



EVIDENCE CENTRE CRITICAL APPRAISAL

What is the prevalence of social skill, speech and language deficits in adolescents with significant psychiatric mental health problems?

Kim Hender

Centre for Clinical Effectiveness
Monash Medical Centre
Locked Bag 29
Clayton VIC 3168
Australia

Telephone: +61 3 9594 2826
Fax: +61 3 9594 6970
Email: Kim.Hender@med.monash.edu.au
URL: <http://www.med.monash.edu/publichealth/cce>

24th July 2000

SUMMARY STATEMENT:

Copyright – please refer to Appendix for information.

Disclaimer - please refer to Appendix for information.

Publication of materials – please use the following format when citing this article:
What is the prevalence of social skill, speech and language deficits in adolescents with significant psychiatric mental health problems? Southern Health Care Network / Monash Institute of Public Health & Health Services Research, Clayton, 2000.
<http://www.med.monash.edu.au/publichealth/cce>

REQUEST:

What is the prevalence of social skill, speech and language deficits in adolescents with significant psychiatric mental health problems?

REQUESTED BY:

Nadine Dell'Agostino, Speech Pathologist, Adolescent Inpatient Unit, Monash Medical Centre, Clayton.

METHODOLOGY

Search Strategy

The Centre for Clinical Effectiveness defined the 'best available evidence' as that research we can identify that is least susceptible to bias. We determine this according to pre-defined NHMRC criteria (see Appendix).

First we search for systematic reviews, evidence-based clinical practice guidelines, or health technology assessments, and randomized controlled trials. If we identify sound, relevant material of this type, the search stops. Otherwise, our search strategy broadens to include studies that are more prone to bias, less generalizable, or have other methodologic difficulties. We include case-control and longitudinal cohort studies in our critical appraisal reports. While we cite observational and case series studies, and narrative reviews and consensus statements, in our reports we do not critically appraise them. Some studies can produce accurate results but they are generally too prone to bias to allow determination of their validity beyond their immediate setting.

Details of Evidence Request:

Search terms:

The following search terms were used to scour electronic databases and websites:

Table 1. Search terms used in the retrieval of articles from electronic databases and websites

Field of focus	Search term
"Patient"-related	Adolescent, child
"Psychiatry"-related	Psychiatry, adolescent psychiatry, child psychiatry, social psychiatry, mental illness, schizophrenia, mental disorders
"Language"-related	Speech disorders, language disorders, language development disorders, speech impairment, speech defic\$, language defic\$
"Social skill"-related	Social skill, social conformity, social behaviour, socialization
Outcome-related	Prevalence

Resources Searched

We searched the following databases and Internet websites:

- Cochrane Library CD-ROM, 2000, Issue 2
- OVID Best Evidence, 1995 – March/April 2000
- DARE Database of Abstracts of Reviews of Effectiveness, 24th July, 2000
- OVID Medline, 1995 – August Week 3 2000
- OVID CINAHL, 1995 – May 2000
- OVID Current Contents, 1995 Week 26 to 2000 Week 31
- OVID psycINFO- 1995 to June 2000
- OVID sociofile - 1995-June 2000
- PubMed Clinical Queries, 24 July 2000
- SUMSearch, 24 July 2000

Refinements, Searching & Reporting Constraints:

We included items of evidence that were available to us on 24 July 2000. We only included articles published in the last 5 years. Critical appraisal was performed on the subset of studies published in English. Articles that reported prevalence of psychiatric disorder in children with language problems were not included. Articles referring to language problems for children with ADHD were also not included.

RESULTS:

From our sources we identified 9 articles which we categorised as follows:

Table 2. Study designs of articles retrieved by search

Study Design	Number included
Systematic reviews or meta-analyses	0
Evidence-based clinical practice guidelines	0
Randomised controlled trials	0
Controlled trials, cohort or case-control analytic studies	0
Descriptive studies	4
Consensus reports, non-evidence-based clinical practice guidelines	0
Narrative reviews	2

Articles were excluded from further appraisal as follows:

Table 3. Reasons for exclusion of articles retrieved by search

Reason for exclusion	Number
Not adolescents	1
Consideration of pre-morbid language only	1
Doesn't give a prevalence rate	1

None of the 4 studies identified were appraised due to the low levels of evidence, rather the actual reported prevalences are summarised in a table (see below). We are reasonably confident these articles represent the most important findings published to date based on our refinements, searching and reporting constraints.

