identified at the health checkup for 3-year-olds, which functions as another mass screening. Children may also be referred to YRC from kindergartens and nursery schools, other medical clinics, and child guidance clinics. The YRC offers programs to support these related facilities, including periodic supervision programs for kindergarten teachers to increase knowledge of developmental disorders. This 'fail-safe' mechanism ensures that this research obtains accurate sensitivity from YACHT-18 screenings.

Study subjects

The subjects for this study were 3,036 children who were born in 1988 and received the YACHT-18 screening during routine health checkups at the age of 18 months at the Yokohama Aoba PHWC. These subjects were taken from a previous survey conducted on incidence of autism (Honda, Shimizu, Misumi, Niimi, & Ohashi, 1996; Honda et al., 2005a). Of these, 222 children had already been diagnosed with some kind of disease or disorder for which they were being treated, and of this group, a pediatric neurologist or rehabilitation physician at the YRC was seeing five. The diagnoses of these five were Fukuyama-type congenital muscular dystrophy and mild mental retardation, mild mental retardation, cerebral palsy, Erb palsy, and pervasive developmental disorder – not otherwise specified (PDDNOS). The child with PDDNOS was examined for signs of delayed motor development at the age of 13 months by a pediatric neurologist, and after periodic monitoring was referred to a developmental psychiatrist for possible ASD at the age of 3 years and 1 month. Of the 3,036 18-month-old target subjects, 2,814 were determined to have no discernible disease or disorder. The study proceeded as follows with this group of 2,814 children.

Research procedures

We investigated how the E&R Strategy was implemented in the HC-18m by examining: 1) the numbers of children of the initial 2,814 who were identified for follow-up after the first YACHT-18 screening, 2) those referred to YRC after the follow-up period, 3) children who were identified as negative (for any disease or disorder), and 4) those later reclassified as false negatives. We calculated sensitivity to autistic disorder, sensitivity to developmental disorders, and specificity for developmental disorders as efficacy indicators. Practically speaking, because specificity for autistic disorder was not significant, we left it out. We also investigated how the study subjects' results on YACHT-18 items were related to the HC-18m overall examination results and diagnoses of developmental disorders. In actual examinations, the PHNs make a determination of pass or fail in a short period of time (seven or eight minutes) based on data from the screening items. By articulating this as an information-processing model, we set up information-processing-based hypotheses for making highly accurate pass/fail determinations and studied the validity of the process.

Ethical approval for the study was given by the National Center of Neurology and Psychiatry, Japan.

Results

Efficacy of the E&R Strategy based on YACHT-18

From the target group of 2,814 children, 402 (14.3%) were identified in the extraction stage using YACHT-18. In the refinement stage, 19 (.7%) were referred to the YRC for examination with an average age of referral being 2 years and 11 months (SD = 11 months). All were diagnosed with developmental disorders, and none were found to be false positives.

There were 4 false negative cases of developmental disorders in the extraction stage; two were brought in by concerned parents and two were identified in the health examination for 3-year-olds. They were an average age of 4 years and 4 months (SD = 9 months) when referred to YRC, which is significantly older than the 19 cases that tested positive ($t = 2.85$, df = 21, $p = .01$).

Of the 2,791 children without developmental disorders, the extraction stage yielded a specificity of 86.3%, but after the refinement stage, specificity increased to 100%.

Breakdown of diagnosed cases of developmental disorders

Of the 3,036 total children screened for developmental disorders, five cases were recognized and diagnosed before the health examination at 18 months of age. Thus, a total of 28 cases out of 3,036 children initially screened were referred to YRC and diagnosed with various developmental disorders (Table 1).

Table 1 Diagnoses of developmental disorders and YACHT-18 results

Diagnosis	Referred before YACHT-18	Positive at YACHT-18	Negative at YACHT-18	Total
Autistic disorder	0	3	2	5
PDDNOS	1	8	1	10
Learning disorders	0	1	0	1
AD/HD*	0	5	1	6
Mental retardation	2	2	0	4
Cerebral palsy	1	0	0	1
Erb's palsy	1	0	0	1
Total	5	19	4	28

*Including 1 transfer and 2 dropped from program before conclusive diagnoses.

