

AFFORDABILITY OF RISPERIDONE AND ARIPIRAZOLE FOR THE TREATMENT OF AUTISM SPECTRUM DISORDER

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INTRODUCTION

The use of risperidone and aripiprazole in children and adolescents with Autism Spectrum Disorder (ASD) is off-label in India and Malta and is not included in the national formularies. The European Medicines Agency and the Central Drug Standard Control Organisation (India) have not approved the drug for the indication of ASD.

AIMS

To compare the use and cost of the treatment of irritability associated with autism using risperidone and aripiprazole, in India and Malta.

METHOD

- A questionnaire (ASD-Q_(IND-MT)) was developed, validated by 10 experts and disseminated to psychiatrists (N=47) in India (n=31) and Malta (n=16) to assess their prescribing behaviour with respect to risperidone and aripiprazole in the management of ASD.
- ASD-Q_(IND-MT) consisted of 6 sections and 28 close-ended Likert scale questions using a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).
- Cost analysis and the Monthly Per Capita Expenditure (MPCE) were undertaken for both countries to assess the affordability of treatment.

RESULTS

- Thirteen psychiatrists in India and 2 psychiatrists in Malta prescribe risperidone and aripiprazole in patients with mild to moderate autism.
- Eighteen psychiatrists in India and 14 psychiatrists in Malta prescribe risperidone and aripiprazole in patients with severe autism ($p < 0.05$).
- Psychiatrists in Malta (n=11) and India (n=21) agreed that accessibility of risperidone and aripiprazole is a matter of concern ($p > 0.05$).
- The cost of one month of treatment with risperidone 1mg and aripiprazole 10mg is €3.50 and €3.90 in India and €26.70 and €28.80 in Malta respectively (Table 1).
- The MPCE of risperidone is 3.30% in Malta and 11.30% in India, whilst the MPCE of aripiprazole is 3.56% in Malta and 12.60% in India.

Drug	Risperidone 1mg	Aripiprazole 10mg
Unit Price per tablet (€)	India €0.12 Malta €0.89	India €0.13 Malta €0.96
Cost of treatment for one month (€)	India €3.50 Malta €26.70	India €3.90 Malta €28.80
Percentage Cost Variation	662%	638%
Average MPCE (€)	India: Urban €30.96, Rural €16.90 Malta €809.50	
Percentage expenditure based on MPCE	India: Urban €11.30%, Rural 20.71% Malta: 3.30%	India: Urban €12.60%, Rural 23.08% Malta: 3.56%

Table 1: Cost Analysis of Risperidone and Aripiprazole in India and Malta

CONCLUSION

The cost of treatment in India is less when compared to Malta, but when cost is measured against the MPCE in both countries, Malta is more affordable than India.