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IMPACT AND RISK OF INSTITUTIONALIZED ENVIRONMENTS ON THE PSYCHO-EMOTIONAL DEVELOPMENT OF THE HIV-POSITIVE YOUTH

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Abstract

The purpose of the research is to highlight the impact of two aspects defining personal identity: the HIV/AIDS status and family background, on the individual self esteem of young people having grown up in a family or an orphanage environment.
We evaluated 93 young people from families and placement centers, both HIV-positive and HIV-negative, for a period of 12 months, from January to December 2013. We used the Self Esteem Inventory to evaluate their overall self esteem, as well as their social, family and school self esteem.
The age of the young people evaluated was between 14 and 25 years, with a mean age of 20.48 years; 33 of them were male (35.48%) and 60 female (64.51%); 49 individuals came from a family environment (52.6%), while 44 from placement centers (47.3%). More than half (53.7%) were attending or have graduated from high school. In 25.8% of cases, education was limited to primary school (4-8 grades), and we reported two cases of home-schooling. A percent of 18.27 of all young people had higher education, attending university or post-high school classes. Overall, self esteem is significantly lower in HIV-infected subjects from placement centers. The same goes for social self esteem. In family and school self esteem, the results are variable, depending on the influence that the HIV status and the growing up environment have on the young people.
Growing up in a placement center impacted negatively on the development of self esteem in young people, regardless of their health status. When adding to this situation a chronic disease such as HIV/AIDS, the proper emotional development of youth is even more endangered. This situation needs to be analyzed in order to fully support the development of all youth.

Key words: environment, HIV/AIDS, placement center, school, self esteem

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1. Introduction

The environment is a key issue in determining health, since it is estimated to account for almost 20% of all deaths in the WHO European Region (http://www.euro.who.int/en/health-topics/environment-and-health). The imbalanced sharing of people's exposure to – and potentially of disease resulting from – environmental conditions is powerfully correlated to a variety of determinants, which can refer to socio-demographic issues or particular sensitive human categories.

Involvements of decision makers to undertake environmental health variations should be based on an appraisal of the extent of these health impacts and on the identification of population groups that are most exposed or most vulnerable to environmental risks (WHO, 2012).

Nowadays, it seems that at least one research and policy dimension remains only a few investigated: the correlation between HIV/AIDS and the environment. This meeting point of HIV/AIDS and the environment generally could affect millions of people (Hunter, 2007; Manciuc et al., 2010).

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1.1. Context

The Centers of Disease Control and Prevention (http://www.cdc.gov/hiv/risk/) describe the infection with the human immunodeficiency virus, also known as HIV, as a predominantly cellular immune deficiency complex. AIDS, which is the acquired immune deficiency syndrome, is the most advanced state of HIV infection, which causes the immune defense system to crash, affecting the CD4 immune cells. This leads to central nervous system infections, opportunistic infections and tumors.

The infection is caused by the HIV retrovirus, which only affects CD4 - LT4 cell receptor and neural tissue, and multiplies in the presence of antibodies. HIV - 1 was first identified in 1983 by Luc Montagnier, followed in 1984 by Le Gallo. In 1986, a new HIV type, HIV-2 was also identified (Benea and Streinu Cercel, 2011).

HIV is transmitted through three direct paths - sexually, through blood, or vertically, in the womb - or indirectly - through the common use of syringes by infected drug addicts, from mother to child during birth, or through unsanitary medical instruments. The main risk groups are homo/heterosexual men with multiple intercourse, hemophiliacs, heterosexuals with multiple sexual partners, blood transfusion recipients, infants born of HIV positive mothers. HIV develops in the human body in six stages: (1) the incubation, (2) the asymptomatic infection, (3) the symptomatic infection, (4) generalized lymphadenopathy, (5) ARC (AIDS Related Complex), (6) AIDS. The incubation (1) extends over a period of 1-3 months. In this time the virus enters the blood stream and begins identifying and infecting CD4 cells. The asymptomatic infection (2) can extend up to 10 to 14 months, in which time the virus multiplies; antibodies appear after 6-12 weeks post infection. The symptomatic infection (3) is characterized by neurological, liver and skin infections. Stage 4 is the generalized lymphadenopathy in which there are at least three nodule groups identified, lasting more than 3 months. The lymphatic nodules are proof that the immune system is fighting pathogens. Stage 5, ARC (AIDS Related Complex), is characterized by weight loss and the presence of fever for more than a month. In the last stage, AIDS, opportunistic infections and tumors are already present.

