

# Health Care Needs Assessment in Juvenile Special Facility



## **Health Care Needs Assessment in Juvenile Special Facility**

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## **Abstract**

The Government of Georgia initiated reforms in the penitentiary system in 2005. Currently administration of health in the penitentiary system of Georgia is provided by the Ministry of Corrections and Legal Assistance, its structural unit – Penitentiary Department in particular.

As a result of a monitoring visit to the country ever since 2001 European Committee for the Prevention of Torture<sup>1</sup> (CPT) has been providing recommendations to the Government of Georgia to ensure development and implementation of an efficient health care policy in the penitentiary system. Recommendations to better ensure fulfillment of the right to health is reiterated in the subsequent years' visit reports of the Committee for the Prevention of Torture (see reports of 2004, 2007).

Considering data presented in these reports the Ministry of Corrections and Legal Assistance should make efficient steps in order to reduce public health risks in the penitentiary institutions. In this context significant consideration is given to minor convicts and their health care needs, as to the group most vulnerable to risk factors existing in the penitentiary institutions.

Presented study is an attempt to answer the question: what impact does the penitentiary system have on prisoners' health and what steps are to be taken to ensure adequate treatment, care and preventive measures.

## **Key words**

Health  
Juvenile penitentiary institution  
Medical services  
Juvenile Prison  
Minor convicts

## **Information about the Study**

The study is funded by the Open Society Georgia Foundation and implemented by the Georgian Center for Psychosocial and Medical Rehabilitation of Torture Victims - GCRT. The aim of the study was identification of main problems and needs in Avchala Juvenile' Correctional Facility; identification of factors preventing accessibility of medical services, study of these factors and analysis of their causes, identification

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1 CPT - European Committee For The Prevention of Torture - <http://www.cpt.coe.int/en/states/geo.htm>

of eradication potential and development of appropriate recommendations.

The study has been conducted according to the methodology developed in advance that comprised three instruments - 1. Questionnaire and analytical framework for the evaluation of health care organization in the institution 2. Questionnaire and a complex of medical investigations to study main parameters of physical health and case studies 3. Questionnaire and mental health screening test.

Methodology of the study has been developed according to international documents, considering national legislation and by-laws.

During the study information has been obtained by means of special questionnaires and in-depth interviews. Quantitative and other types of data were additionally requested from relevant institutions.

Qualitative data obtained in the study have been processed by means of recurrent generalization, whereas quantitative data - by means of SPSS methodology. .

# Part 1.

## Health Care Standards in Penitentiary System

### Main Principles

Accessibility of health care in the penitentiary system is ensured by various international standards. Most important among them is an International Covenant on Economic, Social and Cultural Rights ratified by the resolution of the Georgian Parliament as of 25 January 1994; it establishes the rights of every human being to the highest possible standard of physical and mental health. These standards equally relate to the convicts as to any other individuals, meaning that adequate medical services should be accessible to the convicts and these services should not be inferior to the standards established in the civil public health sector of the country.

This principle is strengthened by the Council of Europe Recommendation No R (98) 7<sup>2</sup> of the Committee of Ministers to Member States Concerning the Ethical and Organizational Aspects of Health Care in Prison, as well as in the third major report on the Committee activities of the Council of Europe Committee against Torture.<sup>3</sup>

In the same report of the Council of Europe Committee against Torture are formulated main principles that health care system in the prison should comply with:

**Medical care should be accessible to convicts; this primarily implies unlimited contact with a doctor** – immediately upon imprisonment the doctor should examine the convict without delay and take medical history; medical tests should also be performed if necessary.

- **The convict should be provided with adequate medical care** – prison's medical service should ensure the standard of treatment, care and rehabilitation equivalent to the standards that are accessible generally to patients in the public sector. Prison's medical service should comply with the medical standards adopted in the country. Special care should be given to provision of psychiatric service, as the risk of mental disorders among prisoners is considerably higher.
- **Principles of obtaining informed consent from the patient and maintaining confidentiality should be observed** – patients should be provided with comprehensive information about medical investigations, therapy, and prognosis for a disease. The convict has the right to consider information about his/her health

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2 RECOMMENDATION No. R (98) 71 OF THE COMMITTEE OF MINISTERS TO MEMBER STATES CONCERNING THE ETHICAL AND ORGANISATIONAL ASPECTS OF HEALTH CARE IN PRISON

3 3rd General Report on the CPT's activities – <http://www.cpt.coe.int/en/annual/rep-03.htm#III>.

with relatives or another doctor outside the prison. The convict has the right to refuse treatment. Confidentiality of medical information of the convict patients should be maintained.

- **Taking preventive measures** - role of the medical service of the prison is not limited to medical treatment of patients; it also involves provision of social care and preventive activities. Special care should be given to hygiene, prevention of communicable diseases and suicide, elimination of violence, maintaining of social and family relationships.
- **Humanitarian assistance** - among the convicts should be identified vulnerable categories that need special assistance. Special attention should be paid to maternal and child issues, minor convicts and individuals with personality disorders.
- **Professional independence** - obligation of the prison's medical personnel to provide convict patients with medical care often comes into conflict with interests of the prison's administration and security service. This often causes ethical problems due to which health personnel have to face tough choice. To avoid this it is necessary to ensure professional independence of the prison's medical staff. In any case medical performance should be guided exclusively by medical criteria.
- **Professional competence** - in addition, prison's medical staff should be equipped with relevant knowledge and skills in order to adapt medical practice to the risk factors caused by imprisonment.

