Caring for the carers: an evaluation of the recovery, readjustment and reintegration programme (R3P)

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ABSTRACT

Introduction The challenges faced by healthcare workers, not least during the response to the COVID-19 pandemic, have been extensively studied, and concerns continue to be highlighted in relation to their long-term mental health. Identifying the need to support their personnel, a leader-led structured programme of reflection: the recovery, readjustment and reintegration programme (R3P) was designed by the UK Defence Medical Services to mitigate the potential stressors associated with this outbreak and enhance the resilience of the workforce.

Methods 128 military personnel completed an evaluation of R3P. A survey included measures of anxiety before and after the intervention, perceptions of the discussion themes and whether these brought a sense of closure to areas of distress, and attitudes to help-seeking.

Results Most respondents (86%–92%) rated the five discussion themes either 'helpful' or 'very helpful', 51% of respondents reported a sense of closure about an issue that had been causing distress and 72% of respondents felt better able to seek help should it be necessary. Evaluating the effect R3P had on anxiety, a Wilcoxon signed rank test elicited a statistically significant difference in anxiety pre-R3P and post-R3P; Z=−3.54, p<0.001. The median anxiety rating was 3.5 (IQR 4.75, 95% CI 1.25 to 6.00) before undertaking R3P, which decreased to 3 (IQR 4.75, 95% CI 1.00 to 5.75) after undertaking R3P. 39.1% of participants reported decreased anxiety, 18.8% reported increased anxiety and 42.2% reported no change.

Conclusion This evaluation has identified several positive aspects to R3P with many personnel reporting a reduction in anxiety, a sense of closure and increased likelihood of help-seeking. Several participants did report an increase in anxiety and the long-term impact of R3P on mental health and well-being is unclear. Further mixed-methods evaluation incorporating a longer follow-up is required.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ During their contribution to the UK COVID-19 response, UK Defence Medical Services personnel were exposed to the same pressures that were shown to have significantly impacted the mental health of UK NHS personnel.

⇒ Leadership has a significant association with the mental health and help-seeking behaviour of personnel, while peers are best placed to provide immediate support.

WHAT THIS STUDY ADDS

⇒ Meaning-centred coping can form the basis of a robust intervention aimed at helping personnel cope with prolonged periods of pressure, and help leaders convey a sense of worth to personnel.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The recovery, readjustment and reintegration programme is now being evaluated for use within a decompression package for the wider United Kingdom Armed Forces (UKAF) on return from deployments.

⇒ This leader-led intervention, providing a safe environment and encouraging meaning-centred coping within a structure of peer support may lead to an improvement in help-seeking within the UKAF.

INTRODUCTION

The challenges faced by healthcare workers (HCWs) have been extensively studied, and concerns about their long-term mental health continue to be highlighted.[1 2] A study of the mental health of UK NHS personnel during the COVID-19 response found the prevalence of common mental health disorders to be higher than in the general population.[3]

UK Defence Medical Services (DMS) personnel were among those military personnel involved in the national COVID-19 response, many already embedded within the NHS and others drafted in from other areas. Identifying the need to support the mental health of their personnel, a leader-led structured programme of reflection: recovery, readjustment and reintegration programme (R3P)[4] was designed by the DMS. R3P had two primary aims: to promote meaning-centred coping and to encourage help-seeking. Meaning-centred coping relates to the maintenance and restoration of one's sense of purpose and meaning.[5] Meaning has been defined as a sense of coherence, purpose, achievement and existential fulfilment,[6] and the exploration of meaning could be achieved through reappraisal or acceptance,[7] plus exposure to other people's perspectives. Loss of personal meaning following exposure to trauma has a detrimental effect on personal functioning, while finding meaning plays an important part in the recovery process and is a stronger predictor of positive mental health than both emotion-focused and problem-focused coping.[5]

The research underpinning R3P identified themes that were reported by HCWs to generate distress during and after a prolonged period of stress. These themes comprise: vulnerability; death and suffering; professional and personal challenges;