Detection of HIV - specific antibodies is carried out by two methods: ELISA, and Western - Blotting assay. Negative results of these tests indicated the absence of infection, while positive results mark the presence of HIV in the blood. These tests can sometimes be negative in infected people, in the 6-12 week immunological windows (corresponding to the incubation period). Once the infection detected, the patient is counseled and informed of the importance of adherence to therapy. The medication prevents the spread of the virus in the blood, supports the immune system, and thus significantly extends the patient's life (Benea and Streinu Cercel, 2011).

1.2. HIV infection - psychosocial aspects

Jonathan Mann, former director of the Global HIV/AIDS World Health Organization, refers to three major global epidemics related to HIV: the first is based on the HIV that enters the community silently and unnoticed, as the infected person may not be aware of this throughout the incubation and even asymptomatic infection; the second is the AIDS epidemic, which occurs when the HIV infection causes a serious disease, making the infection "visible"; the third component is the social, cultural, economic and political responses given to the first two types of epidemics (Mann, 1987). "Sociological and epidemiological research on the AIDS phenomenon focus on the socio-cultural, demographic, economic and political dimensions and implications of this complex phenomenon, which began as a medical problem, but became a real and disturbing social problem" (Buzducea, 1997). This phenomenon refers to discrimination, stigmatization, blame, collective rejection, which prevents an effective fight against the first two types of epidemics.

1.3. Psychological profile of HIV infected young

The HIV/AIDS patient has a number of features that must be dealt with in a specific manner. Clinical practice has shown that most HIV/AIDS patients suffer from inferiority complex due to their physical appearance that has been altered by the side effects of some antiretroviral drugs (Manciuc et al., 2009). The impact of physical changes experienced by patients is significant in terms of emotional anxiety, depression, and stress. Physical incapacity, weakness, and being rejected by peers can cause low self-confidence. In order to carry out a normal life the patient must understand and be convinced that he/she can do the same activities as healthy people, and most importantly, he is or may be the same as all the other people around.

Research shows that the environment in which HIV-positive patients live, work or get treated has a major impact on the development of self-esteem (McGovern et al., 2002). Also, the stress of the current environment may cause a more rapid disease progression (O'Cleirigh and Ironson, 2007).

In Romania, more than two thirds of the HIV-positive population is made up of young people that have been infected in childhood, through unscreened blood transfusions (Buzducea and Lazar, 2008). They are the innocent victims of the pandemic. An impressive number of them were abandoned in orphanages because their parents' ignorance, poor living conditions or other disease-related disability, the rest remained in the family, where they had two essentially distinct types of

attitudes: acceptance and support, or blame and stigma - depending on the level of education of parents (Buzducea, 1997).

1.4. Young people growing up in placement centers

The main characteristics of an institutionalized child, whether abandoned at birth or in the first 4 years of life, are mental retardation, failure to establish deep relationships with other people, numbness of emotional reactions, aggression, low self-confidence, increased antisocial impulses, closely linked to emotional problems. Basic expressions such as smiling and crying are also affected and are less graphic. We can also identify tantrums, hyperactivity, passivity, extreme apathy, in some cases extending to autism. Even in relatively well-integrated and apparently balanced children, there is a diminished development and expression of feelings, as well as difficulties in establishing social contacts (Dumitrana, 1998).

