moral Injury and Distress In Health Care Professionals During Infectious Disease Crises
Williams et al

Opinion piece: A trainee's experience of virtual psychotherapy
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The Methods Corner: Introduction and Critical Appraisal
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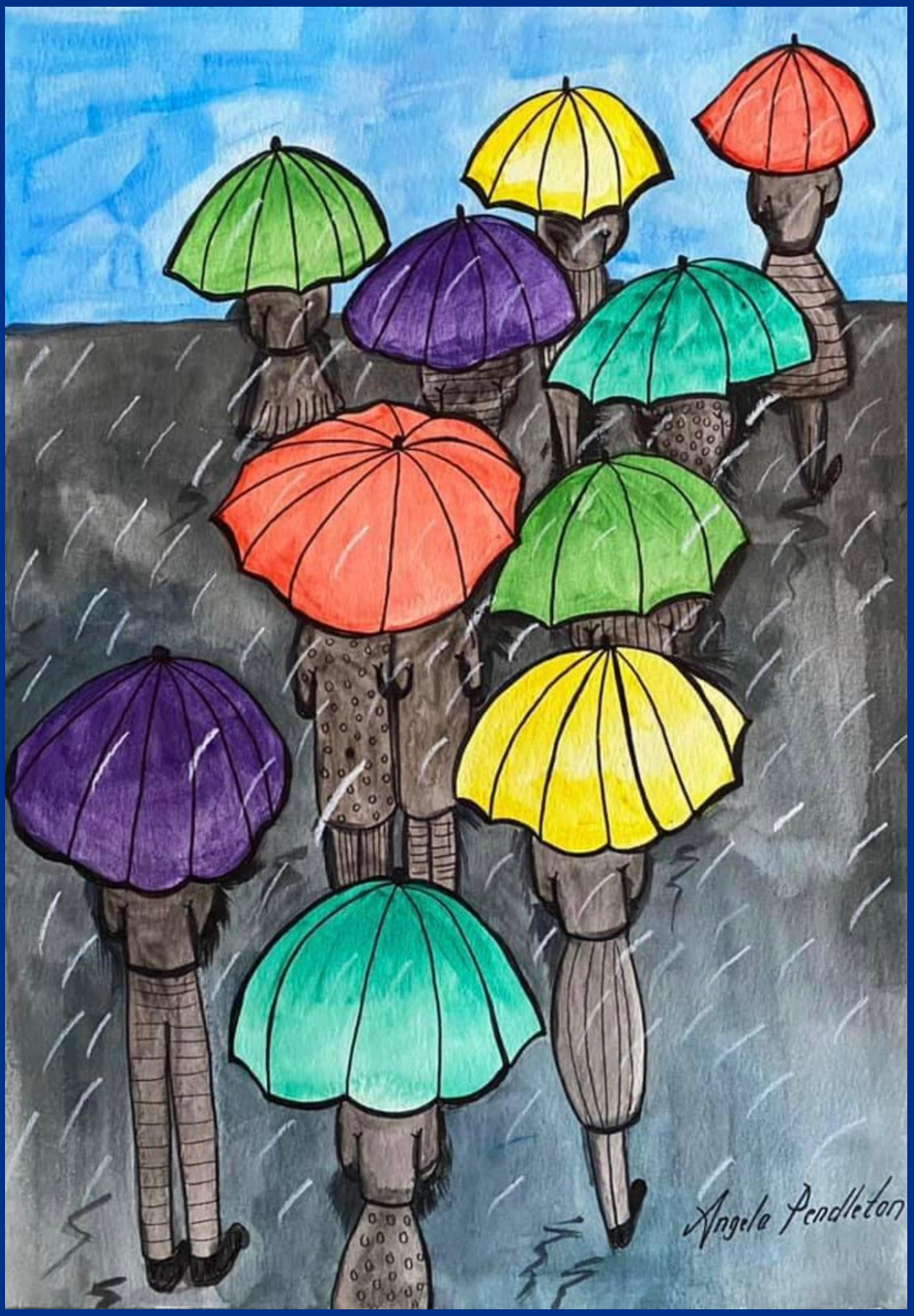

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Kent Journal of Psychiatry

January 2022 – Volume 2 – Issue 1

Kent Journal of Psychiatry is a psychiatric journal with emphasis on the publication of research by psychiatry trainees and their mentors. This traditional source of new medical knowledge is under pressure due to the logarithmic growth of journal submissions; this journal attempts to redress this balance.

The editors will offer support to young authors in the presentation of their findings. This will be followed by rigorous peer review. The procedure will enable the journal to fulfil a valuable educational and developmental role in addition to presenting high quality research to a wider readership.

Kent Journal of Psychiatry is a free online publication which appears on an annual basis. It offers the best of new research from innovative young thinkers on the front line of mental health care.

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Editorial Introduction

Welcome to the 2022 edition of KJPsych. This edition has a strong flavour of Pandemic Psychiatry. We have all been through a period of unparalleled change and it is unsurprising that this has resulted in thought-provoking articles from trainees who have faced the challenges on the ground.

We have two articles (R. Bradey et al & V. Williams et al) which invite us to consider the mental health of those who care for others. A third paper (S. Bennett) offers a discussion of the experiences of grappling with early psychotherapy training in a virtual environment.

Dr Isaac-Momoh et al present a careful examination of the actual use of Care Plans with some disturbing conclusions. And finally, we are delighted to introduce our resident statistician, Dr Ruth Knight with a regular feature, 'The Methods Corner'. Ruth will be offering advice and responses to those of us who would like to develop a better understanding of the Mystical Arts of Statistics.

Nurturing doctors: A systematic review of interventions to reduce stress and distress

Rhian Bradley, Tahmina Yousofi, Rafey Faruqui, Kate Hamilton-West

Background

What is already known about the topic?

Within the UK, 27% of university students disclose a mental health problem [1], indeed mental health conditions accounted for 17% of disability disclosed by first-year students in 2015/16 [2]. The context is that the majority of students are in their adolescence and early adulthood, a peak period for the onset of a range of mental health conditions [3]. The student population may be particularly vulnerable to mental health issues, having to adapt to stressors such as new physical and social environments, academic demands, and self-directed learning [4].

Medical students undoubtedly experience additional stressors, to the extent that 87% of UK medical students report a stressful event within their student role in the last month [5]. The most significant stressor is academic, in particular the vast theoretical workload coupled with a strong internal motivation to perform well [6,7,8,9,10]. The poor quality of student-faculty relationships [9,11]; the competitive nature of medical school [6,9,12]; the stoic attitude encouraged within medicine [13]; communicating with patients [5]; and dealing with death and suffering [5,13] were also reported as stressful. Within UK medical students, depression has been reported in 2.7 [14] to 48.8% [15], a probable psychiatric disorder is in 46% [16], with just fewer than 15% having considered suicide during their studies [17].

Previous reviews of stress reduction strategies in medical students have supported their effectiveness [18,19,20], interventions included support groups, relaxation training, mindfulness, mentoring programs and grading changes. A meta-analysis found positive effects on their psychological health of a moderate effect size [21]. Reviews have however noted the sparsity of high-quality research, including lack of controls, heterogeneous interventions and variable outcome measures making it difficult to draw firm conclusions. Despite tentative support for the effectiveness of interventions, 80% of medical students within the UK describe the wellbeing support available as poor, or only moderately adequate [17] and the process of accessing support as 'a series of closed doors' with inadequate university services and lengthy waits to access psychological support through primary care [22].

What this paper adds

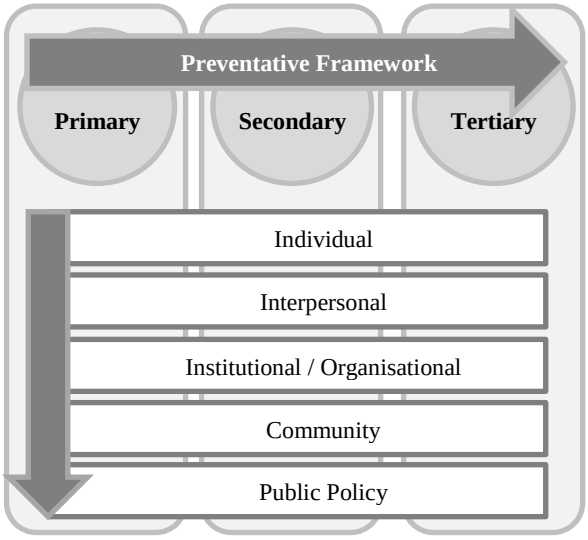
Within the context of the recent expansion of UK medical schools [23] and as medical students are reporting additional stressors related to the COVID-19 pandemic [24], this is a salient time to reconsider how best to support their mental health. This systematic review not only considers the current evidence for interventions to reduce stress and support the wellbeing of medical students, but also proposes a structure for implementing these interventions. We combined preventative and ecological paradigms of health promotion to develop a conceptual framework [25] to understand the complexity of stress in medical students, and inform future interventions to support their wellbeing.

The preventative framework for health is based on reducing an individual's exposure to known risk factors and strengthening their protective factors [26]. Three components are central [27]: Primary prevention targets risk factors and promotes protective factors in a whole population group not identified as being at increased risk (universal prevention), a

subpopulation known to be at increased risk (selective prevention), or individuals already showing detectable signs or symptoms of a disorder but who do not yet meet diagnostic criteria (indicated prevention) [26,27]; secondary prevention seeks to reduce the prevalence of disorder through early detection and treatment of diagnosable conditions [26,27]; tertiary prevention aims to reduce impairments that may result from a disorder, to restore function and prevent relapses and recurrences [26,27]. Limitations exist when such prevention strategies focus solely on personal responsibility, negating the impact of sociocultural factors on behaviour [28]. An ecological framework for health prevention highlights an individual's interaction with their physical and sociocultural environment. It recognises multiple levels of influence on health behaviours: individual, interpersonal, institutional/organisational, community and public policy factors. It also considers the reciprocal nature of these factors interacting; that individuals both influence and are influenced by others and their environment [29].

Figure 1

Relationship between preventative and ecological paradigms



The origin of most mental health conditions is multifactorial, the cumulative effects of multiple small effect size risk factors (both genetic and environmental) that interact in complex ways to progressively increase vulnerability [30,31]. Protective factors can mitigate these risks and include resilience, an individual's long-term ability to respond to adversity in a healthy and adaptive manner [32], with resilient individuals 'not only (being) born' but 'raised' [33]. Mental health thus lends itself to a preventative framework and outcomes are promising and can be cost-effective [34]. The role of preventative interventions may be even greater during sensitive developmental periods such as adolescence through early adulthood [35].

Method

This systematic review was carried out according to a review protocol [36] and reporting follows the Preferred Reporting Items for Systematic Reviews and MetaAnalyses (PRISMA) statement [37].

Objectives

We carried out a systematic review to identify interventions that could effectively reduce stress and support medical students' wellbeing.

Search strategy

We developed the search strategy to answer the defined objective. The following three electronic databases were searched from their inception until July 2019: Medline, Psycinfo and CINAHL Only studies in English were included in the search. This was supplemented by reference searching of full-text articles identified in the database search to identify articles not retrieved by electronic searches. We used the following keywords: "medical student" OR "medical undergraduate" AND stress OR distress OR "mental illness" OR psychiatr* OR depression OR mood OR anxiety OR schizophrenia OR psychosis OR suicid*. The keywords were chosen to ensure a comprehensive search of studies.

Study eligibility

Eligibility was assessed according to pre-defined Inclusion and exclusion criteria:

- Study types: Published primary research, written in English was eligible for inclusion. This included both quantitative and qualitative studies with and without a comparator. Editorials or review articles were excluded.
- Types of participants and setting: Medical students who were currently in training within any

public or private medical school were eligible for inclusion. Any other students were excluded.

- Types of intervention: Interventions were included if they targeted medical students with the objective of reducing stress and/or promoting the wellbeing during their time in training. No specific intervention types were excluded.
- Types of outcome measures: Studies were eligible that reported a wellbeing outcome.

Study selection

Studies were selected in two steps. First, eligibility criteria were applied to titles and abstracts of studies identified from the literature search. Studies were screened and reviewed by two independent reviewers. If the title and/or abstract provided insufficient information to assess the relevance we assessed the full article. Second, full texts of articles selected in the first stage were independently reviewed for final inclusion by the two reviewers. Any discrepancies and/or disagreement in study selection were resolved by discussion or by consultation with a third reviewer if indicated. The PRISMA flow diagram provides detailed information regarding the selection process of studies (Figure 1. diagram of study selection).

Data extraction

Data was collected using a standardised form that was finalised during pilot extraction. Data were extracted by one reviewer and checked for accuracy and completeness by a second reviewer. The following information was extracted from each included study:

a) publication (author(s), year, country of origin)

b) sample characteristics (sample size, year of training)

c) characteristics of intervention(s) and control intervention(s) (enrolment and attrition of participants, provider and mode of delivery, content)

d) study design and methods

e) outcome measures of interest

Table 1 provides detailed information regarding the study, sample characteristics, study characteristics and empirical findings.