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Table 1 Survey questions

Survey questions		
Serial no.	**Question**	**Response options**
1	What is your gender?	Male; female; transgender; gender neutral
2	What is your age? (In years only)	
3	a. Are you a member of the Armed Forces? b. If you are a regular or reserve member of the Armed Forces, to which service do you belong?	Regular; reservist; civil servant Royal Navy; Army; Royal Air Force; Royal Marines
4	What is your profession?	Doctor; nurse; paramedic; CMT/Medic; healthcare assistant; biomedical scientist; physiotherapist; non-clinical support; other
5	What is your rank/grade?	Drop down list
6	How long have you been a member of the Armed Forces? (In years only)	Drop down numerical menu; not applicable
7	Have you had experience of deployed overseas deployments?	Yes; no; not applicable
For questions 8 and 9—on a scale of 0–10, where 0 is low and 10 is high		
8	How would you rate your level of anxiety or worry, associated with the issues that you faced during the pandemic, prior to attending R3P?	Tick box: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10
9	How would you rate the importance of peer support in your willingness to engage in the R3P group discussions?	Tick box: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10
10	How would you rate the usefulness of each discussion group in addressing your experiences during the pandemic? a. Morally challenging decisions b. Vulnerability c. Death and suffering d. Professional/Personal challenges e. Expectations	Tick box: very unhelpful; unhelpful; helpful; very helpful
11	Following reflection during the R3P group discussions, please identify any of your experiences during the pandemic that have been particularly positive:	Free text
12	Following reflection during the R3P group discussions, please identify any experiences during the pandemic that you found particularly stressful:	Free text
13	Following the group discussions, do you now feel able to seek further help or support (medical/pastoral/peer) to enable you to better cope with your experiences of the pandemic?	Yes; no; not sure
14	On a scale of 0–10 (0 is not at all, 10 is extremely), how useful has R3P been in introducing you to people who you can contact should you need additional support?	Tick box: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10
15	On a scale of 0–10, (0 is poor, 10 is excellent), how would you rate your sense of value from the DMS for your contribution to the pandemic response?	Tick box: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10
16	On a scale of 0–10 (0 is low, 10 is high), how would you rate your level of anxiety or worry, associated with the issues that you faced during the pandemic now that you have completed R3P?	Tick box: 0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10
17	Following the group discussions, do you feel that you have been able to find a sense of closure to one or any of the previous concerns you had that were associated with the pandemic?	Yes; no; not sure
18	What aspects of R3P do you think could be improved?	Free text
19	Additional comments	Free text

CMT, combat medical technician; ; R3P, recovery, readjustment and reintegration programme.

expectations and morally challenging decisions,[4] the latter being strongly associated with poorer mental health if unresolved.[8] R3P enables leaders to use these themes as handrails, validating experiences and encouraging personnel to explore their meaning among peers who share a contextual understanding. Finding meaning, notably acknowledging the strengths and achievements within these potentially distressing experiences, offers an opportunity for post-traumatic growth.[9]

R3P also sought to encourage help-seeking. HCWs have been identified as being 'heroes', impervious to stress and unwilling to seek help.[10] The programme emphasises that discussion may generate a range of emotions, not all positive, but that this is normal. It also promotes the benefit of sharing experiences in a supportive environment, rather than ruminating on them in isolation. Leaders are able to highlight and endorse the specialist support available, and staff are encouraged to seek help if they feel any stressors remain unresolved, or if issues discussed during reflection cause distress. Numerous studies within military populations have identified a significant association between perceptions of leadership and mental health[11] and help-seeking,[12] while a study of HCWs during COVID-19 reported the benefits of supportive leadership.[13]

Consistent with recommendations about the implementation of novel interventions in the military,[14] an evaluation was undertaken to establish the efficacy of R3P as a leadership tool to support the mental health of their personnel.