The infection with HIV/AIDS adds a new level to this pattern of development. Youth grow up with stigma and their behavior changes in order to meet the negative expectations - weakness, emotional disabilities, lack responsibility, going up to the idea of innate criminal personality. In these circumstances, negativity seems dominant in post-institutionalized youth. Young people evaluate themselves in the same negative terms used by others, and each failure turns into incapacity, incompetence, and inability to overcome an obstacle (Dusek and Flaherty, 1981). Another frequently encountered aspect is the tendency for young HIV-positive institutionalized youth to have aspirations and make plans that are inconsistent with their personal capacities – thus setting themselves up to fail. Also, the fear of overcoming their social status, the fear of real or imaginary social stigma, the lack of confidence in one's self, as well as the attitude some people have towards them – all contribute to a negative self image and underestimation (Close, 2007).

Numerous studies have shown that descriptive attributes can influence impression on a person. Thus, if presented with positive traits of a person, the tendency is to perceive that person as pleasant. This is also true when the negative traits are presented. Even if we do not have direct contact with a group, we tend to attribute unpleasant features due to the fact that they are strangers (Coopersmith, 1967). This is how stereotypes are manifested. They occur when we perceive all persons belonging to a particular group as having the same characteristics. The effects can be serious, especially when a social group is perceived in a negative light. Stereotypes are very often used in relation with youth from shelters. Therefore, it is important to inform the community, raising people's involvement in actions concerning these children, meeting with them on a personal level.

Prior to 1989, children from orphanages in Romania were confused either with young offenders or with "street children", being a permanent subject of discrimination. Their existence was explained by the hypothesis of antisocial personality, family disorganization being related to the lack of affection. Changing this vision involves a new way of explaining the phenomenon by assigning social causes and focusing on the poor living conditions, as result of a faulty social structuring (Florescu and Frăţiman, 2000).

Prejudices about children/young people with HIV from orphanages are born from stereotypes that may or may not have a real basis. They operate on the principle of generalization by which group characteristics are assigned to every member, undifferentiated, a simplistic cliché of appreciation and categorization. Integration of youth in orphanages is difficult due to their habits, but also because of social representations related to these young people: social representations of attitudes and behaviors produce anticipation justifying against social norms (Usaci, 2003).

In this context, the purpose of the present research was to highlight the impact that two major aspects – HIV/AIDS status and family background (growing up in a family or an orphanage) induces on the individual self esteem.

A review of the research regarding the social and emotional development of HIV/AIDS infected persons and also the shaping of identity in institutionalized youth led us assume that both the HIV-positive status and growing up in an institutional environment have an impact on self-esteem. Studies have indicated that there is a specific pattern in terms of shaping the personality aspects of young people growing up in shelters and those living with AIDS (Parker and Aggleton, 2002). Self-esteem is one of the most important aspects of self-identity, and we expect that individuals who meet one or both conditions expressed above have a specific level of self-esteem, lower than the general population.

2. Method

We evaluated 93 young people aged between 14 and 25 years, for a period of 12 months, from January to December 2013. We divided the subjects into four different groups. A number of 25 subjects in the experimental group 1 (HIV infected individuals from families) were randomly selected from patients admitted to the department of HIV/AIDS in the Infectious Diseases Hospital Iasi, Romania. The 19 subjects in the experimental group 2 (HIV infected people from placement centers) were selected from the "Gulliver" Hospice Type Placement Center.

The experimental group 3 (uninfected persons coming from families) consisted of 25 randomly selected people from the following institutions:

- *Al. I. Cuza* University of Iasi, Romania, from the Department of Sociology, Sport and Physical Education, Geography and Geology;
- *Gheorghe Asachi* Technical University of Iasi, Romania, from the Departments of Civil Engineering, Electronics and Telecommunications;
- *George Enescu* University of Arts, Iasi. Romania, Department of Interior Design and Decorative Arts;
- *Gheorghe Asachi* technical high school, Iasi, Romania;
- *G. Calinescu* School no. 39, Iasi, Romania.

