#### INSERM Clinical and Public Health Network

Coordinators: Bruno FALISSARD and Jean-Michel THURIN

# PRACTICE-BASED RESEARCH NETWORK IN PSYCHOTHERAPY

## PROGRESS REPORT at 4 years

**AUTISM Section – March 2013** 

#### Practice-based research network in psychotherapy

Coordinators: Jean-Michel Thurin and Bruno Falissard

Institutions: INSERM Unit U669 and the French Federation of Psychiatry

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Steering committee: Dr Jean-Michel Thurin, Pr Bruno Falissard, Mme Monique Thurin, Pr Bernard Golse,

Pr David Cohen, Pr Catherine Barthélémy, Dr Geneviève Haag, Dr Marie-Christine Cabié, Dr Olivier

Lehembre, Pr Philippe Robert, M Denis Mellier

Methodology and data analysis: Bruno Falissard, Jean-Michel Thurin, Monique Thurin, Tiba Baroukh, Fadia Dib (U669)

http://www.techniques-psychotherapiquesorg/Reseau/

### **I INTRODUCTION**

JM THURIN, B FALISSARD<sup>1</sup>, M THURIN<sup>2</sup>

Here is the second progress report of the Network of Practice-Based Research in Psychotherapy (RRFPP). It is based on the *experience of studies already completed on courses of psychotherapy in the ASD (autism spectrum disorders) section* and based on 2 themes: *the construction and modalities of working in a network,* and the research in the strict sense of the term — the methodology of the studies, data analysis, and initial results. Although these 2 themes can be distinguished theoretically, they are very closely linked because they are mutually connected in the performance of a new generation of research, which we present here.

The March 2010 report presented the network's establishment and its earliest accomplishments, that is, the first case studies completed in each section as described at the first feedback conference on January 22, 2010.

Since then, substantially more clinicians are conducting psychotherapy within the ASD section, and they have included many more cases. Currently, 23 peer groups are operating, and 79 children are in treatment. Inclusions remain open. Recently, one new peer group was set up, focused on adults with ASD, and new requests for participation have come from both clinicians and institutions.

Since 2010, the plan of analysis of the process has become more detailed. The growing number of completed cases has made it possible to analyze the course of each child participating in the study. With the conclusion of each case at the end of its study year, we have been able to conduct several grouped or pooled case studies (at 12, 26, 41, and finally 50 cases), as well as a comparative study of "similar" cases. We have used mixed data analysis, combining both quantitative and qualitative methods.

Reflections on the construction of the network and the studies previously conducted call attention to 5 particular points:

- The first is the appropriateness of the methodology chosen to the conditions and objectives of both the clinical practice and the research. It has allowed the network to involve numerous therapists and led to tangible changes in their positions about publicly presenting and assessing their practices.

These are individual case studies conducted under natural conditions, with the measurement and analysis of both the changes seen during the course of 1 year of psychotherapy and the characteristics of the internal process, based on indicators concerning the child, the therapist, and their interaction. These cases were subsequently regrouped in a database, which made it possible to study them as a group and to conduct comparative studies. The intensive individual studies routinely included an initial and final case formulation, completion of the ICD diagnosis, and the initial workups. Repeated assessments of both autistic behaviors and the development of psychosocial skills enabled us to use these different indicators to follow the course of this disorder and the acquisition

<sup>&</sup>lt;sup>1</sup> Bruno Falissard. Inserm U669, Maison de Solenn, 97 Bld de Port Royal, 75679 Paris cedex 14

<sup>&</sup>lt;sup>2</sup> Jean-Michel Thurin & Monique Thurin. Inserm U 669 & Fédération Française de Psychiatrie. Réseau de recherches fondées sur les pratiques psychothérapiques, 9 rue Brantome, 75003 PARIS, France. E-mail : jmthurin@techniques-psychotherapiques.org - www.techniques-psychotherapiques.org/reseau/

<sup>&</sup>lt;sup>3</sup> Le contenu de ce terme sera précisé à partir des critères utilisés pour réunir les patients et de ceux issus de classifications et d'analyses factorielles.

of the new individual and psychosocial skills that play a role in mental health. At the same time, a description of the internal process of the psychotherapy has allowed us to describe its most characteristic elements and the principal mediators that intervene in the changes in the child.

