

The Fast Track prevention programme improved some outcomes in high risk schoolchildren

Conduct Problems Prevention Research Group. *Initial impact of the Fast Track prevention trial for conduct problems: I. The high-risk sample.* *J Consult Clin Psychol* 1999 Oct;67:631-47.

QUESTION: In children at high risk of developing long term antisocial behaviour, can a multicomponent preventive programme (Fast Track) improve social, emotional, and academic skills?

Design

Randomised (allocation not concealed*), partially blinded (observers of child behaviour)*, controlled trial with 1 year of follow up.

Setting

Primary schools in neighbourhoods with high rates of delinquency and juvenile arrests in 4 US regions.

Patients

891 children (mean age 7 y, 69% boys) who had completed 1 year of kindergarten and were behaviourally disruptive (ie, had high scores on teacher and parent ratings of behaviour problems).

Intervention

54 schools matched for size, poverty, and ethnic composition were allocated to the intervention (445 children in 191 classrooms) or control (446 children in 210 classrooms) conditions. The intervention consisted of a curriculum (Promoting Alternative Thinking Strategies [PATHS]), parent groups, child social skills training groups, parent child sharing time, home visiting, child peer pairing, and academic tutoring and was given during school and 2 hour extracurricular enrichment programmes and in the home.

Main outcome measures

Child social cognition and reading, child peer relations and social competence, parenting behaviour and social cognition, and child aggressive and disruptive behaviour. These were based on both reports and direct, independent observation.

Main results

At 1 year, the preventive programme led to improved outcomes for child social cognition and reading (effect sizes 0.23 to 0.54, $p \leq 0.04$); child peer relations and social competence (effect sizes 0.27 to 0.28, $p < 0.02$); parenting behaviour (effect sizes 0.23 to 0.32, $p \leq 0.03$); and child aggressive and disruptive behaviour (effect sizes 0.26 to 0.31, $p \leq 0.02$) compared with no intervention; the effect sizes are shown for outcomes with $\geq 80\%$ follow up. The effect sizes for measures of parenting behaviour and social cognition with $\geq 80\%$ follow up were not statistically significant.

Conclusion

In children at high risk of developing long term antisocial behaviour, the Fast Track preventive programme improved some measures of social, emotional, behavioural functioning, and academic skills at 1 year

*See glossary.

COMMENTARY

The Fast Track Prevention Trial is a large carefully done study aimed at preventing conduct problems. It has many strengths. The design was strong: a randomised controlled trial with the unit of assignment being an entire school. The intervention programme was guided by a well developed model of the development of antisocial behaviour in children. The programme consisted of 7 elements (6 targeted elements and 1 universal element) that focused on the children, the parents, and the teachers. The assessment procedures included data from the children themselves, parents, teachers, and peers. A combination of paper and pencil reports (eg, checklist data) and observational data (eg, behavioural observations in school) were used. The positive outcomes were reported not only by parents, teachers and children but by independent observations as well.

After only 1 year of intervention, modest positive results were seen. The results were mixed, however, with parent and teacher behavioural ratings showing no differential problem reduction between groups, but independent observations showed substantial improvements in disruptive behaviour in the intervention group in the school but not in the home.

It is too early to know whether the intervention will be successful in bringing about clinically important levels of reduction in antisocial behaviour in these high risk children (ie, reductions of a magnitude and consistency that would be meaningful to clinicians). As the study progresses, the answer to this question will become more apparent. One of the challenges the investigators face in subsequent years is to keep attrition rates low. Those rates are not presented as clearly as they might be in the present reports.