Summary of Prevalences

Article	Prevalence
Beitchman et al, 1996	<ul style="list-style-type: none"> • Prevalence of language impairments in children referred for psychiatric assessment and treatment estimates as high as 71% (Camarata, 1988) • Estimates of language impairment among children presenting for psychiatric assessment and treatment as high as 97% (Camarata, 1988) • 27.8% of clinically referred children had a previously identified language impairment, among remaining children referred solely for psychiatric assessment and treatment, 34.4% had an unsuspected language impairment (Cohen, 1993).
Dryborg et al, 1996	<ul style="list-style-type: none"> • Prevalence of language disorders in children and adolescents attending the psychiatric centre was 10%.
McDonald et al, 1998	<ul style="list-style-type: none"> • In a group of psychiatrically disturbed children and adolescents, 45% of children had a mild deficit and 32% had a moderate to severe deficit. Only 12 children out of 53 had no speech and language impairment.
Toppelberg et al, 2000	<ul style="list-style-type: none"> • Developmental language disorder in 53% of children referred to 3 mental health centres, and in almost half of these the language problems were undiagnosed (Cohen, 1993).
Cohen et al, 1998	<ul style="list-style-type: none"> • 145 children referred to child psychiatric services met one or more of the criteria for a previously identified language impairment (38%), while 97 (41%) of those remaining met a criterion for an unsuspected language impairment. Altogether, in the total sample 242 children (63.6%) had a language impairment.
Javorsky et al, 1995	<ul style="list-style-type: none"> • In youth at a psychiatric hospital, 32 participants (33%) qualified for the diagnosis of a language learning disability.

REFERENCES

1. National Health and Medical Research Council. A Guide to the Development, Implementation and Evaluation of Clinical Practice Guidelines. Canberra: Commonwealth of Australia, 1999.

ARTICLES IDENTIFIED

Level IV evidence

- Beitchman, J. H., N. J. Cohen, et al. (1996). "Language, learning, and behavior disorders: Developmental, biological, and clinical perspectives." New York, NY, USA: Cambridge University Press 582.
- Cohen, N. J., M. A. Barwick, et al. (1998). "Language, achievement, and cognitive processing in psychiatrically disturbed children with previously identified and unsuspected language impairments." *Journal of Child Psychology & Psychiatry & Allied Disciplines* 39(6): 865-77.
- Dyrborg, J. and V. V. Goldschmidt (1996). "Language disorders in a child psychiatric center - demographic characteristics and comorbidity." *Nordic Journal of Psychiatry* 50(4): 317-324.
- Javorsky, J. (1995). "An examination of language learning disabilities in youth with psychiatric disorders." *Annals of Dyslexia* 45: 215-231.
- McDonald, C. A., R. Paterson, et al. (1998). "Paediatric assessment in a residential child and adolescent psychiatry unit." *Journal of Paediatrics & Child Health* 34(3): 267-72.
- Toppelberg, C. O. and T. Shapiro (2000). "Language disorders: a 10-year research update review." *Journal of the American Academy of Child & Adolescent Psychiatry* 39(2): 143-52.

ARTICLES EXCLUDED

- Cohen, N. J., R. Menna, et al. (1998). "Language, social cognitive processing, and behavioral characteristics of psychiatrically disturbed children with previously identified and unsuspected language impairments." *Journal of Child Psychology & Psychiatry & Allied Disciplines* 39(6): 853-64.
- Emerson, J. and P. Enderby (1996). "Prevalence of speech and language disorders in a mental illness unit." *European Journal of Disorders of Communication* 31(3): 221-36.
- Nicolson, R., M. Lenane, et al. (2000). "Premorbid speech and language impairments in childhood-onset schizophrenia: association with risk factors." *American Journal of Psychiatry* 157(5): 794-800.

APPENDIX

Copyright

© This publication is the copyright of the Southern Health Care Network. Other than for the purposes and subject to the conditions prescribed under the Copyright Act 1968 as amended, no part of this publication may, in any form or by any means (electric, mechanical, microcopying, photocopying, recording or otherwise), be reproduced, stored in a retrieval system or transmitted without prior written permission. Inquiries should be addressed to Centre for Clinical Effectiveness.

Disclaimer

The information in this report is a summary of that available and is primarily designed to give readers a starting point to consider currently available research evidence. Whilst appreciable care has been taken in the preparation of the materials included in this publication, the authors and Southern Health Care Network do not warrant the accuracy of this document and deny any representation, implied or expressed, concerning the efficacy, appropriateness or suitability of any treatment or product. In view of the possibility of human error or advances of medical knowledge the authors and Southern Health Care Network cannot and do not warrant that the information contained in these pages is in every aspect accurate or complete. Accordingly, they are not and will not be held responsible or liable for any errors of omissions that may be found in this publication. You are therefore encouraged to consult other sources in order to confirm the information contained in this publication and, in the event that medical treatment is required, to take professional expert advice from a legally qualified and appropriately experienced medical practitioner.

Levels Of Evidence

As Defined By "A Guide To The Development, Implementation And Evaluation Of Clinical Practice Guidelines" (National Health & Medical Research Council, Canberra, 1998):

Level I		Evidence obtained from a systematic review or meta-analysis of all relevant randomised controlled trials.
Level II		Evidence obtained from at least one properly designed randomised controlled trials.
Level III	-1	Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method).
	-2	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series with a control group.
	-3	Evidence obtained from comparative studies with historical control, two or more single-arm studies or interrupted time series without a parallel control group.
Level IV		Evidence obtained from case series (either post-test or pre-test and post-test), opinions of respected authorities (narrative reviews), descriptive studies, reports of expert (i.e. consensus) committees, case studies.