

QUALITY IMPROVEMENT PROJECT ON RAPID TRANQUILISATION

Are we adhering to the NICE Guidelines in patients who are agitated/ aggressive???

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PDSA 2

INTRODUCTION:

Violence, agitation and aggressive behaviour refer to behaviours that can cause harm to others or to the person with those behaviours, regardless of whether it is verbal, physical and intentional. These behaviours are common in health care settings.

From 2013 – 2014, 68,683 assaults were reported against NHS staff in England, 69% of these were within mental health and learning disability unit. [1]

Rapid tranquilisation is to be used in situations where psychological and behavioural approaches, such as 'de-escalation', have failed. It is a treatment of last resort. It is a restrictive treatment and therefore needs to be monitored closely to ensure its correct use, and to ensure patient safety.[1]

Rapid tranquilisation is defined as, "use of medication by the parenteral route (usually intramuscular or, exceptionally, intravenous) if oral medication is not possible or appropriate and urgent sedation with medication is needed".[1]

There was a national audit on rapid tranquilisation in 2007 which made several recommendations; including the importance of monitoring following rapid tranquilisation, which was found to be one of the areas of poorer performance and this audit/QIP aims to find out if their recommendations have been followed.[3]

AIMS & METHODOLOGY:

Aim

- ▶ To explore whether the NICE guidelines for rapid tranquilisation are adhered to on the psychiatric inpatient unit (PICU/ Tryweryn).
- ▶ Hence Audit was first done in 2018
- ▶ Re-Audit in 2019-2020
- ▶ QIP followed the Audit

Objectives

1. To discover if more conservative steps, such as de-escalation and oral medications are being used and given chance to work before giving IM medications.
2. To find out if safe doses are being prescribed with appropriate medications
3. To discover if patients receive appropriate aftercare following rapid tranquilisation

Standards were taken from NICE guidelines NG10

1. Conservative de-escalation to be utilised before medication offered
2. Oral and IM medications should be written up separately on the medication chart
3. Oral medication should be offered before IM
4. Enough time should be given for oral medication to work before going to IM
5. Only 1 drug of each class is to be used, unless rationale documented otherwise
6. To not exceed BNF doses
7. Documentation of rationale for use of Acuphase (Zuclopenthixol acetate) is clear
8. Patient to be monitored appropriately after rapid tranquilisation (i.e. vital signs – see appendix A)
9. To give the opportunity for the patient to discuss the event afterwards

Sample - All patients who had received rapid tranquilisation, that were in PICU from August 2019 to February 2020. Unlike the previous audit which was retrospective, this audit is a prospective one. Over a period of 6 months, we collected data from those patients who had received rapid tranquilisation.

RESULTS: PDSA 1

Plan: Plan the test, including a plan for collecting data.

- State the question you want to answer and make a prediction about what you think will happen.
- Develop a plan to test the changes. (Who? What? When? Where?)
- Identify what data you will need to collect.

QUESTION: Are the rapid tranquilisation NICE guidelines adhered to, in patients with agitated/aggressive behaviour?

WHAT IF IT DOES NOT WORK? We will continue to share the importance of the protocol adherence.

PREDICTIONS: Following the discussion with the ward manager in PICU and the staff, especially after seeing the Audit results from 2018, we believe that we will adhere to the NICE guidelines

W: Trainee doctors (Asha and Sathyan) along with the staff in Psychiatric intensive care unit will be involved in this project and data collection for 6 months from August 2019-Feb 2020

• Prospective data collection based on standards from NICE NG10 guideline. This included 10 questions

Do: Run the test on a small scale.

- Carry out the test.
- Document problems and unexpected observations.
- Collect and begin to analyze the data.

• Following discussion with ward manager during February 2019 and following showing the presentation from 2018 with regard to the audit, we discussed with the staff in the ward regarding the protocol.

• Prior to actually starting the second audit, the adherence was noted to be low.

• However following persistence and having created a protocol jointly with the ward manager, we could see the difference.

Study: Analyze the results and compare them to your predictions.

- Complete, as a team, if possible, your analysis of the data.
- Compare the data to your prediction.
- Summarize and reflect on what you learned.

• Over the first 2 months, 12 patients received Rapid Tranquilisation. Out of these 12, we randomly selected 4 patients to find the NICE guidelines adherence to be a 100 percent. (Overall adherence for 12/12 patients was 100%)

• The predictions regarding the adherence to protocol shows that the PDSA was successful.

Act: Based on what you learned from the test, make a plan for your next step.

- Adapt (make modifications and run another test), adopt (test the change on a larger scale), or abandon (don't do another test on this change idea).
- Prepare a plan for the next PDSA.

• Following the first PDSA, the plan was to continue the same.

• **The staff were appreciated for their efforts in maintaining 100% adherence a success.**

• The same will be continued with some positive reinforcement from ward manager and myself

PDSA 2

PDSA 2 – Step 3: STUDY

PDSA 2 – Step 1 /2: PLAN/ DO

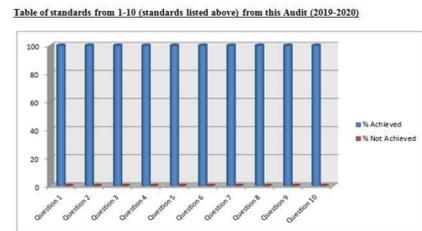
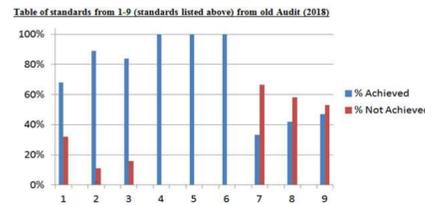
- We continued with the same protocol. The staff have been consistent in monitoring the data effectively while following to the protocol strictly.