Work in peer groups plays a central role in this methodology. It simultaneously makes it possible to strengthen the quality of the scoring for assessments (3 individual scores plus 1 meeting for comparison, discussion, and validation) and to conduct clinical discussions based on the data collected, discussions the therapists appreciated highly. With the use of new information and communication technologies, training and meetings can take place remotely, at a distance. The organization as a network and the active collaboration of researchers and clinicians that underlies it have served as an essential support throughout for conducting rigorous, controlled studies that simultaneously provide clinical and cognitive benefits to the children who participate. The work on assessment instruments and the data analysis also benefited from this collaboration.

- The second aspect concerns the effectiveness of psychotherapy in children on the autistic spectrum conducted by experienced professionals, 80% of whom currently use a psychoanalytic approach, 10% a cognitive-behavioral approach, and 10% some different approach (e.g., psychomotor or play therapy). The overall effect sizes are significant (2.1 for the reduction of autistic behaviors and 1.3 for the developmental gains). Their clinical translation, both in terms of behavior and new skills, shows the importance of the changes obtained.
- The third aspect completes the second. It concerns the possibility of describing accurately and specifically the diversity of the cases and the response to psychosocial interventions in ASD; both factors are often stressed but rarely approached systematically. This diversity was examined according to different criteria (such as age at study entry, and at diagnosis, years of psychotherapy, and severity of disorders) and related to the children's different trajectories. The common features and differences in these trajectories, associated with a specific definition of the mediators and environmental factors likely to explain them, made it possible to go beyond the standard beforeand-after studies and to consider different hypotheses about the causation of changes (mediators and mechanisms) and the impact of moderators on the treatment effects.
- The fourth aspect, underlined by the clinicians who participated in this research, concerned the theoretical questions to which it gave rise and the impact it had on the quality of their work.
   Participating therapists have stressed these aspects during numerous feedback meetings, in surveys we conducted on this subject<sup>4</sup>, and in the report by the Italian group coordinators<sup>5</sup>. These effects appear to be a consequence of the design of the research, which goes far beyond the observation of a result. This design continually asks questions of the participants, not only about the nature of the changes, but about what underlies them. Kazdin<sup>6</sup> and many others highlighted the general importance of this process and its potential effects on practices several years ago.
- The fifth aspect involves the *processes of change and the different levels by which they can be approached*. The precise definition, developed in this research, of the mediators and moderators that play a role in these treatments provides knowledge of the modes of action and the mechanisms

<sup>&</sup>lt;sup>4</sup> Thurin JM, Thurin M & Midgley N. Does participation in research lead to changes in attitudes among clinicians? Report on a survey of those involved in a French practice research network. Counselling and Psychotherapy Research 2012; 12(3): 187-193.

<sup>&</sup>lt;sup>5</sup> Amenta M & Messeca S. Le groupe de recherche italien. *Pour la recherche* 2012 : 73-74: 5-6.

<sup>&</sup>lt;sup>6</sup> For example, Kazdin AE. Evidence-Based Treatment and Practice New Opportunities to Bridge Clinical Research and Practice, Enhance the Knowledge Base, and Improve Patient Care. *American Psychologist* 2008; 63 (3): 146–159.

that underlie the effects of psychosocial interventions in ASD. As Lerner et al.<sup>7</sup> stressed, this is the first phase of a more fundamental approach. Taking into account the diversity and complexity of the cases and considering the different markers, including perhaps those that are physiological and neuroanatomic, this approach, combined with the clinical and functional analysis, makes it possible to follow and understand the variety of these disease courses.

This network continues to function and grow. Although it was conceived in 2007 and selected for funding in 2008, its work fits perfectly within the 2012 recommendations by HAS about the development of research studies<sup>8</sup> and in the 4th part of the 2013 autism plan devoted to research<sup>9</sup>.

