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Research and Intervention for Drug-Addicted Mothers and Their Children: New Perspectives

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1. Introduction

According to research carried out by the EMCDDA, drug-addicted women in Europe account for at least one quarter of the total European population consuming illicit substances (Emcdda, 2006a). A specific research platform entitled “Women and Drugs” was created within the context of the second European project “Democracies, Cities and Drugs.” This platform is focused on what characterizes and distinguishes female substance addiction from male substance addiction: its manifestation, its attributes, and the interventions or services which can be put into effect while devoting special attention and offering specialized care to this phenomenon. Our findings confirm that women substance users are exposed to a great number of risks such as medical, social, economic, familial and psychopathological risks requiring intervention through specific tools and aimed responses (see Brentari, Hernandez, Tripodi, 2011). The investigated factors included pregnancy, parenthood and the well-being as well as development of the child, while taking into account institutional and ethical reflections regarding this complex theme.

The substance abuse phenomenon indeed affects a high number of fertile women. When drugs are consumed during pregnancy, they can have serious, direct and indirect effects on the postpartum development with subsequent effects on the child (OTIS, 2010). Substance abusing mothers represent an at-risk parenting situation which, in turn, profoundly influences the quality of the mother-child relationship. The awareness of these at-risk situations for children along with the widely accepted notion that ideally, children should always be raised by their mothers led to the introduction of residential treatment in Italy. These services deal with maternal pathologies and provide care and assistance for children; in fact, these therapeutic communities accommodate addicted mothers as well as their children.

Up until recently, therapies for children (particularly medical ones) were administered by institutions outside of the community, while no therapeutic treatment was mandated for minors. The first therapeutic communities for drug addicted mothers and their children appeared in Europe in the early nineties. These institutions must provide assistance to
children and assure them the greatest possible social, psychological and physical well-being. In addition to the funds available for each mother, funds for each individual minor are made available on a daily basis. Our project: “Research and intervention on minors in communities for addicted mothers and their children: from at-risk parenting to child well-being” was promoted within this specific intervention framework. The project aims to secure child well-being by assessing maternal parenting as well as by carrying out direct and indirect observations of the child, his/her caregivers and the caregiver-child relationship. At the same time, the most suitable intervention for each single subject is put into effect.

2. Female substance addiction, pregnancy and parenthood

As stated above, there is an ever increasing interest towards defining characteristics which are specifically related to substance abuse in the female population, with specific reference to the following two crucial aspects.

a. general differences, in terms of individual and relational characteristics, life history and family history which single out addicted women as subjects with experiences of trauma, abandonment or neglect, from either a physical or psychological standpoint ( Parsec Association, 2004; Stocco et Al., 2000, 2002; Studio VEdeTTE, 2007). These subjects suffer also for their specific medical problems (HIV, sexually transmitted pathologies, etc.), for their social situation (prostitution, access to the job market, etc.) and institutional difficulties (organization and access to services). From this point of view, the interest is to detect and realize any available data projections referring to female substance addiction and feasible interventions from the legislative and health perspective (Home Ministry Government, 2010).

b. specific issues related to pregnancy and parenthood in substance abusing women from the medical-gynecological perspective, including all psychological aspects which might have an impact on the subsequent relationship with a child.

2.1 Substance abuse

All international data confirm a commonly shared view according to which male drug users outnumber women drug users by far (UNODC, 2004). However, recent research suggests that the gender gap may be narrowing, at least with reference to some types of drugs (EMCDDA 2006a). For example, for cannabis use and binge drinking, differences in drug use between men and women have substantially narrowed, at times showing an almost equal consumption between the genders. Another trend indicated a higher percentage of female rather than male students using tranquilizers or sedatives which are bought without prescription. Patterns of drug use based on gender differences are illustrated by the percentage of patients entering treatment services in Europe. The percentage of female patients is around 20% (EMCDDA 2005): among those receiving drug treatment, problems relating to amphetamine-type stimulant drugs (ATS) are most common among young people (under 20 years old), whereas problems relating to the use of sedatives or pharmaceutical drugs are most widespread among older patients (over 39 years old) (EMCDDA 2005).
With reference to intravenous drug use (IDU), the WHO reported a rapid increase in the rate of female IDUs in recent years, especially in Eastern Europe and Asia (Pinkham and Malinowska-Sempruch, 2007). According to available epidemiological data, women are more likely than men to abuse and become dependent on substances such as tranquilizers and sedatives when used without prescription (Simoni-Wastila et. al, 2004). It has also been shown that women typically become dependent on substances more quickly than men: this holds good for cannabis, cocaine and other stimulants, as well as opioids, inhalants and hallucinogens (UNODC, 2004).

With respect to “binge drinking”, an EMCDDA gender perspective report underlines that male predominance in general is lower in those countries where the prevalence of binge drinking is highest. Gender correlation with respect to cannabis use and binge drinking increases proportionally according to the increased use of those substances (EMCDDA, 2006a). Other studies show that in recent years, risky alcohol consumption has increased among young girls and adolescents (Anderson, Baumberg, 2006; O.N.Da, 2008).

Several studies suggest that women are more likely to use and abuse prescribed psychoactive drugs such as painkillers, sleeping pills and tranquillizers (EMCDDA, 2006a). This remark applies especially to opioids and depressants of the central nervous system. Sleeping-pill and anti-anxiety drug abuse is less visible than other, more common forms of addiction among women (PNS, 2008; Stocco, 2000). Actually, this seems related to the high incidence of depression or anxiety disorders in women (WHO, 2000). It is important to note that a lifetime prevalence of benzodiazepine use (for sleep or anxiety problems) without medical prescription among school students between the ages of 15 and 16 is significantly higher in females than in males (EMCDDA, 2006a).

### 2.2 Mental health and dual diagnosis

A high percentage of women substance users suffer from mental disorders. This specific type of diagnostic comorbidity, called dual diagnosis was defined as the co-existence, in one

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1. Binge drinking is defined as a dangerous practice of consuming large quantities of alcoholic beverages in a single session. More specifically, experts agree that binge drinking occurs when one consumes 5 or more alcoholic drinks within a couple of hours.

2. The term “comorbidity” was introduced by Feinstein and further specified by Klerman (1990) who used it to denote two or more disorders occurring at the same time or in the life course of one and the same subject. Cloninger (1990) stated that comorbidity implied the likeliness for a subject with a specific index disorder to develop a second disorder. Finally, Golberg (1996) very interestingly pointed out that it was only possible to talk of comorbidity when the assessed disorders were clearly distinct entities: symptoms of interrelated domains should not be classified as comorbidity. This clarification must be kept in mind since comorbidity only occurs when two different disorder categories can be recognized and described: however, it cannot be considered irrelevant that a “disorder” should be accompanied by symptoms or clusters of symptoms belonging to domains that are to a greater or lesser extent interrelated with the psychopathological domain of the index disorder. Rather, this reveals a “specific vulnerability” for a psychopathological development of the interrelated domain to reach disorder level and, therefore, comorbid condition (Di Sciascio, Nardini, 2005).
and the same subject, of a disorder related to psychoactive substance abuse and another psychiatric disorder (World Health Organization, WHO, 1995). As far as addiction is concerned, co-morbidity refers to the co-presence of a serious mental disorder and a disorder caused by substance abuse/dependence when such causality can be demonstrated (De Leon, 1989; Buckley, Brady, Hermann, 2010; Bobes, Casas, Szerman, 2009).

Dual diagnosis is more frequent among women than among men, particularly with regard to affective and anxiety disorders. Affective disorders (especially depression, moodiness and low self-esteem, loss of interest or pleasure in enjoyable activities) and anxiety disorders (excessive anxiety with physical and emotional effects such as apprehension, nervousness or fear) are common and serious pathologies to be treated in addicted women. A recent comprehensive study in United States confirmed that feelings of depression, hopelessness, sadness and suicidal ideation are more frequent in high school girls than in boys and that these feelings are more likely associated with a high risk for drinking and other drug use in girls (CASA 2003, cit. in Brady, Back, Greenfield, 2009). Also personality disorders (mostly Cluster B), posttraumatic stress disorders, suicide attempts and eating behavior disorders have to be treated in addicted women. Schizophrenia and other psychotic symptoms are also frequent in women (Stocco et al., 2000, Instituto de la Mujer, 2007).

Particularly, exposure to trauma is a very frequent condition in drug-addicted women and it is the environmental basis for a posttraumatic stress disorder: sexual assault is the most frequent type of trauma experienced by women, but all different kinds of abuse are suffered by women before or during drug addiction. All in all, women are four times more likely to develop this disorder than men after exposure to traumatic events (Ciechanowski, 2010; Instituto de la Mujer, 2007)

Moreover, a lifetime prevalence of eating disorders (such as anorexia and bulimia) was found in women misusing substances: these disorders are thought to be behavioural patterns stemming from emotional conflicts that need to be solved so that the patient can develop a healthy relationship with food (Charles & Pull, 2004). Among psychiatric disorders, these are serious mental illnesses with a high incidence of co-morbidity and also with a high mortality rate (Ibidem).

Causes for high co-morbidity between substance misuse and mental health issues are not known and prevalence varies among different populations. Etiological theories in dual diagnosis include factors that are common to both disorders: a substance use disorder secondary to mental illness; a mental illness secondary to substance use, as well as bidirectional models. Women have more difficulties than men when treated for dual pathologies: these difficulties are related to drug addiction and mental illness. Drug addiction damage in a woman’s body occurs earlier and more intensely than in men. Women seek treatment later than men, and addiction treatments do not often include a suitable program for dual diagnosis cases. In addition to this, women with mental illness usually suffer from some degree of impaired cognition. This makes them feel embarrassed, and contribute to a lack of compliance and difficulties when confronted with the need to change their lifestyle. Moreover, these women don’t seek specific services: on the contrary, they usually prefer to see general practitioners. Women typically don’t ask for mental or addiction treatments nor for social help. As a result, doctors that are unprepared to treat these cases may delay assistance (Instituto de la Mujer, 2007).
Finally, reference should be made to the co-dependence phenomenon (also called bi-dependence): more often than not, drug-addicted women experience problematic relationships with multi-problematic partners who also have drug- or alcohol-addiction problems (Moral Jiménez & Sirvent Ruiz, 2007).

