

# Defence Committee Inquiry: Armed forces and veterans mental health

#### Written evidence submitted by Medact

#### **Executive summary**

- 1. This submission from Medact, an organisation that represents a wide variety of health professionals, presents evidence that military service has a detrimental impact on the mental health of minors recruited into the armed forces.
- 2. Psychologists characterise adolescence as a 'window of vulnerability'. In mid-adolescence, minors are less able than adults to make an informed choice about a military career, and are more susceptible to long-term impacts of high-stress environments.
- 3. Research has shown that mental health and behaviour problems are prevalent in the British armed forces, particularly the army, and are proportionally greater for those who enlist in the youngest age group.
- 4. The prohibition on deploying minors on operations insufficiently safeguards them from mental health effects of early military service. Evidence shows elevated levels of anger, anxiety and depression even in young personnel in training who have not yet been deployed.
- 5. Research clearly shows an association between childhood adversity and long-term susceptibility to stress, as well as the psychiatrically toxic effect of additional stressful experiences in adolescence. Minors from disadvantaged backgrounds are the most at risk from premature military service. Young people from disadvantaged backgrounds are most affected by military work; this group is particularly vulnerable to the stress of initial training and, later, to the stress of warfare in the context of developing PTSD.
- 6. In the wider public interest and to bring policy into line with the public health consensus regarding conducive environments for adolescent development, and with the large majority of other countries across the world, Medact encourages the Committee to call for an end to the recruitment of minors, and for more research focused on the impact of early military service on young people.

#### Introduction

- 7. Medact represents a variety of health professionals, bringing a public health perspective to the peace and security field. Among our concerns are the health effects of military service on young people, particularly minors with a childhood background of adversity.
- 8. The association between stressful war experiences and stress-related mental health problems is well established. This submission presents evidence that military service has a detrimental impact on the mental health of young people both before and during deployment on operations. We produced a report on this issue in 2016 and wish to offer new evidence to the Committee's inquiry. (1)

## Developmental susceptibilities in mid-adolescence

- 9. Psychologists have characterised adolescence as a 'window of vulnerability', particularly due to the elevated prevalence of mental health disorders, including anxiety. (2)
- 10. Adolescence is a developmental phase approximately between the ages of 10 and 19, with new research extending this to as old as 24, (51) during which complex changes in the brain alter decision-making biases and reactions to stress. (2,3,4,1) This includes the under-development of the prefrontal cortex and a higher capacity for plasticity, resulting in experiences during this time playing a role in determining which synapses are strengthened and long-term neurological development. (52) In mid-adolescence, which includes the 16–17 age group, two developmental susceptibilities are salient:
  - 10.1. **Decision-making.** Young people are more inclined in mid-adolescence than as adults to make life choices based on emotive appeal, rather than on an appreciation of their consequences. (3,4,5) Adolescents and young people are therefore more prone to risk-taking behaviours. In neurological terms, the reward-seeking, socioemotional structures of the brain develop early, whereas the cognitive structures responsible for evaluating the consequences of choices do not develop fully until late adolescence. (3,4,5,6) With this in view, Medact and other health professionals have argued that young people in mid-adolescence are at greater risk of enlisting without the understanding of military service that informed consent implies. (1,7) The risk is compounded by recruitment marketing and literature encouraging the view that presents military service as an adventurous career without risk. (1,8)
  - 10.2. **Reactivity to stress.** Young people in mid-adolescence are more susceptible than adults to high-stress environments, (2,10) leading to a higher incidence of mental health problems such as anxiety and depression. (3,11,2,12) Neurological research indicates that this is partly due to the tendency of the adolescent brain not to extinguish fear after a stressful event; under continued stress, the fear persists and becomes chronic. (2) Traumatisation and conditions of chronic stress can impede the development of the adolescent brain, and there is some evidence that this can lead to mental health and anxiety disorders in adulthood. (2,11,12) Medact and the American Public Health Association have therefore argued that it is not responsible policy to subject young people aged 16 or 17 to stress of a military environment, particularly initial training. (1,7) This applies with greater weight to young people who enlist with a childhood background of adversity, whose reactivity to stress is more marked than average, as discussed below. (13,14,15)

### Early military service: Risk factors

- 11. **Stress and aggression in initial military training.** The stress and aggression of initial military training could account for the elevated levels of anger, anxiety and depression found in young personnel who have not yet been deployed, and for the post-enlistment increase in violent behaviour, discussed below.
  - 11.1. Use of stressors. Initial military training is characterised by the extensive use of stressors, including beasting and punishment, to condition recruits for service. (38,39)
  - 11.2. **Repeated stimulation of aggression.** Military academics acknowledge that initial military training, particularly in the infantry, repeatedly stimulates aggression to prepare recruits for killing others at close quarters. (41,38) Some research from

Canada and Germany, and early research the US, has found that initial military training is associated with an increase in antagonistic attitudes. (42,43,44)

12. Taking into consideration adolescent reactivity to stress and its possible impact on brain development, the high-stress context of pre-deployment increases the risk of long-term mental health disorders in this age group.