Placing this study in the context of lowering the burden of suffering from antisocial behaviour in children and adolescents is important. In a community sample, if the presence of early externalising behaviour assessed by currently available measures is used to designate kindergarten and first grade children in normal populations as high risk for later antisocial behaviour, the level of misclassification will be substantial.¹ At least one half of the children who develop clinically important antisocial behaviour later on will not be picked up by the initial screen. Furthermore, $\geq 50\%$ of the children who receive the intervention may not need it and may be subjected to the negative effects of labelling. Thus, the predictive accuracy of a one time screen imposes a disadvantage on the potential effect of early intervention programmes to prevent antisocial behaviour in children and adolescents. A promising approach is to move away from identifying a predictor at 1 point in time and to move towards continuous risk assessments over time.²

Another important issue with this study is the extent to which it will be disseminated and maintained in other settings if it proves to be effective. Two points are relevant here. First is the cost of study.³ Eventually, data from an economic analysis will be needed to convince school authorities and others that although this intervention is expensive (we do not know how expensive yet), it is worthwhile because it reduces downstream costs (eg, special class placements and vandalism). A second point is the acceptability of the study by school boards and individual schools. It may be that a school willing to take on such a programme is already on a positive trajectory anyway.⁴

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Sources of funding:
National Institute of
Mental Health; Center
for Substance Abuse
Prevention; Department
of Education.

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The Fast Track prevention programme improved classroom atmosphere and peer reported behaviour problems

Conduct Problems Prevention Research Group. *Initial impact of the Fast Track prevention trial for conduct problems: II. Classroom effects.* *J Consult Clin Psychol* 1999 Oct;67:648–57.

QUESTION: Can the universal component of the Fast Track prevention programme reduce behaviour problems in the classroom?

Design

Randomised (allocation not concealed*), partially blinded (observers of classroom atmosphere)*, controlled trial with 1 year of follow up.

Setting

Primary schools in neighbourhoods with high rates of delinquency and juvenile arrests in 4 US regions.

Patients

6715 children who were in first grade in 12 participating schools and who were not high risk children.

Intervention

Schools matched on size, achievement levels, poverty, and ethnic composition were allocated to intervention (198 classrooms) or control (180 matched comparison classrooms) conditions. The intervention consisted of 57 lessons. 40% of the lessons focused on skills related to understanding and communicating emotions, 30% on skills for increasing positive social behaviour, and 30% on self control and other steps in social problem solving. Lessons were taught 2–3 times/week for 20–30 minutes each from mid September to May.

Main outcome measures

Children's behaviour was assessed by teacher report (Teacher Observation of Classroom Adaptation—Revised and the Social Health Profile) and peer reports of social behaviour. Observers rated the classroom atmosphere. Outcomes were reported at the classroom (not individual student) level.

Main results

In hierarchical linear modelling analyses, the intervention was more effective than no intervention for reducing peer reports of aggression ($p=0.03$) and hyperactive and disruptive behaviour ($p=0.02$) (table); no difference was seen for peer reports of prosocial behaviour or ratings of most liked children. The groups did not differ for teacher ratings of behaviour. Classrooms in the intervention group were rated as having a more positive classroom atmosphere ($p<0.01$) than those in the control group (table).

Conclusions

The Fast Track prevention programme improved behaviour (according to peer reports) and ratings of classroom atmosphere. Teacher reports did not show a difference in behaviour.

*See glossary.

Fast Track preventive programme v no intervention for schoolchildren†

Outcomes at 1 year	Mean scores‡		Effect size	p value
	Fast Track	Control		
Peer reported aggression	-0.08	-0.01	-0.22	0.03
Peer reported hyperactive and disruptive behaviour	-0.09	-0.04	-0.22	0.02
Classroom atmosphere	2.68	2.88	NR	<0.01

†NR=not reported. Outcomes were reported at the classroom not individual student level.

‡ Lower scores indicate better functioning.

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Certainly, considerable demands are placed on a participating school in implementing such a programme (and a programme in which they seem to have had little developmental input). In this regard, it would be important to know how many schools turned down the initial request to participate in the study.

The Fast Track Prevention Trial is an important initiative. It will show the extent to which children identified as being antisocial early, on the basis of parent and teacher checklist information, can be helped to modify their behaviour by an intensive and expensive intervention programme. Provided the reductions in the levels of antisocial behaviour are of a magnitude that would be meaningful to clinicians, the challenge then for the investigators will be to develop strategies to ensure the programme can be disseminated and maintained in various settings. This will certainly require the costs of the programme to be known and probably will necessitate finding ways to reduce costs and to ensure that the programme is widely acceptable to schools.

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Sources of funding:
National Institute of
Mental Health; Center
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