Dealing with different study designs

Due to the heterogeneity in study design and interventions evaluated it was not possible to conduct a meta-analysis.

Risk of bias assessment

Each item was judged independently by two reviewers. Any disagreement was resolved through discussion with a third reviewer.

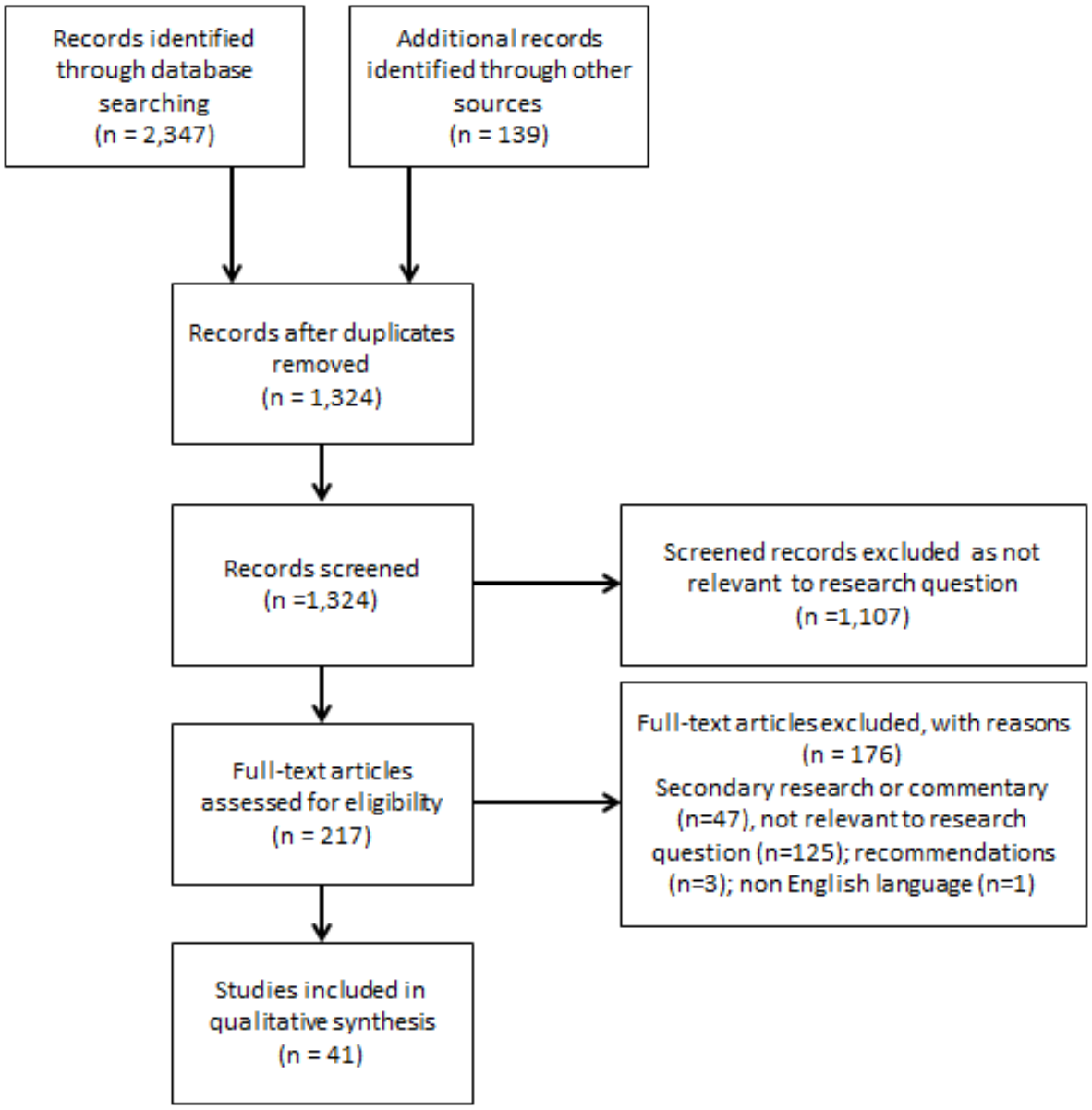
Heterogeneity

An exploration was made for any heterogeneity that existed between studies to consider how these might alter the conclusions drawn by the review.

Statistical analysis

A narrative approach was used to synthesize the findings because the studies were heterogeneous in terms of design, methods, interventions and outcome measure.

Figure 2
Diagram of study selection



Results

Curriculum and Grading

Two studies considered outcomes in successive cohorts following the introduction of a pass/fail system that replaced a five-interval grading system across the medical programme, with the aim of reducing perceived competition between peers. The pass/fail class exhibited a significant reduction in stress [38] and increased well-being [39], compared to their five-interval graded peers. Mood improvement did not reach significance [38].

Two studies considered outcomes in successive cohorts following transition from a traditional lecture based pre-clinical curriculum to a problem-based learning (PBL) curriculum. The first PBL curricula had a focus on easing the transition to clinical sciences with communication and procedural skills training; students of the PBL curricula had significantly less anxiety for clinical skills (suturing, phlebotomy) however experienced significantly higher anxiety for communication (dealing with colleagues, and

abusive/intoxicated/psychiatric patients) despite receiving communication skills training [40]. The second PBL curricula, described as a 'faculty guided, student directed' approach, resulted in a reduced likelihood of depression (OR 0.42, 95% CI 0.14, 1.21) but this did not meet significance [41].

Mindfulness and Yoga

Eight studies reported on mindfulness-based stress reduction interventions within small group settings over four [42] to nineteen [43] weeks. Outcomes were positive with significant reductions in anxiety and depression [44,45] stress [46] and distress [42,47]. Reflective comments were striking "as a medical student, I am constantly thinking of problems and solutions, my mind feels like it is running a marathon…by the last week I felt that I had created some space in my mind" [48]. Both peer led mindfulness interventions reported reductions in stress [43,49] and depression [49]. An audio guided intervention also resulted in a significant reduction in stress and anxiety [50]. Yogic interventions were considered in two studies with intensity ranging from three [51] to six [52] sessions weekly; significant improvements in wellbeing were found post intervention [52] including a reduction in baseline and 'examination day' anxiety compared to control [51].

Stress Management/Relaxation

More broadly defined stress management and relaxation interventions were considered in thirteen studies. Six interventions had favourable outcomes; these included a significant reduction in stress [53], distresses [42] and depression [54]. All but one [54] were optional and they were predominately within small group settings [42,53,55] with a strong emphasis on practicing skills rather than a didactic approach [42,53,56]. Two interventions were predominantly didactic but these also included a small group component [54,57]. One intervention was peer led [55] and one highlighted role modelling by a senior physician [56]. Qualitative feedback stated that the intervention gave students 'permission' to engage in self-care without the burden of guilt associated with activities that they previously perceived as 'self-indulgent' [56].

Other stress management and relaxation outcomes failed to show significance [58,59,60]. Outcomes were mixed following a classroom-based intervention; whilst 67% reported less stress, 21.1% reported an increase [61]. Neither a didactic [60,62,63] approach nor interventions with a very broad agenda [63] resulted in favourable outcomes. A compulsory small group intervention resulted in a significant reduction in mental quality of life; this intervention being added onto existing curricular demands was perceived as counterproductive by some, taking time away from studying or activities of greater personal interest [64].

Behavioural Interventions

Group based physical activity was significantly associated with reduced stress [65]. No such changes were observed when exercising alone or with no exercise beyond as a means of transportation.

A 'behavioural change' intervention in which participants selected a personal behaviour to change by setting a goal, tracking progress, and self-assessing their success found that of students choosing an emotional health theme, 66.7% met their goal, however this did not reach significance [66].

Benefits of expressive writing were dependent on individuals' coping styles. Students with a coping style with high levels of emotional expression demonstrated a reduction in depression when writing on emotional topics, whilst those with low levels of emotional expression benefited from writing about their 'best possible self' as if their future goals were achieved; there were no such changes in the control writing group [67].

Cognitive & Self-awareness Interventions

A web based cognitive-behavioural therapy (CBT) intervention included topics of behavioural activation, cognitive restructuring and managing anxiety. Participants increased their use of cognitive and behavioural coping skills, which resulted in a reduction in stress of borderline

significance. Participants reported that it may have been of greater benefit at the beginning of medical school to establish healthy habits early in training [68].

A 'self-awareness' intervention in which students received individual feedback on mood and health habit survey results and attended a self-care lecture group, found no significant change in mood [69].

Mentorship

Mentorship by faculty was considered in two studies, and by peers in another. Outcomes of a faculty led programme to facilitate students' initiation and thereafter meeting weekly, were mixed compared to controls from an institution without formal mentorship; whilst mentored students were significantly more able to overcome anxiety they had worse emotional wellbeing [70]. A faculty led programme providing academic counsel and onward referral to university support services had negative outcomes; despite 95% of students supporting such a scheme, only 18.4% rated this intervention as successful [71]. Success was associated with tutors actively engaging with students and regular meetings [71]. A peer led 'buddy programme' linking first year students with second year peers to support induction and academic, social and personal needs resulted in a reduction of stress at enrolment [72].

Education, Screening and Access to care

Two studies considered the impact of a multi-pronged intervention comprising of education to destigmatise mental illness, confidential and anonymous on-line screening for depression and suicidality, with those at risk being offered on-line counselling and thereafter referral for treatment. Both appeared to support students accessing services; only 23% of students identified through screening as being of high risk of suicide were currently receiving mental health support [73] and 71% referred for treatment, stated that they would not have sought support without the programme [74]. A third intervention which reduced barriers to care by ensuring readily available, low cost, confidential therapy resulted in a significant decline in depression and suicidal ideation [75].

Multifaceted Interventions

An intervention implemented in phases included a pass/fail grading system; rationalising curricular demands; compulsory resilience and mindfulness programme; regular sessions to pursue interests and mentorship; confidential mental health screening and follow up; and a peer led coping strategy programme for clinical students. There was a clear trend of improved stress, anxiety and depression outcomes reaching significance by the second year [76,77] post intervention; results were however less favourable for senior classes [77]. A second intervention included a peer led mentorship programme; a wellness committee addressing ongoing mentorship, physical fitness, social activities, community wellbeing, and emotional support (including an anonymous on-line mental health forum with a psychiatrist); and an annual reflective workshop with modelling of self-care - 95% of students rated their experience as positive [78].

Table 1

Study, sample characteristics, study characteristics and empirical findings

Study	N	Population (age (years); gender; ethnicity)	Intervention (modality; length)	Comparator	Outcome (p values and effect sizes where available)	Research design
Austenfeld JL et al [67]	64	Third year medical students; mean age- 26.4; female- 45%; white- 84% Hispanic- 11%	Expressive writing ('emotional topic' vs. 'best possible self'); three weekly sessions	Control group writing about their day without emotion	Reduction in depression (CES-D) in the 'emotional topic' group for those with a coping style of high emotional expression/ reduction in depression in the 'best possible self' group in those with coping style of low emotional expression and processing compared to other group and control	RCT (un-blinded)
Ball S et al [69]	64	First year medical students; mean age- 24; female-40.7%	Self-awareness (feedback on mood and health habit scores/one off self-care lecture)	Control group without intervention	No significant changes in depression (BDI-II) compared to controls following either feedback (F 0.33) or self-care lecture (F 2.4)	RCT (un-blinded)
Bloodgood RA et al [39]	281	First and second year medical students; mean age- 22; Female- 46-62%	Pass/fail grading system	Control class with 5-interval grading system	Significant increase in wellbeing (GWB), including anxiety and depression sub scores in pass/fail class compared to 5-interval graded peers in first 3 semesters ($p < 0.008$)	Cohort
Bond AR et al [48]	27	First and second year medical students	Mindfulness; 11 weeks	No control	Reduction in stress (PSS), not reaching significance (p 0.7)	Cohort
Camp DL et al [41]	275	First year medical student; Female- 33.8%; white- 86.5%	'Problem based' curricula (PBL) (faculty guided, student directed approach to generate learning in basic and clinical sciences)	Control year with traditional lecture-based learning (LBL)	Reduction in depression (SDS) in PBL (OR 0.42, 95% CI 0.14,1.21) compared to LBL, not meeting significance (p 0.74)	Cohort
Danilewitz M et al [49]	30	First and second year medical students; Female- 73%	Mindfulness (peer led); 8 weeks	Waiting list control	Significant reduction in stress (DASS) post intervention. Between group effect size 0.7 (p 0.019)	RCT (un-blinded)
Downs N et al [73]	1008	Medical students; mean age 24.7-26.3; female- 52-63%; white 37-47%, Asian 26-44%, Hispanic 2-16%	Education to destigmatise mental illness/ confidential on-line screening for depression (PHQ-9) and suicidality/ with 'at risk' students being offered on-line counselling and referral for treatment; 4 year	No control	72 interacted with an on-line counsellor, 23 were referred for treatment. Of the 13 students whom the counsellor identified as being a high suicide risk, only 3 were currently receiving mental health care	Cohort

