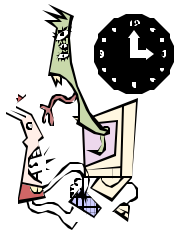

"ORIGIN AND EVOLUTION OF AGGRESSIVENESS AND VIOLENCE IN CHILDREN AND ADOLESCENTS"

DR. ESTEBAN GASPAR

In this communication, I will address the origins and evolution of aggressiveness and violence in adolescents from the psychiatric point of view. Existing literature looks at aggressiveness, violence, and juvenile delinquency as behaviors caused by multiple factors which constitute bio-psycho-social events, and therefore are not the domain of only one discipline. In sum, they are not medical diseases, and therefore, the light in which I will look at all of these emotions, acts or behaviors will be partial and based only on medical and psychological disciplines.

Before beginning to reflect on these subjects and read the most recent bibliography available, I recalled a book I had read many decades ago entitled *Marital Stress*, by Henry Dicks. For over twenty years, the author worked at the family unit of the Taistock Clinic of London; and he published this book in the 1960s. In its first pages, he comments that, in England in 1910 there were less than 800 divorce suits, and by mid-century, in the post-war years, the number had risen to nearly 30,000. Therefore, the divorce rate multiplied to 3500. The author wonders that would have happened if there had such an increase in the area of mental health, and proposes what would happen to the concept of family, and the children of these dissolved marriages.

Then, reading some specific untitled material, I found out that, in 1998, after 20 years of study, Swedish researchers Dalter and Levander found that 20,000 offenses were perpetrated by 75 young people, following a notable increase in criminal behaviors. In 1940, there were 200 juvenile delinquents; by 1980, that figure had risen to 4,300 – in a country of 7 million people.

In reflecting on both these interesting observations, the question that comes up is: what relationship is there between household disintegration and the increased rate of criminality, which in some way it finds its roots in aggressiveness and violence?

US publications dealing with domestic violence, such as abuse and ill-treatment of children and women, sexual abuse and extra-family crimes such as criminal behaviors, point to a growing number of these offenses, mainly the great violence used, the rising numbers of drug addicts and alcoholics among young people, and the fact that they are joining these circles at an earlier and earlier age.

In this communication, I will deal with the following items: a) biological bases of aggressiveness; b) development of aggressiveness from early childhood to adolescence; c) psychiatric disorders of children and

adolescents characterized by violence or leading to personality disorders with a tendency to violence and delinquency in adult life; and, in conclusion, d) some proposals for prevention.

Biological bases of aggressiveness

Many organic systems are involved in the generation of aggressive behaviors. The brain is an organ of extraordinary complexity whose operation has become clearer in the last few decades. There is no doubt that our cerebral functions make us who we are.

We have recently learned that there are cerebral structures that become complete only after two years of age. The corpus callosum, with its millions of fibers connecting both cerebral hemispheres, takes two years to complete its configuration. This is crucial in explaining how a baby's bonding and attachment to his or her mother, or with those surrounding him or her, are "imprinted," so to speak, in the baby's anatomy. As recently stated by Dr. Enrique Probst in his paper "Psychoanalysis and Neurosciences," affection is the primitive producer of human motivation and is neuro-physiologically generated by signs similar to sensations, but that do not occur in the traditional sensory systems, but rather in limbic structures. The neurobiological activation of affections triggers motor stereotypes such as facial expression, posture, and tone of voice, which in turn transmit physical data that underlie empathy and emotional communication. In his work, Dr. Probst continues to state that these ideas generate the following hypothesis: the behavior and non-verbal communication of parents evoke, in children, the affections that guide character development.

Recently discovered mechanisms juxtapose the first human experiences (notably early bonding and attachment with the mother) with cerebral plasticity, by which anything that is learned creates an anatomical change in the brain.

From this perspective, Probst states the relevance of recalling the fact that the neurological development of the pre-frontal cortex is completed around the age of 20.