Of the 23 cases definitively diagnosed with developmental disorders within the specified target group of 2,814, 17 cases were followed until age 6. These included: autistic disorder (5 cases), PDDNOS (9 cases), attention deficit/hyperactivity disorder (AD/HD) with borderline intelligence (2 cases), and learning disorders (1 case) (DSM-IV; APA, 1994). One case of AD/HD and two cases of mental retardation transferred out of the district before age 6, and three AD/HD cases dropped out while diagnosis was still inconclusive.

The incidence of autistic disorder of the target group of 2,814 children in this study was .18%, while the incidence of autistic disorder in the entire population of 3,036 children who underwent the HC-18m was .17%. This is consistent with incidence of autistic disorder reported in recent research, and leads to the assumption that all cases of autistic disorder in the cohort examined in this study were positively identified. However, when including all developmental disorders other than autism, there are 23 (.82%) of 2,814 cases, and 28 cases (.92%) of the total of 3,036, and thus it is conceivable that not all cases of developmental disorders were identified.

Sensitivity of YACHT-18

The sensitivity of YACHT-18 for the 5 cases of autistic disorder was 60%. Based on the Tanaka-Binet IQ test at age 5, sensitivity was 66.7% for 3 high-functioning cases with IQs of 70 or more and 50% for 2 low-functioning cases with IQs of 69 or less. The sensitivity was 82.6% for all 23 cases of developmental disorders. In terms of IQ, sensitivity was 86.7% for 13 of 15 cases with IQs of 70 or more and 75% for 6 of 8 cases with IQs of 69 or less.

One-fourth of children with ASDs are known to exhibit developmental regression, including that of speech. This is consistent with survey results in Yokohama that are reported previously (Honda et al., 2005b). Among the target group, two cases of PDD-NOS experienced regression in which initial speech development was completely lost. In both cases the regressive episode occurred between the age of 12 and 18 months, so they tested positive in the YACHT-18. No developmental regression was recognized in the five cases of autistic disorder. However, among the low-functioning group, one false negative child had begun speaking just before the HC-18m, and tested negative. However, at age 2½ years, the parents became concerned about developmental delay and took the child to see a specialist.

Microscopic E&R in the YACHT-18 process

To focus on the details of the data, first, we identified failures for each item on the YACHT-18 screening (Table 2). Of 14 total items, comprised of 11 questionnaire items, 2 interview items, and the picture card test, 11 items had a less than 5% failure rate. Items with a 5% or higher failure rate were the interview items on 'language' (8.4%), the questionnaire's 'pointing' items (11.1%), and the picture card test (38.5%). Next, we conducted simulation analyses to identify processes for using the YACHT-18 data to increase the efficacy of the developmental disorder screening. At this point, we focused on the picture card test because the failure rate was notably higher than other items.

We hypothesized that other items in the screening were useful in the extraction stage, while the picture card test was useful in the refinement stage. Therefore, for the purpose of the simulations, the 2,599 children who took the picture card test were divided into two groups. One group was composed of 22 children who were diagnosed with developmental disorders, including 5 with autistic

Table 2 Failure rate for each item

Item	A(n = 5)	P(n = 9)	O(n = 9)	T(n = 2791)	Total(n = 2814)
Questionnaire					
1 (walk)	1 (20%)	0 (0%)	1 (11.1%)	10 (.4%)	12 (.4%)
2 (climb stairs)	1 (20%)	2 (22.2%)	1 (11.1%)	58 (2.1%)	62 (2.2%)
3 (pencil)	1 (20%)	2 (22.2%)	1 (11.1%)	27 (1.0%)	31 (1.1%)
4 (spoon)	2 (40%)	0 (0%)	1 (11.1%)	47 (1.7%)	50 (1.8%)
5 (hold things)	0 (0%)	0 (0%)	1 (11.1%)	2 (.1%)	3 (.1%)
6 (point)	4 (80%)	6 (66.7%)	5 (55.6%)	296 (10.6%)	311 (11.1%)
7 (say words)	1 (20%)	6 (66.7%)	4 (44.4%)	99 (3.5%)	110 (3.9%)
8 (commands)	1 (20%)	1 (11.1%)	0 (0%)	8 (.3%)	10 (.4%)
9 (imitate)	0 (0%)	1 (11.1%)	1 (11.1%)	12 (.4%)	14 (.5%)
10 (interest)	2 (40%)	0 (0%)	0 (0%)	19 (.7%)	21 (.7%)
11 (look)	1 (20%)	1 (0%)	0 (0%)	10 (.4%)	12 (.4%)
Interview					
Pointing	2 (40%)	3 (33.3%)	6 (66.7%)	114 (4.1%)	125 (4.4%)
Language	3 (60%)	3 (33.3%)	6 (66.7%)	223 (8.0%)	235 (8.4%)
Test					
Picture Card	5 (100%)	8 (88.9%)	7 (77.8%)	1064 (38.1%)	1084 (38.5%)

A: autistic disorder; P: PDDNOS; O: other developmental disorders; T: typical development.