METHOD

The evaluation was carried out across six DMS sites during June 2021 where the leadership team had received training on using R3P. On completion of the intervention, those who took

Table 2 Demographics and distribution of personnel reporting reduced anxiety and a sense of closure

Participant characteristics	Number (%), n=128	Reduced anxiety (overall 39.1%), n (%)	P value	Sense of closure (overall 51.6%), n (%)	P value
Service					
Royal Navy/Royal Marines	55 (43.0)	18 (32.7)	0.347	29 (52.7)	0.970
Army	26 (20.3)	10 (38.5)		13 (50.0)	
Royal Air Force	47 (36.7)	22 (46.8)		24 (51.1)	
Rank					
Senior officer	19 (14.8)	6 (31.6)	0.399	9 (47.4)	0.573
Junior officer	16 (12.5)	9 (56.3)		7 (43.8)	
Senior non-commissioned officer	23 (18.0)	10 (43.5)		10 (43.5)	
Junior non-commissioned officer and below	70 (54.7)	24 (35.7)		40 (57.1)	
Age (years)					
18–24	24 (18.8)	9 (37.5)	0.141	15 (62.5)	0.616
25–30	24 (18.8)	6 (25.0)		13 (54.2)	
31–35	27 (21.1)	10 (37.0)		11 (40.7)	
36–40	26 (20.3)	9 (34.6)		14 (53.8)	
41 and over	27 (21.1)	16 (59.3)		13 (48.1)	
Gender					
Male	53 (40.2)	20 (37.7)	0.796	24 (45.3)	0.232
Female	77 (58.3)	30 (39.0)		42 (56.0)	
Profession					
Doctor, dentist	10 (7.8)	1 (10.0)	0.007	4 (40.0)	0.020
Nurse	57 (44.5)	27 (47.4)		29 (50.9)	
Medical assistant	39 (30.5)	9 (23.1)		27 (69.2)	
Other clinical personnel	15 (11.7)	10 (66.7)		3 (42.9)	
Non-clinical support	7 (5.5)	3 (42.9)		3 (20.0)	
Service length (years)					
5 or less	38 (29.7)	12 (31.6)	0.558	26 (68.4)	0.012
6–12	32 (25.0)	13 (40.6)		15 (46.9)	
13–22	47 (36.7)	19 (40.4)		17 (36.2)	
23 or more	11 (8.6)	6 (54.5)		8 (72.7)	

part were invited to complete a pseudononymised survey. The questions in table 1 assessed how useful the discussion themes were, whether they helped participants achieve a sense of closure and whether R3P promoted help-seeking. A Likert scale aimed to determine whether such reflective discussions alleviated or generated anxiety. Analysis of the quantitative data was carried out using SPSS V.28 and to aid analysis, the Likert scales for anxiety, peer support and feeling valued were grouped into 0–3 (low), 4–7 (medium) and 8–10 (high). The free text replies were analysed using reflexive thematic analysis with the second author carrying out validity checks throughout each stage.[15] Prior to data collection, participants provided electronic informed consent for anonymous use of their data.

RESULTS

One hundred twenty-eight members of the DMS undertook an evaluation of R3P. Demographic data and the distribution of personnel reporting reduced anxiety and a sense of closure are presented in table 2. Profession was the only variable in which a statistically significant distribution was reported in both anxiety and closure, with a lower percentage of doctors, dentists and medical assistants reporting a reduction in anxiety; and a lower percentage of doctors, dentists and non-clinical support personnel reporting a sense of closure. Table 2 suggests that the benefits of R3P may be consistent across gender, rank, age and service.

Table 3 details self-reported anxiety pre-R3P and post-R3P. A Wilcoxon signed rank test elicited a statistically significant difference in anxiety pre-R3P and post-R3P; $Z=-3.54$, $p<0.001$. The median anxiety rating was 3.5 (IQR 4.75, 95% CI 1.25 to 6.00) before participants undertook R3P, which decreased to 3 (IQR 4.75, 95% CI 1.00 to 5.75) after undertaking R3P. Fifty (39.1%) participants reported decreased anxiety, 24 (18.8%) reported increased anxiety and 54 (42.2%) participants reported no change in score.

Table 3 also details the importance of peer support, with 67% identifying this as an important feature of the intervention. On conclusion of R3P, 72% of respondents felt better able to seek help and 47% found the intervention useful in introducing them to further support options. When asked to rate their sense of value within the DMS, only 39% felt highly valued. Analysis not included in this table found that a significantly higher percentage of personnel who reported feeling valued reported lower prelevel and postlevel of anxiety and a greater willingness to seek help. R3P provided 51% of respondents with a sense of closure about an issue that had been causing distress.

