

Children's Mental Health : A Scientific Application and Cultural Values in Daily Lives

Dwijo Saputra

Child Development and Learning Difficulties Centre, SmartKid Clinic

In the last two decades, a variety of results of scientific verification related to the development of psychopathology or therapy methods have been obtained, including psychosocial or medication therapies for various types of emotional and behavioral disorders in children and adolescents. Children's and adolescents' daily mental health services play very important roles in children's development in order to reach optimum development. In order that results and effective and efficient benefits can be rendered, mental health services for children and adolescents must be done by considering results of empirical researches. Nevertheless, in its application, one must consider the heterogeneity of the population in the service center, including the conditions of the children and adolescents requiring help, the personnel of the health service center, ethics and cultural values; and available service system.

Keywords: children's mental health service, scientific verification, cultural values, practical application

Dalam dua dekade terakhir didapatkan berbagai hasil pembuktian ilmiah yang berkaitan dengan perkembangan terjadinya gangguan kesehatan jiwa (psikopatologi) maupun metode terapi. Metode meliputi terapi psikososial maupun terapi medikamentosa bagi berbagai kondisi gangguan emosi dan perilaku pada anak dan remaja. Layanan kesehatan jiwa anak dan remaja dalam praktik sehari-hari adalah layanan yang memiliki peran sangat penting bagi perkembangan anak, agar setiap anak dimungkinkan untuk mencapai perkembangan yang seoptimal mungkin. Agar dapat memberikan hasil dan manfaat yang efektif dan efisien, pemberian layanan kesehatan jiwa bagi anak dan remaja harus dilakukan dengan mempertimbangkan hasil penelitian secara empiris. Namun, dalam penerapannya harus dipertimbangkan heterogenitas populasi di tempat pelayanan, termasuk kondisi anak dan remaja yang memerlukan bantuan, orang yang memberi pelayanan, etika dan nilai budaya, dan sistem pelayanan yang tersedia.

Kata kunci: layanan kesehatan jiwa anak, bukti ilmiah, nilai budaya, penerapan dalam praktik

Based on data from the WHO, one out of five adolescents of 18 years old encountered mental health problems. Today the total of the population of children and adolescents in Indonesia (0-19 years old) is 81.8 million (38.3%) and this means that there are 18 million of children and adolescents in Indonesia who encounter mental health problems. The result of epidemiological research in Jakarta showed prevalence of ADHD in elementary school children of 26.2%. This means that one out of four elementary school children in Jakarta experienced attention-deficit disorder, hyper-

activity, and impulsiveness. This condition affects their academic achievements and their adaptability to their surroundings in their interactions with friends and adults (Saputro, 2004). One of the biggest constraints is that the problem is not well understood by the people involved and this situation hampers the availability of principled human resources to build this nation in the future. When the availability is hampered, burdens and sufferings will have to be dealt with by everyone who relates to the problematic children and adolescents. Furthermore, it also cause a risk to health and the development of the child, even could be the cause of adult's health problems.

Conclusions that can be taken from the results of the researches in the fields of children and adolescents' mental health:

This paper has been presented at the 3rd Meeting of the Indonesian Association of Child and Adolescent Mental Health in Yogyakarta, 6-7 May 2011.

Correspondence concerning this article should be addressed to Dwijo Saputra, Child Development and Learning Difficulties Centre, SmartKid Clinic, Jalan Musyawarah 9, Jakarta 11590. E-mail: dwijos@yahoo.com

First, how mental health problems happen is complex; they are not just caused by one risk factor. Second, risk factors themselves cover biological, psychosocial, and ecological ones towards children, family and social contexts. It is totally impossible to overcome the problem by only healing the risk factor in the children themselves. Third, risk factors are not counted as specific factors; yet, still these risk factors are heavily related to any maladaptive conditions. Fourth, by improving protective factors (factors that minimize risk factors), children's competence is also improved; and emotional and behavioral problems in children and adolescents are minimized.

The management of the mental health problems in children and adolescents involves their social context management. This social context management includes minimizing or negating risk factors and improving protective agents. Within the last two decades, scientific results related to mental health problem (psychopathology) and therapeutic treatment have been verified and they cover psychosocial and medical therapies for any emotional and behavioral problems in children and adolescents. Yet, how can those scientific results be applied in daily lives?

