

The Effect of Clozapine on Violence / Aggression in Adults With Mental Illness and Personality Disorders: A Systematic Literature Review

Dr Manar Shaheen*

Royal College of Psychiatrists, London, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.236

Aims. Violence is not uncommonly seen in patients with mental illness and personality disorders. Various medications have been used to control aggression including antipsychotic medications. Clozapine has proven effectiveness in the treatment of resistant schizophrenia. Recently studies tried to explore its effectiveness as anti-aggression medication. The aim of the review is to explore the efficacy of Clozapine in controlling violence in adults with mental illness and personality disorders.

Methods. comprehensive psychiatric literature review was conducted. Screening of the relevant articles in the national and international databases covering the period between 1973 and 2012. Multiple data sources searched. The author used the Cochrane Library, Ovid on line and NHS Evidence journals and databases to access health care databases advanced search to find articles on EMBASE, MEDLINE, AMED, CINAHL, PsycINFO, Health Business Elite and HMIC. The studies narrowed down following a flowchart, based on the PRISMA statement. Studies including patients with brain injury, moderated/ severe learning disabilities were excluded. Quality assessment of literature completed.

Results. 52 robust studies were retrieved showing consistent evidence to support the use of Clozapine as anti-aggressive medications in patients with schizophrenia and schizoaffective disorders. Studies has shown that a dose of 500 mg daily has a superior effect on controlling aggression, A serum Clozapine level of 0.35 mcg/l can exert anti aggression effect. Some studies noted that its anti-aggression effect could be observed from 5 weeks onwards after treatment is initiated.

The evidence supporting its use in individual with personality disorders has been little. Neither randomized controlled trial nor prospective case controlled trials were conducted to support its anti-aggressive effect in this group. However, few studies reported some reduction in the aggressive behaviour when small dose of 100 mg daily was used in patients with emotionally unstable personality disorder.

Conclusion. There is sufficient evidence to support the use of Clozapine in controlling aggression and violence in patients with schizophrenia and schizoaffective disorders. Its use in personality disorders needs further exploration and support by robust studies. Studies has found anxiety disorders very common in borderline personality disorders, 88% of personality disorder patients involved in a study had co morbid Anxiety disorder. It is possible that the sedative effect of clozapine; may have lowered anxiety levels and subsequently contributed to the reduction in impulsivity and aggression.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Assessing Prevalence of Post-Traumatic Stress Disorder Symptoms Following the 2015 Earthquake in Langtang, Nepal

Dr Rajasee Sharma^{1*}, Mr Ngawang Dorje Tamang² and Dr Gaurav Bhattarai¹

¹Black Country Healthcare NHS Foundation Trust, Dudley, United Kingdom and ²Rural Health and Education Service Trust, Kathmandu, Nepal

*Corresponding author.

doi: 10.1192/bjo.2023.237

Aims. Among the consequences of natural disasters, post-traumatic stress disorder (PTSD) has been one of the most prevalent mental health issue. Nepal has been categorized as a region prone to natural disasters including earthquakes and avalanches. However, mental health implications of such disasters have been rarely explored in Nepal especially in remote regions like Langtang. In this research, we have estimated the prevalence of post-traumatic stress disorders (PTSD) among the survivors 7 years after the mega earthquake and avalanche in 2015 in rural mountainous region of Langtang in Nepal. We also explored the association between sociodemographic parameters and PTSD scores.

Methods. A Cross sectional quantitative observational study was carried out in 2022. Study population included the residents of Langtang who are the survivors of 2015 earthquake. Simple random sampling was done and participants aged 18 years and above who consented to the study were included. Sociodemographic details were assessed using a predesigned structured questionnaire and PTSD symptoms were measured using the Nepali version of PTSD Symptom Checklist 5 (PCL 5). PCL-5 scores of >31 was used as cutoff for presence of PTSD. Data were analysed using SPSS software.

Results. A total of 124 participants were included in the study. PTSD symptoms score were above the cut off in 7.3%. Most respondents were males (60.5%), young adults aged 18–30 years (36.3%), with no formal education (53.2%), with at least loss of one family member (66.1), and majority rescued after a week (42.7%). Sociodemographic variables such as age group, education, occupation, location during the incident, rescue time and substance use were significantly associated with the PTSD scores. Middle aged respondents were observed to have significantly high PTSD scores followed by older age group ($p = 0.04$). Similarly, PTSD scores were significantly higher among the respondents with no formal education and who had agriculture/tourism as their main occupation ($p = 0.02$). Likewise, respondents who were in Langtang during the incident were found to have significantly higher scores ($p < 0.001$). Interestingly, PTSD scores were found higher among those respondents who were rescued within a week from the time of incident as compared to individuals who were rescued after a week ($p < 0.001$). Also, PTSD scores were higher among the respondents who consumed any type of substance ($p = 0.002$).

Conclusion. PTSD was prevalent even 7 years after the incident in the Langtang community. Certain sociodemographic parameters were identified to be associated with increased PTSD symptoms.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Evaluating the Potential Benefit of Implementing the STAR (Socio-Technical Allocation of Resources) Methodology in Mental Health Commissioning Decisions

Dr Manu Sidhu^{1*} and Dr Renée Okhiria²

¹North West Anglia NHS Foundation Trust, Peterborough, United Kingdom and ²Cambridge University Hospitals NHS Foundation Trust, Cambridge, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.238

Aims. A rise in mental illness has inspired the UK government to increase mental health service funding by £2.3 billion/year, deepening the need for robust evidence on how to best allocate mental health resources. The STAR methodology was co-developed by the London School of Economics and the Health Economics Unit to help commissioners allocate resources by combining a value-for-money analysis with stakeholder engagement. The aim of this research was to evaluate the potential benefit of implementing the STAR methodology in the allocation of mental health resources.