## Mental health outcomes of military service, by age

- 13. Research shows that mental health and behaviour problems are prevalent in the British armed forces, and proportionally greater for those who enlist in the youngest age group.
- 14. We note that 20 per cent of armed forces recruits in 2016-17 were aged under 18. (53) 80 per cent of those recruited under the age of 18 enlist into the army, of whom 41 per cent enlist for the infantry. (54)
- 15. Research shows that personnel serving in frontline combat roles such as those within the infantry have reported a higher prevalence of PTSD than those in other roles. (19)
- 16. The King's Centre for Military Health Research (KCMHR) has found that British armed forces personnel as a whole are twice as likely as civilians to suffer from anxiety and depression (known as Common Mental Disorders); (16) more than twice as likely to be drinking at levels deemed harmful to health; (17,18) and slightly more likely to have the symptoms of post-traumatic stress disorder. (19)
- 17. While the data are not sufficiently disaggregated to determine the prevalence of these problems among minors specifically, it is clear that the relationship to age is linear; the youngest are most affected, and the oldest, the least. (21,22)
- 18. Research in the UK and US has not found that service in the armed forces brings a mental health benefit compared to full-time civilian education or work. (23,24,25,16)

## Mental health effects of military service prior to a first deployment

- 19. The prohibition on deploying minors on operations insufficiently safeguards them from a mental health impact of early military service. A growing body of evidence from the UK and US indicates that military service exacerbates pre-enlistment mental health problems, which are seen to increase soon after enlistment and before recruits are sent to war:
  - 19.1. Anxiety and depression (known as common mental disorders or CMD). As mentioned above, British personnel, including the youngest, are twice as likely as working civilians to experience CMD. This is probably not due to their socioeconomic background or to the effects of deployment, since the study's analysis was adjusted to account for socio-economic background, and an earlier study found that deployment to Iraq/Afghanistan was not a risk factor for CMD (16,21). The study's findings therefore indicate that military service is associated with an elevated rate of CMD before personnel are deployed.
  - 19.2. Anger. Nondeployed personnel (all ages) in combat roles, such as the infantry where minors are over-represented, are twice as likely as those in support roles to report anger problems linked to aggressive behaviour, such as kicking or smashing something, according to KCMHR. (29)<sup>1</sup>
  - 19.3. **Violent behaviour.** As a composite of anger, hostility, and negative internalised emotions such as depression, (31) violent behaviour is an indicator of mental ill-

<sup>&</sup>lt;sup>1</sup> The researchers found that personnel in combat roles (deployed and nondeployed) were twice as likely to behave aggressively, and also that there was no difference between deployed and never-deployed personnel.

health in a population. In 2013, it was found that the rate of violent and sexual offending among armed forces personnel (all ages) increased by a quarter after personnel enlisted and before they were deployed, reflecting similar findings in the US. (22,32) (After deployment, the rate of violent and sexual offending by British personnel reached double their pre-enlistment rate.) The same study found that that drug-related offences, which are another mental health indicator, showed a similar pattern of increasing prevalence relative to the pre-enlistment rate.

- 19.4. **Suicide.** The rate of suicide among army males aged 16–19 has been much higher than in the navy or RAF, and higher also than among civilians of the same age. (33) Since most of this age group has yet to be deployed, and since their elevated suicide rate has persisted through times of high and low operational tempo, it appears to be related not to deployment specifically, but to some other characteristic of early military service. Although the suicide rate in the age group has been in slow decline, in 2015 it spiked again. (33) Once young personnel leave the armed forces, the risk of suicide rises again; ex-forces personnel aged 16-24 have been between two and three times as likely as their non-veteran counterparts to kill themselves. (34)
- 19.5. Former junior soldiers. A study by the then Department for Business Innovation and Skills in 2012 found that 48 percent of junior soldiers at the Army Foundation College left the army within four years of enlisting (so-called Early Service Leavers). (35) The army's data show that most of its ESLs (all ages) are discharged during training, before their first deployment. (36) This group exhibits very high rates of mental health problems. Research by KCMHR has found that: 20 percent of ESLs had symptoms of PTSD; 46 percent were suffering from CMD; and 31 percent were misusing alcohol at harmful levels. (37)
- 20. Taken together, these findings offer clear evidence of a detrimental impact of early military service on young recruits' mental health, attitudes and behaviour.