Drolet BC et al [78]	>200	First and second year medical students	Multifaceted intervention with peer led mentorship /student wellness committee/ on-line mental health forum /annual small group workshop with a focus on reflection and modelling self-care	No control	Promising feedback with 95% rating their experience as positive	Cohort
Dyrbye LN et al [64]	105	First year medical students; age <25 77-80%; female- 58-59%	Stress management and resilience training within a small group setting, with individual meetings with facilitators; year long	No control	Significant reduction in mental quality of life (SF-8), ($p < 0.001$) and increase in stress ($p < 0.05$) in intervention group	Cohort
Erogul M et al [45]	58	First year medical students; mean age- 23.5; female- 45.6%	Mindfulness; 8 weeks	Control group without intervention	Significant reduction in stress (PSS) (p 0.03)	RCT (un-blinded)
Finkelstein C et al [59]	184	Second year medical students, mean age 24.6-25.4, female 61.1-77.3%	Stress management, 10 weeks	Control- no intervention	Reduction in anxiety (SCL 90) and stress (PSMS) in intervention group, not reaching significance (p 0.1 and 0.26)	Cohort
Hassed C et al [54]	148	First year medical students over >18 years	Stress management; semester	No control	Significant reduction in depression (SCL-90) (p 0.01), not reaching significance for anxiety (p 0.11)	Cohort
Holtzworth-Munroe A et al [53]	40	First and second year medical students	Progressive muscular relaxation; six weeks	Control- no intervention	Significant reduction in stress (Likert scale) in intervention group compared to control ($p < 0.04$), this did not reach significance for depression	RCT (un-blinded)
Jain S et al [42]	83	Medical students (n=17), others premedical, pre-health and nursing); mean age- 25; female- 80.7%, white- 16%, Hispanic- 21%	Mindfulness vs somatic relaxation; 4 weeks	Waiting list control	Significant reduction in distress (BSI) for mindfulness and somatic relaxation group compared with control ($p < .05$) with an effect size/ $d = 1.36$, and 0.91 respectively	RCT (un-blinded)
Kelly JA et al [60]	48	Medical students (80%)/ nursing students and residents; female- 33%	Stress management; six weeks	Waiting list control	Reduction in anxiety (STAI) post intervention, not meeting significance	Cohort
Klamen DL [57]	30	First year medical students	Stress management seminars; three	No control	Students feedback reported that 81% improved their stress management, no statistical analysis	Cohort

Kushner RF et al [66]	343	Second year medical students; age 24-26 63.5%; white- 47.3%, Asian- 28.6%, Black- 7.4%	Behavioural change programme; six weeks	No control	66.7% of students with a mental health plan met their goal however this did not reach significance	Cohort
Lattie EG et al [68]	16	Medical students; mean age- 25.4; female- 50%	CBT; six weeks	No control	Reduced stress (PSS) following intervention borderline significance (p 0.058, d =0.53)	Cohort
Lee J et al [56]	66	First and second year medical students; female- 66.7%	Stress management emphasising role modelling by senior physicians; six weeks	No control	Students feedback reported an increased awareness of the importance of their personal wellbeing	Qualitative study
Malathi A et al [51]	50	First year medical students	Yoga, x 3 weekly; three months	Control- no intervention	Significant reduction in baseline and 'examination day' anxiety (STAI) in the intervention group ($p < 0.001$)	RCT (un-blinded)
Malik S [71]	172	Second and third year medical students and faculty	Faculty member led mentorship	No control	18.4% rated intervention as successful, success significantly associated with active engagement by tutors	Cohort/ Qualitative
Mehta M et al [52]	36	First year medical students; age 17-21- 100%; female- 41.7%	Yoga, x 6 weekly; four weeks	No control	Significant improvement in wellbeing (PGWBI) (p 0.000)	Cohort
Mitchell RE et al [62]	38	First year medical students	Non-directive stress management group for 7 weeks/ one off stress management and study skills lecture	Control- no intervention	No significant reduction in in depression (BDI) or anxiety (STAI) for either intervention groups	RCT (un-blinded)
Moir F et al [43]	275	Second and third year medical students; mean age- 20.9; female- 54%	Mindfulness (peer led); 19 weeks	Control- not invited to attend intervention however, were not excluded	Improved mental health (PHQ- 9, GAD-7) in the intervention group, not reaching significance	RCT (un-blinded)
Mouret GM [72]	412	First year medical students	Peer led mentorship	Control class pre-intervention	Reduced stress (Likert scale) at enrolment, less consistent at six months post intervention, no statistical analysis	Cohort

Moutier C et al [74]	2860	medical students (n=498), pharmacy students and medical residents	Education to destigmatise mental illness/ confidential on-line screening for depression (PHQ-9) and suicidality/ those 'at risk' being offered on-line counselling and referral for treatment	No control	42 interacted with an on-line counsellor, 15 were referred for treatment. Of the cohort referred for treatment, 71% would not have sought treatment without the programme	Cohort
Pereira MA & Barbosa MA [63]	33	Third and fourth year medical students; ages 19-26; Female- 58%	Stress management; semester	No control	Post course feedback- 3.2% enhanced relaxation, 16.1% enhanced quality of life	Cohort
Pereira MA, Barbosa MA et al [61]	76	Second, third and fourth year medical students; mean age- 21; female- 53%	Stress management; semester	No control	Post course feedback-67% less stress however 21.1% reported an increase in stress, no statistical analysis	Cohort/ Qualitative
Redwood SK et al [55]	1,111	First year medical students	Stress management (peer led); 7 weeks	No control	Post course feedback-considered valuable by 72%, 97% positive about peer leaders, no specific outcomes on stress/ anxiety	Cohort
Rehman R et al [70]	1000	First year medical students; mean age- 20; females- 61-65%	Faculty member led mentorship	Control school without mentorship programme	Significant increase in ability to overcome anxiety (Likert scale) compared to non-mentored ($p<0.001$) however non-mentored students significantly better emotional wellness (Likert scale) than mentored ($p <0.028$)	Cohort
Rohe DE et al [38]	81	First and second year medical students, mean age 22.7-24.3, female 50-63%	Pass/fail grading system	Control class with 5-interval grading system	Significant reduction in stress (PSS) in pass/fail class than their 5-interval graded peers (p 0.01), improved mood (POMS) did not significance	Cohort
Rosenzweig S et al [45]	302	Second year medical students	Mindfulness; 10 weeks	Active control group (didactic seminars on complementary medicine)	Significantly improved mood state (POMS) post intervention period ($p < .05$) not apparent in control	Cohort

Sarikaya O et al [40]	201	First year medical students; mean age 21.7-22	'Problem based' curriculum - allowing for a smooth transition from basic to clinical sciences	Control class with traditional lecture based curriculum	Control students had significantly more anxiety (Likert scale) for clinical skills such as phlebotomy and suturing ($p < 0.001$). Despite receiving communication skills training students within the 'problem based' curricula had significantly more anxiety for communication, such as dealing with nurses ($p < 0.05$) and psychiatric patients ($p < 0.005$)	Cohort
Scholz M et al [58]	42	Medical students; mean age- 24.9; female- 88%	Progressives muscular relaxation/autogenic training; 13 weeks	No control	Reduced depression (BDI-II) post intervention not meeting significance (effect size 0.07)	Cohort
Shapiro SL et al [44]	200	Premedical, first and second year medical students, 20 other students	Mindfulness; 8 weeks	Waiting list control	Significant reduction in anxiety (STAI) (F 4.11 $p<0.05$) and depression (SCL-90-R) (F 8.18, $p<0.006$)	RCT (un-blinded)
Slavin SJ, Schindler DL et al [76] Slavin SJ, Chibnall JT [77]	Approx. 875	Medical students	Multifaceted intervention with Curricular and grading change/ learning communities/ resilience and mindfulness curriculum/ confidential mental health screening/ peer led clinical coping strategy programme	Control pre-intervention classes	Significant reduction in anxiety (STAI) and depression (CES-D) post intervention ($p < 0.001$, effect size of 0.18). No data available regarding senior class outcomes, however noted to be less favourable	Cohort
Thompson D et al [75]	120	Third year medical students	Reducing barriers to care through ensuring easily available, affordable and confidential therapy services	Control pre-intervention class	Significant reduction in depression (CES-D) ($p<0.01$) and suicidal ideation ($p<0.001$) post intervention	Cohort
de Vibe M et al [47]	288	Medical and psychology students; mean age- 23; female- 76%	Mindfulness; 7 weeks	Control- no intervention	Significant reduction in distress (GHQ-12) post intervention (Hedges'g 0.65, 95% CI 0.41, 0.88)	RCT (un-blinded)
Warnecke E et al [50]	66	Final two year medical student; mean age- 23.9; female 65%	Mindfulness (audio guided); 8 weeks	Control- no intervention	Significant reduction in stress (PSS) ($p < 0.05$) and anxiety (DASS) ($p < 0.05$) post intervention	RCT (single - blind)
Yorks DM et al [65]	69	First and second year osteopathic medical students	Group fitness class/exercising alone; 12 weeks	Control- no exercise beyond as a means of transportation	Significantly decrease in stress (PSS) (p 0.038) in the group fitness class compared to other groups	Cohort

CES-D, Center for Epidemiological Studies Depression Scale; BDI, Beck Depression Inventory; GWB, General Wellbeing Schedule; PSS, Perceived Stress Scale; SDS, Zung Self-Rating depression Scale; DASS, Depression Anxiety Stress Scales; SF-8, Medical Outcomes Study Short Form; SCL-90-R, Symptom Checklist-90-R; PSMS, Perceived Stress of Medical School Scale; BSI, Brief Symptom Inventory; STAI, State-Trait Anxiety Inventory; PGWBI, Psychological General Wellbeing Schedule; PHQ- 9, Patient Health Questionnaire; GAD-7, Generalized Anxiety Disorder Scale; POMS, Profile of Mood States Scale; GHQ-12, General Health Questionnaire

Discussion

High levels of academic pressure without the supportive scaffolding of wellbeing can cause distress and mental health difficulties. Within this review interventions to reduce academic stress through changing the grading system [38,39] resulted in significant improvements in well-being. Changing the curriculum to support the smooth transition into clinical training [40] reduced anxiety for procedural skills, however insights gained into the challenges of communication may have heightened anxiety in this area.

Many interventions focused on enhancing resilience. Studies in this review revealed that effective strategies include mindfulness [42,44,45,47,50] yoga [51,52] CBT [68], group based physical activity [65] and broader stress management/relaxation programmes [42,53,54,55,56,57]. Favourable outcomes are often associated with practice-based learning and a group setting [42,44,45,47,53,55,56]. Relational aspects with a group setting seem to have a role in an interventions success [65]. The review found that that interventions embedded within the curriculum can empower students to engage in self-care without guilt [56]. However compulsory interventions can impact negatively on wellbeing [64] possibly through not being responsive to individuals' needs and coping style; the latter having been shown to impact on outcomes [67]. The lack of sustained benefit at six months [45] suggests that students may benefit from an ongoing programme to support them adopting sustainable wellbeing practices; practice predicting favourable outcomes [47].

In this review peer support is shown to negatively correlate with depression [55], and its value was highlighted through peer led interventions [43,49,55,76,77,78] and mentorship [72]. The success of faculty mentorship is associated with mentor engagement [71].

Many medical students experiencing mental health issues do not seek support. This review revealed that 21% would not seek treatment if depressed [79] and 43% were not using mental health services despite feeling the need to [80]. Barriers include time [80,81,82] and financial [82] constraints, concerns about confidentiality in particular of diagnoses appearing on academic records [80,81,82,83] and stigma [79,80,81,82,83,84]. Stigmatised views are prominent, with 28.8% believing that seeking help for depression would make them feel less intelligent [79] and 66.1% that their application for posts would be less competitive if they sought treatment for depression [79]. Positively, interventions that reduced stigma through education, improved detection of 'at risk' students through screening and improved access to confidential treatment showed favourable outcomes [63,74].

Outcomes of multi-faceted interventions within the review were positive [76,77,78], however clinical year students had less favourable outcomes, suggesting that resilience enhancing interventions in pre-clinical years may not be sufficient to combat stressors encountered in clinical settings thereafter [77].

Strengths and Limitations

The review's broad inclusion criteria allowed both quantitative and qualitative studies to be reported, these being complementary in understanding the impact of wellbeing interventions. Despite this, only [41] studies were identified; one within the UK [71]. Due to the heterogeneity of studies, data was not always easily comparable. Some studies may not have been identified due to chosen keywords, exclusion of studies in languages other than English, and relevant unpublished studies may have been overlooked.

The primary research posed limitations. The often-self-selected nature of participants may constitute a group that is more likely to gain benefit due to their level of interest or need. The majority of outcomes were self-reported and thus open to recall bias and outcomes were predominately assessed with screening tools which may not accurately reflect symptoms meeting diagnostic criteria. Studies without a comparative group failed to control for confounding variables such as natural adjustment to university life and timings of key academic stressors. Where the control group was an alternative institution, confounding factors such as curricula, grading systems, and other formal and non-formalised wellbeing programmes were not controlled for. Generalisability may be impacted when students with acute and chronic illnesses were excluded [70] or when participants were studying osteopathic medicine, which may bring somewhat different challenges [65].