I have referred to the mentioned work in rather broad terms, to explain and understand that the brain is the integrating center of our psychological world – our psychical apparatus, as so brilliantly conceived by Freud.

In our brains, we perceive our surrounding social reality; there, our thoughts, reasoning, character, and behavior are produced.

This being said, I will now make reference to some nervous centers and later to other biological factors connected with aggressiveness and violence.

Aggressiveness is governed by the various brain levels from the hypothalamus, located at the lower part of the brain, to the cerebral cortex.

In the limbic and emotional circuits, the tonsillar plexus regulates aggressiveness.

Injuries experienced by monkeys and cats in laboratories attest to the importance of these cerebral areas, as well as the hierarchy of the top level of control located in the pre-frontal cortex area. Patients affected by cortex injuries may become aggressive, irritable or violent.

Neurotransmitters (knowledge about which has led to the extraordinary work of psycho-pharmacology) are another site for many neurophysiological processes of aggressiveness.

Serontonine is particularly important in modulating aggressiveness, as well as dopamine, and the ascending dopamine tracts. These links between aggressiveness and biochemistry are very important, since we hope to work on these areas using the corresponding medication, which we hop will be more effective than what we currently have. There are also other areas related to endocrinology. High testosterone and low blood glucose levels generate or increase aggressiveness.

In terms of hereditary factors, recent studies cited by Cadoret and Col have used three different perspectives to examine genetic factors related to aggressiveness and violence. The first perspective includes studies on families, twins, and foster homes, establishing factors that are genetically transmitted and connected with these behaviors. The second perspective includes studies of adopted children, where socio-environmental elements clearly interact with genetic elements, implying that both circumstances—environmental and genetic—are required for the development of aggressiveness.The third perspective includes the observation that the biochemical mechanisms associated to aggressiveness come from specific genes in animal models, thus confirming that there are physiological mechanisms similar to those of human beings.

The development of aggressiveness and violence

Although aggression occurs in contexts such as antisocial behavior, substance abuse, and criminal behavior, it is advisable, for the purposes of this study, to isolate aggressiveness.

This behavior is rooted in the inherent aggressive instinct of the human race (if not the entire animal species), and develops in human beings in ways that make it very useful to study. Petit is one individual involved in such work.

Aggression can be described as an act that injures or hurts another person, and which, in extreme circumstances, ends up in a violent act. We are likely to find its roots in aggressive interpersonal relationships in early childhood, connected to the child's family environment and peers.

There are ample, widely-known descriptions of the child's early relationship with the mother. These have been enriched by Otto Kenberg, who describes four development stages in the object relationships ranging from early weeks of life to 18-24 months of age. The author states that the response that the infant receives by crying, which is a biological, physiological manifestation, depends on the mother's attitude.

From that moment on, the child develops in a very particular way in each case of object relationship. According to Kenberg, it is at this stage of object relationship that the individual acquires pathological characteristics that determine the mental pathology he or she will develop in childhood, adolescence or adulthood. Depending on how upset the relational installation may be, the individual will show disorders at the lower, medium or higher levels. Kenberg established this classification mainly in order to study psychotic, narcissistic, borderline, and neurotic conditions.

There is much post-Freudian literature in English on this first stage of human development.

Returning now to the subject of the development of aggressiveness, let us jump to twelve months of age, where the child is interested in the activities of his or her peers.

From the first year of life to preschool stage, we can observe the child's hostile outbursts manifested by small physical aggressions: the child usually hits or pushes his or her peers, often with his or her own body, and sometimes with objects; the same occurs at home with siblings of similar age. Parents and teachers in general try to control and regulate such outbursts.

Language development helps the child to inhibit his or her motor conduct and begin communication through language.

In turn, this allows the child to express aggressiveness verbally; the dimension and intensity will be ruled by the external inputs the child has received and which he or she has internalized, and how the child's budding psychical system will permit the externalization of hostile emotions. The censor structure, or its outlines, the superego, is already present in this stage, which is early, according to Melanie Klein.