#### The influence of childhood adversity on mental health outcomes

- 21. Considering evidence clearly shows the association between childhood adversity and longterm susceptibility to stress, as well as the psychiatrically toxic effect of further stressful experiences, (55) it is alarming that the army continues to target minors for recruitment. This group is particularly vulnerable to the stress of initial training, and to the stress of warfare in the context of developing PTSD. (26)
- 22. A Ministry of Defence briefing paper obtained by Child Soldiers International shows that army recruitment campaigns such as 'This Is Belonging' specifically target young people aged 16-24 from the lowest three economic and social groups, with a mean household income of £10,000 and less. (56) Research has shown associations between mental health disorders and low income or poverty, with 26 per cent of women and 23 per cent of men in the lowest socioeconomic class being at high risk of mental health problems. (57)
- 23. While some young people who enlist as minors fare well, the available evidence shows that military service exacerbates, rather than alleviates, pre-existing problems in this age group, especially those with a stressful childhood background. Adolescents who have faced adversity in their childhood and beyond are particularly susceptible to developing mental health problems during or after military service:
  - 23.1. A childhood background of adversity is common in the armed forces. KCMHR's research has found that 76 percent of British military personnel surveyed had experienced two or more adverse childhood experiences (ACEs), such as trouble

with the police or at home. (26) A high count of ACEs was associated with young age, being in the army, and having low educational attainment.

- 23.2. Young people with a background of adversity are markedly susceptible to developing general psychological ill-health, PTSD, self-harming behaviour and alcohol misuse, particularly those who have been exposed to violence. (55)
- 23.3. Childhood adversity has a cumulative impact, such that additional exposure to stressful experiences increases the risk of lasting mental health and behaviour problems. (58) Young people with a high number of ACEs suffer a significant psychological and neurological impact, with long-term effects on adolescent development. Repeated adversity in childhood overstimulates stress-relieving hormones. (58) This can impair adolescent development of the prefrontal cortex, which is responsible for executive thought and cognition, and engender long-term hypersensitivity to threats. (2, 14, 15, 58)
- According to UK and US research, recruits with an adverse childhood background are more likely than others to leave the armed forces early, especially during training. This is thought to be due in part to their greater susceptibility to stress relative to older recruits, and to young recruits from less-disadvantaged backgrounds. (45,46,47,48)

### Conclusion

- 24. The research findings of the last decade challenge the assumption that the enlistment of minors from troubled backgrounds provides the developmentally conducive environment that they lack.
- 25. This submission has shown that the prevalence of certain mental health and behaviour problems is elevated in the British armed forces, particularly anxiety and depression, harmful alcohol use, and violent behaviour, with the youngest personnel most affected. While factors related to the socioeconomic deprivation of recruits clearly play a role, a growing body of evidence indicates that military service in general, and initial training in particular, tends to exacerbate pre-existing problems.
- 26. In Medact's view, the research shows that military enlistment leads to an excessive and disproportionate risk to the mental health of young people in mid-adolescence, particularly the youngest age group aged 16 or 17. The evidence indicates that the armed forces are not developmentally conducive for the mental health of minors, particularly those who join up with existing stress-related mental health problems.
- 27. Continuing full-time education towards mainstream academic or vocational qualifications is now the norm for most young people aged 16, including 88 percent of those from disadvantaged backgrounds. (49) We encourage the government to promote full-time education to the age group, and not to target them for premature enlistment into the armed forces.

### Recommendations

- 28. Medact invites the Committee to consider the following as recommendations to the Government:
  - 28.1. Bring the enlistment of minors to an end, in line with the vast majority of the world.

- 28.2. While the armed forces continue to recruit minors, recognise the special vulnerability of the age group by collecting mental health data disaggregated by enlistment age.
- 28.3. Commission further research into the mental health effects of early military service prior to a first deployment, and after deployment, with special attention to the youngest personnel.
- 28.4. In view of the evidence of disproportionate psychological harm caused by highstress environments to adolescents from disadvantaged backgrounds recruitment campaigns should not strategically target them.
- 28.5. Monitor the mental health outcomes of discharged personnel who enlisted as minors.

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