Conclusion

Whilst the availability of high-quality research is limited, there is evidence that a preventative framework to reduce risk factors and strengthen protective factors is effective in reducing stress and distress in medical students during their training.

Primary prevention strategies include modifying causes of excessive academic stress by rationalising curriculum content, non-competitive grading systems, smoothing transition to clinical experience and providing supportive clinical placements. Strengthening of protective factors include actively engaged mentorship and resilience interventions embedded within both pre-clinical and clinical curricula, with students having autonomy to choose interventions that resonate with their own beliefs and needs. Resilience has a social component [33] thus peer support to enable social integration should be in place, being mindful that additional systems may be required for minority groups at higher risk of marginalisation and depression [85]. Brief and easily accessible interventions for students with distressing symptoms not meeting diagnostic criteria are helpful to avoid progression to established mental health disorders [86]. All students should be supported to access care, including cohorts that may under-report their struggles such as minority ethnic and international students [87].

Secondary prevention focuses on the early detection and treatment of diagnosable mental health conditions. Strategies to aid early detection include training medical school staff and screening programmes. Access to effective treatment for established conditions requires clear referral pathways and external partnerships with the national health services and third sector agencies. Where difficulties in accessing treatment within local settings arise due to peers being on clinical placement, reciprocal agreements are needed to allow treatment outside of the local area. Students need reassurance that care is confidential through clear information sharing policies that promote the inclusion of their support networks in times of crisis.

Tertiary prevention reduces impairment that can be associated with mental health disorder, allowing resumptions of medical studies. Occupational health services advise on reasonable adjustments, and systems are needed to communicate these within rotating clinical placements.

The preventative framework aligns with an ecological model, recognising that medical students require a range of interventions at multiple levels to reduce stress, promote their wellbeing and to manage the spectrum of mental health difficulties they may encounter. Individual level strategies focus on promoting resilience; interpersonal level interventions on role modelling and mentorship; institutional level strategies highlight curriculum and grading, staff training, screening programmes, referral pathways and occupational health provision; community level factors include the creation of a destigmatising medical school environment where mental health is openly explored; national level interventions include pre-admission policies on disclosing mental health needs [88]. This multi-level 'whole university' approach is endorsed in the University Mental Health Charter [89] and General Medical Council guidance on the responsibilities of medical schools [90].

Co-production is the contribution of service users to the design and provision of services [91]. As interventions 'prescribed' by faculty do not

always align with medical students views on what would best support them [92], their involvement in the design of wellbeing strategies is crucial. The reciprocal nature of students being both influenced by, and being able to influence their environment is in keeping with the ecological model.

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Crisis & Contingency Care Plans: An Evaluation of their Use in the Management of Mental Health Crisis

Abubakar Isaac-Momoh, Juliet Agbowu and Mo Eyeoyibo

Introduction

The Department of Health in England in the spring of 1991 introduced the Care Programme Approach (CPA) as a form of case management to improve the community care of people with severe mental illness in England [1]. The Care Programme Approach is a national initiative that provides a framework for integrated and effective MH (MH) care for patients in the NHS [2]. The Care Programme Approach incorporates a care planning system designed to ensure that patients receive a systematic assessment of their health and social needs and the development of a person-centred care plan to address these needs. The CPA intends to prompt professionals into taking a holistic approach that considers the patient as an individual and their life in general when assessing their needs.

Since the creation of the original CPA guidance in 1991, it has undergone two essential updates to improve its effectiveness and implementation. These updates include the publication of Effective Care Co-ordination in MH in October 1999, which sets out guidance on integrating care management and care programme approach [3]. Also, C&C (Crisis & Contingency) planning became an integral aspect of the CPA process in this update [3]. The most recent update 'Refocusing the Care Programme Approach' was published in the spring of 2008. This update highlights good practice and puts recovery at the heart of the person-centred approach [4]. It also sets out how CPA is to be used effectively, including the requirement that care plans are regularly reviewed, and amendments made where necessary to ensure that it always meets the needs of the patient [4].

The CPA process now routinely expects patients to participate in a joined-up collaborative approach in planning their care, including C&C care planning. This joined-up collaborative approach to care planning, also referred to as Joint Crisis Planning (JCP) is intended to enable patient-centred care delivery [5]. Collaboration is usually between the patient and his/her care coordinator. However, these care planning meetings may include the patient's relatives or carers if the patient consents to it. Involvement of relatives or carers is usually necessary because during periods of crisis it may be difficult for patients to implement their crisis or contingency plans on their own and require the assistance of others to implement these crisis or contingency plans on their behalf.

It may be helpful here to first define crisis before outlining the requirements of a C&C plan and section 136 legislation.

Wales MH Policy Implementation Guidance on the Care Programme Approach for MH Service Users defines crisis as 'the subjective experience of lack of control, helplessness and perceived lack of ability to cope that a person experiences when he/she faces a stressful event that extends beyond their current repertoire of coping mechanisms' [6]. Crisis plans are specific plans of action for implementation in the event of a crisis. Contingency plans are plans put in place to be used at short notice to prevent early warning signs of a crisis from escalating into a crisis [6]. Patients often experience MH crises during out-of-hours necessitating the application of emergency interventions. For appropriate action to be taken during a crisis, anticipating the nature of the crisis and early warning signs is helpful [6]. Crisis plans should set out the action to be taken, based upon previous experience [5].

C&C care plans are statements recorded in patients' medical record demonstrating early warning signs of a crisis, and the personalised

coping strategies to manage these early warning signs and prevent the crisis from escalating [6]. Measures to prevent harm from coming to the patient should the crisis escalate, and the safety of the patient is at risk, are also recorded. Therefore, C&C plans should contain among other things early warning signs of an impending crisis and coping strategies to mitigate the crisis, contact details of support networks and the support available to manage and de-escalate the crisis and prevent the need for hospitalisation.

Section 136 legislation under the 1983 MHA refers to people identified as having MH needs within public places. This legislation provides the police with powers to remove a person identified as suffering MH issues from a public place to a place of safety if it is in the interest of the person or for the protection of others to do so [7]. Such persons can clearly be deemed as being in the midst of a MH crisis where use of a C&C care plan would be highly relevant and early use could possibly have averted such a crisis.

Rationale

There have been reservations in the effectiveness of the CPA in MH crisis care since its creation in the early 1990s despite its promises and intentions. Such ineffectiveness was first alluded to by Hogman as early as in 1992 when he wrote about his doubts in the ability of 'community care' policies in providing compassionate, safe support for severely distressed MH patients [8].

More recently, the Care Quality Commission (CQC) an independent regulator of health and adult social care in England published a report on MH crisis care in 2015 which suggested inadequate care for patients in the community especially during periods of MH crises [9]. In the CQC report, they revealed up to 42% of patients experiencing MH crisis have difficulties accessing help at the time they need it and often do not get the right help [9]. This CQC finding was also echoed by the House of Commons Home Affairs Committee eleventh session report on policing and MH where they acknowledged the limited availability of appropriate care to people in MH crisis, especially at night resulting in the police becoming the 'de facto first aid response for people in a MH crisis' [10].

Anecdotally, these views are often expressed by patients in MH crisis when they are detained by the police to places of safety. These patients or their relatives often report that they had no choice but to involve the police when experiencing a MH crisis. The lack of adequate crisis care in the community may partly explain the increasing number of patients in MH crisis detained by the police under section 136 of the MHA and brought to local places of safety. This increasing number of patients detained by the police under section 136 due to MH crises is highlighted by the database of patients detained under section 136 of the Mental Health Act (MHA) within a typical NHS MH Trust. A close examination of this database shows that a significant proportion of patients presented with repeated MH crises despite being well known to MH services. These patients often present with what appear to be similar issues during each crisis presentation. With such repeated MH crises and the associated increase in the number of patients in MH crisis detained by the police under section 136, it is difficult to disagree with the CQC's assertion of failure or inadequate crisis care in the community.

There are multiple factors that contribute to inadequate community crisis care but the ineffectiveness of C&C care plan use is a significant contributor. The idea behind C&C care plans is that they will address issues presented by patients during MH crises and prevent a repeat of such crisis incidents.

Adequate management of patients in MH crises in the community is essential to limit the need for hospital admissions (whether voluntary or involuntary) and the consequent enormous cost of these admissions to the NHS. A lot has been mentioned over the media about the considerable pressure on public service finances in England of which the NHS is not exempt. The CQC in their 2015/2016 annual overview of the quality of health and adult social care in England described the situation as a challenging time for all health services including MH services as tight resources put the sector under significant financial pressure [11]. It is an open secret that MH services have borne the brunt of the cut in NHS funding. MH

services have continued to experience cuts in their funding in recent years. Available data from the King Fund show that around 40 per cent of MH trusts experienced reductions in income in 2013/14 and 2014/15 financial years [12]. This reduction in income has had a negative impact on the number of available beds in hospitals or community resources within various MH services. Therefore, ineffective crisis management resulting in repeated MH crises and the detention of patients under the MHA will not only add to the existing financial pressures in the NHS but will also be very costly for allied services as well as patients and their family.

The following sections in this paper will describe the relevant findings from the literature review with regards to C&C planning and their effectiveness in managing patients experiencing MH crises. The aims and objectives of this study, as well as details of the study performed, will be described. This description will include the findings generated from this study and the suggested recommendations.

Literature Review

The following keywords were entered in Medline, PsycINFO, PubMed and The Cochrane Library as search criteria: crisis plans, contingency plans, mental health crisis care, care programme approach, Section 136 and police, Mental Health Act. These searches generated a relatively small amount of research relating to the use of patients' C&C care plans in managing crisis. Hence, a further search in Google scholar was conducted using the same search terms in order to include non-databased and unpublished reports (grey literature) in the review. Google scholar search also yielded a paucity of information. Many of the available studies related to the topic appear to focus on highlighting the increasing trend in patients in MH crises and the increasing detention of these patients under the MHA confirming the findings within this study and the seriousness of the issue. Others have analysed the Care Programmed Approach and its implementation across the NHS, but studies analysing the effectiveness of using C&C care plans in managing crisis appear to be lacking.

Professor Thornicroft and his colleagues, in an attempt to understand the increasing trend of sectioning patients experiencing MH issues, undertook their CRIMSON study in 2010. In this study, they noted a similar increase in the number of patients with MH issues admitted on a compulsory basis to psychiatric hospitals in England and Wales per head of population [13]. This increased number is thought to have occurred despite the patients having had CPAs with joint crisis planning (JCP) suggesting lack of effectiveness in JCPs. This contrasted from earlier studies carried out by Henderson and his colleagues in 2004, which suggested the effectiveness of JCPs [14]. Thornicroft and his colleagues highlighted several explanations for their finding, which included crisis interventions plans often being generic and not personalised to patients. The crisis plans were of poor quality with no meaningful interventions to address an impending crisis. The available interventions on these crises and contingency care plans were often not implemented by MH professionals when managing patients in crisis [13].

The National Institute for Health and Care Excellence (NICE) produced a quality statement and standards for adult MH in 2011 to guide professionals involved in managing patients presenting with MH crises. This statement and standards which are in keeping with the Department of Health Care Programme Approach (CPA) directives and enshrined in my organisation's CPA policy stipulates that every patient seen by MH services especially those experiencing MH crisis and therefore at risk of future crisis is expected to have a C&C care plan as part of their care planning process [15]. This NICE guidance stipulates that C&C care plan should contain standard information such as early warning signs of a crisis and coping strategies to manage the crisis, named contact and support available to help prevent hospitalisation as well as information about 24-hour access to services [15]. Other standard information to be included in the C&C plans are details of whether and the degree to which relatives or carers are involved in the care planning process, details of patients' advance statements or decisions and where safety of the patient is at risks and hospitalisation required, where the patient would like to be admitted and

the practical needs of the patient in the event of hospitalisation (e.g. childcare, care of other dependants, including pets)[15]. Despite this guidance, there continue to be problems in the management of patients experiencing MH crises as highlighted by the care quality commission. The CQC, in their recent report on the use of the MHA in 2018, revealed a year-on-year rise in the use of MHA since 2010. They put forward several suggestions to explain this increasing trend, including inadequate crisis care in the community highlighted as the main contributing factor [16].

The concerns around inadequate crisis care of community patients in MH crisis led to the birth of the MH Crisis Care Concordat in 2014. This MH Crisis Care Concordat is a national agreement between health services and agencies involved in the care and support of people experiencing MH crises in the community ensuring that these individuals get the needed help they require [17]. Also, the MH Crisis Care Concordat highlights that individuals experiencing MH crisis have a crisis plan that effectively identifies targets and contingency plans that would be instrumental in preventing the need for admissions into hospitals and improve patient's experience of the NHS [17].

Bearing in mind the issues highlighted in the sections above, an assumption can, therefore, be hypothesised that the increased frequency of MH crisis in community patients and the associated increased section 136 activity observed in these patients reflects their ineffective C&C care plans. A good understanding of the issues with C&C plans will, therefore, assist in addressing the increasing difficulty in managing patient's MH crises in the community hence the importance of this study.