2.3 Medical implications

Drug use, particularly intravenous drug use (IDU) remains one of the major risk factors for acquiring blood-borne infections for both men and women. With reference to the risk of infections related to sharing needles and other drug paraphernalia, it has been demonstrated that a significant number of women begin using drugs in the context of a sexual relationship (UNODC, 2004; Price & Simmel, 2002). Women are also more likely than men to borrow or share injection equipment, particularly with their sexual partners. They also often rely on men to acquire and inject them with drugs (Doherty et al. 2000; Vidal-Trecan at al, 1998, Pinkham et al. 2007). Women share needles with more people in their social network than men do (Sherman et al. 2001). This leads to an increased risk for acquiring blood-borne infections, particularly HIV and hepatitis C, which is generally very high among intravenous drug users.

Biological and social factors contribute to the increase of women drug users’ risks for HIV. The overall data available for 25 European countries in 2005 showed that 35% of newly diagnosed cases of HIV were among women, reaching 41% in Eastern Europe, where the epidemic was mainly concentrated among IV drug users (Euro-HIV, 2007). Studies in nine EU countries showed that the average HIV prevalence was more than 50 percent higher among women IV drug users than among their male counterparts (EMCDDA, 2006). The correlation of IV drug use, sex work and unsafe sexual practices led to a significantly increased risk of HIV infection among women (UNODC, 2004).

Risk behaviour for infections needs to be considered not only with reference to HIV, but also to other blood-borne diseases such as Hepatitis C and B. Hepatitis C is the most common infectious disease among IV drug users, since it is transmitted through the sharing of needles, syringes and, unlike HIV, other injection-related equipment (Eurasian Harm Reduction Network (2007b). In 2006, the EMCDDA reported that median sero-prevalence of hepatitis C virus (HCV) is quite similar in male and female IV drug users: 58.1 % in males and 56.4 % in females. It is generally understood that it is more difficult to acquire HCV through sexual transmission than it is to acquire HIV. Infection among IV drug users will therefore be almost exclusively the result of sharing syringes and other injecting paraphernalia (EMCDDA, 2006).

2.4 Gender violence and social conditions

Neglect and abuse in childhood are common trends in the personal backgrounds of many female substance users.

European data estimates that one in five women experiences some form of physical or sexual violence (European Women’s Lobby, 2001; Stocco, Llopis et al., 2000). In England and Wales alone, there were over 1 million female victims of domestic violence between 2009-2010. In the same area, every year over 300,000 women are sexually assaulted and 60,000
women are raped. Overall in the UK, more than one in four women experience domestic abuse during their lifetime (Home Minister Government, 2010)\(^3\).

These women tend to define their substance use as the best coping mechanism available to them. Parental negligence and lack of attention in addition to the trauma of physical or sexual abuse make women more vulnerable to developing problems with substance abuse. In the absence of adequate support, such conditions can become a descending spiral (EMCDDA, 2009).

The link between substance use and gender violence/domestic abuse is complex. There is no reliable evidence of a cause-effect link between the two. However, where problems with substance use exist, domestic abuse is often present as well. Physical or sexual abuse on women is often perpetrated by a male partner or other male family members. Studies show that women with substance use problems are more likely than men to have experienced physical and/or sexual abuse (UNODC, 2004). A history of violence can have an impact on a woman’s experience with substance abuse and mental health problems. Women who use substances are also more likely to live in environments where violence or sexual abuse is a common pattern: a study by Vogt (1998) and Zken et al. (2003) found that a significant background variable for female drug addiction are past experiences of violence, especially sexual exploitation. In line with this view, some Italian research studies have shown that about 50% of young female drug users with anti-social behaviour and one-third of female psychiatric patients were victims of untreated sexual abuse during childhood (Gelinas, 1983; Malacrea, 2006).

Social, physical and psychological deprivations expose women to the influence and exploitation of male partners. Substance use can also drive women into sex work as a source of income (EMCDDA, 2009).

### 2.5 Pregnancy and parenthood

Women drug users who become pregnant form an additional sub-group requiring specific attention and care, both for them and for their babies (EMCDDA, 2006a). Drug use is associated with direct and indirect complications throughout pregnancy, postnatal morbidity and developmental delays (Hunter and Powis 1996): for instance, within the groups studied by Aronica et al. (1987) and by Palmieri (1991), 50% of the subjects were pregnant women with one or more children. Alleged reproduction difficulties in this population were attributed both to neuroendocrine alterations induced by substances such as heroin and opioids and to an irregular and inconstant lifestyle, alimentary deficits and poor hygienic, sanitary habits (Genazzani, 1987). However, neither of the two classes of factors seem to significantly reduce the chances for these subjects to bear children (Ibidem).

These women usually report deep feelings of anguish and dismay which build up their inner world, always suspended between impotence and manipulative, boundless omnipotence. Actually, addicted women often wish to get pregnant and bear a child as a form of vital defense or a redemption experience, even though this idealized view does not prevent the emergence of phases of anguish which are tied to the clashing of evidence against the ever incumbent denial of the event (Tempesta, et al., 1987). Evidence of this

\(^3\) Figures from 2009/10 British Crime Survey data http://rds.homeoffice.gov.uk/rds/
denial can be found in the failed acknowledgement of a delayed period as a “sign” of pregnancy, the delay with which they finally resolve to taking a pregnancy test and, later on, their carelessness towards the fetus’ needs (Tempesta et al., 1987). Moreover, these women often keep on using drugs during pregnancy while keeping their lifestyle unchanged for as long as possible, in homage to drug addiction homeostasis (Di Cagno et al., 1985). Even when drug consumption is discontinued during pregnancy, it is often resumed after delivery or during the postpartum period in an attempt to feel up to the new task and soothe the sense of guilt and failure.

In fact, for an addicted woman, delivery may imply having to cruelly realize what she was not able to do for her child and her negligence towards him/her: when real life needs become too hard, either because of the child’s or the mother’s difficulties or else for lack of a support network, the dream embodied in the fetus/child is shattered and heavy, depressive feelings may ensue which, up to that point, had been kept at bay by a megalomaniac investment on the child and on an idealized maternal image (De Zordo, 1997; Tempesta, et al., 1987).

No matter whether these women remain abstinent or else resume drug consumption, their difficulties in carrying out parenting functions emerge fairly early. Generally speaking, these mothers seem to find it difficult to build and maintain gratifying interpersonal relationships (with their partners and their families of origin), they tend to adopt a lifestyle leading to isolation and, above all, they have trouble in recognizing and satisfying their children’s needs (Fiks, Johnson, Rosen, 1985). Their more or less conscious inadequacy in performing the parenting function has been suggested to derive from their early feelings and experiences: affective deprivation, losses, separations, lack of affective continuity in their families of origin (Johnson, Cohen, Brown, et al., 1999; Ravndal, Lauritzen, Frank, Jansson, Larsson, 2001). This inadequacy seems to be at the root of their educational style which is often characterized by an authoritarian overinvolvement of the child: any external influence is rejected with a tendency to isolation, while the child is urged to become independent as quickly as possible and communication is controlled and avoided (Wellisch, Steinberg, 1980). Moreover, ambivalence seems to be a complex and typical feature of the relationships these mothers build with their children: they often expect them to take their mothers’ expectations and wishes on themselves and consequently, they induce a role reversal and a process whereby these children are forced to think and act like adults, something they also experimented during their infantile past (Malagoli Togliatti, Mazzoni, 1993).

Finally, becoming a mother to a newborn does not coincide with a renewed motivation to seek counselling and/or treatment, rather, it strictly depends on a wide range of variables (McMahon, Luthar, 2000): according to the data available in the literature, mothers seem to be more prone to entering a detoxification and drug treatment when they are in young age, have more than one child, have got financial and legal problems, have suffered physical mistreatment and, above all, when they join advanced therapeutic programs (Grella et Al., 2006).

3. Children of drug-addicted mothers

It is indisputable that the development of children born from drug-addicted parents is highly at risk already before their birth, because the interaction of personal, relational and
social factors does not support the individual's adjustment to his/her environment (see Nicolais, 2010). In this respect, Cicchetti and Rizley (1981) identify two categories of developmental risk factors: endogenous risk factors, such as physical or behavioral anomalies and psychological disorders, which make it difficult for the parent to take care of the child; exogenous risk factors, related to the environmental context in which the child is raised, such as features of his/her parents’ personal histories, their psychological characteristics as well as ecological aspects of his life context or the one of the whole family. Both categories have become the subject of interest in several studies on this special children population.

3.1 Endogenous risk factors

Many research studies on children of addicted mothers, originally from US, focused on the harmful effects on the fetus following exposure to psychotropic substances, since recent data indicate that around 5% of all pregnant women aged between 15 and 44 years use substances (Substance Abuse and Mental Health Service Administration, 2005) which leads to the birth of approx. 375,000 babies with withdrawal symptoms every year.