The inter-systemic relationship between this, the ego and superego, will determine at that age, and during the rest of the child's life, the form of relationship, the quantum of aggression, and its externalization. Very young children begin realizing slowly, and much more so at school age, the manifestation of others that threaten their self-esteem and give rise to aggressive response.

The influence of parents and the family environment on the child's way of handling aggressiveness is well known. The determinant of how parents exert their authority and firmness in discipline and strictness, primitive behaviors condition child's management of aggressiveness and conditions permissiveness and the absence of limits due to the parents' passive acceptance of the child's inappropriate behavior.

The socialization of aggressiveness must take place in the family environment. If this environment is faulty, if there is no natural family environment, or if it is replaced by another, then the child's future changes radically.

Fixed patterns and stability of aggressiveness

The idea that there are fixed factors of aggressiveness is accepted. Longitudinal studies have shown that a high percentage of aggressive children (with pathological

aggressiveness) become antisocial and violent, and virtually all antisocial adults had behavioral disorders during childhood and adolescence.

Half of all children with antisocial behavior grow into adolescents with multiple features of antisocial personalities; half of them become adults with a clear-cut antisocial personality. Based on these elements, we can trace the path leading to chronic aggressiveness; the persistent path in the course of life which may begin early (in pre-adolescence) or begin in adolescence. The early beginning path is the most severe; those who take it may tend to become violent adults.

For the group that begins late, the prognosis is more positive: aggressions occur in adolescence, and their treatment and evolution are more favorable. There is a significant connotation between aggressiveness as a stable pattern throughout life, and the concept of personality disorder; these are precisely defined in accordance with the idea that they are personalities, structures with fixed behavior patterns.

Peer relationships as co-determinants of aggressiveness

Interaction with peers and children of the same age plays a leading role in the development of aggressiveness, starting at an early age and persisting in childhood, with particular emphasis in adolescence. There is evidence that alliances with others determine the style and quantum of aggressiveness. Acceptance or exclusion by peer groups is also closely linked to aggression. Social rejection by the peer group is more disturbing than acceptance. The selection of groups where aggressiveness and its maximum expression – violence – is perceived as a value, gradually orients behavior in that direction, making it stable and installing it as a fixed personality pattern.

Rejection by peers is liable to increase aggressive behavior, hamper learning of social skills, and impede the assimilation of appropriate knowledge that must be obtained during the school years and those that follow.

The network of friendships that these children make may be with people of similar characteristics them, who lead them to have behavior disorders.

According to the above statement, we may think that antisocial tendencies, including violent behavior, happen because of other juxtaposed factors involved. These factors include temperament and psycho-physiological reactivity connected to biological aspects; parental aspects, such as their position as regards discipline and the emotional evolution of their child; and the type of exposure and development with peers.

Some children are born into a world where behaviors established by temperament and psycho-physiological factors predispose them to develop defective parental behavior; thus, they finally go to school, they already have a social and academic handicap.

School experiences are very frustrating for the child. He or she is rejected by the peer group, and

sees his or her behavioral possibilities diminished.

The conjunction of these occurrences makes it difficult or impossible to learn how to face and successfully cope with social situation. It conditions mis-understanding of the intentions of others, and aggressive reactions, as the child cannot think about or weigh the consequences of his or her actions in the face of what is believed to be a provocation by the "OTHER" (peer, teacher or authority figure). For this reason, the child or adolescent may respond with aggressiveness or violence.

Psychiatric diseases in the child and adolescent

The issue is obviously of a medical, psychiatric, and psychological nature, and our role is to recognize, understand and treat child and adolescent diseases.

Diagnosis manuals contain an extensive chapter called "Initial disorders in early childhood, childhood, and adolescence." Out of all of the disorders, I will highlight three that directly pertain to the subject of aggressiveness and violence. The best-known is what is called the "disocial disorder," also termed "behavior disorder": its essential characteristic, according to the DSM IV [Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition], is a persistent and repetitive behavioral pattern of violating the basic rights of others or significant social standards appropriate to the age of the subject.