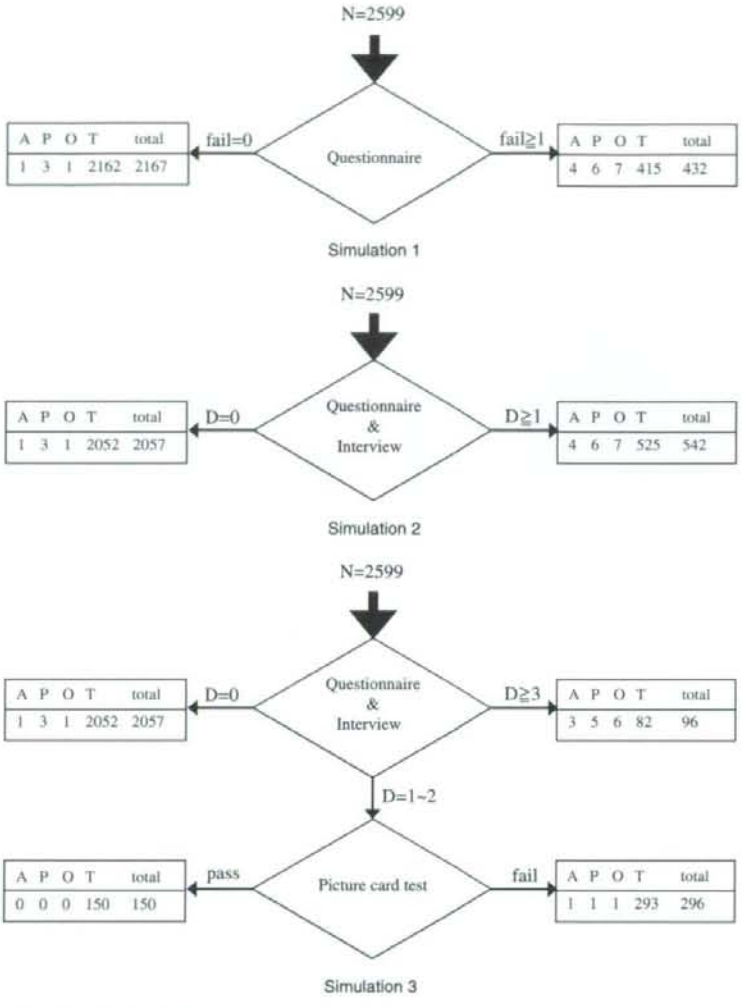

Figure 2 The results of the three simulations
D: Numerical value obtained by combining (A) the number of failed items on the questionnaire, (B) results of 'pointing' items in the interview, and (C) the results of the language comprehension items.

disorder, and the other was composed of the 2,577 children who were not diagnosed with developmental disorders. We believe that all cases of autistic disorder were identified, but we have to recognize the possibility that some cases of other developmental disorders may have slipped through the screen. However, for the purpose of the simulations (based on the YACHT-18 items), we consider the 22 cases of developmental disorders as being the total number, and so are designating the percentage of these cases recognized as positive in the simulations as 'sensitivity to developmental disorders.' We refer to the percentage of the remaining 2,577 children who were recognized as negative in the simulations as 'specificity for developmental disorders.'

Figure 2 shows the algorithms and results of the three simulations conducted in this research.

The evaluation criteria for Simulation 1 included the responses to 11 items in the YACHT-18 questionnaire related to motor development, language, and social interaction where one or more failed items indicated a positive case. Sensitivity for autistic disorder was 80%, sensitivity for developmental disorders was 77.3% and specificity for developmental disorders was 83.9%.