- The case studies conducted in the network setting can be seen as research-actions. They have created a dynamic that opens clinicians up to research activities. The creation of this very rich database has enabled us to use the data and experiences collected as part of the implementation of interventions to contribute to improving our knowledge of the processes of change in these children, of their needs, and of the types of interventions and support available to them.
- This research has also allowed the assessment by very rigorous studies of the effectiveness and safety of practices not previously evaluated and for which expert opinion varies (e.g., psychodynamic psychotherapies), of consensual interventions not yet assessed by controlled studies (e.g., exchange and development therapy as well as interventions begun late in childhood or during adolescence).
- The principal effectiveness criteria were variables both behavioral and functional considered essential for the improvement of the child/adolescent's participation in society.
- At the same time, the subsequent follow-up of these children should provide information about the long-term effects of the interventions used. These interventions have been described very precisely from a detailed description based upon on the psychotherapeutic process questionnaire (CPQ), an instrument applicable to multiple theories that assesses the characteristics of the psychotherapy and of the therapeutic actions it includes.

In Part I, the report presents the international context and establishment of *practice-based research networks* at the beginning of this century, their objectives, methodology, and organization; it also describes this particular network, its work processes, internal activities (meetings with therapists for training, information, and operational feedback, weekly meeting of the methodology group), and public actions (interventions, conferences, communications, and publications). The second part is devoted to the studies and their analysis at 3 levels: as individual cases, pooled cases, and comparative cases, and to the initial conclusions and the prospects.

It is accompanied throughout by complementary documents, accessible as an appendix (in French) on the Internet, as well as by the spreadsheets from which the statistics were analyzed and the results determined.

<sup>&</sup>lt;sup>7</sup> Lerner MD, White SW, McPartland JC. Mechanisms of change in psychosocial interventions for autism spectrum disorders. *Dialogues Clin Neurosci* 2012; 14: 307-418.

<sup>&</sup>lt;sup>8</sup> HAS et Anesm. *Actions futures : le développement des études de recherche. Recherche-action, Recherche clinique.* In Recommandations de bonne pratique pour Autisme et autres troubles envahissants du développement : interventions éducatives et thérapeutiques coordonnées chez l'enfant et l'adolescent (Méthode Recommandations par consensus formalisé), mars 2012, p 44-47.

<sup>&</sup>lt;sup>9</sup> Third Autism Plan (2013-2017) presented Thursday, May 2, 2013 by Marisol Touraine, Minister of Social Affairs and Health, and Marie-Arlette Carlotti, Minister Responsible for Persons with Disabilities and the fight against exclusion.http://www.social-sante.gouv.fr/IMG/pdf/plan-autisme2013.pdf

2012 and early 2013 saw the preliminary results reported at numerous network meetings, 2 radio interviews, and 20 presentations at conferences, including 14 after acceptance for international events.

Subsequent reports will follow this one: both results from larger number of cases and a more in-depth description of the methods of statistical analysis in this simultaneously innovative and complex field.

Comments and questions are welcome.

Jean-Michel THURIN

#### **Acknowledgments**

#### I thank particularly

- Geneviève Haag, who energized the psychoanalytic community and participated in all the informational and training meetings and seminars with the therapists in the network, bringing to them especially her long clinical experience in the domain of ASD and her openness to multidisciplinary approaches to the children's educational and psychosocial situations
- Catherine Barthélémy, who has been present from the scientific conception of the project and who participated directly with the inclusion of cases using the exchange and development therapy (several others are currently being analyzed and still more are in the process of inclusion). Her very active presence at the Feedback Days and on the Scientific Committee nourished very fruitful discussions with the network clinicians and coordinators. Her availability to answer ad hoc or general questions was extremely helpful, as well as her very attentive review of this report and her suggestions about its enhancement and its viewpoints.
- Bruno Falissard, who committed himself to this ambitious and risky project, participated actively in
  its launching and its dissemination in numerous public meetings. He opened and shaped the basic
  discussions on the statistical and mixed analyses of the complex data, still far from complete, and
  participated in the basic scientific dynamics of the network.
- Monique Thurin, who has been fully involved in the network's functioning and in the relationships with therapists, in the collection, validation, and organization of the data, and in training network participants, both in meetings and by Internet. She has also provided her particular skills to the qualitative analysis of the corpus presented in the general report and in the numerous presentations she has made at national and international conferences.
- David Cohen, coordinator of the network's borderline personality adolescent section and highly involved in the research on ASD, whose support and advice have contributed greatly to the network and its perspectives.
- Bernard Golse, who supported the establishment of the ASD section and has remained involved in its promotion.
- The therapists who participated in this research with rigor, curiosity, and skill. Their (volunteer) work has been considerable, and the cases collected already comprise a very strong knowledge base. Their active participation marked a milestone in overturning the conventional wisdom that the psychotherapeutic process and the changes accompanying it cannot be presented or assessed, and that psychotherapists will refuse to do so. I should add that this work has been conducted in a highly professional and congenial atmosphere
- The different public figures and department heads who participated in discussions, convinced the clinicians they worked with to join the network and participate in the studies, fueled the dynamic around the questions raised, and invited network leaders to come talk about the project at scientific events they organized