Subjects in the experimental group 4 (uninfected institutionalized persons) were a total of 25, and were recruited from the Placement Center, Iasi, Romania. We evoked two independent variables – the person's HIV status (positive/negative) and the person's growing-up environment (family/placement center). Our goal was to evaluate their individual and cumulated impact on the dependent variable – self esteem (Table 1).

Table 1. Variables and experimental groups in the study

Independent variable 1 / ***Independent variable 2***		***HIV status***	
		HIV +	***HIV -***
growing-up environment	family	experimental group 1	experimental group 3
	placement center	experimental group 2	experimental group 4
Dependent variable		**self esteem**	

To measure self-esteem we used The Self-Esteem Inventory (SSI), developed by the Center for Applied Psychology in France, based on a study of the origins, implications and correlations of self-esteem. The instrument was designed to measure self-esteem on four levels: social, family, personal and professional (or school). There were 58 items that describe feelings, opinions and reactions. Most items come from the Dymond Rogers scale (Rogers and Dymond, 1954).

There are two forms - school and adult – for which compiling the inventory is the same:

- The overall scale: 26 items (1, 3, 4, 7, 10, 12, 13, 15, 18, 19, 24, 25, 27, 30, 31, 38, 39, 43, 47, 48, 51, 55, 56, 57).
- Social scale: 8 items (5, 8, 14, 21, 28, 40, 49, 52).
- Family scale: 8 items (6, 9, 11, 16, 20, 22, 29, 44).
- Work / school scale: 8 items (2, 17, 23, 33, 37, 42, 46, 54).
- Lying scale: 8 items (26, 32, 36, 41, 45, 50, 53, 58).

For the purpose of our study we used the school form. All the subjects completed the questionnaire individually. In group 1, 2 and 4 the psychologist was sometimes asked to read the questions aloud and to explain their meaning, depending on the education level of the persons.

3. Results

3.1. Study sample

We evaluated 93 young people, with a mean age of 20.48 year (Fig. 1); 33 were male (35.48%) and 60 female (64.51%); 49 came from a family environment (52.6%) and 44 from placement centers (47.3%). As for the level of education, more than half (53.7%) of the young people were attending or had finished high school. In 25.8% of cases education was limited to primary schooling (4-8 grades), and we reported two cases of home-schooling. 18.27% of all young people had a higher education, attending university or post-high school classes.

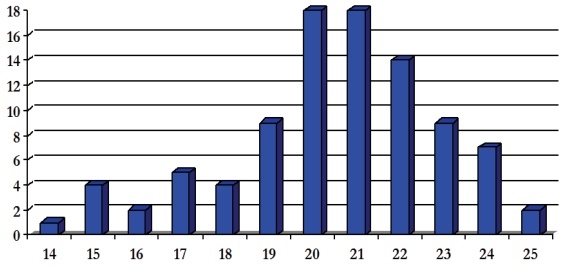

Fig. 1. Distribution of subjects according to age

3.2. Impact of the HIV status and growing-up environment on the Overall Self Esteem

There are significant differences between the results obtained by the institutionalized youth and the ones growing up in families, on the Overall Self Esteem. The independent variable "growing-up environment" affected the subjects' results on the dependent variable **Overall Self-Esteem**, as following:

- HIV positive youth from placement centers had a significantly lower overall self esteem than HIV positive youth form families ($p = 0.001 < 0.05$);
- HIV negative youth from placement centers also had a significantly lower overall self esteem than HIV negative youth form families ($p = 0.002 < 0.05$).

Regarding the impact of the second independent variable, **HIV status**:

- comparing youth from placement centers, HIV positives had a significantly lower overall self esteem score than HIV negatives ($p = 0.008 < 0.05$);
- comparing youth growing up in families, HIV positives had a significantly lower overall self esteem score than HIV negatives ($p = 0.004 < 0.05$).