**"European Prison Rules"**<sup>4</sup> is a significant instrument for consideration of health care organization and health rights in the penitentiary system. Third part of this document is concerned with health in prisons.

According to principles covered by the "European Prison Rules ":

- Prison's management should be protecting health of the patients under its supervision;
- Organization of the prison's health services should imply close collaboration with the state or general public health administration;
- Health policy in the prisons should be integrated and be in compliance with the national health policy;
- Health care services of the country should be accessible to the prisoners without discrimination on the ground of their legal status;

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<sup>4</sup> Recommendation Rec(2006)2 of the Committee of Ministers to member states on the European Prison Rules



- Health services in the prisons should be striving to investigate and cure prisoners' physical or mental disorders and deficiencies;
- The prisoners should be provided with all necessary medical, surgical and psychiatric services, including those provided in the framework of public health services;
- Each prison should be provided with the service of at least one qualified internist;
- Measures should be taken to ensure permanent immediate accessibility of a qualified health professional in cases of emergency;
- Each prison should be staffed by medical personnel adequately trained in health matters;
- Services of a qualified dentist and ophthalmologist should be accessible to every prisoner;
- Accountable to the doctor medical personnel or qualified nurse should be consulting prisoners as soon as possible after their imprisonment and providing them with required medical tests, apart from the cases when this is obviously unnecessary;
- The doctor or another competent person should be regularly inspecting, collecting information from other relevant sources and recommending the director on following issues:
  - a) Food and water – quantity, quality, preparation and delivery;
  - b) Hygiene and cleanness of the institution and prisoners;
  - c) Sanitary condition, heating, electricity and ventilation of the penitentiary institution;
  - d) Cleanness and adequacy of the prisoners' clothes and bed/linen.
- The director should consider reports and recommendations submitted by the doctor or another competent person, and in accordance with these recommendations take immediate measures for their implementation;
- Patient prisoners requiring specialist's care/treatment should be transferred to specialized medical institutions or municipal hospitals, if possibility of such care/treatment does not exist in the prison;
- Prison's medical service should ensure psychiatric treatment for all patients who require it and give special care to suicide prevention;

### ***Georgian Legislation***

According to Georgian legislation convicts' rights to health care in the penitentiary system is guaranteed by "**Code of Imprisonment**" (see article 24). Chapter XX of the Code (Organization of Medical Services) also defines main principles of control of convicts' medical services and health status.

Medical services for convicts are also regulated by the law of Georgia "**On Health Care**". The law protects patients in the penitentiary

system from any type of discrimination at the time of providing medical assistance.

The rights of imprisoned person to health is additionally stipulated by the law of Georgia **“On Patient’s Rights”** according to which the individual in the imprisonment before trial and in the penitentiary institution enjoys all those rights stipulated by this law that the patient has in the civil health sector. The restriction is concerned only with the right of the patient to choose a provider of medical service, though this decision could be appealed in the court.

Obligations of the subject of an independent medical activity providing medical service to the prisoners are regulated by the law of Georgia **“On Medical Activities”**.

Specific health issues of persons imprisoned in the penitentiary institutions are also regulated by laws of Georgia **“On HIV Infection/AIDS”**, **“On Psychiatric Aid”**.

# Part 2

## Health Care Organization in the Juvenile Special Facility

### ***Aim of the Study:***

The aim of the study is investigation and evaluation of health care system and the process of health administration in the minors' correctional institution, and development of relevant recommendations.

### ***Methodology***

The process of health care organization and administration in the minors' correctional institution has been studied by means of specially developed questionnaire (127 questions). 5 main fields were identified for the survey:

- I. Organizational structure and administration
- II. General/technical part
- III. Ancillary services
- IV. Data management, information and documentation
- V. Disease management and patient safety

Specific number of questions was dedicated to each field. Evaluation was made according to 0, 0.5 and 1-point scale:

1. Response to the question is positive (means that raised issue is completely settled, with existing documentary evidence) – 1 point.
2. Response to the question is not exhaustive (settling of the raised issue is initiated, or exists an order, resolution or their drafts; documents completely or partly reflect the initiated project) – 0.5 point.
3. Response to the question is negative (raised issue is not settled; it has not been considered. Or the response is positive, though relevant documentary evidence could not be presented) – 0 point.

The questionnaire and recommendations have been developed in accordance with international standards<sup>5</sup>.