#### II PRACTICE-BASED RESEARCH NETWORKS: INTERNATIONAL CONTEXT

Practice-based research networks are a response to the gap that sometimes exists between the approach of clinicians to problems that arise in practice and the responses provided by laboratory research. While research concerns highly focused topics, in practice multiple factors are involved that cannot be neglected or dissociated from the patient's principal problem. These includes the interlinked nature of their diseases, the particularities of their histories, their vulnerability, and their living situations, as well as the heterogeneity of clinicians in their competence, skills, and experience in different treatments. All of these aspects engender clinical questions beyond the scope of the generalizations that can legitimately be made from clinical trials. This situation is particularly crucial in the domain of psychotherapy, where the interpersonal dimension and individual variability constitute an essential aspect of its performance and its effectiveness.

These networks began in the 1960s in Australia, New Zealand, and Europe; they grew during the 1990s, especially in the European Union, developing in various clinical disciplines: general medicine, pediatrics, psychiatry, and psychology.

The American Academy of Family Physicians provided impetus to the growth of these networks in the field of general practice. In 1997, it set up the <u>Federation of Practice Based Research Networks</u>, described in 7 publications reporting professional experiences associated with it. These networks developed in pediatrics, in rural hospitals, in end-of-life and palliative care (bringing together 205 hospices and care centers, 145 of which collected data and participated in 16 network studies), and in psychiatry, for both psychotherapeutic and community practices.

The possibility of working and sharing information with people in very different places is an inherent part of the work of these networks. Ideally, the infrastructure must include an electronic data system and be capable not only of collecting, transferring, and pooling data from primary research but also of communicating a new research project rapidly and of measuring consecutive changes in clinical data.

#### **Definition of practice-based research networks**

The definitions of these networks vary somewhat according to their functions and particular objectives. Their common characteristic is that clinicians organize to conduct research on questions linked to their practices.

- A practice-based research network is "a group of practicing clinicians that cooperates to collect data and conduct research studies" (Zarin 1995) [network of psychiatrists belonging to the American Psychiatric Association].
- A practice-based research network is "simply a network of clinicians who collaborate to conduct research that will inform them about their daily practice," (Audin *et al.* 2001<sup>10</sup>)[network of UK psychotherapists].
- -"A practice-based research network is defined as a group of clinicians, practices, or institutions that are devoted primarily to the delivery of patient care and are affiliated with each other in order to investigate questions related to community-based practice. Networks are usually formal collaborations between community-based physicians and academic institutions: the physicians collect research data, and

<sup>&</sup>lt;sup>10</sup> Audin K, Mellor-Clark J, Barkham M, Margison F, McGrath G, Lewis S, Cann L, Duffy J, & Parry G. Practice research networks for effective psychological therapies. *Journal of Mental Health* 2001; 10(3): 241-251.

academic institutions have the staff and facilities required to design research studies and analyze, interpret, and publish the data. This definition includes a sense of ongoing commitment to the research endeavor, as well as an organizational structure that transcends a single study. To qualify as a PBRN [practice-based research network], the clinicians and/or office staff members within the network must actively participate in the research process" (Kutner et al. 2005<sup>11</sup>)[network of palliative care in reference to networks of general practitioners and pediatricians].