In fact, psychoactive substances can have various harmful perinatal effects. Among others, the authors listed: rupture of the placenta and premature birth, low weight at birth and APGAR* scores below normal, low cranial circumference, the occurrence of perinatal stroke, congenital deformities and neurobehavioral disorders in newborns who had been exposed to cocaine and heroin during pregnancy (Lutinger, Graham, Einarson, Karen, 1991; Mayes, Granger, Bornstein, Zuckermann, 1992; Zuckerman, Bresnahan, 1991; Zuckerman et al., 1989). Moreover, the fetus can develop a dependency to the substances used by the mother: after delivery, when drug intake is abruptly discontinued, the baby runs the risk of undergoing real withdrawal crises (Foetal Drug Syndrome, FDS) which intensity may vary according to the used substance and its intake method (Finnegan, 1986; Zacchello, Giaquinto, 1997; Zuckerman, Brown, 1993).

Finally, it must be pointed out that many of these children test HIV-positive at birth: in most cases, remission occurs during the first months of life but for some of them, it is indicative of infection. Similar data are reported also for other infective pathologies such as hepatitis, syphilis, toxoplasmosis, cytomegalovirus (Zacchello, Giaquinto, 1997).

Later on, some studies report rhythm irregularities in the sleep-awake state and in food intake, as well as a tendency to hyperactivity (Zuckerman, 1994) already in early infancy. Learning difficulties, low attentive capacities and a higher degree of aggressiveness in

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* Apgar: Abbreviation for the Apgar score, a practical method of evaluating the physical condition of a newborn infant shortly after birth. The Apgar score is a number arrived at by scoring the heart rate, respiratory effort, muscle tone, skin color, and response to a catheter in the nostril. Each of these signs can receive 0, 1, or 2 points. A perfect Apgar score of 10 means an infant is in the best possible condition. An infant with an Apgar score of 0-3 needs immediate intensive care. The Apgar score is measured routinely 60 seconds after delivery and then it is repeated after 5 minutes. In the event of a difficult resuscitation, the Apgar score may be done again at 10, 15, and 20 minutes. An Apgar score of 0-3 at 20 minutes of age is predictive of high morbidity (disease) and mortality (death). <http://www.medterms.com/script/main/art.asp?articlekey=2302>
preschool and school age (Cavazzuti, Frigieri, Finelli, 1987; Fundaro, Salvataggio, 1987; Oloffson, Buckley, 1983; Sanderegger, Zimmermann, 1978; Wilson, McCreary, Kean, Baxter, 1979) are also reported in these children, even if, compared to controls, neither differences in IQ levels nor alterations of intellectual functions are to be found (Azuma, Chasnoff, 1993). In this respect, Lester and Tronick (1994) offer an outlook on the effects of prenatal drug exposure which takes into consideration functional difficulties in the “4A” childhood areas (attention, arousal, affectivity and action). However, we should also remember the results of a research by Alessandri, Bendersky and Lewis (1998) revealing a correlation between the severity of the child’s developmental deficit and the amount of substance (in their specific research, heroin) consumed by the mother during pregnancy. The neurobehavioral vulnerability which is typical of children who were exposed to drugs in utero must, therefore, be considered within a wider context including relational and environmental aspects too, two factors which also have an influence upon child development immediately after birth.

The clinical presentation of the "addicted babies" depends on the type of substances used by the mother during pregnancy, by value, frequency and time since last use / abuse. Substances commonly used by drug addicts are Alcohol, Nicotine, Marijuana, Tranquilizers, Cocaine and opioids in general, as well as heroin and methadone (Johnson & Kate, 2000; Lester & Barry, 2000). It was found that if the mother has made extensive use of drugs such as alcohol, hypnotics, or heroin–that could be considered "not exciting" the nervous system–the infant will manifest respiratory depression problems immediately after birth. Expressions of neonatal abstinence syndrome could be constant irritability, tremors and stiffness of muscle tone. Other possible symptoms include: irritability of the nervous system, gastrointestinal disorders, vomiting, diarrhea, hysterical crying, sleep disturbances, rapid breathing.

When we consider the effects of the substance exposure on the development of the child, the researches reveal that the global development is slowed and more in deficit at the cognitive level but not completely destroyed. In general, the child exposition to heroin and methadone during intrauterine development, is already evident after 48 hours of birth, while the exposure to the Alcohol leave marks immediate developing a real withdrawal syndrome. With reference to the specific symptoms related to different substances, many studies are interested to the exposure to Cocaine, that is a stimulant causing the blood vessels: this substance decreases the oxygen supply to the fetus and, consequently, the infant is at risk of suffocation. Also, the infants exposed to cocaine in the last gestational period reveal a state of reduced alertness and reduced responsiveness to external stimulation, when compared with controls.

In the table below are classified as such direct effects, distinguishing them according to the type of substance used by the mother (Wright & Walker, 2001).

3.2 Environmental factors: the attachment contribution

In addition to the various aspects highlighted in the studies mentioned above, we should not forget the multiple postnatal factors which contribute to determine the developmental outcomes of children who were born from drug-addicted parents.
The effect of drugs on mother and baby

| Drug          | Antepartum            | Intrapartum             | Post-partum                  | Long term                        |
|---------------|------------------------|-------------------------|-----------------------------|----------------------------------|
| Smoking       | Growth restriction     | Fetal Distress          | Increases in Infant deaths  | Fetal Alcohol syndrome Mental Impairment |
| Alcohol       | Fetal Alcohol Syndrome |                         | Maternal withdrawal symptoms|                                  |
| Heroin / Opiates | Preterm Labor         | Problem with analgesis  | Neonatal abstinence syndrome| Probably not                     |
| Cocaine       | Placental Pathology    | Placental Pathology     | Prolonged fetal withdrawal (3 days – 3 weeks)| Aggressive children Neurodevelopme ntal delay |
|               | Growth Restriction     | Low birth weight        | Chaotic lifestyle            |                                  |
|               | Impaired brain development|                           |                              |                                  |
|               | Abruption              | Fetal distress          |                              |                                  |
| Amphetamine   | Growth restriction     | Maternal cardiovascular disturbances | Chaotic lifestyle |                                  |
|               | Maternal hypertension |                         |                              |                                  |
|               | Antisocial behavior    |                         |                              |                                  |
| Ecstasy       | Congenital defects     |                         |                              |                                  |
| Benzodiazepines | Cleft lip and palate |                         |                              | Neurodevelopmental delay         |

Table 1. The effect of drugs on mother and baby. Source: Wright & Walker, 2001

A large part of research in this domain have focused interest on the role of the quality of the proximal environmental factors on child development and well being; one of the most important factors that have an impact on child’s early development is the quality of interactions and relations between child and the significant adults who play a protective role for him (the mother and/or other caregivers). In this perspective, the “Attachment theory” (Bowlby, 1969-1980) has provided useful theoretical and methodological tools to study the affective-relational development during the first years of life both in normal as well as in “at-risk” populations, in order to study the role of the quality of early interactions on the child well being and adaptation to the context.

According to this theoretical model, feeling safe and secure is the first and most important, early developmental task during the child’s first year of life and one major protection factor in the process of adjusting himself/herself to the environment. Various research studies investigated the parent and child role and how they influenced the quality of the attachment bond: however, the contribution of each of the two parties is still not clear.

Van IJzendoorn, Goldberg, Kroonenberg, and Frenkel (1992) carried out a meta-analytical work on the influence of the child’s and/or the parents’ problems on the development of attachment during the first year of life. Attachment was assessed using the Strange Situation
Procedure\(^5\) (Ainsworth, Blehar, Waters, Wall, 1978): researchers found a lower percentage of Secure attachment (B) and an increase in the Disorganized/Disoriented (D) category among samples of mother-child dyads at risk which differentiated them from the distributions observed in the general population. Moreover, a prevalent influence of maternal problems and difficulties rather than of children’s endogenous risk factors came to light affecting the quality of infant-mother attachment. In fact, attachment distributions within groups of children of mistreating mothers (Carlson, Cicchetti, Barnett, Braunwald, 1989; Crittenden, 1985; Schneider-Rosen, Braunwald, Carlson, Cicchetti, 1985), mentally disturbed mothers or drug addicted mothers (Rodnig, Beckwith, Howard, 1989) revealed high divergence when compared to normative samples, more so than in case of problems coming from the child’s side only. In fact, the child’s problems did not seem to jeopardize the process of creating a secure attachment bond with the mother (van IJzendoorn et al., 1992).

Research studies with groups of parents suffering from psychiatric disorders, behavioral disorders or else mistreating their children seem to proceed along the same direction: once again, they reveal a high percentage of insecure attachment and, more specifically, entangled attachment (E) and unresolved attachment (U) tied to experiences of trauma and bereavement. These subjects seem to have difficulties in working through life experiences which they went through during childhood while their caregivers only proved to be scarcely adequate and supportive (van IJzendoorn, Bakermans-Kranenburg, 1996). Therefore, parents belonging to clinical populations do not seem to be emotionally secure, which represents a potential risk factor for their children, because of the process of intergenerational transmission of attachment, according to which the mother’s representational world has got a fundamental role in the co-construction of a bond with the

\(^5\) The Strange Situation is a standardized observation procedure (Ainsworth et al., 1978; Ainsworth, Wittig, 1969) which aims at activating and intensifying the child’s attachment behavior towards his/her parent by exposing the child to a moderately, yet increasingly stressful situation. In fact, the Strange Situation takes place within a context – an observation laboratory – which is not familiar to the child: it foresees the presence of an unfamiliar adult and a series of two separations and reunions with the mother (or any other adult figure we might be interested in studying the child’s attachment relationship with). This procedure is applicable to children between 12 and 24 months of age; between two subsequent administrations, a time interval of at least 6 months must be respected, so that the child can forget the situation and the stressful feelings tied with it (Ainsworth, 1985; Ainsworth, Bell, Stayton, 1971). The procedure is subdivided into eight short episodes, each of them lasting approximately three minutes and following one another according to a fixed order and a clearly stated consignment.