Table 4 highlights that most respondents (86%–92%) rated all discussion themes either 'helpful' or 'very helpful', and for each theme, a higher percentage of personnel reporting that the discussion was helpful also reported reduced anxiety and a sense of closure.

Table 3 Impact of recovery, readjustment and reintegration programme

Variables	Number (%), n=128
Importance of peer support	
Low (0–3)	18 (14.1)
Medium (4–6)	24 (18.8)
High (7–10)	86 (67.2)
Feel able to seek help	
Yes	93 (72.7)
No	13 (10.2)
Not sure	22 (17.2)
Useful in introducing you to support	
Low (0–3)	23 (18.0)
Medium (4–6)	44 (34.4)
High (7–10)	61 (47.7)
Sense of value from DMS	
Low (0–3)	31 (24.2)
Medium (4–6)	47 (36.7)
High (7–10)	50 (39.1)
Previous anxiety	
Low (0–3)	64 (50.0)
Medium (4–6)	33 (25.8)
High (7–10)	31 (24.2)
Current anxiety	
Low (0–3)	76 (59.4)
Medium (4–6)	32 (25.0)
High (7–10)	20 (15.6)
Change in anxiety	
Reduction between 3 and 10	21 (16.4)
Reduction of 1 or 2	29 (22.7)
No change	54 (42.2)
Increase of 1 or 2	20 (15.6)
Increase between 3 and 6	4 (3.1)
Sense of closure	
Yes	66 (51.6)
No	21 (16.4)
Not sure	41 (32.0)

DMS, Defence Medical Services.

Thematic analysis identified several stressors during the COVID-19 response: feeling unprepared, questioning their clinical competence, poor information from leadership, lack of support, isolation, morally injurious experiences and a fear of the unknown. Positive experiences were professional development opportunities, improved ways of working, increased sense of identity, teamwork, peer support and a new appreciation for life. While participants reported an appreciation for the protected time to reflect, suggested improvements for future programmes included the environment, timing and structure and a need for a greater mixture of ranks and professions to enable a better understanding of others' perspectives. Negative comments included R3P being rushed, not following the script and 'being another tick box exercise'. Of note, the four individuals who reported the highest increase in anxiety all reported negative comments about leadership and R3P delivery.

DISCUSSION

One of the primary aims of R3P to promote meaning-centred coping was implied, with most participants finding the discussions useful and over half of the sample reporting closure of a stressor due to those discussions. Failure to find closure may reflect the need for further reflection, which emphasises the need for supportive interventions to be woven into the fabric of the organisation, not simply with reactive one-off events.[16] Leaders' involvement in the discussion is also an important step in reducing avoidance,[17] an essential factor in enhancing psychological resilience. Meaning-centred coping has the potential to stimulate goal-directed value-driven action,[18] and further research may establish whether R3P prompted individual or organisational behaviour change. One area in which the development of a balanced meaning may prove beneficial relates to the exposure to morally injurious events, where distress may be caused by the individuals' inability to integrate their perception of events into a more global meaning and make sense of their experiences.[19 20] A further benefit to finding meaning is 'existentially mattering'; being given value and worth, significance and purpose, all of which are within the leader's gift and have a positive effect on mental health.[21]

Recognising that meaning provides a buffer against anxiety,[22] the statistically significant reduction in anxiety may reflect the sense of closure or through normalising the shared experience. Alternatively, it may reflect comfort in the knowledge of the additional services available or that their leaders have visibly invested time in their well-being. The increase in anxiety in some participants may reflect the breaking down of avoidance and causing participants to reflect on stressful events, or alternatively a reflection of how the intervention is conducted. Generating emotion, if managed well, which would include validating the individual and encouraging help-seeking, is not a negative reflection of this programme. Meaning-centred coping is not a quick fix, and a long-term follow-up would determine whether initial distress led to supportive conversations which then prompted closure.

The study had several limitations. The small sample size limits the generalisability of the positive results, and the timing of the preanxiety and postanxiety scores may lead to recall bias. As an initial evaluation, this was a valuable indicator that participants perceived benefit from the intervention, however, a future study would look in more detail at the changes in anxiety and over a longer follow-up period.