The evaluation criteria used in Simulation 2 were the results of both the questionnaire and the interview. The letter 'A' represents the number of failed questionnaire items out of 11 total. Next, for the four interview items related to 'pointing,' 'B = 1' represents cases yielding two or more failed items, and

Table 3 Simulation analyses

Simulations	Sensitivity for autism	Sensitivity for developmental disorders	Specificity for developmental disorders
(1)	80%	77.3%	83.9%
(2)	80%	77.3%	79.6%
(3)	80%	77.3%	85.4%
PHN	60%	82.6%	86.3%

'B = 0' represents one or fewer failed items. On the two language comprehension interview items, 'C = 1' represents cases with one or more failed items and 'C = 0' represents zero failed items. With 'D' being the sum of A, B, and C (D = A + B + C), we tried setting a cutoff score for D = 1. Sensitivity for autistic disorder was 80%, sensitivity for developmental disorders was 77.3%, and specificity for developmental disorders was 79.6%.

In Simulation 3, the refinement process was implemented using the results of the picture card test added to Simulation 2. If D = 0, the comprehensive determination on YACHT-18 is 'pass.' If D = 3 or more, the case is flagged, and if D = 1 or 2, the case passes if the child successfully passes the picture card test, but is flagged if the picture card test is failed. Sensitivity for autistic disorder was 80%, sensitivity for developmental disorders was 77.3%, and specificity for developmental disorders was 85.4%.

Simulation analyses 1, 2, and 3 were compared with actual screening results produced by PHNs (Table 3). Compared to Simulation 1, the number of children identified increased in Simulation 2, thus specificity for developmental disorders declined. Of the three, Simulation 3 increased specificity for developmental disorders the most by excluding children who passed the picture card test, in that only the 150 children who did not have developmental disorders passed through the screen.

In screenings conducted by PHNs, sensitivity for autistic disorder was lower, but sensitivity for all developmental disorders, including autism, and specificity for definitively excluding all children with no possibility of developmental disorders were higher than in the three simulations.

Discussion

A macroscopic E&R process, beginning with the extraction stage at the HC-18m that continues over a span of several months, is implemented together with a microscopic E&R process initiated at the time of the HC-18m checkup, using the YACHT-18 examination items.

First, we will consider the macroscopic E&R process. The screen sensitivity for autistic disorder was 60%. The figures for the present study may seem low. However, sensitivity was 81% for children with autism identified in an epidemiological survey of autism whose target population was 35,716 children (Honda et al., 2005a). The subjects of the present study are taken from that population. This was a total population study conducted with no manipulation of subject selection to include high-risk subjects, and so the precision may be low. In the extraction stage, specificity for developmental disorders was 86.3%, and in the refinement stage, it rose to 100%. This demonstrates the exceptional utility of the E&R Strategy. The fact that the age of referral to YRC of true positive cases recognized at the HC-18m was significantly younger than false negative cases confirms that the system of early detection of developmental disorders through the HC-18m makes a major contribution to implementing early interventions.

The only prior research on the efficacy of early detection of autism among 18-month-olds was a total population study using CHAT conducted without subject selection manipulation; however, the sensitivity was unexpectedly low (Baird et al., 2000). This is not because CHAT has low utility as a research tool, but may be due to relying on only one screening. The reason that other screening instruments cannot be compared with ours is that the age of the subjects differs or the studies were not conducted on total populations free of manipulation of subject selection.

Developed for research purposes, other screening instruments are narrowly focused on early detection of autism. Even if their specificity to childhood autism was high, simply excluding with certainty all cases other than childhood autism shifts the focus away from useful clinical purposes. Because the goal is to pass all cases of developmental disorders except autism, the opportunity to identify these cases is lost. From a clinical perspective, it is extremely important to conclusively exclude cases with no developmental disorders. Accordingly, practical indices for studying screening efficacy are sensitivity for autistic disorder, sensitivity for developmental disorders, and specificity for developmental disorders.

Next, we will evaluate the microscopic E&R process. When we look specifically at the failure rate on YACHT-18 items, the high failure rate (38.5%) on the picture card test is noteworthy. When abnormality is suspected due to failure on this item, nearly 40% of the children are flagged. We hypothesized that this item can be utilized as a microscopic refinement tool. This hypothesis was consistent with the perceptions of the administering PHNs. In a simulation using actual examination data of children whose inconclusive questionnaire and interview results placed them in the gray zone, it was discovered that those who tested negative after the picture card test did not

include any cases of developmental disorders. By excluding these children, specificity for developmental disorders increased approximately 6%.