The SSP coding is based on the observation of the overall organization of a child’s attachment behavior and foresees two assessment levels: the first one is based on graduated ordinal scales on a 7-point Likert scale (range 1 – 7), which refer to specific behavioral sequences the child can display in the various episodes. They can be applied to each procedure episode at 15-second intervals. The second level leads to the assignment of an attachment pattern according to four categories. It is based on the observation of the way in which the behavioral systems of attachment and exploration are organized during the whole procedure both towards the caregiver, as well as the stranger, while various stress elements are introduced, one after the other. The four categories are (Scheme 3): secure attachment (B) – research studies referring to “non-clinical” United States children show that between 54.9% and 67% of the population fall into this category; avoidant attachment (A) is observed in an average range of 20.5% - 22.9% of the population. Resistant attachment (C) is less frequent among the population (7.5% -12.5%), while disorganized/disoriented attachment (D) is observed in 14.7% of the children (van IJzendoorn, Goldberg, Kroonenberg, Frenkel, 1992).
child (Benoit, Parker, 1994; Fonagy, Steele, Steele, 1991; Ward, Carlson, 1995; van IJzendoorn, Bakermans-Kranenburg, 1997; Zeanah, 1992).

4. Therapeutic communities and the intervention model in Italy: an overview

In Europe, during the past years, referral to Juvenile Court was the most commonly applied procedure to drug-addicted mothers (Pomodoro, 1993, 1996). More often than not, these cases resulted in the suspension or revocation of parental rights, until the mother or both parents passed examinations which were required by the Court and administered by services in charge of evaluating and following the case. In case of substance addiction, a common solution during evaluation period was to separate the child from the mother (or both parents) and relocate him/her elsewhere, that is, for instance, at the grandparents’ home, or else, at other out-patients services’. The first TC for mothers and children were founded in Switzerland, Germany and Italy in the early 1990s, then also in Spain and Portugal. Further solutions included admitting the child to family crisis intervention homes or placing the child in an extra-familial home or elsewhere, depending on the resources available in the territory. As for Italy, the juvenile judges’ reluctance to place children in therapeutic communities – even though this would guarantee the presence of their mothers at their side – was justified by the fact that this environment – although run by professionals – did not seem to guarantee adequate attention to the child, nor did community workers seem to possess adequate training and the right methodological tools to operate for the well-being of the child and the mother-child couple. Therefore, more often than not, judges would take steps towards a separation of the mother-child dyad. These measures clearly indicated a lack of alternative possibilities within the enlarged network of fostering services but also an underlying prejudice towards drug-addicted parents who were considered “irredeemable” with regard to their capability to offer adequate care and protection to their children, especially in the very first years of their lives (Pomodoro, 1993, 1996). Confiding the child to his/her grandparents in foster care has become the most frequently adopted measure when one or both parents are drug-addict, even though this measure is still considered controversial as for its outcomes (Cirillo, 1996; Ghezzi, 1996). More specifically, criticism is raised towards its generalized and almost automatic use: if it is true, on the one hand, that it can provide an answer to the child’s immediate need for protection, on the other hand it can turn into a very heavy obstacle against a possible recovery of the child’s parents (Cirillo et Al., 1996). For this reason – as well as many others - the need has arisen for new intervention paths to be sought and experimented.

4.1 Therapeutic communities for drug-addicted women and their children

Over the past twenty years, the Veneto region has radically modified the functions of therapeutic communities for addicted mothers and their children, rethinking assessment and intervention measures in case of female drug addiction while paying special attention to children’s well-being and to the results obtained in the short and long run. Communities for drug-addicted women and their children offer residential care to the mother-child dyad (sometimes to the father too) and provide a comprehensive rehabilitation program which takes place during a two-year stay. Many of these facilities are now present on the whole national territory: they greatly differ from each other in terms of constituent aspects which have now been included into a complex and articulated regulation that also leaves room for
autonomous regional organization and definition (available places, internal arrangement, monthly fee etc.). These facilities can accommodate up to 10-12 dyads: as for the children’s age, the range spans from few-months-old babies (but more and more often, pregnant women are admitted too) up to school age children. In the first place, communities give hospitality to drug-addicted women (already detoxified or on methadone therapy and followed by the “Ser.T.”, territorial services), who are offered a comprehensive rehabilitation path.

One further aspect of paramount importance is that, within a mother-child therapeutic community, addicted mothers are offered parenting support. Admitting the mother-child dyad into the community means guaranteeing an adequate intervention for the adult, while providing a protective environment for the child. Indeed, many of the problems associated with child development when a mother suffers from addiction can be addressed more easily and eventually solved once these children are offered an appropriate and stable relational context (Chasnoff, 1992). Moreover, a direct admittance of the mother-child dyad satisfies the need to overcome barriers between generations, since both the addicted woman’s and her partner’s families of origin are often not willing to help looking after the child. Moreover, it has been demonstrated how implementing assistance tools for children and families with a family-based approach prevents treatment dropouts (McComish, et al., 2000; Grella, et al., 2000). In fact, a dropout risk exists from the very first moment addicted mothers enter a therapeutic community, which is for them a very difficult step to take. These mothers fear that they might be labeled as incapable of caring for their children and consequently, that they have to be separated from them (National Institute on Drug Abuse, 1996; Stevens, et al., 1989).

As for the intervention methods, a combined treatment (that is, for the parent and the child together) is carried out on an intensive basis (the dyads are in residential care): in other words, it is typical of these communities to offer a therapeutic rehabilitation program which is centered on the family-parent-child system taken as a whole (Meisels, Dichtelmiller, Fong-Ruey Liaw, 1993). Usually, the mother is the primary focus of the intervention: however, special attention is given to the mother-child relationship too in all facilities offering support to the dyad. An intervention on the child is carried out only when it becomes clear that there is a need for it: in fact, in most cases, these children are physically and psychologically healthy but their caregiving environment reveals a symptomatology which must be tackled and solved. However, in recent times, greater and greater attention has been paid to ensuring the well-being of children living in therapeutic communities, since having a drug-addicted parent is indeed considered as a sort of risk factor in relation to the child’s evolutionary path (Capra, 2011). The length of time mothers have to devote to their rehabilitation program actually affects children too. At a very early stage in their lives, when many new experiences should be made and new things should be learnt, they spend a long time at a therapeutic community’s. Actually, already during the gestation period, they were exposed to the drugs consumed by the mother and often had to endure their mother’s irregular alimentation and burdensome life rhythms. Even when delivery and the post partum period went well and without complications, during the first months of life most of these children experienced multiple separations from their mothers or closest caregivers, who were often scarcely respectful of their rhythms and needs. Others had to confront themselves with new people and environments: for instance, with specialized health care services, or else they had to meet social workers, psychologists or community workers.
Finally, some of them had to endure sudden changes in their daily life and moved to another house or a different town etc. Because of all this, one of the primary interventions in favor of children residing at a community’s is to offer them stable life conditions, deep affective experiences as well as sound routine practices. With reference to the last mentioned aspect, communities seem to work as a place of physical and psychological attachment within which it becomes possible to create new and adequate affective relationships: all this is made possible thanks to the “holding” function supplied by the community as a context of early caregiving and a guarantee of protection from danger, as well as a secure base for the exploration of the environment. This concept of community allows us to consider it, all in all, as a parenting environment where the a growth towards motherhood can be followed and supported, where mothers are no longer blamed or punished for their inadequacy and difficulties but rather are offered a very important chance to experience regression to the role of daughters and children in need (who are taken care of by community workers, psychologists etc.). The chance to experience mixed feelings towards their institutional “parents” seems to make it possible for these women to trace down the relational and representational bonds which were cut short during their infancy and adolescence favoring a review of their own past which is very beneficial to the relationship with their children.

5. A research and intervention project on minors in therapeutic communities for addicted mothers and children

Until a few years ago, in Italy, communities for drug-addicted mothers and their children provided treatments to disintoxicate mothers and favour their rehabilitation into society, while also ensuring overall medical and social support for their children’s development, for whom no specialized health treatment was foreseen (in case of need, treatment would be carried out by facilities outside of the community). However, in the last few years, a radical and much needed-for reorganization has come into effect in the field of residential and semi-residential services for drug-addicts and alcohol-addicts. More specifically, during the years 2006-2007 in North-Eastern Italy, new service units have been defined for addiction treatment, among others: swift admission services, semi-residential services, residential services (type A - B - C), type C1 (for drug-addicted mothers with minor children) and C2 (for drug-addicted minors). Moreover, requirements and standards authorizing socio-sanitary and social facilities to offer assistance have been redefined so as to bestow them recognition at institutional level. Over the years, especially in the Veneto region, it became clear that it was necessary to better define professional competences together with the methodological and organizational pre-requisites which are at the root of the intervention procedures in these specialized services. Treatment paths and management procedures within these services were redefined, whereby treatment must include a parallel series of medical-pharmacological, psychological and socio-educational interventions which are offered not only to the mother, but to the child too. Therefore, since 2008, the mother-child dyad and the quality of the caregiving relationship which develops between the two in the course of time have acquired prominent focus in the assessments and interventions by professionals who work in this specific field. The combination of all these assessment procedures is extremely important in order to arrange the best therapeutic and rehabilitation path for the mother who, up to that point, had been considered the sole subject to be taken therapeutic charge of in the community.
However, when minors are sent to therapeutic communities together with their mothers, this usually happens following a decree by a tutelary judge of the juvenile court so as to make sure that they receive protection and their psycho-physical health condition is assessed. For this reason, it was necessary to reconsider all areas of competence within direct and indirect interventions in favour of minors. Following this path, as of 2010, new socio-sanitary services for children in therapeutic communities type C1 have received official recognition. They are conducted by health professionals and technicians and foresee individualized interventions (individual psychological support, psychomotility, pet therapy), group psychomotility, clinical observation and assessment of the father-child and mother-child relationship, neuropsychiatric observation and assessment, mother-child relationship supervision and relational psychotherapy. Therefore, nowadays, not only are mothers but also their children officially considered clients of a community, where they are offered specific interventions of socio-psycho-physical health care.