After performing a Test of Between-Subjects Effects specific to SPSS, we observed that, even though each of the independent variables had an impact on the subject's level of overall self esteem, there was no cumulated impact ($p = 0.380 > 0.1$).

3.3. Impact of the HIV status and growing-up environment on the Social Self Esteem

There are significant differences between the results obtained by the institutionalized youth and the ones growing up in families, on the **Social Self Esteem**. The independent variable "growing-up environment" affected the subjects' results on the dependent variable Social Self-Esteem, as following:

- there was no significant difference between HIV positive youth growing up in placement centers and families, regarding social self esteem ($p = 0.278 > 0.1$);
- HIV negative youth from placement centers had a significantly lower social self esteem than HIV positive youth form families ($p = 0.001 < 0.05$).

Regarding the impact of the second independent variable, "HIV status":

- comparing youth from placement centers, there was no significant difference between HIV positives and HIV negatives regarding social self esteem ($p = 0.744 > 0.05$);
- comparing youth growing up in families, HIV positives had a significantly lower social self esteem score than HIV negatives ($p = 0.011 < 0.05$).

There is also a cumulated effect of both independent variables' interaction on the subjects' social self esteem ($p = 0.011 < 0.05$)

3.4. Impact of the HIV status and growing-up environment on the Family self esteem

There are significant differences between the results obtained by the institutionalized youth and the ones growing up in families, on the Family Self Esteem. The independent variable "growing-up environment" affected the subjects' results on the dependent variable Social Self-Esteem, as following:

- HIV positive youth from placement centers had a significantly lower family self esteem than HIV positive youth form families ($p = 0.000 < 0.05$);
- there was no significant difference between HIV negative youth growing up in placement centers and families, regarding family self esteem ($p = 0.030 < 0.05$).

Regarding the impact of the second independent variable, "HIV status":

- comparing youth from placement centers, HIV positives had a significantly lower family self esteem than HIV negatives ($p = 0.003 < 0.05$);
- comparing youth growing up in families, there were no significant differences between HIV positives and HIV negatives regarding family self esteem score ($p = 0.030 > 0.1$)

3.5. Impact of the HIV status and growing-up environment on the School self esteem

There are significant differences between the results obtained by the institutionalized youth and the ones growing up in families, on the School Self Esteem. The independent variable "growing-up environment" does not influence the results on the dependent variable "school self esteem", in the sense that there are no significant differences between the results of subjects from orphanages and those from families in the variable ($p = 0.120 > 0.05$ for HIV+; $p = 0.344 > 0.05$ for HIV-). However, the independent variable "HIV status" does influence the results on the dependent variable "school self esteem", in the sense that there are significant differences between the results of infected and uninfected subjects.

- comparing youth from placement centers, HIV positives had a significantly lower school self esteem than HIV negatives ($p = 0.009 < 0.05$);
- the same can be said when comparing youth growing up in families – HIV positives had a significantly lower school self esteem than HIV negatives ($p = 0.043 < 0.05$).

4. Discussions

After analyzing the results, we conclude that HIV positive young people have a lower level of overall self esteem compared with uninfected youth. Both young people from families and from placement centers recorded significantly lower scores in cases of HIV infection than in the absence of disease. Family support is the main factor influencing family self esteem, as there are no significant differences between positive and negative youth that grew up in a family environment. For young people from placement centers, there are differences in scores, lower averages having been obtained by HIV-positive youth.