The problem with considering only questionnaire data is the issue of caregiver error due to superficial or mistaken understanding of the questions or inability to accurately discern the child's developmental characteristics. This is addressed in the interview by the PHN who monitors and records the caregiver's answers while confirming comprehension of and correct answers to the questions. This research did not find any difference in sensitivity to developmental disorders between the questionnaire data and the combined questionnaire and interview data. This is because children who failed none of the items on the questionnaire did not have additional failures from the interview. However, perhaps this result is related to the small size of the target population. Fifteen years of screening experience demonstrate that the interview items often increase total failed items. It is therefore presumed that this is a highly effective process in which the failures from the interview questions are added to those of the questionnaire in order to detect even the slightest abnormality; then in the refinement stage, the picture card test excludes cases in the gray zone.

Moreover, results of the PHN screenings for sensitivity and specificity for developmental disorders were better than in our simulations. This is undoubtedly related to the highly skilled screening staff. Many current diagnostic tools for autism (e.g., ADI-R; Lord, Rutter, & Le Couteur, 1994) designed for clinical and research purposes are investigator-based. The average person will have difficulty distinguishing between abnormal and normal behavior in areas of social interaction and communication that are affected by ASD, and it is extremely difficult to create questionnaires such as those used in the fields of psychiatry and psychology that elicit a simple 'yes' or 'no' answer from the respondent. Accordingly, professionals must be equipped with knowledge of autism and skills to implement a tool effectively (Rutter et al., 1988). The same can be said for early detection screening tools. There is a limit to how well a screening tool can be constructed to detect subtle abnormalities in the social interaction and communication of infants and children. When highly specialized professionals use a tool in a clinical situation, it is the skill with which they use the tool that enables them to identify children with suspected developmental disorders. Even when a screening tool includes behavioral markers characteristic of autism, if users do not have training or knowledge of autism, they may not be able to apply the tool effectively. This research is strongly dependent on a care system and on highly skilled screening teams available in the city of Yokohama.

YACHT-18, even with the microscopic E&R Strategy, produces false negatives, and we may assume two reasons for this technical limitation. First, during the extraction stage, specialists do not observe the children. Both the questionnaire and the medical interview items require parental responses, so cases with D = 0 at this stage unequivocally test negative. Second, YACHT-18 focuses more on developmental delay than developmental deviance, and so at 18 months of age, children with developmental disorders who do not exhibit developmental delay may pass the screen. This group of children is composed of those with ASDs who regress after 18 months of age and those high-functioning children who have PDDNOS.

Going forward, two steps must be taken. First, comprehensive, prospective research must be conducted in specific communities using our macroscopic and microscopic E&R Strategy to determine its validity. Second, educational programs on developmental disorders including ASD must be developed for health professionals who conduct community public service programs for early detection of developmental disorders.

Conclusion

We recommend that a community care system using screening tools targeting all developmental disorders at the health examination for 18-month-olds, followed by further testing and follow-up during the refinement stage, be implemented at the local governmental level in other communities. Most importantly, local government must ensure that education about developmental disorders and training in the use of screening tools is provided. If this occurs, it will be possible for even more children with developmental disorders and their families to benefit from early intervention measures. This will also certainly facilitate the advancement of research on autism.

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Key points

- For early detection of autism, it is difficult to maintain an efficient level of sensitivity and specificity based on observational data from a single screening.
- An innovative approach called the Extraction and Refinement (E&R) Strategy is proposed.
- The Extraction Stage is designed to increase sensitivity. In the Refinement Stage, a follow-up program implemented by the public childcare system raises specificity.
- Microscopic E&R Strategy: By including 'pointing' items (which have low pass rates) in the screening tool, false positives from the first screening are reduced.