It is not easy to combine clinical and rehabilitation activities with research. The authors have striven to set innovative research projects in motion which methodological principles are going to be described in the following pages. In so doing, we hope to stimulate cultural growth while improving care giving practices. The first, preliminary results are presented in this chapter.

The project “Research and intervention on minors in communities for drug-addicted mothers and their children: from at-risk parenting to child wellbeing” is the result of joint work carried out by the Psychology Department of the University of Padua and two therapeutic communities for addicted mothers and their children, Villa Emma and Casa Aurora, located in Venice and its mainland (Mestre) and run by the social cooperative Villa Renata.

The project provides a multi-method evaluation through a longitudinal approach aimed at programming and monitoring the interventions performed by parents while following the development of children living in therapeutic communities. Developmental risk factors and/or clinically relevant, real life symptoms are identified as they emerge. Our theoretical and methodological points of reference are based on the study of parenting and development according to the current, dynamic, multi-factor models of influence (Belsky, 1984; Gabble, Belsky, Crnic 1992; De Palo, 2010).

The setting of the project is the therapeutic community and its complex caregiving system. The focus of the assessment is set on three areas, each of which is investigated at different levels: (a) evaluation of the mother’s psychic condition, in terms of personality and individual characteristics, assessed through interviews (such as the Adult Attachment Interview, SCID-II), questionnaires and dynamic tests (Rorschach); (b) evaluation of the

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6 The Adult Attachment Interview (AAI) developed by George, Kaplan and Main (1985) is a semi-structured interview assessing attachment in adolescence and adult age. The interview includes a series of questions through which a subject is asked to recall his/her attachment history and attachment experiences with his/her caregivers during infancy. The AAI coding scheme foresees two distinct phases: a first phase during which text content and form are analyzed through Evaluation Scales (Scales of Subjective Experience and Scales of the State of Mind) and a second phase during which the interview is analyzed as a whole in order to formulate a categorical classification of the subject’s attachment.
mother’s parenting capabilities as well as those of the father’s (if present), through the observation of their interactions with the child both in daily routine exchanges and/or in structured settings (Attachment Q-Sort\(^9\), Lausanne Trilogue Play\(^10\), Emotional Availability Scales\(^11\)); (c) evaluation of the child’s development and adjustment through assessment measures for the developmental age (Vineland Scales\(^12\), Child Behavior Check List\(^13\), Attachment Story Completion Task\(^14\)), aimed at identifying a developmental diagnosis according to the indications of the current 0-3 classification system for early infancy; (d) a comprehensive analysis of the progressive and current context of relations between caregiver and child, exploring limits and points of strength; (e) data obtained at various observational levels are shared by a professional team striving to achieve data integration so as to guarantee a very careful and comprehensive evaluation. Thanks to these organized data, it is possible to acquire a deeper knowledge and a better understanding of the

\(^7\) The Structured Clinical Interview for DSM-III-R. The SCID-II (First, Gibbon, Spitzer, Williams, & Benjamin, 1997) allows diagnostic evaluations of a potential personality disorder such as the ones included on Axis II of DSM-IV, passive-aggressive and depressive disorders (Appendix B of DSM-IV) and unspecified personality disorder (UPD). The Italian version of the SCID for DSM-IV was published in 2003.

\(^8\) The Rorschach Test (Rorschach, 1921) is a perception, projective, psycho-diagnostic instrument. It is composed of 10 standardized cards out of 23 (5 black and grey, 2 red and grey and 3 multi-coloured), each of them carrying a symmetric ink-blot. With this test, it is possible to observe both stable personality traits as well as a possible psychopathology or possible affective disorders. Moreover, this test offers very valuable information on the subject’s intelligence and cognitive processes. As for data analysis and interpretation, they are carried out both at quantitative and at qualitative level.

\(^9\) The Attachment Q-Sort (Waters, & Deane, 1985) allows repeated data acquisition over one single week, so as to compare the attachment bonds created by the child with his/her caregivers, as well as a measurement of children’s attachment over a longer period of time (from 1 to 5 years). The AQS comprises 90 items which describe a child’s attachment behaviours in his/her natural, everyday home environment.

\(^10\) The Lausanne Trilogue Play (LTP, Fivaz-Depeursinge, Corboz-Warnery, 1999) is a semi-standardized, laboratory, play procedure during which mother, father and child interact. This procedure allows observation and evaluation of the quality of interactions within the mother-father-child family system during a play interaction where all three partners are involved at the same time. The coding scheme of the LTP procedure is made up of 10 scales, each of them defining an observation variable (Lavanchy, Cunnet, Favez, 2006). They are graduated on a 5-point Likert Scale (range 1 – 5) and coded for each of the four parts of the procedure.

\(^11\) Emotional Availability Scales (EAS, Biringer Robison Emde, 1998 ) Interactive adult-child video-recordings are observed and evaluated according to the adult’s sensitivity, his/her capacity to frame the environment, his/her non-intrusiveness and non-hostility. The child’s involvement and his/her replies to the adult are evaluated too.

\(^12\) The Vineland scales allow measurement – by means of a semi-structured interview – of 4 main dimensions (scales) and 11 sub-dimensions (subscales). They can find application in various clinical, educational and research settings: they are particularly useful to observe adaptive behaviours and to investigate to what degree a disability, if present, can have an impact on the subject’s everyday performances.

\(^13\) Child Behavior Check List Achenbach CBCL (1991, 1992) This scale allows to investigate social competencies and behavioural problems in children aged 18 months - 18 years. Its items favour a description of the child’s behavioural and emotional repertoire through the narratives supplied by parents, teachers and/or educators supporting the evaluation of a potentially problematic conduct as listed in the behavioural scales.

\(^14\) The Attachment Story Completion Task (ASCT; Bretherton, Ridgeway, Cassidy, 1990) was designed to assess attachment style in preschool and school age. Five story stems referring to attachment-relevant family themes are presented to the child who is asked to complete them freely using a set of dolls and props.
### 1st PHASE

**Objective**
Investigate mother’s personality characteristics and her attachment history since these are indexes of her parental competence.

| Investigated Areas | Personality | Pathology Self-Perception | Attachment |
|--------------------|-------------|----------------------------|------------|
| Measures           | Rorschach Test | SCID II (Structured Clinical Interview for DSM-IV) | AAI (Adult Attachment Interview) |

### 2nd PHASE

(a) **Indirect assessment of the child (through mothers/educators)**

**Objective**
1) Evaluation of the child’s relational and developmental competencies and psychopathological aspects
2) Give mothers a chance to compare and share their perceptions of their children with those of the educators, so as to find a common language on the main topics referring to the children

| Investigated Areas | Development | Symptomatology | Attachment Relationship |
|--------------------|-------------|----------------|------------------------|
| Measures           | VABS (Vineland Adaptive Behavior Scales) | CBCL (Child Behavior Checklist) | AQS (Attachment Q-Sort) |

(b) **Assessment of adult-child relationships**

**Objective**
1) Observation and evaluation of the mother-child dyadic relationship (if possible, the father-child relationship too) then comparison with the educator-child dyadic relationship
2) If possible, observation and evaluation of the mother-father-child triadic relationship

| Observed Relationships | Mother-Child | Educator-Child | Father-Child | Mother-Father-Child |
|------------------------|--------------|----------------|--------------|---------------------|
| Measures               | EAS (Emotional Availability Scales) | LTP (Lausanne Trilogue Play) |

### 3rd PHASE

**Direct assessment of the child**

This investigation is only carried out on children who show dysfunctional or pathological characteristics during screening phase 2.
Table 2. Phases of our research project: “A model of research and intervention on minors in communities for drug-addicted mothers and their children: from at-risk parenting to child wellbeing”.

caregiver, the child and their relationship: these data also help professionals to more clearly identify the therapeutic and pedagogical objectives to be suggested to the dyad, which can then be supported and monitored over time. These objectives can be modified and re-elaborated according to each individual project but also to the changes observed during the intervention. In fact, the same evaluation procedure is administered at different times during the mother-child residential period. It aims at monitoring the interventions and any possible change as well as identifying eventual aspects of danger and/or increased risk that may require the use of further community facilities. A continuous assessment of the intervention is a powerful instrument to reflect, both clinically and ethically, on the opportunity to go on providing care to mother-child pairs featuring elements of danger and pathology. This assessment also examines the presence of prejudicial clinical manifestations of the child and any developmental difficulties related to inadequate maternal care which can arise in spite of the protective and rehabilitative intervention provided by the community and its comprehensive setting. In 2010, we started gathering data which are presently being processed and which will be described in depth in this chapter.
6. Conclusions

Our project started in 2009: the following, preliminary results are now available (De Palo, Simonelli, Capra, 2010). Twenty-four mothers took part to the program: they were evaluated according to the 1st phase protocol. The reported data refer to the first twelve of them, whom data have already been processed for. Generally speaking, 31 is their mean age: they entered the community at different times from 2007 to 2010. Most of them started consuming substances during pre-adolescence/adolescence (12-19 years).