PDSA 2 – Step 4: ACT

- The PDSA done second time showed that the adherence was 100% again.
- The adherence to the protocol has been followed for not just the sample that was selected, but for the entire set of patients who received the Rapid Tranquilisation

- Over the next 2 months, 8 patients received Rapid Tranquilisation.
- **Out of these 8, we randomly selected 4 patients to find the NICE guidelines adherence to be a 100 percent. (Overall adherence for 8/8 patients was 100%)**
- The predictions regarding the adherence to protocol shows that the PDSA was successful.

The table below demonstrates levels of achieving the various standards 1-9 and compares them to each other. Blue being achieved, red representing not achieving the targets.



Graph and Tables

No.	Comparison with the previous Audit	% Achieved 2018	% Not Achieved 2018	% Achieved 2020	% Not Achieved 2020
1	Conservative de-escalation to be used before medication	65%	35%	100%	0%
2	Oral and IM medications written up separately on the chart	89%	11%	100%	0%
3	Oral medication offered before IM	84%	16%	100%	0%
4	Enough time to be given for oral medication to work before going to IM	100%	0%	100%	0%
5	Only 1 drug of each class to be used, unless rationale states otherwise	100%	0%	100%	0%
6	To not exceed BNF doses	100%	0%	100%	0%
7	Documentation of rationale for use of Acuphase (Zuclopenthixol acetate) is clear	33.3%	66.6%	100%	0%
8	Patient to be monitored appropriately after rapid tranquilisation	42%	58%	100%	0%
9	To give the opportunity for the patient to discuss the event afterwards	47%	53%	100%	0%
10	Data	Not checked	Not checked	100%	0%
11	Overall number of patients	19	21		

DISCUSSION:

Following the previous Audit and a detailed discussion with the ward manager in Tryweryn in 2019 February regarding the results obtained, we then further took it forward with the TODAY WE TALKED INITIATIVE.

This was the first part of QIP, → here in restraints and enforced Rapid tranquilisation was looked into. This initiative reduced the coercive measures in dealing with aggression.

The utilisation of de-escalation techniques and behavioural support plans that was person centred in turn brought down the rate of Rapid Tranquilisation successfully. Thus placing our PICU as having least restraints in UK in 2019 (Second least 3/ month) → PICU was awarded the prestigious *Nursing Times* Team of the Year Award for their pioneering work transforming the Tryweryn psychiatric intensive care ward at Betsi Cadwaladr.

Following this QIP, we then formatted the proforma for Rapid Tranquilisation which included the services to be provided/ actions to be taken, Post Rapid Tranquilisation physical health monitoring and patients response to medication.

The PICU will continue to maintain this 100% standard and we would then consider extending the Audit to both Open wards and PICU in entire North Wales.

What have we achieved?

With the co-operation from the team in PICU, the results showed that:

- ✓ all the patients only receive rapid tranquilisation when truly necessary and
- ✓ this is done in the safest manner possible;
- ✓ with appropriate monitoring afterwards
- ✓ and a discussion with the patient about the event.

This adherence ensures that rapid tranquilisation is done as safely as possible, with risks as low as possible.

With the restraints reduced due to TODAY WE TALKED INITIATIVE, the number of Rapid tranquilisations have reduced as well. On an average over 6 months it was 21 patients who were rapid tranquilised. This is less than the national rate.

Form for recording patient details and adherence to NICE guidelines for rapid tranquilisation. Includes sections for 'What concerns you to be given rapid tranquilisation?', 'The safe management of violence and aggression', and 'Oral and IM medication written separately on chart'.

Form for recording patient details and adherence to NICE guidelines for rapid tranquilisation. Includes sections for 'Should intramuscular medication be administered appropriately', 'Rapid Tranquilisation Checklist (Appendix 2 of MILD000)', and 'Drug administered'.

Form for recording NEWS score and side effects after rapid tranquilisation. Includes sections for 'NEWS score and side effects must be recorded every 30 minutes for minimum of 1 hour following administration of rapid tranquilisation and documented and should include pulse oximetry and patient is ambulatory' and 'Patient response to medication'.

Form for recording patient details and adherence to NICE guidelines for rapid tranquilisation. Includes sections for 'Should intramuscular medication be administered appropriately', 'Rapid Tranquilisation Checklist (Appendix 2 of MILD000)', and 'Drug administered'.

References:

1. NICE (2015) *Violence and aggression: short-term management in mental health, health and community settings*. Available at: <https://www.nice.org.uk/guidance/ng10/chapter/1-Recommendations> (Accessed: 6/2/18).
2. rpsych (2015) *Rapid tranquilisation algorithm*. Available at: [http://www.rpsych.ac.uk/pdf/RT%20Algorithm%20\(2\).pdf](http://www.rpsych.ac.uk/pdf/RT%20Algorithm%20(2).pdf) (Accessed: 6/2/18).
3. rpsych (2007) *National audit of violence*. Available at: <http://www.rpsych.ac.uk/pdf/Module%203b%20National%20Report1.pdf> (Accessed: 6/2/18)
4. GMC (2018) *Record your work clearly, accurately and legibly*. Available at: https://www.gmc-uk.org/guidance/good_medical_practice/record_work.asp (Accessed: 6/02/18).



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