#### Principal networks existing in the field of mental health

#### In the United States

- The American Psychiatric Association's practice research network

Created in 1993 by Zarin, Pincus, et al., it subsequently became the American Psychiatric Institute for Research and Education's (APIRE) Practice Research Network (PRN). http://www.psychiatry.org/researchers/practice-research-network

APIRE is a research initiative by a network of psychiatrists across the US who cooperate to pool data and undertake research studies about a variety of questions about clinical practice and the delivery of health-care services. Currently, it includes nearly 800 psychiatrists. When fully developed, it will comprise 1000 psychiatrists practicing in a full range of public and private treatment configurations.

APIRE was founded in 1998 to fulfill the leadership role of the American Psychiatric Association by contributing to the scientific base of psychiatric practice and policy, reinforcing the research infrastructure in this domain, and improving the quality of psychiatric care by conducting and supporting clinical and health-services research and educational actions.

Growing awareness of the need for practice-based research in the field of psychiatry led to the network's formation; It was designed to round out traditional research methods by producing information from a wide range of patients, treatments, and practice configurations and structures. Consequently, the network's research results are appropriate for and generalizable to daily *clinical decision-making*.

The network also a plays an essential role in collecting data useful for studying and planning health policy. Given the rapid changes in the organization, funding, and delivery of psychiatric care in the US, this continuous research laboratory serves as a valuable resource. A <u>bibliography</u> of publications relative to this network can be downloaded from the link.

- The Pennsylvania Practice Research Network (PPRNet)

Started by TD Borkovec (2001)<sup>12</sup> and continued especially by L <u>Castonguay</u>, this is the oldest network in the field of psychotherapy. Its objective is to *create programs that simultaneously maximize their internal validity by their choice of rigorous scientific methodology and their external validity by conducting research in psychotherapy as it is currently applied. This (US) National Institute of Mental Health (NIMH) is currently seeking to focus more on research in the real world of clinical practice, and this network's objective coincides with that aim. It has initiated numerous research projects. One of the* 

<sup>11</sup> Kutner et al. The Practice-Based Research Network as a Model for End-of-Life Care Research: Challenges and Opportunities. Cancer Control 2005; 12(3): 186-195. http://ww.moffitt.org/CCJRoot/v12n3/PDF/186.pdf. <sup>12</sup> Borkovec TD., Echemendia RJ., Ragusea SA., & Ruiz M. The Pennsylvania Practice Research Network and future possibilities for clinically meaningful and scientifically rigorous psychotherapy research. *Clinical Psychology: Science and Practice* 2001; 8:155-168.

most recent concerned the treatment responses possible for the upsurge in severe mental disorders (e.g., depression, anxiety, eating disorders, and self-mutilation) that has been observed among students. This network insists especially on the development of a true collaboration between clinicians and researchers.

Bridging the divide between clinicians and academic researchers

"One of the most exciting extensions of our work at the BHL [Behavioral Health Laboratory] is our collaboration between researchers and our extensive network of clinicians. Working with leading academics in the field, we are facilitating academic research in the real world. As clinicians, we have long expressed concern that academic studies have little relevance to ongoing clinical work. The PRN [practice research network] will benefit policy-makers, administrators, clinicians and clients by providing research based clinical solutions to real clinical problems."

TD Borkovec and other members of the network published an article that describes its creation, discussed approaches to different research questions, and proposed several guidelines.

- The community child psychiatry network of San Diego

This network conducted an observational study of psychotherapy for children (4- to 13-year-olds) seen for behavior disorders at 6 public health centers in San Diego (CA, USA) (Garland *et al.* 2006).

#### In the United Kingdom, the Northern Practice Research Network (SPR-N PRN)(UK)

This network is an offshoot of a group formed by the *Society for Psychotherapy Research (SPR)*. Its first initiative was the selection of assessment instruments, the definition of different methods of assessment, and their linkage (Audin *et al.* 2001, Barkham *et al.* 2003<sup>13</sup>).