The first aspect refers to personality diagnosis: 10 subjects were diagnosed a structure of personality with borderline features (polydrug use of psychotropic substances with heroin as the main substance of abuse). This characteristic shows a clinically significant association with some other investigated aspects, particularly, with an insecure attachment style which is prevalent within the group and which seems to be rooted in experiences of traumatic and/or doleful events during these women’s infancy, especially physical and sexual abuse which most of them experienced in intra-familial environments. Moreover, their attachment style, which developed on the basis of their infantile experiences with their caregivers, is associated to disorganization characteristics and a difficulty to work through early experiences of loss or trauma. The educational style they experienced in their families of origin was predominantly coercive. To sum up, at exploratory level we can say that, in the mothers accommodated at the community, we notice associations between early traumatic events (coercive educational style and abuse) experienced within their families of origin, an insecure working-through of their own attachment history and borderline personality features. These results urge us towards a reflection on feasible intervention methods for patients presenting similar clinical pictures where drug-addiction almost seems just a symptom of a more complex pathology. At the same time, this reflection seems of paramount importance to globally re-think interventions in favor of minors living in the community: in fact, shouldn’t the fact of being born to mothers with similar characteristics be considered in itself a vulnerability factor which shall issue to psychopathology?

We believe that a possible answer can be found within the described project, since the main objective of our research and intervention model is to observe the child’s level of development and the risk and protective factors characterizing his/her growth so as to plan taylor-made interventions to satisfy each single minor client’s needs and support each single mother-child relationship. Therefore, within the model we presented in this paper, attention is focused on the well-being of minors who were born to drug-addicted mothers. Reason for this choice is the unavoidable need to carefully and realistically consider the condition of these children: their drug-addicted mothers present an at-risk parenting function and are therefore supported by educators who play the role of more adequate, alternative caregivers. The “adolescent” aspect of drug-addicted women can be a major risk factor against the assumption of their parental role: these mothers are often envious of the therapeutic support which is given to the child and which develops in a situation of conflict between mother and child. Moreover, these patients often have great difficulties in acknowledging limits, even physical ones, between their child and themselves: these mothers often find it hard to distinguish themselves from their child, especially if it is a female child, and they mix up their thoughts, actions and feelings with those of their daughters. When they have a male child, they find it difficult to differentiate their sons from their own fathers or partners. Therefore, by choosing to set up a project on minors’ health,
all research objectives are focused on the viable, most adequate actions to be taken in order to achieve the set goal, that is, the well-being of children born to adults with parenting function at risk.

To this extent, a parallel administration of evaluation measures both to the mother and to the educator makes it possible to investigate what is the latter’s (and the community’s) image of the child. Carefully monitoring the idea the community has of a child makes it possible to create a univocal perception of him/her which otherwise gets lost in the various circumstances characterizing the community environment. The attention educators continuously devote to the child is shared with the mother, with whom they strive to create a univocal, shared image of the minor. Actually, within a community for drug-addicted mothers and their children, both educators and the very treating team perform the function of secure base which neither the mother nor the child have found elsewhere: they offer an alternative and vicarious relational model both to women and their children. Since educators possess characteristics that are typical of early caregivers (closeness, continuous presence, responsiveness etc.), they often find themselves emotionally involved in the relationship with the child: for this reason, their continuous training and supervision aim at helping them to stick to their professional role, without wanting to replace the mother’s role.

7. References

Achenbach, T.M. (1991). Manual for the Child Behavior Check List/4-18 and 1991 Profile. Burlington: University of Vermont.

Achenbach, T.M. (1992). Manual for the Child Behavior Check List/2-3 and 1992 Profile. Burlington: University of Vermont.

Ainsworth, M. D. S. (1985). Patterns of infant-mother attachment: antecedents and effects on development. Bulletin of the New York Academy of Medicine, 61, 771-791.

Ainsworth, M. D. S, Wittig B. A. (1969). Attachment and exploratory behavior of one-year-olds in a strange-situation. In B. M. Foss (Eds), Determinants of infant behavior IV, Methuen, London, 113-136.

Ainsworth, M. D. S., Bell, S. M., Stayton, D. J. (1971). Infant-mother attachment and social development: socialization as a product of reciprocal responsiveness to signals. In M. P. M. Richards (Eds) (1971). The integration of a child into a social world, Cambridge University Press, London, 99-135.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.

Alessandri S. M., Bendersky, M., Lewis, M. (1998). Cognitive functioning in 8- to 18-month-old drug-exposed infants, Dev Psychol. 1998 May;34(3):565-73. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1531636/?tool=pubmed>

Anderson, P., & Baumberg, B. (2006). Alcohol in Europe. A public health perspective. Analysis for the European Commission. Institute of Alcohol Studies, UK. Retrieved from <http://ec.europa.eu/health/ph_determinants/life_style/alcohol/documents/alcohol_europe.pdf>

Aronica E. et Al. (1987). Il rapporto tra donna e droga. Alla ricerca di possibili differenze e specificità. Atti del Convegno “La donna e l’eroina”. Torino: CIC Ed. Internaz.
Associazione Parsec (2004, April, 16). In-Dipendenza Donna: Workshop su Tossicodipendenza e Maternità, Paper presented at meeting of Istituto Superiore di Sanità, Roma.

Azuma, C.D., & Chasnoff, I. J. (1993). Outcome of children prenatally exposed to cocaine and other drugs: A path analysis of three-year data. Pediatrics, 92(3), 396-402.

Belsky, J. (1984). The Determinants of Parenting: A Process Model. Child Development, 55, 83-96.

Benoit, D., & Parker, K.C.H. (1994). Stability and Transmission of Attachment across Three Generations. Child Development, 65, 1444-1456.

Biringen, Z., Robinson, J., & Emde, R.N. (1998). The emotional availability scales (3rd ed.). Unpublished manuscript, Department of Human Development & Family Studies, Colorado State University, Fort Collins, CO.

Bobes J., Casas M., Szerman N. et al. (2009). “Manejo clínico del paciente con patología dual. Recomendaciones de expertos”. In Sociodrogalcohol. Valencia. Retrieved from <www.sociodrogalcohol.org>

Bowlby, J. (1969). Attachment: Attachment and Loss (Vol. 1). New York: Basic Books (trad. it. Attaccamento e perdita (Vol. 1): L’attaccamento alla madre, Boringhieri, Torino 1972.)

Bowlby, J. (1973). Separation: Anxiety & Anger: Attachment and Loss (Vol. 2). London: Hogarth Press (trad. it. Attaccamento e perdita (Vol. 2): La separazione dalla madre, Boringhieri, Torino, 1975).

Bowlby, J. (1980). Loss: Sadness & Depression: Attachment and Loss (Vol. 3). London: Hogarth Press (trad. it. Attaccamento e perdita (Vol. 3): La perdita della madre, Boringhieri, Torino, 1983.)

Brentari, C., Herrera Hernandez, B., Tripodi, S. (2011, in press). Attention to Women Drug Users in Europe, Guidelines of the “Democracy, Cities and Drugs II” Project. A Public Health Executive Agency project. Retrieved from <www.democitydrug.org>

Bretherton, I., Ridgeway, D., & Cassidy, J. (1990). Assessing internal working models of the attachment relationships: An Attachment Story Completion Task for 3-year-olds. In M.T. Greenberg, D. Cicchetti, & E.M. Cummings (Eds.), Attachment in the preschool years: Theory, research, and intervention (pp. 273-308). Chicago: University of Chicago Press.

Buckley, P., Brady, K., & Hermann, R.. (2010). Dual diagnosis: Severe mental illness and substance use disorders. UpToDate, Inc. MA. Online 18.2:, Retrieved from <www.uptodate.com>

Capra, N. (2011). Presentazione del progetto terapeutico di presa in carico residenziale in comunità per madri tossicodipendenti e i loro figli. Paper presented at International conference “L’esposizione dei minori alle droghe: dalla vita prenatale all’adolescenza”, February 24-26 2011 Padova, Italy.

Carlson, V., Cicchetti, D., Barnett, D., & Braunwald, K. (1989). Disorganized/disoriented attachment relationships in maltreated infants. Developmental Psychology, 25, 525-531.