Given the extensive research linking leadership with mental health,[23] the emphasis of R3P in placing leaders at the forefront of the intervention and of the organisation providing legitimised time within the working day appears justified. The thematic analysis suggested that the intervention was seen as a clear investment in the health and well-being of personnel. Furthermore, leaders introducing personnel to the range of support services available, corroborated research stating that visible caring leadership, peer support and clear signposting enabled help-seeking,[24] with most participants reporting they felt able to seek help. The impact of peer support on long-term mental health is also widely acknowledged[25] and was reported as being highly important to most participants within this study. When supported through trauma, an individual may experience post-traumatic growth,[26] and in this case, respondents reported several positive aspects to their role throughout the pandemic.

While the implementation of R3P was accompanied by training and support tools, the pace of the rollout, scant available resources and concurrent stressors faced by each team limited the reach to all those responsible for its

Table 4 Evaluation of discussion themes

Value of discussions	Numbers (%), n=128	Reduced anxiety (overall 39.1%), n (%)	p value	Sense of closure (overall 51.6%), n (%)	P value
Morally challenging decisions					
Very helpful	38 (29.7)	21 (55.3)	0.061	24 (63.2)	0.243
Helpful	80 (62.5)	27 (33.8)		39 (48.8)	
Unhelpful	7 (5.5)	2 (28.6)		2 (28.6)	
Very unhelpful	3 (2.3)	0 (0)		1 (33.3)	
Vulnerability					
Very helpful	35 (27.3)	20 (57.1)	0.023	22 (62.9)	0.210
Helpful	82 (64.1)	29 (35.4)		41 (50.0)	
Unhelpful	8 (6.3)	1 (12.5)		2 (25.0)	
Very unhelpful	3 (2.3	0 (0)		1 (33.3)	
Death and suffering					
Very helpful	38 (29.7)	19 (50.0)	0.284	24 (63.2)	0.059
Helpful	73 (57.0)	27 (37.0)		38 (52.1)	
Unhelpful	12 (9.4)	3 (25.0)		3 (25.0)	
Very unhelpful	5 (3.9)	1 (20.0)		1 (20.0)	
Personal/Professional challenges					
Very helpful	43 (33.6)	23 (53.5)	0.058	25 (58.1)	0.235
Helpful	73 (57.0)	25 (34.2)		25 (52.1)	
Unhelpful	9 (7.0)	2 (22.2)		2 (22.2)	
Very unhelpful	3 (2.3)	0 (0)		1 (33.3)	
Expectations					
Very helpful	36 (28.1)	15 (41.7)	0.824	23 (63.9)	0.040
Helpful	75 (58.6)	29 (38.7)		39 (52.0)	
Unhelpful	12 (9.4)	5 (41.7)		2 (16.7)	
Very unhelpful	5 (3.9)	1 (20.0)		2 (40.0)	

delivery. This may have impacted the level of detail provided during the programme, particularly in relation to its structure, timing, content and consistency of signposting, which accounts for several negative comments. Reflecting on this, lessons learnt have already prompted the development of a webinar accessible via an electronic link and standardised instructions which include frequently posed questions.

CONCLUSION

This evaluation has identified several positive aspects to R3P with many personnel reporting a reduction in anxiety, a sense of closure and increased likelihood of help-seeking. It has also validated the relevance of the five discussion themes and highlighted their benefit in enabling personnel to reflect and find meaning in their experiences. Given the number of respondents who denied, or were unsure of having reached closure, it was concluded that there is a need for R3P to be an ongoing support tool. The opportunity to reflect among peers is only the start of the process of coping with challenging experiences and leaders should acknowledge their role in encouraging a culture of communication and meaning-centred coping. Recognising that several participants reported an increase in anxiety following R3P, further exploration is required to ascertain whether this relates to the recall of stressful experiences or the way the programme is carried out.

The long-term impact of R3P on mental health and well-being is unclear and further mixed-methods evaluation incorporating a longer follow-up is required. However, the early evidence suggests that the programme does encourage meaningful conversation while conveying a clear sense of value to DMS personnel.

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