Widening Gap between Research Results and Application

Valente and Rogers (1995) revealed a fact that happened in the midst of the 17th century when James Lind for the very first time invented an effective cure for scurvy (*A Treatise of Scurvy*, 1753). However, the curing processes he initiated were not applied by British Navy. This condition brought the illness unresolved for decades and it caused misery to humanity (Walker, 2003). One of the hardest challenges in applying the result of the research was faith in the wrong place, namely by regarding the preexisting practical ways as adequate to solve the existing problems and belittling the scientific results of the research. The same thing also happened to children and adolescent mental health services in which there was a wide gap between scientific research results and practices in the field (either in clinical or social contexts as in schools and families). Evidence-based practice in children and adolescent mental health has been developed within the last two decades; nevertheless, facts confirm that the mental health services rendered for children and adolescents on daily basis are still far from scientific standards.

Neuroscience of Child and Adolescents Mental Health

The latest development in biology (biomolecular)

has transformed the paradigms in preventing illnesses and promoting health, including mental health. It has been proven that health problems during adulthood are rooted in the weaknesses or abnormality from one's childhood. Those abnormalities shape biological-memory which weakens the physiology system, including psychoneurophysiology and produces vulnerability which leads to health problems and adaptability functions later on (Shonkoff, Boyce & McEwen, 2009).

Concepts of mental problems or illnesses were not popular until the mid-twentieth century. In that century, children's mental problems was not seen as a typical condition and was differently treated from adults' mental problems. Since the end of 1980, mental health services for children have been developed along with the supportive research evidence. Since then, research and research evidence related to brain-behavior in children and adolescents have developed tremendously fast. Scientific evidence in the impacts of stress and trauma on the development and the functions of children's brains were also found. Psychosocial trauma impacted negatively on all areas of development and brain functions (Perry, 2000, 2008; Van der Kolk, 2006). Historically, brain organs were viewed as organs working hierarchically to deliver information from brainstem to cortex (McLean, 1990). The lower part of the brain delivers responses far before information reaches cerebral cortex. The influence of socioemotional trauma creates a block in the nervous system of the lower part brain; as a result, it affects the sensory reception and motoric and linguistic production (Perry, 2000; Van der Kolk, 2006).

Cerebral cortex section as a part of brain which functions rationally executive becomes inadequate in controlling emotional arousal and this results in permanent pattern changes of the lower part of the brain. Thus, traumatic experience of a child may result in changes of brain functions (Perry et al., 1991; Perry & Pollard, 1998; Perry, 2001; 2008). In several researches, therapy through playing traditionally which emphasizes awareness, verbalization, motoric behaviors, and problem-solving has proved to be powerful to stimulate cerebral cortex and to be appropriate in overcoming the upper part of the brain problems (Gaskill, 2008).

Mental Health Services for Children and Adolescents: Is It Acceptable and Affordable?

Mental health services for children and adolescents were started in the end of 1980. According to daily facts, children's mental health services have been included in a variety of services in organizations, insti-

tutions and systems in society, as schools, children welfare services, children health clinics, and youth delinquency rehabilitation centers. The system of this service model was developed using principles and values with the emphasis on children coaching in community, coordinated existing services, family involvement in planning and giving therapies, and finally cultural values consideration in rendering services.

Basically, a service loses its effectiveness when it is unable to reach the needy. Unreachable services and interrupted medicine delivery are two main problems in daily practices. Among families whose children became out-patients, 40-60% of them decided to quit this service. Most children visited the health clinics for one or two sessions only (Armbuster and Fallon, 1994) and so did the children from vulnerable population groups (children without their fathers, poverty, acute problems). Most of the children stopped at premature level of medication and visited clinics only once. In mental health services, there are several types of therapies:

Psychosocial Therapy

Scientific evidence through meta-analysis towards any psychosocial therapies indicated that psychosocial therapy is more beneficial than groups without therapy. However, the same results of scientific research also indicated that psychosocial therapies in clinics exhibit that there is no difference between the group receiving therapies and the group not receiving therapies. The effect size was negative, or below effect size found through a research in a laboratory or a research place (Hoagwood et al., 2001). This result showed that psychosocial therapies in children successfully overcame illnesses and reduce symptoms could only be found in the laboratory or research place.

Family Focused Treatments (FFT)

Families play very important roles on children's socio-emotional development. The results of meta-analysis towards this therapy displayed the effectiveness of the drugs on several health problems: conduct problem including ADHD, physical abuse and maltreatment, emotional problems (as anxiety, grief, and depression), toilet training problem, and psychosomatic symptoms. This FFT therapy was conducted within short terms for outpatients (on cognitive-behavioral, structural or strategic bases). Often-times, this therapy is conducted with individual and medicamentous therapies (Hoagwood et al., 2001).