Aims and Objectives

The aim of this study was to evaluate the effectiveness of C&C care plans of patients within a typical MH Trust in managing their acute MH crisis as well as preventing recurrence of further MH crisis and or detention of these patients under sections of the MHA (1983). This study, therefore, intended to improve the effectiveness of C&C care plans in managing patients' MH crisis.

The specific objectives of the study include:

1. To examine the content and quality of existing C&C care plans of patients and ascertain if they were fit for purpose and meet the standards outlined in NICE 2011 guidance on managing patients presenting with MH crises.
2. To determine whether patients' existing C&C care plans are being referred to or considered in decision making during crisis assessment and management.
3. To investigate the recurrent themes/issues that are associated with patients' frequent presentation to MH services in crisis and detention under the MHA.
4. To assess patients' and/or relatives' involvement in the formulation of C&C plans.

Methodology and Methods

The methodology utilised in this study is the evaluation research approach. This research approach provides researchers with the opportunity 'to judge actions and activities in terms of values, criteria and standards' while seeking to enhance effectiveness [18]. Utilising evaluation research approach meant this study was able to identify ineffective practices relative to national standards in the use of C&C plans when managing patients in MH crises and hence make recommendations to modify these ineffective practices.

This study was retrospective and utilised secondary data generated from the document analysis of electronic patient records within an acute MH NHS Trust. This data generation method enabled the collection of comprehensive existing data without disrupting participants that were investigated in the study [19].

A cohort of working-age patients between the age of 18 and 69 with MH issues presenting to my organisation in crisis and detained under section 136 of the MHA between 1st March 2018 to 31st March 2018 was identified from the Trust's section 136 database. A total number of 148 patients that met criteria for the study were identified and included in the study. Of these 148 patients, 122 of the patients were patients known to the Trust and had previous contacts with the

Trust before their detention under section 136 during this study period. These 122 patients were the patients focused on during analysis of the collated results in order to address the objectives of this study as these patients were expected to have C&C plans before their detentions. The remaining 26 of the 148 patients were either new to the organisation or were out of area patients and as such had no C&C plans in their records before their detention in March 2018. A structured template (see appendix 2) was used to gather data via free text and targeted keyword searches from each patient's case notes and correspondence on the Trust's records system. Data extracted include socio-demographics of the patients; recurrent themes/issues associated with patients' frequent MH crises; contents of the current C&C care plans and evidence of their use in decision making during crisis assessment and management; evidence of patients and or relatives involvement in crisis and care planning.

The data generated were analysed via text mining and simple MS Excel tables and charts. These processes enabled the data collected to be structured and summarised using categories and numerical descriptors such as frequency, and percentages. The tables and charts also allowed patterns within the structured data to be derived and inference or descriptive associations drawn about the represented population. These processes enabled sample data to be evaluated in comparison to set standards.

The data utilised in this study were anonymised and stored in a private computer that is password-protected and not accessible to the public. This process ensured that data utilised in the study were managed according to Data Protection Act (1998) to protect the identity and confidentiality of patients whose data were used in the study.

The methodology utilised in this study relied on the robustness of existing data, which was sometimes incomplete. Advantages of the approach were both financial and practical. The approach lends simplicity and ease to any future re-evaluation or study replication. The use of existing data enabled the investigation of distressed, vulnerable individuals during their period in crisis which would be ethically challenging with other approaches such as a mixed-methods approach which would require a direct interview of such vulnerable individuals. However direct interviews would have enabled the development of data-driven approaches that would enhance a deeper understanding of the processes underpinning section 136 and acute MH crises rather than relying on preconceived hypotheses [20,21,22].

This study was about service evaluation and the exploration of current practices and as such Trust ethical approval for this study was acquired from the clinical audit and service evaluation department. The study did not require ethical approval from Integrated Research Application System (IRAS); however, further ethics permission for this study was also granted by Middlesex research and ethics committee. Permission to access relevant records for patients utilised in this study was granted by the Trust clinical audit and service evaluation department.

Results

Figure 1
Shows the age range of study participants

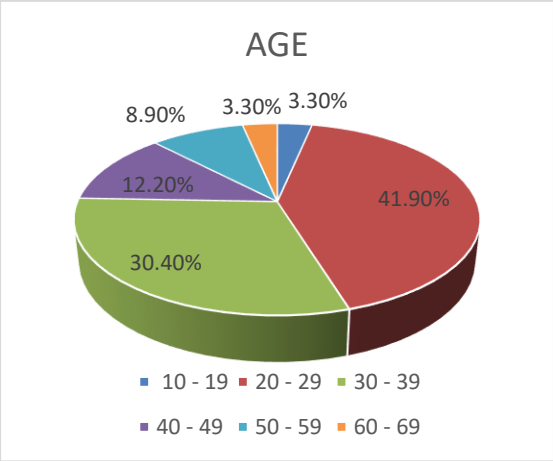


Figure 2
Shows the number male to female participants in the study

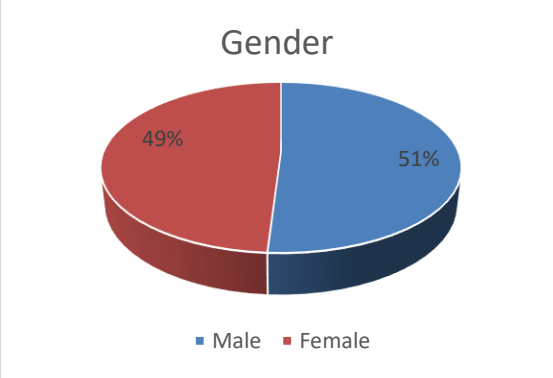


Figure 3
Shows the marital status of the study participants

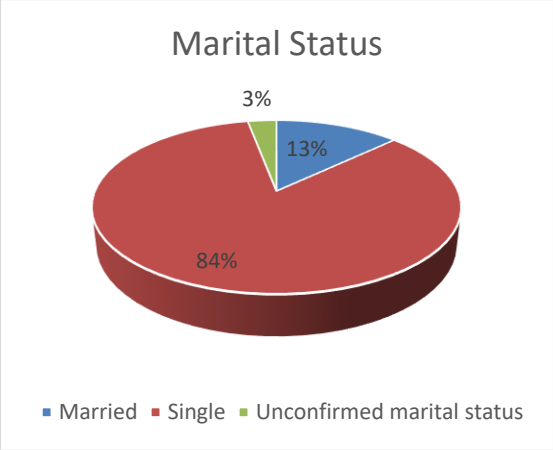


Figure 4
Shows the employment status of the study participants

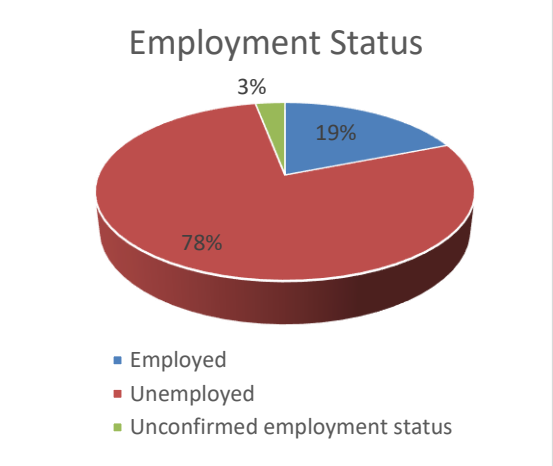


Figure 5
Shows number of previous section 136 detentions in study participants

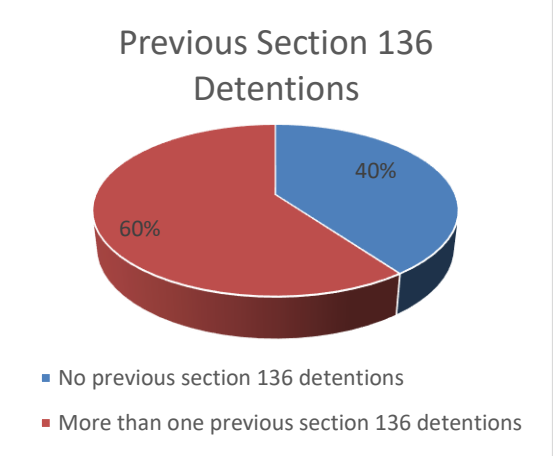


Figure 6
Shows outcome of MHA assessment following detention under section 136 in study participants

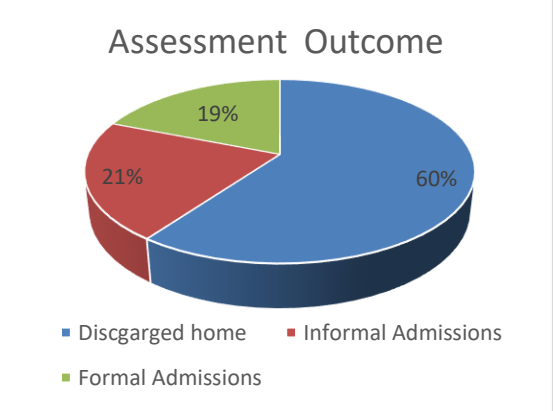


Figure 7
shows participants' previous contact with MH services; presence of care coordinator prior to participants' detention; presence of C&C plans prior to detention; use of C&C plans during section 136 assessment and management