Cavazzuti, G.B., Frigieri, G., & Finelli, P. (1987). Il follow up del bambino nato da madre farmacodipendente. Bollettino per le farmacodipendenze e l’Alcolismo, 10(6), 20-28.
Charles Pull, C.B., (2004). Binge Eating Disorder. Current Opinion in Psychiatry, 17(1), 43-48.
Chasnoff, I.J. (1992). Cocaine, pregnancy, and the growing child. Current Problems in Pediatrics, 22, 302–321.
Cicchetti, D., & Rizley, R. (1981). Developmental perspective on the etiology, Intergenerational transmission and Sequelae un Child Abuse and Neglect. Journal of American Academy of Child Adolescent Psychiatry, 34, 541-565.
Ciechanowski, P., Katon W., Stein, B.M., & Hermann R. (2010), Post-traumatic stress disorder: Epidemiology, pathophysiology, clinical manifestations, and diagnosis, UpToDate, Inc. MA. Retrieved from <www.uptodate.com>
Cirillo S. et Al., (1996), La famiglia del tossicodipendente, Cortina, Milano
Cloninger, C. (1990). The empirical structure of psychiatric comorbidity and its theoretical significance. US: American Psychiatric Association.
Crittenden, P.M. (1985). Maltreated infants: Vulnerability and resilience. Journal of Child Psychology and Psychiatry, 26, 85-96.
De Leon, G. (1989). Psychopathology and substance abuse and psychiatric disorders: what is being learned from research in therapeutic community. Journal of psychoactive drugs, 21, 177/188.
De Palo, F. (2010). The trasmission gap: quali influenze familiari e contestuali nel passaggio tra rappresentazioni dell’adulto e comportamenti di attaccamento del bambino. Ph.D. Thesis. Milan University
De Palo, F., Simonelli, A., & Capra, N. (2010). Madri tossicodipendenti: attaccamento personalità e trattamenti possibili. Paper presented at “Congresso Nazionale dell’Associazione Italiana di Psicologia (AIP) – Sezione di psicologia clinica” September 24-26 2010. Università degli Studi di Torino.
De Zordo, M.R. (1997). Genitori e bambini: genitori-bambini. In G. Fava Vizziello & P. Stocco (Eds.), Tra genitori e figli la tossicodipendenza (pp. 103-120). Milano: Masson.
Di Cagno, L., et al. (1985). Distorsione della relazione oggettuale e persistente della tossicodipendenza. Giornale di Neuropsichiatria dell’Età Evolutiva, 5,(2) 133-138.
Di Sciascio, G., & Nardini, M. (2005). Comorbidità fra disturbi mentali e dipendenze patologiche: il problema della cosiddetta “Doppia Diagnosi”. DITE-Edizioni Scientifiche.
Doherty, M.C., Garfein, R.S., Monterroso, E., Latkin, C., & Vlahov, D. (2000). Gender difference in the initiation of injecting drug use among young adults. Journal of Urban Health, 77(3), 397
Eurasian Harm Reduction Network. (2007). Hepatitis C among Injecting Drug Users in the New EU Member States and Neighboring Countries. Situation, Guidelines and Recommendations. Vilnius: Eurasian Harm Reduction Network.
EuroHIV. (2007). HIV / AIDS Surveillance in Europe, Mid-year report 2006, No. 74. French Institute for Public Health Surveillance, Saint-Maurice.
European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). (2005). Differences in patterns of drug use between women and men. Paper presented at meeting of European Drug Situation, Lisbon. Retrieved September 10, 2010 from <http://www.emcdda.europa.eu/html.cfm/index34278EN.html>
European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2006). The state of the drugs problem in Europe. Annual report. EMCDDA. Luxembourg: Publications Office of the European Union.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2006a). A gender perspective on drug use and responding to drug problems. Paper presented at meeting of European Drug Situation, Lisbon.

EMCDDA (European Monitoring Center for Drugs and Drug Addiction) (2009). The State of the Drugs Problems in Europe. Annual Report. Luxembourg: Publications Office of the European Union, 2009 — ISBN 978-92-9168-384-0

European Women’s Lobby (2001), Young Women's Guide to Equality between Women and Men in Europe, EWL- LEF, Brussels, Retrieved from <http://www.womenlobby.org>

Ficks, K.B., Johnson, H.L., & Rosen, T.S. (1985) Methadone-Mantained Mothers: Three-Year Follow-up of Parental Functioning. The international journal of the addiction, 20(5), 45-57.

Finnegan, 1986. Neonatal Abstinence Syndrome (NAS) Clinical Presentation and Management.

First, M.B., Gibbon, M., Spitzer, R.L., Williams, J.B.W., & Benjamin, L.S. (1997). Structured Clinical Interview for DSM-IV Axis II Personality Disorders, (SCID-II). Washington: American Psychiatric Press.

Fivaz-Depeursinge, E., & Corboz-Warnery, A. (1999). The Primary Triangle: A developmental system view of fathers, mothers and infants. New York: Basic Books. (Trad. it. Il triangolo primario: Le prime interazioni triadiche tra padre, madre e bambino, Cortina, Milano, 2002).

Fonagy, P., Steele, M., & Steele, H. 1991, Maternal representation of attachment during pregnancy predict the organisation of infant-mother attachment at one year of age. Child Development, 62, 891-905.

Fundaro, C. & Salvataggio, E. 1987, Lo sviluppo del bambino di madre tossicodipendente. Bollettino per le Farmacodipendenze e l’Alcolismo, X, 6.

Gable, S., Belsky, J., & Crnic, K. (1992). Marriage, Parenting, and Child Development: Progress and Prospects. Journal of Family Psychology, 5, 276-294.

Ghezzi, D., & Vadilonga, F.1996, (Eds.) La tutela del minore. Milano: Raffaello Cortina Editore.

Gelinas, D. (1983). “The persisting negative effects of incest”. Psychiatry, 46, p. 312-332

George, C., Kaplan, N., & Main, M. (1985). Adult Attachment Interview. Unpublished manuscript, Department of Psychology, University of California, Berkeley.

Genazzani, A.R., Santoro, V., Carino, M., Golinelli, S., Maietta Latessa, A., & Volpe, A. (1987). Riproduzione e farmacodipendenza. Bollettino Farmacologico e Alcol, 6, 609-615.

Goldberg, D. (1996), A dimensional model for common mental disorders, British Journal of Psychiatry, Vol 168 (Suppl 30), Jul 1996, 44-49.

Grella, C.E., Joshi, V., & Hser, Y.I. (2000). Program variation in treatment outcomes among women in residential drug treatment. Evaluation Review, 24(4), 364-383.
Grella, C.E., Hser, Y.I., Huang, Y.C. (2006). Mothers in substance abuse treatment: differences in characteristics based on involvement with child welfare services, Child Abuse Neglect, Jan; 30(1), 55-73.

Home Ministry Government (2010). Call to End Violence against Women and Girls, ISBN: 978-1-84987-377-2, London, Retrieved from <http://www.homeoffice.gov.uk/publications/crime/call-end-violence-women-girls/vawg-paper?view=Binary>

Hunter G and Powis B., (1996). Women drug users: barriers to service use, and service needs. The Centre for Research on Drugs and Health Behaviour: Executive Summary, 47, 1996

Instituto de la Mujer. (2007). Ministerio de Trabajo y Asuntos Sociales. Intervención en drogodependencias con enfoque de género. Nipo: 207-07-132-8. Madrid. Retrieved from <http://www.mtas.es/mujer>

Ijzendoorn M. H. Van, Goldberg S., Kroonenberg P. M., Frenkel O. J. (1992). The relative effects of maternal and child problems on the quality of attachment: a meta-analysis of attachment in clinical samples, Child Development, 63, 840-858

Johnson, J., G., Cohen, P., Brown, J., et al. (1999). Childhood maltreatment increases risk for personality disorders during early adulthood. Archives of General Psychiatry, 56, 600-606.

Johnson, K. (2000). Prenatal Cigarette, Cocaine Exposure Tied to Language Problems. OB GYN News, 35, 13.

Klerman, G.L. (1990). Approaches to the phenomena of comorbidity. American Psychiatric Association, US

Lavancy, C., Cuennet & Favez, N. (2006). Coding manual for Family Alliance Assessment Scale (Evaluation grid of the Lausanne Triadic Play). Fourth version. Manoscritto non pubblicato. Centre d’Etude de la Famille (CEF). Lausanne.

Lester, B. M. & Tronick, E. Z. 1994, The effects of prenatal cocaine exposure and child outcome. Infant Mental Health Journal, 15(2), 107-120.

Lester, Barry. (2000). Drug-addicted Mothers Need Treatment, Not Punishment. Alcoholism & Drug Abuse Weekly, 12, 5.

Malacrea, M., (2006). Caratteristiche, dinamiche ed effetti della violenza su bambini e bambine”, In: Bianchi, D., Moretti, E., (2006). Vite in bilico. Indagine retrospettiva su maltrattamenti e abusi in età infantile. Ministero della Solidarietà Sociale, Centro Nazionale Documentazione e Analisi per l’Infanzia e l’Adolescenza. Retrieved from <http://ems.cilea.it/archive/00000763/01/Vite_in_bilico_Q40.pdf>

Malagoli Togliatti, M., Mazzoni, S. (1993). Maternità e tossicodipendenza. Milano: Giuffrè Mayes, L. C., Granger, R. H., Bornstein, M. H., & Zuckerman, B. 1992, The problem of prenatal cocaine exposure: A rush to judgment. Journal of the American Medical Association, 267, 406-408

McComish, J.F., Greenberg, R., Ager, J., Chruscial, H., & Laken, M. (2000). Survival analysis of three treatment modalities in a residential substance abuse program for women and their children. Outcomes Management for Nursing Practice, 4(2), 71-77.
McMahon, T.J., Luthar, S.S. (2000). “Women in Treatment: Within-Gender Differences in the Clinical Presentation of Opioid-Dependent Women”, In Journal of Nervous & Mental Disease: October 2000 - Volume 188 - Issue 10 - pp 679-687

Meisels, S. J., Dichtelmiller, M., & Fong-Ruey L. (1993). Un’analisi multidimensionale dei programmi di intervento per la prima infanzia. In C.H. Zeanah (Ed.), Manuale di salute mentale infantile (pp.317-339). Milano: Masson.

Ministero della Salute (2010). Rilevazione attività nel settore tossicodipendenza: Anno 2008. Retrieved October 3, 2010, Retrieved from <http://www.salute.gov.it/imgs/C_17_pubblicazioni_1306_allegato.pdf>

Moral Jiménez, M., Sirvent Ruiz, C. (2007). Codependence and Gender: exploratory analysis in differences in tds- 100 symptomatic factors. 8° Congreso Virtual de Psiquiatria. Interpsiquis Febrero 2007. Psiquiatria.com, Retrieved from <http://www.fispiral.com/wp/wp-content/uploads/2012/01/21.pdf>

National Institute on Drug Abuse (NIDA) (1996). National pregnancy and health survey: Drug Use Among Women Delivering Livebirths. Rockville, MD: National Institutes of Health Publications.

NSW Department for Women, Young Women’s health: depression and risk taking behavior. Retrieved from <www.women.nsw.gov.au/pdf/young_womens_health>

Oloffson, M. & Buckley, W. (1983). Investigation of 85 children born by drug-addicted mothers. II Follow up 1-10 years after birth. Acta Pediatr. Scand., 72, 407-413.

