

Avoiding valproate exposure in pregnancy using a decision-making tool

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Background

Valproate is a known teratogen. If taken during pregnancy, up to 4 in 10 babies are at risk of developmental disorders, and approximately 1 in 10 are at risk of birth defects. A class action in 2017 have led to banning of valproate usage in women unless on "Pregnancy Prevention Program" in Europe. Currently there are no similar restrictions in Australia. The mental health service at Royal Brisbane and Women's Hospital (RBWH) plans to implement a "Decision making tool" to ensure valproate exposure is minimised in pregnancy and consumer are informed of risks to children.

Aim

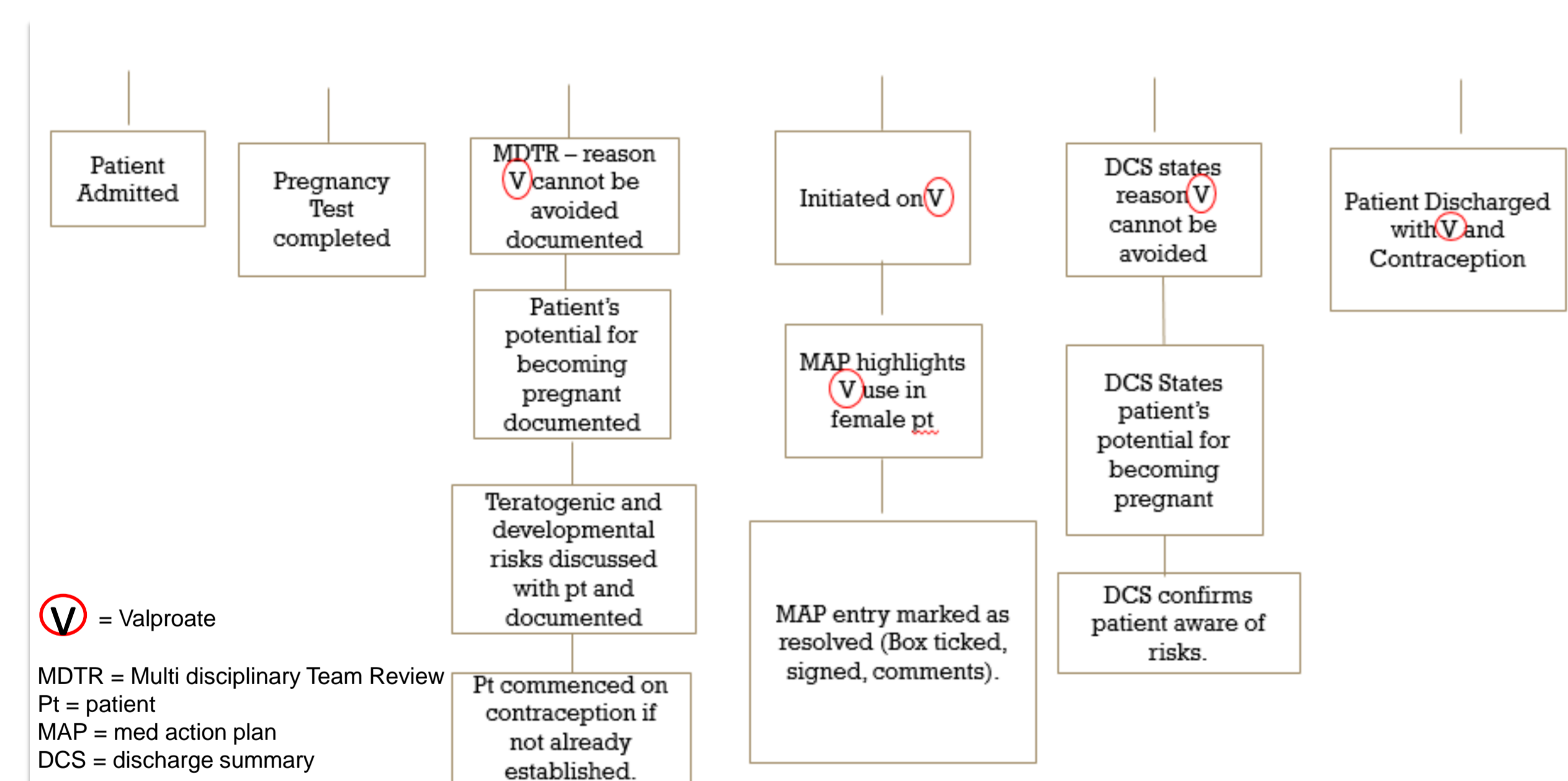
To collect baseline data prior to implementing the decision-making tool on:

1. The prevalence of valproate use in females on mental health wards
2. Determine if the risks and contraception options are discussed with consumers.

Method

Females prescribed valproate as in-patients in 2017 were identified. A standardised audit tool was used to analyse data obtained from hospital's electronic databases and applications.