These behaviors are: aggression involving physical harm or threats to another person, which may cause loss or damage of property, fraud, or theft, and serious violations of social standards. These disorders cause a significant deterioration in social, academic or employment activities. This behavior may emerge at home, at school, or in the community. Disocial (or Behavior) disorder is virtually the same in antisocial adults. It is interesting to reflect on previous American terminology, which called it sociopathic behavior, and the French and German schools, which call it psychopathic, in the case of adults – that is, a disease of the psyche, as the European designation seems to indicate, or a social disease, as implied by its current name.

This problem is very fittingly analyzed by Otto Kenberg when he indicates that the diagnostic criterion adequately guides us to the childhood origins of this pathology of character, but blurs the distinction between the sociocultural and economic determinants of delinquency on the one hand, and the personality pathology on the other.

According to the author, there is a clear relationship between the specific constellations of early child development and the subsequent social maladjustment of the individual.

From the psycho-pathological standpoint, these children and adults exhibit another significant characteristic, which is the acute presence of narcissistic features in their personality. Their excessive self-centeredness and emotional superficiality with outbursts of insecurity alternate with their greatness and omnipotence, which

in some way prevents them from seeing reality, understanding the norm, and not challenging it. They have a tremendous inability to defend themselves from others, or establish empathy and commitment to others. In the previous chapter, we have already discussed the relationship of these patients with their peers.

When the adolescent comes a home that was broken early on, when he or she was unwanted by his or her parents, or single mother; when he or she did not receive sufficient love and care during early childhood, we understand that the adolescent-adult patient had no place to obtain empathic feelings towards others. What we still have to understand is that there are patients with these same disorders, and these same character features, who have not lacked this love and care.

Another psycho-pathological element to study is what occurs with the internal moral level of these patients. Do they have a superego? A hypertrophied superego that pushes them to do things? Or do they have gaps in that psychic structure? It seems that Kenberg adheres to the latter. Evidently it is a pathological superego shaped by very distorted parental imagos. Now, returning to the same issue, if there were no parental imagos, then these defects would be more understandable.

Attention deficit disorder is another child and adolescent disease related to our subject. As stated in the DMS IV [Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition], the essential characteristic of the disorder is a persistent pattern of non-attention and/or hyperactivity-impulsiveness, which is more frequent and severe than the one usually observed in subjects with similar development. Some symptoms may appear within the first 7 years, but the disease tends to be diagnosed late, mostly in the school years. According to the Manual, children with this disorder may not pay sufficient attention to details, and make mistakes by omissions in their school work or other endeavors.

Work can be messy, sloppy, and performed carelessly. These children tend to have problems in focusing their attention on their school, recreational and work activities, and it is difficult for them to see a task through to the end. Hyperactivity is involved because these children are restlessness and have difficulty staying seated and playing quietly.

In adolescents and adults, symptoms of hyperactivity take the form of restlessness and difficulty concentrating and doing quiet, sedentary activities. Impulsiveness is manifested by impatience, inability to wait, interference with and interruption of group activities. In both children and adults, the impulse comes without thinking, and the action is hasty.

These disorders generate a clinically significant deterioration in social, academic and working life. More often than not, patients show comorbity with a negative, challenging disorder, with a disocial (behavioral) disorder, specific learning disorders, and anxiety and mood disorders.

It should be noted that these disorders are long-lasting, and can precede school age, for which reason we must be very careful in the diagnosis. Although these disorders may diminish in adolescence and adult life, in other cases – although they are a minority – the disorders may persist throughout life. We should point out that psychiatrists who treat adults do not have a notion of the importance of this condition in adults, although there have been 2500 publications on the subject in recent years. I obtained this data from the article by Dalteg and Levander, who surveyed 75 juvenile offenders with hyperactivity syndrome and attention disorders.