O.N.Da. (Osservatorio Nazionale sulla salute della Donna). (2008). La Salute della Donna. Proposte, strategie, provvedimenti per migliorarla. Libro verde, FrancoAngeli Milano

OTIS (Organization of Teratology Information Specialists) (2010), O.T.I.S. Fact Sheets ©. Retrieved from <http://www.otispregnancy.org/otis-fact-sheets-s13037#6>

Palmieri, V. (1991). Osservazione e analisi del tossicodipendente detenuto. Progetto carcere: Quaderni della Fondazione Villa Maraini, 1, Roma.

Pinkham S., Malinowska-Sempruch K. (2007). Women, Harm Reduction, and HIV. New York: International Harm Reduction Development Program of the Open Society Institute. Retrieved from <http://www.idpc.net/sites/default/files/library/IHRD_WomenHRHIV_EN.pdf>

Pomodoro, L. (1993). Aspetti giuridici. In M. Malagoli Togliatti & S. Mazzoni (Eds.), Maternità e tossicodipendenza (pp.13-24). Milano: Giuffrè.

Pomodoro, L. (1996). Introduzione. In D. Ghezzi & F. Vadilonga (Eds.), La tutela del minore (pp.1-13). Milano: Raffaello Cortina Editore.

PNS: Ministerio del Interior (Delegación del Gobierno para el Plan Nacional sobre Drogas) (2000 – 2008). Estrategia Nacional Sobre Drogas. España. NIPO: 126-99-041-3.

Price A. and Simmel C. (2002). Partners’ Influence on Women’s Addiction and Recovery: the Connection Between Substance Abuse, Trauma and Intimate Relationships (Berkeley, California, National Abandoned Infants Assistance Resource Center, School of Social Welfare, University of California at Berkeley, 2002). Retrieved from <http://aia.berkeley.edu/media/pdf/partners.pdf>

Ravndal, E., Lauritzen, G., Frank, O., Jansson, L., Larsson, J. (2001). “Childhood maltreatment among Norwegian drug abusers in treatment”. In International Journal of Social Welfare, 10, 142-147.
Rorschach, H. [1921] (1932). W. Morgenthaler (Ed.), Psychodiagnostik (2nd ed.). Bern-Berlin: Hans Huber (trad. it. Psicodiagnostica, Kappa, Roma, 1981).

Rodning, C., Beckwith, L., & Howard, J. (1989). Characteristics of attachment organization and play organization in prenatally drug-exposed toddlers. Development and Psychopathology, 1, 277-289.

Sanderegger, T. & Zimmermann, E. 1978, Adult behavior and adrenocortical function following neonatal morphine treatment in rats. Psychopharm., 56, 103-109.

Schneider-Rosen, K., Braunwald, K. G., Carlson, V., & Cicchetti, D. (1985). Current perspectives in attachment theory: Illustration from the study of maltreated infants. In I. Bretherton & E. Waters (Eds.), Growing points of attachment theory and research. Monographs of the society for research in child development, 50(209), 194-210.

Sherman, S. G., Latkin, C. A., & Gielen, A.C. Social factors related to syringe sharing among injecting partners: a focus on gender, Substance Use and Misuse, vol. 36, No. 14 (2001), pp. 2113-2136.

Simoni-Wastila, L., Ritter, G., & Strickler, G. (2004). Gender and other factors associated with the nonmedical use of abusable prescription drug. Substance Use and Misuse, 39(1), 1-23.

Stevens, S., Arbiter, N., & Glider, P. (1989). Women residents: Expanding their role to increase treatment effectiveness in substance abuse programs. International Journal of the Addictions, 24, 425-434.

Stocco, P., Llopis Llacer, J.J., De Fazio, L., Calafat, A., & Mendes, F. (2000). Women drug abuse in Europe: Gender identity. Palma de Mallorca: European Institute of Studies on Prevention (IREFREA). Retrieved April 8, 2010 from <http://www.irefrea.org/uploads/PDF/Stocco%20et%20al_2000_Women%20Drug%20Abuse.pdf>

Stocco, P., Llopis Llacer, J.J., de Fazio, L., Facy, F., Mariani, E., Legl, T., et al. (2002). Women and opiate addiction: A European Perspective. Palma de Mallorca: European Institute of Studies on Prevention (IREFREA). Retrieved April 08, 2010 from <http://www.irefrea.org/uploads/PDF/Stocco%20et%20al_2002_Women%20Opiate.pdf>

Studio VEdeTTE (2007). Monografia n. 7: Differenze di genere nello studio VEdeTTE. Spoleto (PG): Litografia Spoletina-Del Gallo.

Substance Abuse and Mental Health Services Administration (2005), Overview of Findings from the 2004 National Survey on Drug Use and Health, Office of Applied Studies, NSDUH Series H-27, DHHS Publication No. SMA 05-4061. Rockville, MD.

Tempesta, E., et al. 1987, Storia psichica della gravida tossicodipendente. Bollettino delle Farmacodipendenze e Alcoolismo, 6, X, 602-607.

United Nations Office on Drug and Crime (2004, August). Substance abuse treatment and care for women: Case studies and lessons learned. Wien. Retrieved September 11, 2010 Retrieved from <http://www.unodc.org/pdf/india/womens_corner/sustance_abuse_treat_care.pdf>
van IJzendoorn, Bakermans-Kranenburg, (1996). Attachment representations in mother, fathers, adolescents, and clinical groups: a meta-analytic search for normative data. Journal of Counseling and clinical psychology, 64.

van IJzendoorn, M. H. & Bakermans-Kranenburg, M. J. (1997). Intergenerational transmission of attachment: A move to the contextual level. In L. Atkinson, & K. J. Zuckerman (Eds.), Attachment and psychopathology (pp. 135-170). New York: Guilford Press.

van IJzendoorn, M. H., Kroonenberg, P. M., & Frenkel, O. J. (1992). The relative effects of maternal and child problems on the quality of attachment: A meta analysis of attachment in the clinical samples. Child Development, 63, 840-858.

Vidal-Trécan, G, Coste, J, Coeuret, M, Delamare, N, Varescon-Pousson, I, Boissonnas, A (1998). Risk behaviors of intravenous drug users: are females taking more risks of HIV and HCV transmission? Rev Epidemiole Sante Publique; 46(3):193-204

Vogt, I., Gender and drug treatment systems. In Klingemann H, Hunt G (eds), Drug Treatment Systems in an International Perspective: Drugs, Demons and Delinquents. Sage, London, 1998

Ward, M. J. & Carlson, E. A. 1995, Association among adult attachment representations, maternal sensibility, and infant-mother attachment in a sample of adolescent mothers. Child Development, 66, 69-79.

Waters, E., & Deane, K. E. (1985). Defining and assessing individual differences in attachment relationships: Q-methodology and the organization of behavior in infancy and early childhood. In I. Bretherton & E. Waters (Eds.), Growing points of attachment theory and research. Monographs of the Society for Research in Child Development, 50(1-2), 41-65.

Wellish, D.H. & Steinberg, M.R. 1980, Parenting Attitudes of Addicts Mothers. The International Journal of Addictions, 15, 6.

WHO (1995). The World Health Report 1995. Bridging the gaps, Geneva, World Health Organization, Retrieved from <http://www.who.int/whr/1995/en/whr95_en.pdf>

WHO (2000). Women’s Mental Health: An Evidence Based Review, WHO, Geneva.

WHO (2007a), Interventions to address HIV in prisons: HIV care, treatment and support. Geneva, World Health Organization (Evidence for Action Technical Papers; Retrieved from <http://www.who.int/hiv/pub/advocacy/idupolicybriefs/en>

Wilson, G. S., McCreary, R., Kean, J., & Baxter, J. C. 1979, The developmental of preschool children of heroin addicted mothers: A controlled study. Pediatrics, 63(1), 135-141.

Wright A., Walker J. (2001). Drugs of abuse in pregnancy. Best Practices Res Clin Obstet Gynaeco, 1, pp. 987-998.

Zacchello, F. & Giaquinto, M. (1997). Figlio di madre tossicodipendente. Problemi clinici e assistenziali. In G.M. Fava Vizzuello & P. Stocco (Eds.), Tra genitori e figli la tossicodipendenza (pp.161-168). Milano: Masson.

Zeanah, C.H. (1992). L’esperienza soggettiva nella relazione di attaccamento: la prospettiva di ricerca. In M. Ammaniti & D. N. Stern (Eds.), Attaccamento e psicoanalisi, Roma: Laterza.
Zenker, C., Bammann, K., and Jahn, I. (2003). Genese und Typologisierung der Abhängigkeitserkrankungen bei Frauen. Baden-Baden, Schriftenreihe des Bundesministeriums für Gesundheit, Nomos.

Zuckerman, B. (1994). Prenatal Cocaine Exposure - 9 Years Later. Mosby-Year Book Inc.

Zuckerman, B. & Bresnahan, K. (1991). Developmental and behavioral consequences of prenatal drug and alcohol exposure. Pediatric Clinics of North America, 38, 1387-1405.

Zuckerman, B., & Brown, E.R. (1993). Maternal substance abuse and infant development. In Zeanah C.H. (Ed.), Handbook of infant mental health (pp. 143–158). New York: Guilford Press.

Zuckerman, B., Frank, D. A., Hingson, R., Amaro, H., Levenson, S. M., Kayne, H., Parker, S., Vinci, R., Aboagye, K., Fried, L. E., Cabral, H., Timperi, R., & Bauchner, H. (1989). Effects of maternal marijuana and cocaine use on fetal growth. New England Journal of Medicine, 320, 762-768.