Objectives: its general objectives are to standardize the collection of routine data from all participating sites and to use the resultant database to compare and differentiate the services provided, case profiles, and standard of practice. As a model for research facilitating the collection of effectiveness data, the PRN approach can benefit clinicians in several specific ways, including improving cost effectiveness, research development, and dissemination, eliminating the gap between research and practice, reducing resistance to the evaluation of actual effectiveness, and contributing to the implementation and development of health policy. Real effectiveness must be interpreted as including studies of the mechanisms of change.

Organization: subgroups of clinicians in a PRN can identify particular domains of research interest and can use data generated by the network as a whole to collaborate on publications, reports, and presentations.

Clinicians are directly involved in the choice of themes and in the design and implementation of data collection with their own patients. PRN studies are therefore more able to generate highly relevant data that reflect clinicians' priority needs, and the incorporation of the results into practice is thus more natural than those from traditional concepts of research.

Accomplishments: selection of assessment instruments. Articles about the CORE.

<sup>&</sup>lt;sup>13</sup> Barkham M, & Mellor-Clark J. Bridging evidencebased practice and practice-based evidence: Developing a rigorous and relevant knowledge for the psychological therapies. *Clinical Psychology & Psychotherapy* 2003; 10: 319-327.

#### In France, the Network of Practice-Based Research in Psychotherapy (RRFPP)

Its creation is the culmination of a years-long process spearheaded by Inserm-Psychiatry Interface Committee and JM Thurin et *al.* INSERM, in selecting this network in 2008, sought to ameliorate the glaring lack of knowledge about psychotherapeutic practices in France. Two general objectives underlie this network. The first is the acquisition of knowledge about psychotherapeutic practices in their different conditions and settings, and the other, the development of the assessment of various types of psychotherapy in natural conditions, by deepening our knowledge of the configurations and mechanisms of change during the psychotherapeutic process<sup>14</sup>.

Its methodology is based on case studies and combines qualitative and quantitative approaches. Each study respects the natural process of psychotherapy, takes individual differences into account, and integrates the best standards of evidence. This research network makes it possible to pool similar cases and examine the differences and common features involved in their trajectories.

The clinicians and researchers have worked closely together on a common objective and reduced the gap that previously characterized their respective approaches.

The Network has been funded by INSERM, the Directorate-General of Health, and the Fondation de France. It operates as part of 2 organizations: INSERM Unit 669 (Pr B. Falissard) and the Federation Française de Psychiatrie (French Federation of Psychiatry) (Dr JM Thurin). http://www.techniques-psychotherapiques.org/reseau/

#### In Canada, the Psychotherapeutic Practice Research Network (PPRNet)

The Psychotherapy Practice Research Network is a Canadian interdisciplinary partnership of psychotherapists, researchers, educators, and knowledge users engaged in practice-based psychotherapy research. Such collaborations lead to psychotherapy research informed by the combined expertise of practicing clinicians and researchers. Its goal is to advance practice-based research that translates into excellence in psychotherapy to improve the wellbeing of the community. This network is committed to sustaining the community's wellbeing by training the next generation of clinicians and researchers in collaborative practice-based psychotherapy research. It operates in part through support and funding from the University of Ottawa, the Ottawa Hospital, and the Canadian Institutes of Health Research. <a href="http://www.med.uottawa.ca/pprnet/eng/index.html#4">http://www.med.uottawa.ca/pprnet/eng/index.html#4</a>

#### The online journal *Pragmatic Cases Studies* (PCSP)

This journal was created on the initiative of D Fishman and under the egis of the American Psychological Association, to approach the methodological questions of pragmatic case studies and bring together the publications about them. http://pcsp.libraries.rutgers.edu/index.php/pcsp

The International Project on the Effectiveness of Psychotherapy and Psychotherapy Training (IPEPPT)

This network focuses on 2 objectives: practice-based research at training sites and assessment of the effectiveness of the training. <a href="http://www.experiential-researchers.org/ipeppt.html">http://www.experiential-researchers.org/ipeppt.html</a>

<sup>&</sup>lt;sup>14</sup> Thurin JM, Falissard B & Danion JM. Projet Inserm de Réseau deRecherches Fondées sur les Pratiques Psychothérapiques. *Pour la Recherche* 2007 ; 55, 1-16.