All of these young people had behavior disorders, and 68% had attention deficit disorder. According to this survey, hyperactive subjects have a better psychosocial history, but more school problems, a greater tendency toward criminality, and worse social evolution.

The offenses committed are not particularly associated with violence, but rather associated with criminality; this syndrome is thus an indicator and predictor of delinquency. Another survey (by Guitlerman) carried out among adolescents retrospectively to childhood and prospectively to the age of 30, reveals the disease's long term evolution. By the age of 30, 30% of the patients had Attention Deficit Disorder, and 3% were in treatment.

In adolescence, patients with this syndrome committed more violent acts and were more impulsive than the control group. Guitlerman found greater social, family and environmental problems than in the control group.

Finally, as the last group of disorders whose genesis and evolution bear singular importance, I will mention the negativist challenging disorder whose most outstanding features are centered, according to the DSM IV [Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition], on a recurrent negativist, challenging, disobedient, and hostile behavior **pattern,** with behaviors such as outbursts of rage. These patients get into arguments and challenge adults, but their behavior is not against people or property; they do not cheat, or lie, as do the disocial patients (behavior disorders).

A common element is that the three disorders described above show significant rates of mental illness, such as antisocial disorders, mood disorders, and anxiety disorders, in the family background.

There are many reasons why the adolescents come to us for consultation, either on their own, or brought by relatives, or referred by the authorities of the institution where we work. However, the reasons that are the most frequent in these times are: substance abuse, including alcohol abuse; violent behavior in the family environment or in the social environment; adolescents who are victims of violence; juvenile delinquency; eating disorders, and so forth. I cite these behaviors or motives for consultation that are daily occurrences in the life of psychiatrists, because we immediately tend to wonder about the characterology, character traits and personality of the patients we

see for the above-mentioned reasons. We have to wonder about the individual's personality characteristics, determining them as precisely as possible, because this will allow us to make the prognosis. We must know if the adolescent who does drugs, does so to share an experience with peers, or if he or she will fall into drug addiction. We also try to determine and make a prognosis on whether the adolescent's violent behavior sublimates or indicates an antisocial disorder or criminal behavior.

At this diagnostic stage, we link the history of behavior problems (disocial behavior) and attention deficit disorder, if there were any, with an evaluation of the present and previous psycho-social environments.

Therefore, behind these diagnostic statements of Axis, we must look for the personality features of these patients, which, at an early or medium stage, often do not constitute a clearly defined personality disorder. These diagnoses should be placed in Axis II.

To collect data, it is necessary to carry out several interviews, through which we carefully explore the patient's biography, family and personal history, paraclinical studies, and interviews with relatives of school or coworkers. Thus we will determine the circumstances that will be recorded in Axis IV, pointing out the decisive importance of the "final" configuration of the psycho-social, socio-cultural, and socio-economic environments.

This must make us think about the importance of researching and clarifying the links that unite the pathology of the child-adolescent-adult. We must research these links between pathologies, and see in to what they depend on hereditary factors, genetics, and interaction between adults and children at an early stage. We must also research how psychiatric diseases evolve from childhood to adolescence, and to adulthood. In our milieu, Dr. Zamora studied 112 adolescents, and came to the following conclusions: the presence of aggressive and violent behaviors is the principal reason why an adolescent is referred to a psychiatrist's office. The history of these behaviors may be found in disturbing behaviors since school age.

Dr. Zamora finds that all of them have experienced some kind of abuse. Sexual abuse is liable to be found more frequently among low socio-economic groups. She concludes that the manifestations of violence among adolescents are the epiphenomenon of family violence.

The follow up on these patients in the long term in psychiatry and psychology, is like the anatomical-pathological study: we connect what is said in the context of this work to aggressiveness, violence and delinquency – greater knowledge about which will make prevention and treatment easier.