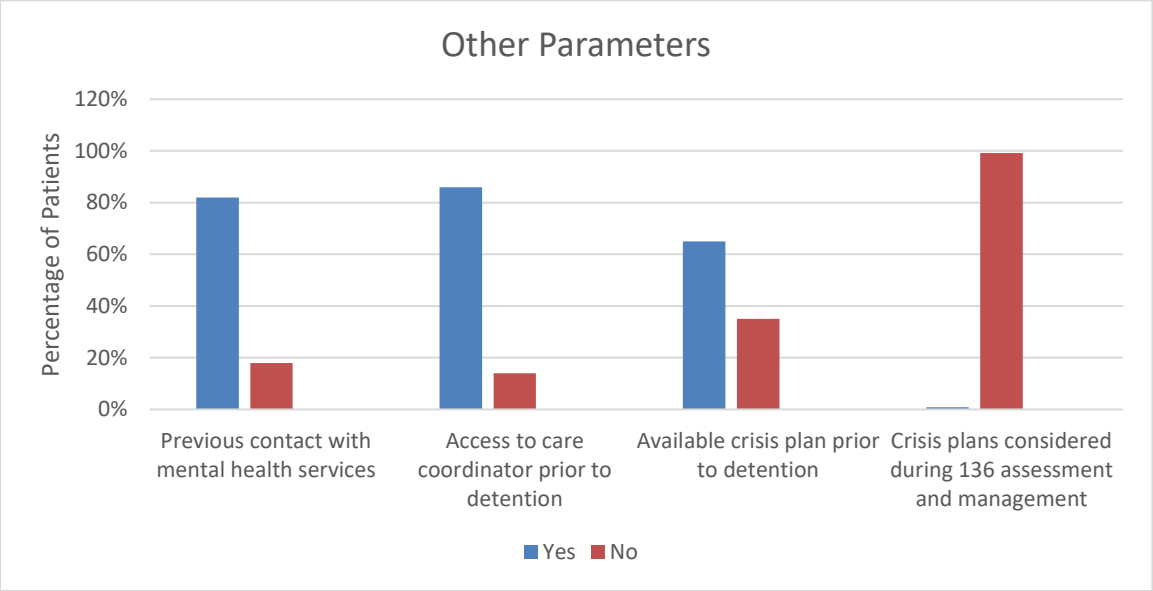


Figure 8
Shows the diagnosis of study participants

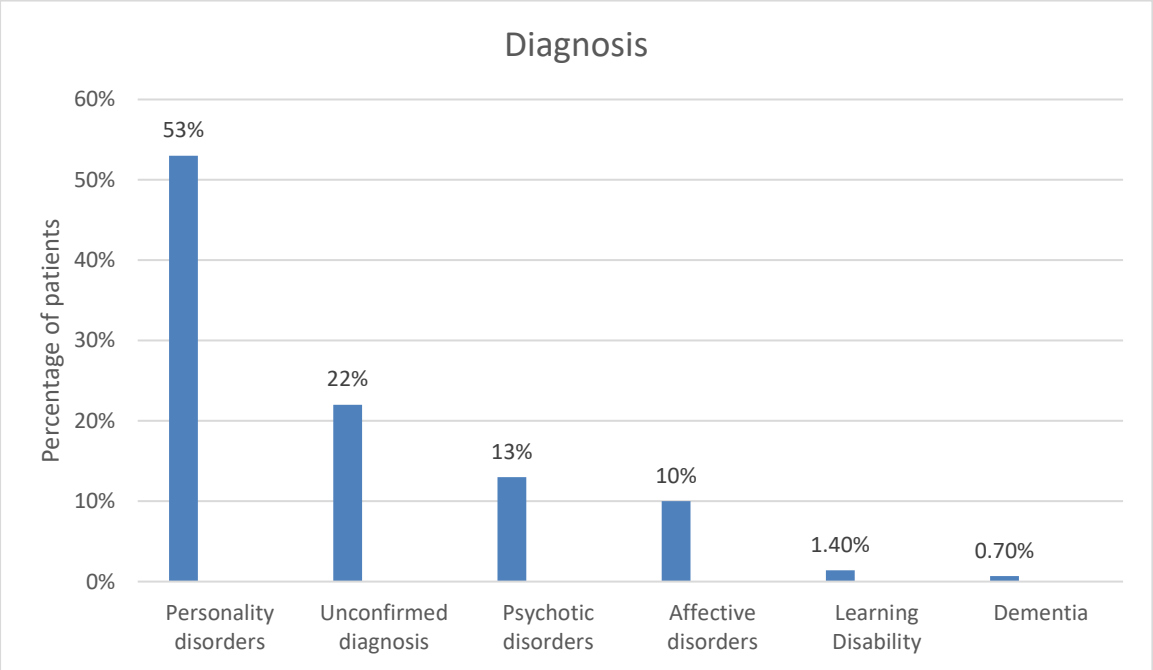
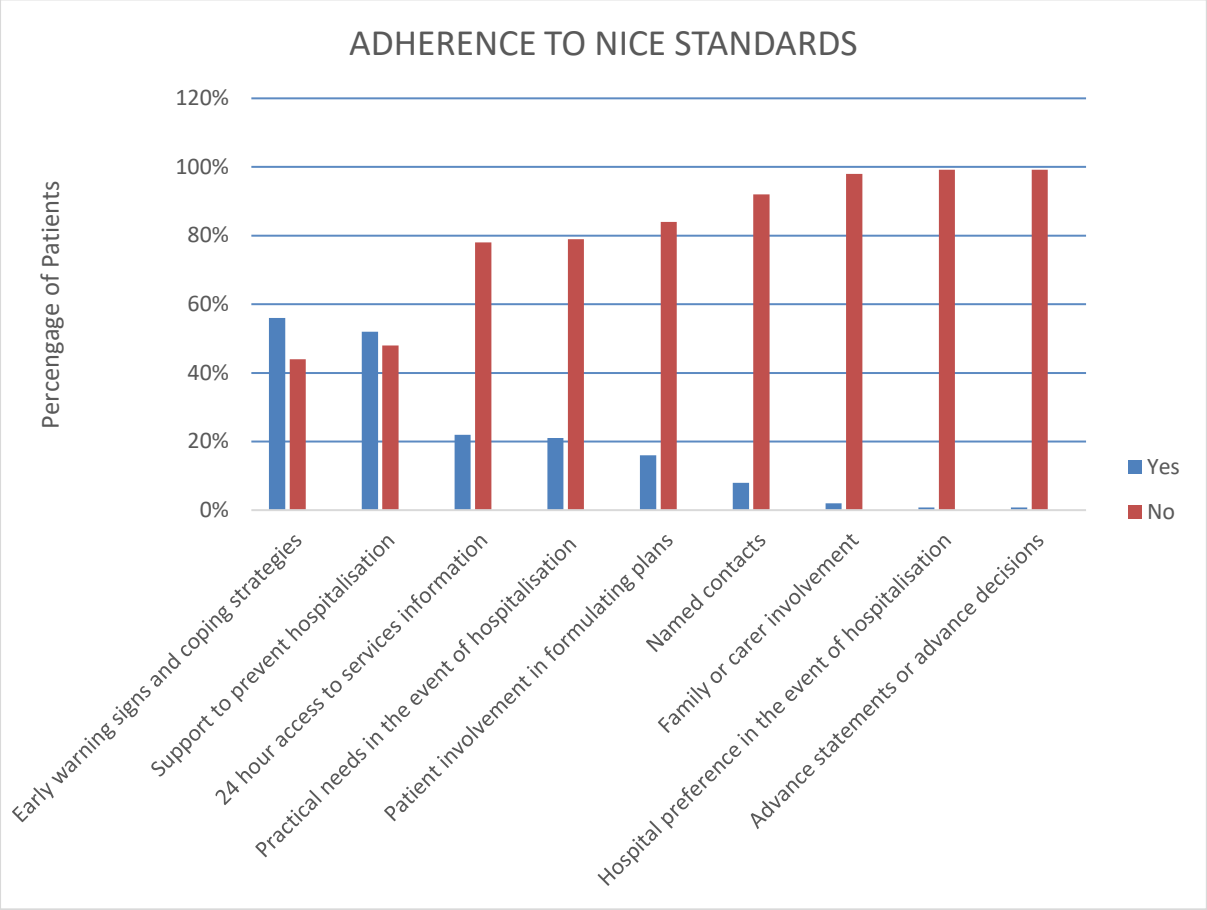


Figure 9
Shows contents of participants' C&C plans in relation to expected NICE standards



Discussion

This study aimed to offer a better understanding of the effectiveness of C&C care plans within my organisation in managing patients' MH crises. This study, therefore, examined the quality of patients' C&C plans and their implementation when patients present in MH crises and are detained under section 136 of the MHA.

This section highlights the overarching themes derived from this evaluation study and analysis, identifying the implications for improving services within my organisation.

The critical findings from this study are that C&C plans were not created for many patients following their contact with the organisation even when they presented in a MH crisis and had a care coordinator in place. In cases where C&C plans were created, the quality and contents of these plans did not meet national standards.

The number of patients detained under section 136 in one month suggests excessive use of section 136 by the police to manage people experiencing MH crises. This finding appears to suggest the failure of crisis management of patients experiencing MH crises and a lack of other support mechanisms leaving the police to deal with these patients. This result is in keeping with the suggestion made by CQC and the House of Commons in their reports [16]. The implication of this in terms of cost to services involved in these detentions is high.

Diagnosis

This study as illustrated in figure 6 differs from previous studies in the literature as it revealed personality disorders (53% of the patients) as the prevalent diagnosis compared to psychosis, which was suggested as the principal diagnosis previously in this patient group [23]. However, it is worth mentioning here that patients with cluster B personality disorders tend to have psychosis as part

of their experiences during a crisis and these psychotic experiences are often the primary precipitant of the crisis presentation.

The Outcome of Section 136 Assessments

This study showed that 60% of patients evaluated in the study did not require treatment in a hospital or meet the criteria for inpatient treatment; hence, they were discharged home following assessment while 19% met the criteria for formal hospitalisation and 21% met the criteria for voluntary hospitalisation. This result is consistent with a study by Zisman and his colleague in 2014, who noted that section 136 detentions accounted for just under one-fifth (19.2%) of all admissions [24]. These outcomes of assessments suggest that most patients experiencing a MH crisis do not require hospitalisation. This result further suggests that adequate care plans, including C&C plans, could lead to early identification of crisis and earlier action possibly preventing the need for section 136 detentions or hospitalisation.

Number of Previous Section 136 Detentions

Sixty per cent of the patients in this study had repeated detentions under section 136 of the MHA during the one month of study. One of the patients examined in the study had as many as 25 repeated detentions. This finding is consistent with findings in the literature where the majority of those detained under Section 136 had previous contact with MH services [25]. These contacts included previous MHA detentions. Zisman and his colleague in their 2014 study, found some individuals presenting up to five times during their study period of six months [24]. These repeated section 136 detentions could, therefore, be seen as a failure of C&C planning process in managing MH crisis as these plans should prevent repeated crisis presentation or escalation of crisis to the point of detentions under the MHA.

Quality and Content of C&C Plans

Sixty-five per cent of the patients in this study had some form of C&C plans documented in their medical records, while 35% had no C&C plans in their records. In the 65% of patients who had a C&C plans, the quality and content of these C&C plans varied from patient to patient. However, none of the C&C plans was written up as stipulated by NICE or had all the expected standards. Each of the C&C plan had several of the expected standards missing in them. This study revealed that 56% of the patients had possible early warning signs of a crisis and their coping strategies recorded in their crisis plans. 52% of the patients in the study had support available to help prevent hospitalisation included in the crisis plans. Only one patient's hospital preference (0.82%) was mentioned in her crisis plan. 21% of patients in the study had their practical needs in the event they rare admitted to the hospital mentioned in their crisis plan. Advance statements and/or advance decisions were only mentioned in one C&C plan (0.82). Relatives or carers were rarely involved in the formulation of crisis plans, with only 1.69% of patients in this study had such involvement.

Only 16% of patients in this study were involved in the formulation of their C&C plans. Twenty-two per cent of the crisis plans in this study had information about 24-hour access to services mentioned in them. In the remaining 78% of crisis plans, either there was no mention of available services or a nonspecific and often unclear generic statement appeared. Only 8% of the crisis plans in this study had names of contacts that can be contacted to support the patients in the event of a crisis. The 16% of patients identified as involved in the formulation of their care plans in this study was lower than that reported by the CQC in 2016 when they found evidence of patient involvement in care planning in 71% of records [26]. This finding is surprising despite several published research suggesting that co-production of care plans and developing advance statements with patients can be an effective way for services to prevent the rising number of detentions under the MHA [14].

This study revealed that crisis plans which adhered to NICE standards were often constructed in a nonspecific generalised manner, lacking personalisation to the patients. These results were in keeping with the findings from the Thornicort et al. 2013 study and appeared to suggest that the completion of C&C plans is a tick box exercise with no meaningful interventions put in place to address patients' needs or impending crisis [27]. The CQC in their 2016 report also made similar observations that care plans did not take into account patients' needs [26].

Use of C&C Plan in Decision Making Following 136 Assessment

This study revealed that in cases where there were C&C plans in place in the patients' records these C&C plans were often not consulted during the patients' section 136 assessments. In this study, only one patient (0.82%) had her C&C plan considered in deciding her management during her section 136 assessment and management. This finding is not surprising as the majority of C&C plans examined would have offered little guidance. This lack of use of C&C plans during section 136 MHA assessments, therefore, begs the question of the point of C&C plans. However, we know from research studies that co-production of C&C plans with patients especially where these crisis plans are completed correctly were helpful to patients during crisis presentation and can be an effective way for services to address the rising number of detentions under section 136 of the MHA [14].

Conclusions

This study did not identify any area of excellent practice with regards to the quality of real C&C plans or their use in managing patient's MH crisis especially when patients present in MH crises and are detained under section 136 of the MHA. The recurrent theme identified by this study indicates a failure to provide plans for a large proportion of patients. In cases where plans were created, the contents did not follow the standard criteria outlined by NICE guidelines. Patients were rarely involved in formulating the plans and they were often generic and not personalised to patients' needs. The C&C plans examined in this study can, therefore, be described as not fit for purpose and may have contributed to the observed increase in the recurrence of MH crises in patients and their detention under section 136.

Finally, professionals undertaking assessments of patients in MH crisis detained under section 136 did not refer to or consider patients' C&C plans when deciding management plans for patients.

Recommendations

Organisations should ensure all clinicians making initial contact with patients are trained in creating C&C plans in line with recommended NICE guidance. Professionals undertaking MHA assessments should familiarise themselves with patients' C&C plans and consult them in their decision making in order to best support patients.

Organisations should provide prompts at places of safety (where MHA assessment take place) to remind professionals undertaking section 136 assessments to consult patients' existing C&C plans during such assessments.

Organisations should include the creation of C&C plans as an essential requirement for all clinicians making the first contact with patients, especially those presenting in crisis. This C&C plans should be included in the letters sent to patients and their general practitioner following such contacts.

Organisations should ensure all clinicians making initial contact with patients are trained in creating C&C plans in line with recommended NICE guidance.

Finally, organisations should review their MH C&C planning at regular intervals to ensure that it is 'fit for purpose'.

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Moral Injury and Distress In Health Care Professionals During Infectious Disease Crises

Verity Williams, Rafey Faruqui, Rhian Bradley and Julie Anderson

Abstract

Healthcare crises create challenges for all professional workforces. In this context, healthcare workers in particular may experience distress when their actions or experiences conflict with their ethical values. Moral injury is a concept which emerged in military contexts to describe the specific distress experienced by individuals exposed to potentially morally injurious events (PMIES) which violate or conflict with their moral beliefs. This paper discusses the concept of moral injury as experienced in the healthcare workforce during infection epidemics and pandemics, with reference to the COVID-19 pandemic. We describe a systematic review of the extent, and clinical and socio-demographic correlates, of moral injury in healthcare professionals during the COVID-19 pandemic.

Introduction

The phenomenon of moral injury (MI) within professional workforces in the context of mass scale disaster events, such as wars and infectious disease, refers to distress resulting from perceived challenges to a person's profound moral and ethical values. Whilst the term 'moral injury' originated in relation to the military, the deontological basis of medical practice, which directs a doctor's duty to the individual patient rather than to society's wider needs, may place doctors at risk of moral injury when this duty is perceived to have been breached. In a crisis such as the COVID-19 pandemic, healthcare professionals may be more exposed to potentially morally injurious events (PMIES), such as participating in decisions to withdraw care due to resource shortages, for example.

An aspect of moral injury debated in the military literature concerns what should constitute a 'transgressive act' predisposing to MI. To be transgressive, the act must violate accepted rules of behaviour, and it has been suggested that transgressive acts should be defined as those falling outside the 'rules of engagement' (in a military context) [1] In a healthcare setting, the COVID pandemic presents a situation out of the ordinary, where resource shortages and other limitations may lead to situations that fall outside the normal 'rules of engagement', thus leading to an increased likelihood of resultant moral injury. The socio-cultural context in which healthcare professionals work may be expected to influence which events are conceptualised as 'potentially morally injurious', and to what extent. A review of evidence for moral injury in past pandemics or infectious may help to define circumstances that could predispose to moral injury.