These results regarding family self esteem can be explained by analyzing the main causes of child abandonment in Iasi and the quality of maintained family ties. In the case of HIV-negative youth from the "Ion Holban" Placement Center, their parents' decision to give them up as babies was mainly motivated by poor living conditions, the inability to ensure a decent living, and rarely because of certain neuro - and locomotive disabilities. For the HIV-positive youth living in the "Gulliver" Hospice Type Placement Center, the situation was different, because most of them have been abandoned prior to their diagnosis, the main reason being their parents' ignorance and fear in the face of the unknown and threatening disease that was HIV/AIDS. These very different situations determined the young people's attitudes towards keeping in touch with heir family, and also shaped positive or negative emotions about them. Since self-esteem refers to the perception of their competence to cope (Branden, 2001), parental attitude is, in the case of HIV positive children, the main factor that shapes and strengthens negative beliefs about their ability to maintain significant relationships with their parents, being loved and accepted.

In the case of school self esteem, young people living with HIV/AIDS recorded low scores,

regardless of their growing-up environment. This can be explained by two specific characteristics of the infection. First of all, poor administration of the antiretroviral treatment allows the virus to penetrate into the central nervous system and affect the brain structures responsible for attention, memory, and focus on intellectual tasks (Dorobăţ et al., 2008). The students recorded poor school performance, which caused them to form a negative image of themselves. Second, the HIV-positive child faces discrimination ever since the beginning of school (Wigfield and Eccles, 1994). Parents or caregivers are required to inform the school doctor or nurse (Astarastoae and Stoica, 2000), which not always respect confidentiality, especially in rural areas, where gossip is the main means of circulating information. Thus, children are stigmatized by teachers who can convey their attitude to other children; this creates a tense learning environment in which good school results fail to appear. In rural communities, where there is sometimes a lack of proper medical education and scientific understanding, children are often forced to drop out of school due to such extreme discriminatory manifestations.

Our results also show that, regardless of their HIV status, young people growing up in placement centers have a lower overall self esteem. Differences emerged regarding social self esteem, where the tendency was manifested only in HIV-negative persons. HIV-positive youth, however, recorded similar levels of social self esteem, with no significant differences between subjects growing up in different environments. Social self esteem emerges by comparison with persons of the same age, by interacting with them, by dealing with various situations involving interpersonal relations and solving them (Baumeister, 2003; Leary 1990). However, HIV-infected young people often wear the stigma of their disease in these social interactions; this stigma is either imposed by society, and perceived as such by its members, or it is felt only by the individual, that reacts in line with expectations derived from it.

5. Conclusions, limitations and perspectives

The most important limitation of this study was the instrument used to measure self esteem – the *Self Esteem Inventory* (SSI). Even though we have used SSI in the school form, practice has shown us that a number of items were difficult to understand by the subjects. These items contain negations that are difficult to answer (for example It 1. "Generally, I do not worry"), or some neologisms (for example, in Romanian It 22 – *agasat* (annoyed), It 17 – *stingher* (lonely), It 56 – *a întreprinde* (to undertake)). Given the intellectual or school level of some subjects, they had difficulty in relating to these items.

To overcome this limit, we opted for reading aloud the questions for the majority of subjects (see Conducting research). Thus, we were able to identify problem items, but also to clarify the difficulties subjects had, in order to help them give their most honest answers.

Another limitation derives from the tendency subjects have to lie. This trend was measured by the *Lying Scale*. There was a greater tendency of presenting oneself in a favorable light in the case of youth from placement centers, whether HIV positive or not, due to a possible desire to please, to be accepted etc.

Although in this study we analyzed the impact of only two variables relied on self-esteem, we believe that this aspect of personality supports multiple influences from factors related to the individual. Future research could take into account the influence of educational attainment on self-esteem, the period of institutionalization, or the number of years the subjects lived with HIV / AIDS.

Research conducted with HIV-negative subjects from various categories, has shown self esteem to be relatively stable over time. Measurements taken in our research have evaluated the self-esteem in a single moment. However, given the specific topic discussed, and the major changes that occur in the subjects' lives at different stages of development, we believe that longitudinal studies are necessary, in order to observe self esteem at different points in the development of children, adolescents and young people to adult stage.

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