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Appendix

YACHT-18 (Young Autism and other developmental disorders CHeckup Tool: For 18-month-olds) questionnaire, interview questions and picture card test

Questionnaire

1. Can your child walk?	Well / Not well (less than 5–6 steps)
2. Can your child climb stairs holding your hand?	Yes / No
3. Can your child scribble with a pencil?	Yes / No
4. Can your child eat with a spoon or fork by him/herself?	Yes / No
5. Can your child hold things between thumb and forefinger?	Yes / No
6. Does your child point to pictures in a familiar picture book, when asked?	Yes / No
7. Can your child say words with meaning?	Yes / No
(List about 4 examples:)	
8. Does your child follow simple commands?	Yes / No
9. Does your child imitate people?	Yes / No
10. Is your child interested in other children?	Yes / No
11. When you call your child, does he/she look at you?	Yes / No
12. Do you have any worries concerning your child's vision? ( )	Yes / No
13. Do you have any worries concerning your child's hearing? ( )	Yes / No
14. Do you have any other worries or questions? ( )	Yes / No

Interview questions

Pointing
1. Does your child point to indicate objects, etc.?
2. Does your child point and say the name of objects, etc.?
3. Does your child point at objects (other than pictures), when asked, 'Which one is the ~?'
4. When asked to identify body parts, does your child indicate by pointing?

Language comprehension
1. When asked to throw something away, can your child go to the wastebasket and throw it away?
2. When asked to throw something away, can your child throw it away and return afterwards?

Picture Card Test
Pass – if the child points to two or more (of six) pictures correctly; fail – if one or zero are pointed to correctly.

第12回　横浜市療育研究大会
プログラム・抄録集

日時：平成 20 年 7 月 22 日（火）
（13 時より受付開始）
13 時 30 分より 17 時 15 分まで

場所：横浜ラポール　ラポールシアター

プログラム

13:00 受付開始
13:30 開会の挨拶　原　仁(中部地域療育センター)
13:35 全体会 ラポールシアター
対談『ライフステージに応じた高機能広汎性発達障害の支援』
神尾 陽子(国立精神・神経センター精神保健研究所)
本田 秀夫(横浜市総合リハビリテーションセンター)
司会:清水 康夫(横浜市総合リハビリテーションセンター)
15:05 休憩・移動
15:15 分科会

分科会Ⅰ. 大会議室	分科会Ⅱ. ラポールシアター
テーマ 『肢体不自由児の療育を考える』 座 長:三沢 峰茂 (横浜市総合リハビリテーションセンター) 佐々木 葉子(北部地域療育センター) ・分科会をはじめるにあたり 渡邉 幸恵(北部地域療育センター) ・講演「どんな子どもに育てたい ー肢体不自由児の療育ー」 半澤 直美(戸塚地域療育センター) ・発表1「重心児の療育プログラム」 坂上 裕美(北部地域療育センター) ・発表2「AAC の活用について ーコミュニケーション場面を設定するー」 下位 友美(戸塚地域療育センター) ・発表3「摂食クリニックについて」 萩原 聡(東部地域療育センター) ・発表4「摂食クリニックの紹介と西部センターでの 6 年間のまとめ」 永井 志保(西部地域療育センター) ・事業団の重心児への取組みと分科会のまとめ 三沢 峰茂(横浜市総合リハビリテーションセンター)	シンポジウム 『高機能広汎性発達障害の支援プログラム』 総合司会:武部 正明 (横浜市総合リハビリテーションセンター) ・「高機能広汎性発達障害のコミュニティ・ケア ー横リハにおけるモデル開発ー」 本田 秀夫 (横浜市総合リハビリテーションセンター) ・「高機能広汎性発達障害の 幼児期の支援プログラム『TREAT』」 日戸 由刈 (横浜市総合リハビリテーションセンター) ・「アスペルガー症候群の学校教育-横浜市の情緒障害通級指導教室の教育実践-」 笠原 丈史(横浜市立綱島東小学校) ・「鉄道大イベントー鐵愛倶樂部メンバーたちの4 年間の軌跡ー」 萬木 はるか (横浜市総合リハビリテーションセンター) ・「ボランティア体験教室—アスペルガー症候群の成人期に向けた支援のあり方—」 日戸 由刈 (横浜市総合リハビリテーションセンター) ・総合討論 神尾陽子 日戸由刈 笠原丈史 本田秀夫 (司会)

※分科会Ⅰ(大会議室)は座席の関係で座れない場合があります。ご了承ください。

17:15 閉会
17:30 懇親会(リハセンター 多目的ホール)