In the light of expanding discussion of this rapidly developing area, we conducted a systematic review of the medical literature to understand the extent and clinical and socio-demographic correlates of moral injury during the COVID-19 pandemic. In this paper, we discuss the extent and associations of moral injury in healthcare workers during COVID-19, as well as features of distress recorded in studies from previous infection epidemics, with a view to developing strategies for improved disaster-preparedness in the workforce.

Systematic review

We conducted a systematic review of reports on online databases in February 2021, using the following search terms: "moral injury" AND "covid" OR "coronavirus" OR "pandemic", supplemented by reference searching (see Appendix). Our search

identified 502 records; after screening articles and removing duplicates, four reports met our protocol requirements.

The papers reported outcomes from 3334 subjects in total, with a higher proportion of female subjects. The largest study [2] reported MI in 41.3% of their sample. Other papers did not use a cut-off value for the moral injury scales, and therefore did not provide prevalence data. The study characteristics and results are presented in Table 1, below.

Table 1
Study characteristics and results

	Hines SE, Chin KH, Glick DR, Wickwire EM. 2021. Trends in Moral Injury, Distress, and Resilience Factors among Healthcare Workers at the Beginning of the COVID-19 Pandemic.	***Hines SE, Chin KH, Levine AR, Wickwire EM. 2020. Initiation of a survey of healthcare worker distress and moral injury at the onset of the COVID-19 surge.***	***Litam S, Balkin R; 2020. Moral Injury In Health-Care Workers during Covid-19 Pandemic***	***Wang Z, Koenig HG, Tong Y, Wen J, Sui M, Liu H, Al Zaben F, Liu G. 2020. Moral injury in Chinese health professionals during COVID-19 pandemic.***
Publication status:	Published	Published	Advance online publication	Preprint
Location:	USA	USA	USA	Mainland China
Date of study:	March -July 2020	20th March – 7th April 2020	May-July 2020	March-April 2020
Aims/ target population	Healthcare workers during first 3 months of COVID pandemic response in USA. Hypothesis that experience of moral injury would increase over the course of the pandemic and vary with resiliency factors	Reported initial measurements of self-reported distress and moral injury among healthcare workers at the onset of the COVID-19 surge in a large academic medical centre in Baltimore.	Understanding the extent to which physicians, nurses, and other healthcare workers experience moral injury whilst working in a pandemic.	To examine the prevalence and correlates of MI among physicians and nurses in mainland China during the pandemic

Study design	Longitudinal observational study. Convenience sample of staff members via email	Observational, cross-sectional online survey. Convenience sample of staff members via email	Cross-sectional survey, online. Convenience sample recruited online.	Observational, cross-sectional online survey. Convenience sample.
Sample size	96	219	109	3006
Demographics:	Male 49% Mean age 40.6 Physicians: 89.7%. Other (nurses and allied healthcare professionals) 10.3% Ethnicity not specified	Female 57%; male 43%, nonbinary/no answer 1% Age mean 39.10 85% physicians, 15% other Ethnicity not specified	76% female. 40 physicians, 62 nurses, 7 other professionals. 75.2% White, 17.4% Asian/Asian American, 2.8% African American/Black. 2.7% Hispanic. 0.9% Native Hawaiian/Pacific	Male 34.9% Average age 35.4 583 nurses, 2423 physicians. 22% had direct contact with COVID patients.
Findings:	Moral Injury Events Scale (MIES) scores did not significantly change between baseline and month one or between month one and month three. A supportive workplace environment was related to lower moral injury.	Average MIES score 16.15 Higher proportion of inpatient time and sleep troubles associated with higher MIES score	Mean MIES score higher for physicians compared to nurses. Study uses a modified version of the MIES, using 6 items of the 9-item scale, with lower scores indicative of higher levels of moral injury. No MIES cut-off used, so no prevalence data.	Used Moral Injury Symptoms Scale-Health Professional (MISS-HP). Due to the lack of a 'gold-standard', the cut-off value of MISS-HP was determined based on self-reported functional impairment. Prevalence of MI – 41.3% (96% CI 393.3-43%). MI significantly less likely in married participants. MI significantly more likely in Buddhists/Taoist and those providing direct care to COVID patients. MI strongly and significantly correlated with depression, anxiety and burnout. Older HCPS less likely to experience MI than those <30 years. Higher MI in females.

Discussion

Our systematic review provided evidence that healthcare professionals working during the COVID-19 pandemic experienced moral injury. Correlates to moral injury in healthcare professionals during the COVID-19 pandemic included providing direct care to COVID-19 patients and a higher proportion of inpatient time. Demographic associations included being unmarried, being under 30 years old, being female, and being of Buddhist/Taoist faith background. Sleep troubles were also associated with greater moral injury. Healthcare role may be a significant factor, as nurses reported greater severity than physicians. There appeared to be a marked correlation between moral injury and experience of anxiety, depression and burnout.

The longitudinal study reported that more stressful and less supportive work environments predicted greater MI at 3 months follow-up. This accords with previous suggestions that inadequate support compounds moral distress following exposure to a potentially morally injurious event [3]. Workplace interventions that enhance support to healthcare professionals may therefore have a useful role in reducing the risk of moral injury.

At the time of our review, most studies contained data from early in the pandemic. Whilst the longitudinal study did not show a significant increase in moral injury over the 3-month period measured, all the studies used data from the pandemic's initial stages. Later data might indicate moral injury increase with hypothesised increased burnout, or conversely that acclimatisation to the pandemic leads to the development of new workplace norms and 'rules of engagement' that thus tend to modify the effect of exposure to potentially morally injurious events.

Most of the papers included in this review did not provide data on the prevalence of moral injury in their sample, due to the lack of a 'gold-standard' cut-off in the symptom scales used. This review demonstrates a need for further studies using a moral injury scale which has been validated for use in healthcare professionals. It should also be noted that MI is not a mental illness diagnosis, although it may contribute to other mental health diagnoses such as PTSD.

Having established the existence of moral injury in healthcare professionals during the pandemic, some possible targets for interventions begin to emerge, including social and workplace support structures, disaster preparedness, burnout prevention and occupational health strategies to address mental illness in healthcare workers. In military and other non-healthcare occupations, exposure to potentially morally injurious experiences has been found to associate significantly with post-traumatic stress disorder, depression and suicidal ideation, and to have highlighted the importance of interventions such as community support [1,4,5]. Considering the experiences of healthcare workers in other recent infectious outbreaks may provide evidence of the factors influencing workforce distress and suggest areas for targeted intervention. Whilst these studies do not all address the concept of moral injury specifically, as opposed to more general distress and impact on healthcare workers' lives, they may highlight recurring factors which influence distress and resilience in healthcare workers during crises and may assist in developing strategies as part of onward workforce preparedness.

There is little public record of healthcare workers' views from epidemics prior to the 21st century [6]. Throughout history there have been regular outbreaks of infectious disease causing epidemics and pandemics, including plague, cholera, flu, MERS and SARS prior to the COVID-19 pandemic. With increased global trade and cross-continental travel, changing land usage and increased human population, greater encroachment on natural habitats may spur more frequent pathogen transmission from animals to humans. There may also be threats related to climate change expanding the habitats of vectors of disease, drug resistance, insecticide tolerance, or even bioweapons [7]. Regardless of the recent experience of the COVID-19 pandemic, therefore, workforce preparedness for pandemics and other disasters is a necessity.

Studies of healthcare workers during infectious outbreaks have also identified loss of professional distance while providing care as a factor which may increase exposure to PMIES [8]. Providing direct care to patients where professional

duties take on personal resonance (for example, caring for those dying alone, or mediating between family and patient), as may have occurred during treatment for patients with COVID, could lead to such loss of professional distance. The association observed in our systematic review that nurses experienced greater moral injury than physicians could be explained by a greater role in such activities. Workforce preparedness strategies which acknowledge the potential of such experiences, promote adaptive coping, and encourage peer support, may be required.

Reports of personal fears such as risk of contagion and concern for the health of family, friends and neighbours were documented among Ebola outbreak workers [9]. Healthcare professionals during the COVID-19 pandemic also described fears of being infected and spreading infection to their families [8]. Rankin (2006) describes the effect of the SARS crisis on nurses in Canada as transforming their view of the profession as being relatively safe, as it had appeared throughout the later part of the 20th century, to one which was potentially life-threatening. Fears of exhaustion, spreading infection, disruption to home life and isolation were relevant features [6]. Nurses caring for SARS patients in Hong Kong expressed similar anxieties about fear of infection and the effect on their families [10].

A study of healthcare workers during the Ebola outbreak in Sierra Leone (2014-16) identified factors related to institutions, public health bodies, and uncertainty of knowledge as markers of distress. Lack of knowledge and misconceptions about the illness, absence of trust and support in the system, as well as insufficient risk information provision were involved in increased distress [9]. A study by Kreh et al (2021) on the psychosocial effects of COVID-19, during the early months of the pandemic in Italy and Austria, reported a loss of trust amongst healthcare professionals in hospitals, combined with uncertainty of information and lack, or anticipated lack, of resources. The study found evidence of moral injury regarding triage and PPE shortage [8]. Nurses caring for SARS patients in Hong Kong also reported feelings of powerlessness, unfamiliarity, and frustration [10]. Uncertainty with regard to information and resources, and fears of institutional failings, seem therefore to increase risk of distress in healthcare workers. Supportive workplaces and institutions that provide appropriate training and supervision, maintain equipment and infrastructure and ensure adequate communication regarding resources and health information may be strategically helpful.

Relevant factors may also exist in public attitudes towards healthcare workers. During the Ebola outbreak, stigma, quarantine and interpersonal isolation were found to be concerns for healthcare workers [9]. Uncertainty concerning means of transmission and public fear about the consequences of infection may affect interpersonal relationships and so reduce sources of social support for healthcare workers. Providing sufficient and accurate public information combined with offering support services to staff may constitute important intervention. Mechanisms to support staff could include building on existing peer networks and developing links with the community to increase trust.

Key areas for health system preparedness emerge from these prior infection experiences: these include adequate supply of equipment, provision of relevant knowledge, ensuring trust in the healthcare system, and better communication concerning risks to rationalise public concerns about spread of disease by health workers and fear of infection from patients [9]. In the case of the Sierra Leone Ebola outbreak, organisational interventions such as a risk allowance (due to economic impact of the outbreak, including increased cost of living), training and supply of equipment, and psychosocial support were developed [9]. Individual and social strategies identified as supporting resilience for staff included inculcating a sense of duty and service, peer and family support, support on social media, and religious beliefs [9]. During COVID, factors identified as supporting resilience have included organisational leadership, supportive environments, and provision of psychosocial and mental health support [8].

Conclusions

It is becoming clear that some healthcare professionals have experienced moral injury whilst working in the COVID-19 pandemic. It is important

that we are able to address moral injury awareness training as part of workforce preparedness and burnout prevention not only during the COVID-19 pandemic but when responding to other crises. Reviewing healthcare- worker experiences in previous infectious epidemics and pandemics may suggest factors that aid resilience or which conversely increase risk of healthcare-worker distress, with implications for developing interventions. Recognition of moral injury is important for the development of strategies to limit the impact of distress on the healthcare workforce. Such strategies include response preparedness, promoting adaptive coping and encouraging peer support.

Appendix

We conducted a systematic review of reports included in Medline, PsycINFO, BNI, CINAHL, EMBASE, EMCARE and HMIC databases using the following search terms: “moral injury” AND “covid” OR “coronavirus” OR “pandemic”. We also searched Google Scholar and Ovid Database and conducted reference searching. Our search was carried out in February 2021, and this was a rapidly developing area in the context of the COVID-19 pandemic. Therefore, we also searched for published quantitative primary research, advance online publications and pre-print research. We reported findings in line with Preferred Reporting Items for Systematic Reviews and MetaAnalyses (PRISMA). We excluded studies which did not offer new data, if data was collected outside the time period of the COVID-19 pandemic (prior to February 2020), or which did not report data on moral injury in healthcare professionals. We did not include studies which included data solely on PTSD symptoms, moral distress or ‘burnout’ rather than moral injury. Our search identified 502 records; after screening articles and removing duplicates, 4 reports met our protocol requirements. Two authors independently assessed the included studies’ methodological quality using a seven-item checklist (as used by Williamson et al, 2018). There was strong agreement between the authors’ ratings.

Three papers used cross-sectional designs. One paper reported longitudinal outcomes of their sample [11], with initial results already described in one of the other three papers [12]. Only one study [2] used a MI scoring system validated for healthcare professionals. The Moral Injury Symptoms Scale – Health Professional (MISS-HP) is a ten-item scale including data of betrayal, guilt, shame, moral concerns, loss of trust, loss of meaning, difficulty forgiving, self-condemnation, faith struggle, and loss of faith. The original scale was designed for military personnel but was modified for applicability to health professionals. It was administered to the Chinese sample following translation. The other papers used the Moral Injury Events Scale scoring system, which has been validated for use in military populations. One of the papers [13] appeared to use a modified version of the MIES, using 6 items of the 9-item scale. It was not clear which items had been omitted and no comment was made regarding the impact of this on validity.