Integrated Community Based Treatment (ICBT)

One of the criticisms towards individual psychosocial therapy is its individual focus with some limited diagnosis. This limitation is not applicable to most children coming to clinics with their heterogeneous psychiatric problems. ICBT is integrated modality therapy, including management of intensive cases, therapy in children care center, and home-based therapy. The result of the research indicated that the conditions where children are managed by trained case manager minimize hospitalization, improve adaptive behaviors, minimize corrupt behaviors, and improve environmental stability (Hoagwood et al., 2001).

School-Based Interventions (SBI)

Empirical data verified that therapy (done at schools) given to children with behavior problems, including ADHD was fruitful. In this therapy, children's behavior management in classrooms with certain targets was also into consideration (*contingency management*). Giving consultations to school teachers to assist them in dealing with children with learning difficulties backgrounds minimizes the number of teachers who sends the children to special education and those who reported the children's behavioral problems. School-based intervention includes prevention intervention towards children with emotional and behavioral risks, group cognitive intervention to prevent depression, and problem-solving skills in social problems (Hoagwood et al., 2001).

Medicamentous Therapies

Psychotropic medicine alarmingly increase. Data in the library showed that at least 3.5 million children per year visited outpatient unit to be treated with psychotropic medicine (Jensen et al., 1999). On the other hand, clinical trial research on psychotropic medicine consumption by children on any illnesses was still limited. Today, the selection of medication and algorithm used was based on personal experience or adult standards with several exceptions. Beside that, the selection of the right medicine types is only one of the factors which determines the success of the medication.

The result of multimodal therapy research on ADHD indicated that respondents who received medication properly and adequately, including titration, turned out to generate better results compared to respondents who are routinely treated with the same type of medicine in community health centers. These different

results are due to active participation of the respondents who learned about medication management (MTA Cooperative Group, 1999).

Currently the total of the children who are treated with a medicine is viewed as having benefits of medical therapy if its equivalence and excellence are clinically tested through two or more random clinical tests. Based on clinical test result conducted by National Institute of Mental Health (NIMH), it was confirmed that psychotropic medicine empirically could be used to treat emotional mental problems in children and adolescents (either external or internal symptom characteristics). However, the greatest benefit was found in the use of psychostimulants in ADHD (Weisz & Jensen, 1999; Jobson & Potter, 1995).

As anti-depressive medicine, tricyclic drug does not indicate any benefits for children with depressive symptoms. Anti-depressive medicine under SSRI category, fluoxetine is considered to be successful in treating children with depressive symptoms (Emslie et al., 1997). Fluoxamine can be properly given to children with anxiety disorder as social phobia, separation phobia, and generalized anxiety disorder (Vitiello et al., 1999). Several types of SSRI medicines and tricyclic are also useful in treating obsessive-compulsive disorder (Emslie et al., 1999; Geller et al., 1999).

Several scientific evidences have shown that anti-psychotic medicines can treat schizophrenia with onset on children and adolescents (Weisz & Jensen, 1999). Yet, their long-term effectiveness and safety are still unknown. Even though in practices, these types of medicines are given with psychosocial combinations, still there is not enough empirical data to support their use, except their use in ADHD.

Treatment and Effective Management

Most clinical test results confirmed how useful the result of certain therapy was, either through pharmacology or non pharmacology. The result of the research ignored all the possible effects of a therapy towards existing symptoms or the bad results found among respondents. Several types of therapy, either groups or individuals, did not show any meaningful and effective results. Moreover, institutional services (as hospitalization, residential therapy center, group homes) also did not have any available data that support the benefits and the effectiveness of the services held by the institutions. Data of several researches confirmed that children placed in group homes no longer improved their behaviors after they are back home. Nevertheless, until today, services

like these, still exist among us (Burns et al., 1999; Weisz et al., 1999).

The main problem is the benefits and the effectiveness of medication obtained through clinical tests are not always in daily practice. Therefore, adjustments or modifications are necessary when applying the results of clinical tests in daily practices. Medication towards children in daily practices has characteristics different from that on research site. To make adjustments when applying empirical evidence in daily practices, some variables (influential towards the effectiveness of medical results) must be taken into consideration, they are, therapists and their educational backgrounds, the way the therapists support children and how they supervise the children's progresses; ethics and cultural values of the organization where therapies are given (this affects attitude, motivation, moral, and service system; and available service system (including referral system and payment methods).

Conclusion

Mental health services for children and adolescents in daily practices are services which play very important roles in children development so that every child is enabled to develop optimally.