Proposed Preventive Measures

1. Promote family unity.
2. Make parents aware of their role as identification sources for the child.
3. Extend the concept that family characters surrounding the child, from birth to the age of at least 2

or 3, represent the child's entire world. From these family members, the child will obtain the foundations and the image that he or she will have of about the self and about others. Teachers, doctors, and various health-related technicians must know and screen behavioral, emotional or cognitive maladjustments, and refer the child to relevant experts.

4. If there are socio-cultural problems, or medical/psychiatric pathologies, spousal conflict, or a history of abuse in the child's household, then the multidisciplinary teams should learn about this, screen these problems, and treat them as early as possible.
5. As stated by Cherro, Musseti and Szabo, adolescents should be encouraged to meet in groups and assemblies to discuss their problems, generate self-help groups, and stimulate change in their parents or the institutions sheltering them. Activities that sublimate aggressiveness, inherent to human nature, should be fostered, with the promotion of recreation, group relationships, studying, stimulating curiosity, epistemophilic pulsions, sports, solidarity, sharing, and learning to love and build romantic relationships with positive parameters and family planning, looking forward to pregnancy and child-bearing.
6. The State should keep taking steps to reduce poverty rates and misinformation, and to protect those who do not have a family, or whose family does not provide sufficient containment and does not offer images for identification or possibilities for access to culture.

Comments:
Dr. Miguel Cherro

I feel honored to participate in this activity, through invitation by Mr. Bonasso. For many years now, I have had a personal relationship with the INAME. Through the Psychiatric Clinic, we developed a series of activities that go beyond our professional relationship as colleagues, to become a friendship, whose reciprocity has enriched us both. It is also an honor to review the presentation made by our friend, colleague and coworker, Prof. Esteban Gaspar.

What can be added to Dr. Gaspar's presentation? First, I wish to underscore this vision that Dr. Gaspar, as mental health specialist, has on the subject of violence and aggressiveness – which are issues that are not identical but are closely inter-related, because aggressiveness is inherent to human nature, while violence is not – redirecting responsibility to society. That is, stating that the responsibility of violence belongs to society. This means that we are all involved and called upon to remedy violence: it is a responsibility shared by all. We, the group of mental health workers, carry part of this responsibility, and we must assume it. We have to respond to this responsibility with certain attitudes.

I rise to the challenge posed by Prof. Gaspar in his presentation. I am going to express my opinion on this fruitful, rich and stirring presentation, which suggests a series of ideas while retaining the equilibrium of addressing issues that

have to do with biological, social, psychological, and family aspects, and with all technological developments. Therefore, it seems to me that from the point of view of equilibrium, his presentation manages to include all of the enormous and varied factors that intervene to cause violence.

I will sum up my perspective by addressing four major issues: the family and the group; a brief review of some disciplinary contributions that may be valuable to this goal; a reference to psychiatric pathology from the child's point of view; and finally a brief reference to prevention.

With reference to the family, I would like to talk about "resilience," an English term that may be translated as "resistance" and construed as the ability of certain individuals to cope positively with situations that may be negative to their normal development. Research efforts should learn from them to see what resources do these individuals have that should be promoted by specific policies. I have been particularly interested in these kinds of questions, and we have finally designed a research study on this subject, based on the contribution of British researcher Sand, who maintains that family groups – by dismantling violent messages – may counteract their effects as a valuable resource.

Based on this working hypothesis, we carried out a research study that has shown an action and measured a result in relation to violence. It was developed at a private school and is statistically documented. It was revealed that opening areas for reflection, spaces in which to talk things over democratically, intensely, and sincerely, without influencing, without suggesting, promotes the possibility of a group changing their conceptualization of violence. Therefore, the postulate that there are elements in the family group that may become antidotes to external violence in society and at home, is a proven fact for us. Likewise, we saw that one year after the work ended, the effect was lost; this is very interesting if we think in terms of mental health. Our other conclusion, drawn from a exploratory survey we carried out among 350 adolescents from varied social environments, some of which belonged to institutions in the sphere of the INAME, is that what all adolescents without exception claim most often, is the need to communicate with adults, which in our conclusions is imperative.