Figure 1. Audit standard for valproate usage in females : an ideal timeline



Data collected:

- Sex
- Age
- Contraception method
- Multi Disciplinary Team Review(MDTR) notes and Discharge Summaries (DCS) were checked for the following:
 - Confirmation of negative pregnancy test
 - Reason valproate cannot be avoided
 - Patient's potential for becoming pregnant
 - Confirmation counselling about risks of valproate treatment completed
 - Valproate usage in women highlighted in Medication Action Plan (MAP)

References

Drug Safety Update MHRA: <https://www.gov.uk/drug-safety-update/valproate-medicines-epilim-depakote-contraindicated-in-women-and-girls-of-childbearing-potential-unless-conditions-of-pregnancy-prevention-programme-are-met>
 MNMH- RBWH Memorandum: New measures to avoid valproate exposure in pregnancy File Ref:MNMH 026/2018

Results

- We identified 30 episodes of female of child bearing age receiving valproate as in-patients over 12 months in mental health service at RBWH with 88 in-patient beds. 12 consumers were commenced on valproate whilst 18 were established on valproate prior to admission.
- Confirmation of negative pregnancy test prior to commencing valproate occurred in 46.7%
 - 5 consumers (16.7%) had reason valproate is unavoidable documented in discharge summary, one consumer (3.3%) had reason documented in notes.
 - 4 consumers (13.3%) had documentation in discharge summary on risks of valproate being discussed, one consumer (3.3%) had documentation in notes.
 - 7 consumers (23.3%) commenced contraception during admission, whilst 5 consumers (16.7%) were already receiving contraception.
 - Pharmacists highlighted valproate risks in Medication Action Plans (MAPs) in 10 (33.3%) episodes, but only 3 (10%) had the issue marked resolved.

Figure 2. Results

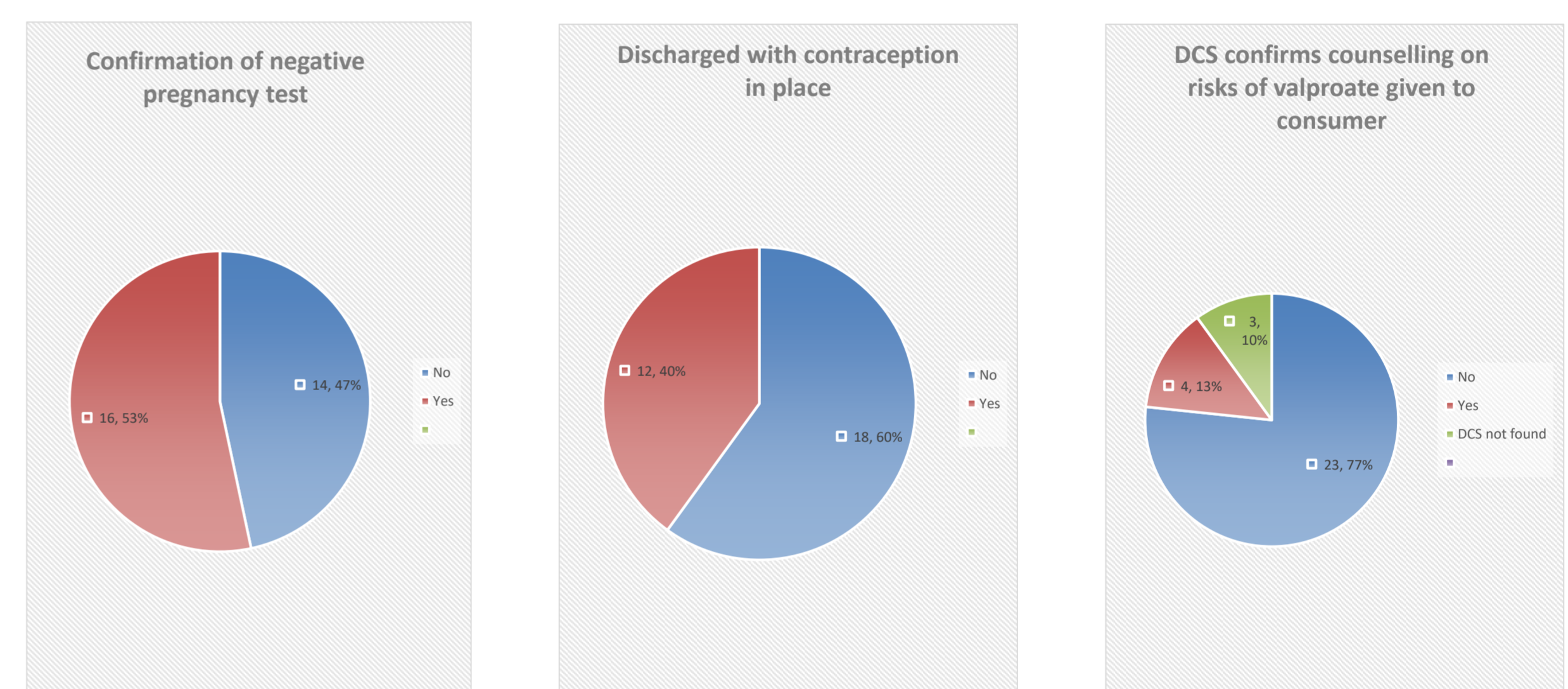


Figure 3. Proposed Decision-Making Tool

Conclusion

Prevalence of valproate use in women of child bearing age is small within the mental health service. Documentation on rationale, discussions of risks and pregnancy prevention are poor. Implementation of the decision-making tool will not be onerous considering the small numbers but will prompt all necessary actions for safely prescribing valproate. Pharmacists should be vigilant of valproate risks during medication review and counselling.