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Opinion piece: A trainee's experience of virtual psychotherapy

Sharna Bennett

Introduction

The COVID-19 pandemic had a big impact on the way that psychiatric services work. The essence of psychiatry is about speaking to patients, face-to-face, to formulate and diagnose. However, with infection rapidly spreading across the world, there was a shift towards virtual methods of working to protect the health of individuals and the spread of the virus.

Core trainees in psychiatry are expected to complete two psychotherapy cases, which must be in different modalities. One should be a short-case (up to 20 sessions) and one should be a long case (with up to 40 sessions). These should both be completed by the end of CT3 [1]. There was further information released by the Royal College of Psychiatry (RCPsych), which advised that those trainees who were due to progress to higher training should not be penalised at ARCP due to difficulties obtaining psychotherapy competencies during the pandemic. Trainees would need further training in ST4 to ensure competencies are met. The College also advised that where trainees have started a case, they can continue this work via phone or a confidential videoconferencing platform. They recommended that supervision should continue using digital platforms e.g. Microsoft Teams [2].

A survey carried out by Mind earlier this year of 2000 people under mental health services reported that half of those people found virtual methods (telephone or online) easy to use. The data was analysed for key themes, and found that waiting times were shorter and there was more opportunity for anonymity, meaning that the patient felt able to speak freely. 15% of study participants found that their mental health got worse using virtual methods, with the key problems being technology, lack of confidentiality, and difficulties finding a private area in their own home [3].

The opinions of those receiving therapy may vary depending on the modality. A study from 2020 looking at internet-based CBT vs Internet-based psychodynamic psychotherapy for social anxiety disorder found no significant difference in preference. There were slight improvements in symptoms for both online methods [4].

A thorough study looked at the ethics behind online psychotherapy. It found several points in favour of this method, mainly with regards to flexibility, convenience and cost. The ethical issues against psychotherapy usage online were privacy and confidentiality, the need for specialist training, technology issues and emergencies [5]. This suggests that it is not a straightforward answer when discussing the future of psychotherapy ad psychotherapy training.

In this article, I aim to reflect upon my personal experiences with psychotherapy training as a core trainee, and to discuss and consider the advantages and disadvantages of using virtual methods.

Personal Experience

I have recently completed a psychotherapy case in Cognitive Behavioural Therapy (CBT). CBT is based around the link between, thoughts, feelings, behaviours and how they can all influence each other. There is a focus on negative automatic thoughts and how they cause us to be trapped in an ongoing cycle. CBT uses structured work to help to break the cycle [6]. I saw the patient on a weekly basis, over 19 sessions, which therefore meant that it was a short case. This started during the pandemic, and, at this time, the psychological services department were working remotely. Therefore, my supervisor agreed that I would work remotely in line with departmental practices. To maintain confidentiality, I will refrain from providing many details about the patient, but she

had a diagnosis of anxiety and depression and had previously undergone a course of CBT face-to-face.

Videoconferencing platform

I was given the choice of two platforms, Attend Anywhere or Lifesize. I initially started with Lifesize, as this was familiar to me. However, after using Attend Anywhere during my work in a community placement, I felt that it might be more appropriate for psychotherapy. With Attend Anywhere, the patient could wait in a waiting room. I could also send a text message to the patient with a link for them to join the waiting room. There were options for refreshing the call due to technical difficulties without having to end the call and reconnect which saved time and caused less interruption to the flow of therapy.

Setting boundaries

With videoconferencing, it can feel like an informal method of conversation. Therefore, it was important to set ground rules (without coming across as dictatorial). We agreed that sessions would be held in private, in a room with no disturbances (tv, phones etc.) Our attention would be focused on the therapy only, with the addition of taking notes where necessary. This carried over to supervision, where I ensured that I was in a private room with no other doctors to maintain confidentiality.

The therapeutic relationship

I started seeing my patient in March 2021, meaning that many people had become accustomed to virtual working by this time. I had attended teaching sessions and training using videoconferencing, but I had only seen one patient in a clinic appointment before using a virtual platform. I felt apprehensive about whether we would be able to build a therapeutic relationship through a screen, having never met in person. For the first few sessions I was worried about a lack of rapport. One of the noticeable issues was difficulty in reading body language. If you are in a room with a patient, you may be able to notice signs of anxiety such as fidgeting or toe-tapping, but here I was only able to see the patients face.

The patient's perspective

I had a brief discussion with the patient about the use of videoconferencing. She explained that she did not like the video therapy and would have preferred face-to-face therapy as it felt easier to speak to the clinician and to open up. However, she acknowledged the ease of using an online system and the reduced time spent travelling to appointments.

Technology issues

At times, there were issues with technology. For example, slow internet connection, meaning that the screen would freeze, or there would be a delay. This could be frustrating when we were having in-depth conversation, particularly if it was an emotional topic that was being discussed. The headphones that the Trust provided had a very quiet microphone, meaning that I had to switch equipment during the sessions.

An important aspect of CBT is completing exercises both between and during sessions. If the therapy took place in person, then the therapist and patient would work through printouts. I overcame this by using screen sharing and an online whiteboard function, where the patient was able to see annotations of diagrams. Fortunately, the patient had a printer and could print resources if required.

Attendance

I considered whether the use of videoconferencing affected patient attendance. I held 19 sessions with my client, but 5 of these were cancelled by the client. This was mainly due to childcare problems or other appointments. I communicated with the patient via email, and she cancelled sessions via this method, usually on the day.

Training

Although I had taken part in training and supervision sessions using videoconferencing, I had not received any training regarding how to get the most out of virtual sessions. I realise that there are several courses to enhance skills, but unfortunately as trainees we were not offered this.

Discussion

I feel that there are several advantages to using virtual methods of psychotherapy. Firstly, in terms of widening access. By being able to access therapy using a phone or computer, this is easier for both staff and patients who have disabilities that may limit their ability to travel to a community site. Likewise for patients who are unable to drive, it removes the issue of travelling on public transport to get to appointments.

Although it may be expensive initially in terms of licensing of video platforms and providing staff with the necessary equipment (laptops, phones and headsets), it may save the Trust money in the long term as less clinic rooms are needed and there will be fewer items printed. Likewise, it will be cheaper for patients, who do not need to pay for petrol or public transport to attend appointments.

Virtual psychotherapy can align well with trainee's schedules. My psychotherapy patient lived half an hour away from my work base. Taking traffic into account, if I had to travel to the community site local to the patient, this would realistically take up my whole morning or afternoon. With virtual working, I could fit this in around my other appointments, meaning that I could see more patients. This was helpful for my patient, who could arrange sessions around childcare. For some who work 9-5 jobs and struggle to attend appointments which will usually be between this time, it may give them more flexibility to attend, particularly those who work from home.

Despite the numerous advantages of virtual working, there are several issues to be taken into consideration. Firstly, not all patients have internet access, which therefore makes virtual psychotherapy impossible. Some may not have laptops or smartphones, and of those who do, a proportion will have unsuitable internet speeds to facilitate videoconferencing. Therefore, if psychotherapy were to continue to be virtual long-term, a group of disadvantaged patients would be excluded through no fault of their own. As previously mentioned, technology issues can be a barrier to successful virtual working. If there is equipment failure or connection issues, a session may have to be cancelled, whereas this problem would not occur face-to-face.

Patients may feel less responsibility to attend virtually, as missing an online appointment may not feel as important as missing an appointment where someone is waiting for you at a clinic. To counteract this argument, patients may feel more inclined to attend an appointment if they are able to do so from their own home.

Many patients suffer with loneliness which inevitably exacerbates mental health conditions, particularly elderly patients who may have limited social contacts. Speaking to a therapist allows human interaction, which can still be gained virtually, but arguably has a bigger impact in a face-to-face setting where interactions may feel warmer and more sincere.

It is important to consider patient consent when using virtual methods. As clinicians, we would always take informed consent from patients when beginning any treatment, whether psychological or pharmacological, but virtual methods are a newer way of working and it is important that patients are aware of the protocols in place to protect them. As the Mind study suggested, the biggest concerns for patients were around confidentiality and privacy. Patients should be made aware that therapy takes place in a private environment, and that trust equipment should be used with encrypted laptops and trust usernames and email addresses, and they would never be recorded without their written consent. Conversely, a concern for clinicians may be the possibility that the conversation is being recorded, or listened to by another person, which is a factor that cannot be completely excluded with virtual working.

Finally, a lack of training in this area may have a negative impact on the outcomes of virtual psychotherapy. Core trainees are usually new to psychotherapy and there is often little training around the provision of this (depending on the area of training), so alongside a lack of training around virtual working, it can be stressful and challenging for doctors to adjust to.

Conclusion

Although I listed slightly more disadvantages than advantages when discussing remote working, I found virtual psychotherapy training to be an excellent learning experience that gave greater

flexibility with my work schedule. My patient was less positive about the experience, which is why it is important to accommodate a mix of both virtual and face-to-face therapy in the future, as patients have individual preferences that vary. It will be interesting to see how the use of virtual therapy progresses through the pandemic. At the time of writing, clinicians are increasing face-to-face working again and introducing patients back into the clinic setting. If there are ongoing lockdowns in future as a result of COVID-19, there would need to be the introduction of a robust, long-term plan for virtual therapy.

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The Methods Corner: Introduction and Critical Appraisal

Ruth Knight

Introduction

The quality of the research that we conduct and that we rely on to inform clinical practice is important. In a 1994 editorial entitled 'The scandal of poor medical research', Doug Altman, a medical statistician well known for his work to improve the quality and reporting of research, famously said "We need less research, better research, and research done for the right reasons" [1]. Since then substantial improvements in terms of research quality and the standards to which research is reported have been made; for example, through the introduction of reporting guidelines such as the CONSORT guidelines for randomised controlled trials (RCTs) [2] which ensure a minimum set of items required to assess the conduct of the study are included in trial results publications. However, many areas for improvement remain and we each have a part to play in ensuring that published research is as high quality as possible.

Purpose

We cannot do good quality research unless we know what that is. In our new series of articles, 'The Methods Corner', we will cover a range of topics including: different research designs, statistical concepts, analysis methods and interpretation of results. Topics will be covered in a clear, interpretable manner with the goal being that these articles enable you to apply these skills and thinking to your own work.

Our Team

We have assembled a team of experts from the KJP editorial team who have between them a wide range of skills and expertise. This includes research specialists at professorial level, a medical statistician, clinically-active psychiatry consultants and directors as well as experts in literature search and synthesis.

Critical appraisal

The first topic in this series, which will be covered in this issue, is critical appraisal. Critical appraisal involves evaluating published research to assess its quality and reliability [3]. It is important not to assume research to be trustworthy simply because it has been published, but rather to examine this critically for yourself. A key question you should always be considering when reading a piece of published research is what biases it might be subject to; for example, if the study aims to assess the effect of a treatment, what impacted who received the treatment. Important areas for specific consideration include:

What journal is the research published in?

It has been estimated that the number of scientific papers published rises by 8-9% per year [4] with these spread across a wide range of journals including so-called 'predatory' journals [5]. It is therefore important to consider where the research is published, and in particular whether the journal in question is peer-reviewed. Peer-review is an important quality control process for published research.

Who are the team?

The skills and expertise of the research team should be assessed to see whether they are the right people to conduct this research; for example, whether they have the relevant clinical background or appropriate methodological skills. Any conflicts of interest which have been declared should also be evaluated to assess whether these pose a concern.

What are the objectives of the study?

The aims of the study should be clearly stated, and, where appropriate, these should match those that were set out at the start of the study. A record of the aims and objectives planned at the start of a study may be available through a published protocol or registry.

What study design is used?

It should be considered whether the study design chosen is appropriate to answer the question at hand; for example, a randomised controlled trial (RCT) is suitable for comparing two treatments, whilst a cohort study is a better option for considering the natural history of a disease.

Who are the population?

The population eligible for inclusion in the study should be examined to assess whether this is appropriate for both the condition and, if applicable, the treatment under consideration. In addition, it should be considered whether the group of patients included in the study are representative of this population of interest, for example by examining a summary of demographic characteristics.

What analysis methods are used?

It should be considered whether or not appropriate analysis methods to answer the question(s) of interest have been selected, and whether these have been applied correctly in order to do so.

What are the conclusions?

Whether or not the conclusions drawn are consistent with the data and results presented should be considered. It is also important to examine whether the conclusions address the aims and objectives laid out for the study.

These questions provide a guide to some of the key points that it may be appropriate to consider as part of a critical appraisal. This is by no means an exhaustive list of points that could or should be considered; equally, not all of these points will be appropriate for all types of research. It is, however, key to consider the merits of a piece of research critically before accepting its results.

Your questions

We want to address the questions about research questions that are most important to you. If you have a particular issue you would like to see addressed in future issues, please email: methodscornerKJP@outlook.com

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