In another study, with adolescent mothers, we also statistically verified the importance of social support. What do I mean by this? We worked with adolescent mothers in underprivileged environments in our country, who bore their first child when they were younger than 17. We saw that the behavior of these mothers with their babies was hardly any different than that of older mothers, provided they had social support. Another factor which is statistically proven is the importance of the group, as mentioned by Prof. Gaspar.

Surely we have proven some things which are common knowledge, but we are doing it with numbers now. And I believe that, in mental health, we must get used to showing, in numbers, what has upheld from a theoretical perspective emerging from the clinic.

In this aspect of communication and group interaction, this research through a subject known as "narratives" is showing that, for a child, the narrative that the child's significant adults make is much more important than the actual traumatic episode that she or he may experienced.

With reference to research from the clinical point of view, I would like to add that many of Dr. Gaspar's statements are confirmed in the laboratory. I would like to focus in the concept of "social reference," which originated from a theoretical trend known as "bonding theory," where several authors are trying to operationalize the concepts, seeking to prove them through measurement. From this perspective, social reference is a characteristic inherent to human beings, pertaining to the mother-infant interaction, which could serve (metaphorically speaking) as the umbilical cord, which acts from a distance, through the eyes. It is a well demonstrated fact that an infant may have greater or lesser initiative depending on the social reference that the mother can transmit by a look or a gesture, without spoken language.

Another concept that they incorporate, and which is liable to become operational, is that of "emotional availability," which is conditioning in accordance with the style, characteristic, and quality of the infant's development. Bonding theory has predicted the type of relationship between a mother and child up until the child reaches the age of 9, which is a long time, for a theory that it still considered to be in the development. Based on these predictions – made using instruments such as the attachment interview, for example – we may predict the type of relationship that the mother will have with that infant, and thus we can act on it starting at pregnancy. The mother brings her own history of her relationship with her mother, a given "internal working model," but the interesting thing about this model is that it can be modified, precisely through this other type of significant bonding that takes place with other baby's reference adults such as the father, the grandmother, etc.

Another aspect that I would like to stress is one that Dr. Gaspar mentioned: "continuity-discontinuity" First, the continuity of the human being as a whole, from childhood to adulthood, which is a position that is not frequent among psychiatrists who treat adults. Fortunately, this is changing, and there is an increasingly closer relationship between the various disciplinary perspectives. Dr. Gaspar and I have worked together for many years now. I have also been carrying out other studies with twins, not to research genetic aspects but rather to show how parents' expectations of their children, even during pregnancy, can influence child development, particularly the type of relationship between parents and their children. This subject of continuity-discontinuity is extremely important, as pointed out by Dr. Gaspar: psychopathology considers that major disorders are originated in disruptions, in the rupture of continuities which are so important for the individual to fully develop.

I would like to briefly mention the words of Dr. Esteban Gaspar, on molecular genetics, which has motivated an interpretation of the

development model, the *transactional model*. This model involves the presence of determinant factors: genetics proper on one hand, and the environment on the other. Genetic information contained in the individual's body may or may not develop in accordance with the influence of the environment.

With respect to the characterization of psycho-pathologies or personality disorders in children, it is very difficult to anticipate or establish typologies at an early age. Only starting at the age of 18 is it possible to characterize disorders of this type; in some cases, they can even be characterized at 14. But we can anticipate conflicting models, or disturbance situations, which we can work to modify and temper.

Mainly, finding adequate emotional support, social support, from the group as a support space, may help to contain a situation with a possible conflictive future. We have examples of this, even in the INAME itself.

Finally, I wish to stress the importance of prevention and how it puts mental health workers in a different position. We must also more away from the individual care model and toward a population care model, without getting into the false opposition of different approaches.

We must all be responsible and cope with the massively emerging demand through an open attitude, seeking to "evaluate" the work of mental health professionals on this subject. We are obligated to submit our performance to constant evaluation at all stages of the professional practice (something that very much resisted, even in our own University) and much more so in this field.