Methods. The barriers and facilitators to commissioning cost-effective mental health services were systematically reviewed. The potential for STAR to overcome these barriers and promote these facilitators was then evaluated by analysing its socio-technical components and assessing its real-world implementation in the COPD pathways of five ICSs.

Results. Fragmentation and cross-sectoral responsibility for the funding and delivery of services can hinder multi-sector buy-in. STAR has overcome this barrier in the COPD pathways of five ICSs by pooling their budgets and building partnerships across sectors through decision conferencing that has facilitated shared priority setting.

Lacking community involvement impedes local stakeholders from embracing change. By championing local stakeholders, STAR's 'socio' component involves front-line workers in funding decisions and fosters a sense of ownership over service adjustments.

The value placed on each outcome varies between sectors, often resulting in conflicting incentives. By considering each sector's interests, STAR enables a consensus on which outcomes to optimise for. Furthermore, STAR's 'technical' components strengthen the objective value-for-money evaluations of the interventions that contribute to each outcome. When modelling the health gain and cost of COPD interventions, STAR discovered that CBT offers a relatively high return on investment, despite often being overlooked as a core intervention for COPD. STAR's economic evaluations are communicated in easily interpretable ways to facilitate a shared understanding on which resources are most worth funding.

Conclusion. Resource allocation decisions are fuelled by the quality of evidence supporting them. Compared with physical health services, mental health services lack evidence that reflects the qualitative and quantitative nature of their outcomes. In particular, services that rely mostly on subjective reports, such as psychotherapy, lack objective value-for-money evaluations, resulting in a hesitancy for funding. By measuring the health gain and cost of each mental health intervention in a systematic, transparent and objective way, STAR enables commissioners to improve the allocative efficiency of mental health resources, thus improving population mental health without increasing cost.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

A Systematic Review of Aerobic Exercise to Improve Cognitive Function in Older People Without Known Cognitive Impairment

Dr Swarupa Sri Balaskanda*, Dr Azuka Egemonye and Professor Rafey Faruqui

Kent and Medway NHS and Social Care Partnership Trust, Maidstone, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.239

Aims. There is an increasing amount of evidence to suggest that regular physical exercise supports healthy ageing. Regular physical

activity provides health benefits for the cardiovascular, respiratory and musculoskeletal systems as well as many other benefits. As well as improving cardiovascular fitness, aerobic activity in particular may also have beneficial effects on cognition among older people. In this paper, we aimed to systematically review the effect of aerobic physical activity, aimed at improving cardio-respiratory fitness, on cognitive function in older people without known cognitive impairment.

Methods. We searched the Cochrane Dementia and Cognitive Improvement Group's Specialized Register, the Cochrane Controlled Trials Register (CENTRAL), MEDLINE, EMBASE, PsycINFO, LILACS, World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP) (<http://apps.who.int/trialsearch>), ClinicalTrials.gov with no language restrictions.

We included all published randomised controlled trials (RCTs) comparing the effect of aerobic physical activity programmes with any other active intervention or no intervention on cognitive function. Participants were ages over 55 with no known cognitive impairment. We looked at trials, which measured effects on both fitness and cognition.

We reviewed the data from trials published since August 2013 to further the research completed by Young J, Angevaren M, Rusted J, Tabet N (published in 2015). This systematic review looked at all the studies completed before August 2013.

Results. There were a few trials that met our inclusion criteria. The aerobic activity programme that participants were subjected to varied in length.

The comparison between aerobic exercise to any active intervention showed no evidence of benefit from aerobic exercise in cognition.

None of our analyses showed a cognitive benefit from aerobic exercise despite the interventions demonstrating benefits to cardiorespiratory fitness

Conclusion. The findings from the available data from the RCTs did not show any evidence that aerobic physical activities, including those which successfully improve cardiorespiratory fitness, have any cognitive benefit in cognitively healthy older adults. Larger studies with longer term interventions and longer follow up would be recommended.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Exploration Heuristics During Anxiety – an Online Study

Dr Georgios Tertikas^{1,2*}, Dr Magda Dubois^{3,4},
Dr Tobias U. Hauser^{3,4}, Dr Daniel K. Campbell-Meiklejohn²
and Professor Hugo D. Critchley^{1,2,5}

¹Brighton and Sussex Medical School, Brighton, United Kingdom;

²Sussex Neuroscience, University of Sussex, Brighton, United

Kingdom; ³Max Planck University College London Centre for Computational Psychiatry and Ageing Research, London, United

Kingdom; ⁴Wellcome Trust Centre for Neuroimaging, University

College of London, London, United Kingdom and ⁵School of Psychology, University of Sussex, Brighton, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.240

Aims. Every day, we may choose something new randomly (random exploration) or select something new with no prior information (de-novo exploration). The link between exploration and anxiety has only been studied using trait-like anxiety questionnaires, but an experimental manipulation of anxiety could have different results.