In order to render effective and efficient results and benefits, health services for children and adolescents' mental health must consider the results of the research empirically. Nonetheless, in real life setting, the heterogeneity of the population in service site must be pondered and that includes the conditions of children and adolescents who require help, people who render services, ethics and cultural values, and available service system.

References

- Armbruster, P., & Fallon, T. (1994). Clinical, socio-demographic, and systems risk factors for attrition in a children's mental health clinic. *American Journal Orthopsychiatry*, 64(4), 577-585
- Burns, B. J., Hoagwood, K., & Mrazek, P. (1999). Effective treatment for mental disorders in children and adolescents. *Clinical Child and Family Psychology Review*, 2, 199-25
- Emslie GJ, Rush AJ, Weinberg WA, et al (1997). A double-blind, randomized, placebo-controlled trial of fluoxetine in children and adolescents with depression. *Archives of General Psychiatry*, 54, 1031-1037

- Emslie GJ, Walkup JT, Pliszka SR, Ernst M. (1999). Non-tricyclic antidepressants: Current trends in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 517–528
- Gaskill, R (2008). Neuroscience and playtherapy. Association for play therapy. *Mining Report*. Association Play Therapy: United States
- Geller, B., Reising, D., Leonard, H.L., Riddle, M.A. & Walsh, B.T. (1999). Critical review of tricyclic antidepressant use in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 513–516.
- Hoagwood. K., Barbara, J.B., Kiser., L., Ringeisen, H., & Schoenwald, S.K. (2001). Evidence-based practice in child and adolescent mental health services. *Psychiatric Services*, 52(9), 1179–1189
- Jensen, P. S., Bhatara, V., Vietello, B., Hoagwood, K., Feil, M., Burke, L.B. (1999). Psychoactive medication prescribing practices for US children: Gaps between research and clinical practice. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 557–565
- Jobson, K. O., Potter, W. Z. (1995). International psychopharmacology algorithm project report. *Psychopharmacology Bulletin* 31, 457–459.
- MacLean, P.D. (1990). *The triune brain in evolution: Role in paleocerebral functioning*. New York: Plenum Press.
- MTA Cooperative Group (1999). A 14-month randomized clinical trial of treatment strategies for attention-deficit/ hyperactivity disorder. *Archives of General Psychiatry* 56, 1073–1086.
- Perry, B.D. (2008). Child maltreatment: The role of abuse and neglect in developmental psychopathology. In T.P. Beauchaine & S. P. Hinshaw (Eds), *Textbook of child and adolescent psychopathology*. New York: Wiley.
- Perry, B.D. (2001). The neurodevelopmental impact of violence in childhood. In D. Schetky & E. Benedek (Eds.), *Textbook of child and adolescent forensic psychiatry*. Washington, D.C.: American Psychiatric Press Inc.
- Perry, B. D. (2000). The neurobiology of childhood maltreatment: The neuro-developmental cost of adverse childhood events. In K. Franey, R. Geffner, & R. Falconer (Eds.), *The cost of maltreatment; who pays? We all do*. San Diego: Family Violence and Sexual Assault Institute.
- Perry, B.D., Conroy, L., & Ravitz (1991). *A persisting psychophysiological effects of traumatic stress: "The memory of states"*. Child Trauma Academy. Retrieved from: <http://www.childtrauma.org>.
- Perry, B. D., & Pollard, R. (1998). Homeostasis, stress, trauma and adaptation: A neurodevelopmental view of childhood trauma. *Child and Adolescent Psychiatric Clinics of North America*, 7(1), 33–51.
- Saputro (2004). Gangguan hiperkinetik pada anak di DKI Jakarta. Unpublished thesis, Program Pasca Sarjana, Universitas Gadjah Mada
- Shonkoff, Boyce & McEwen (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *JAMA*, (6)3. Retrieved from http://developingchild.harvard.edu/index.php/download_file/-/view/248/
- Van der Kolk, B. (2006). Clinical implications of neuroscience research in PTSD. *Annals of the New York Academy of Science*, 1071(IV), 277–293.
- Vitiello, B., Bhatara, V.S., & Jensen, P.S. (1999). Current knowledge and unmet needs in pediatric psychopharmacology. *Journal of Abnormal Child Psychology*. 22, 560–568
- Walker, H. M (2003). Commentary: Addressing the gap between science and practice in children's mental health. *School Psychology Review*, 32(1), 42–47
- Weisz, J. R, Jensen, P.S. (1999). Efficacy and effectiveness of child and adolescent psychotherapy and pharmacotherapy. *Mental Health Services Research*, 1, 125–158