全体会（ラポールシアター）

対　談

ライフステージに応じた高機能広汎性発達障害の支援

神尾陽子（国立精神・神経センター精神保健研究所）
本田秀夫（横浜市総合リハビリテーションセンター）
司会：清水康夫（横浜市総合リハビリテーションセンター）

広汎性発達障害（PDD）は，社会生活において最も重要な機能である社会的相互交渉とコミュニケーションの発達に重篤な異常をみとめる発達障害である。したがって，あらゆるライフステージにわたってPDDの人たちの支援ニーズを明らかにし，学際的なチームによって支援の技法とシステムを開発していくことが求められる。

今回の療育研究大会全体会では，神尾陽子先生をお招きした。神尾先生はわが国におけるPDD研究のリーダーのひとりであり，平成19年度より厚生労働科学研究費補助金（障害保健福祉総合研究事業）「ライフステージに応じた広汎性発達障害者に対する支援のあり方に関する研究：支援の有用性と適応の評価および臨床家のためのガイドライン作成」の主任研究者を務めておられる。PDDの支援にかんする神尾先生のお考えを伺うとともに，今後のPDD支援にかんする展望について本田と対談形式で議論する予定である。

（本田 記）

＜ 神尾陽子先生のご略歴 ＞

1983.3	京都大学医学部卒業
1983.6-1984.3	京都大学医学部精神神経科研修医
1984.4-1985.3	大阪赤十字病院精神神経科研修医
1985.5-1985.12	京都大学医学部精神神経科医員
1986.1-1991.9	京都市児童福祉センター診療所精神科
1991.10	渡英
1992.12	ロンドン大学付属精神医学研究所児童青年精神医学課程終了
1992.12-2001.3	京都大学医学部精神神経科助手
2000.7-2001.4	フルブライト研究員として米国コネティカット大学　訪問研究員
2001.4-2006.6	九州大学大学院人間環境学研究院助教授
2006.7-	国立精神・神経センター精神保健研究所児童思春期精神保健部部長

文科会Ⅱ（ラポールシアター）

シンポジウム
高機能広汎性発達障害の支援プログラム

高機能広汎性発達障害にたいする関心が世界中で大きな高まりをみせている。横浜市のように早期発見と早期介入が活発に行われている地域では，幼児期から高い感度で発見され，早期介入が開始される。しかし，通園施設による福祉的ケアを中心とした従来の手法のみでは高機能広汎性発達障害のこどもたちへの支援は不十分である。知的障害のモデルの援用ではなく高機能広汎性発達障害に特化した支援の技法開発が求められている。また，高機能広汎性発達障害のこどもたちの社会参加支援が本格的に必要となるのは，学齢期以降である。学校教育のなかでどのような取り組みが可能なのか，学校教育にたいして医療からどのような支援が考えられるのか，というテーマを設定しておく必要がある。これらの支援は，学校教育を終了した先の就労を念頭に置きながら考えていくことが重要である。

本分科会では，高機能広汎性発達障害にたいする支援プログラムについて深めていく場としたい。幼児期の早期介入にはじまり，学齢期，さらには就労の準備に向けた支援のあり方について，リハビリテーションセンターおよび情緒障害通級指導教室で開発されてきた取り組みを紹介していただく。さらに，全体会の講師である神尾陽子先生にも加わっていただき，ライフステージに応じた高機能広汎性発達障害の支援について，今後の展望を討論したい。

演題：

高機能広汎性発達障害のコミュニティ・ケア ― 横リハにおけるモデル開発 ―
本田秀夫（横浜市総合リハビリテーションセンター）

高機能広汎性発達障害の幼児期の支援プログラム「TREAT」
日戸由刈（横浜市総合リハビリテーションセンター）

アスペルガー症候群の学校教育 ― 横浜市の情緒障害通級指導教室の教育実践 ―
笠原丈史（横浜市立綱島東小学校情緒障害通級指導教室）

「鉄道大イベント」― 鐵愛倶樂部メンバーたちの4年間の軌跡 ―
萬木はるか（横浜市総合リハビリテーションセンター）

「ボランティア体験教室」―アスペルガー症候群の成人期に向けた支援のあり方―
日戸由刈（横浜市総合リハビリテーションセンター）

総合討論：
神尾陽子　日戸由刈　笠原丈史　本田秀夫（司会）

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ライフステージに応じた広汎性発達障害者に対する支援のあり方に関する研究：
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