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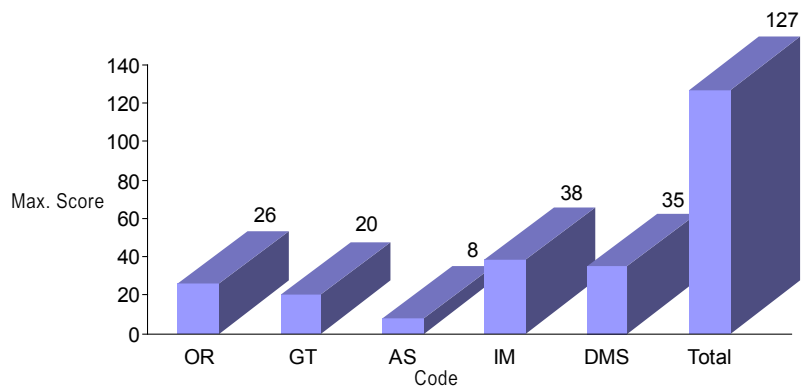
5 1986 Standards for Health Services in Correctional Institutions (second edition). Washington, DC: American Public Health Association;  
American Correctional Association 1990 Standards for Adult Correctional Institutions (third edition). Laurel, MD;  
1998 1998 Standards Supplement. Lanham, MD. Dubler, Nancy N. (Ed.)  
Joint Commission on Accreditation of Healthcare Organizations. 2000 2000-2001 Standards for Ambulatory Care. Oakbrook Terrace, IL;  
National Commission on Correctional Health Care 1996 Standards for Health Services in Jails. Chicago;  
1997 Standards for Health Services in Prisons. Chicago:  
2001 Hospital Accreditation Standards, Joint Commission Resources, Standards, Intends. Oakbrook Terrace, IL

## Results of the Study

Table 1 Results of the survey according to the fields of study presented in points and percentage

Field of the study	Code	Max. positive point	1 point	%	0.5 point	%	0 point	%
Organizational structure and administration	OR	26	8	31	8	31	10	38
General technical part	GT	20	8	40	1	5	11	55
Ancillary services	AS	8	3	38	2	25	3	38
Information management	IM	38	6	16	7	18	25	66
Disease management	DMS	35	6	17	16	46	13	37
Total		127	31	24	34	27	62	49

Diagram 1. Distribution of maximum positive responses according to the fields of study



OR - organizational structure and administration

GT - general technical part

AS - ancillary services

IM - information management

DMS - disease management and patient safety

Maximum positive points may be considered as targets to ensure efficient functioning of the health system.

Diagram 2 Comparison of maximum positive points with obtained through the survey actual points according to the fields

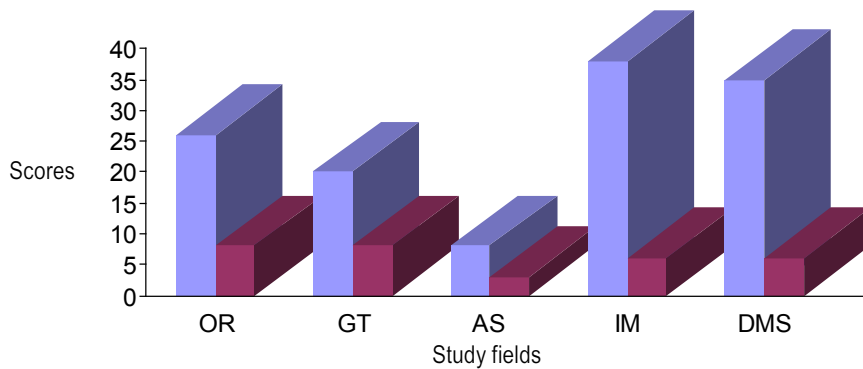
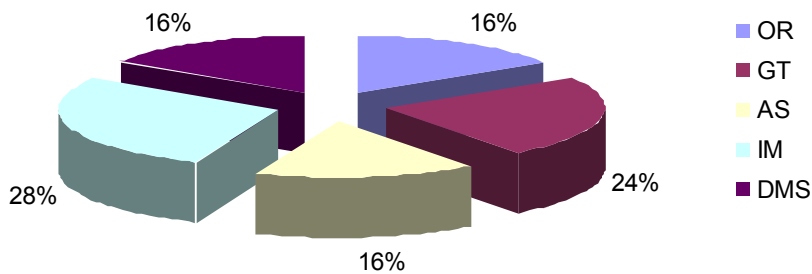
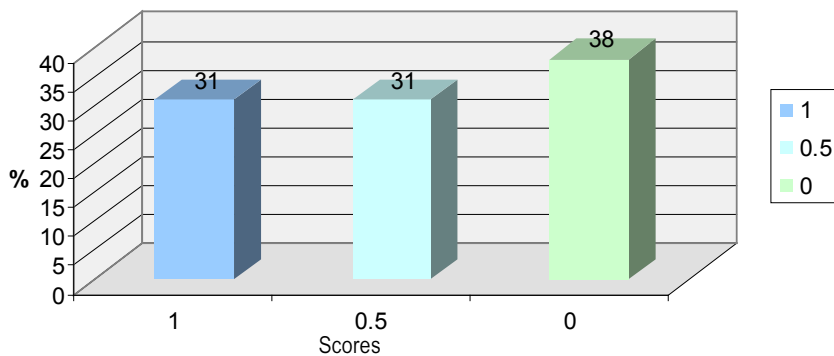


Diagram 3 Distribution of negative result percentage according to the fields



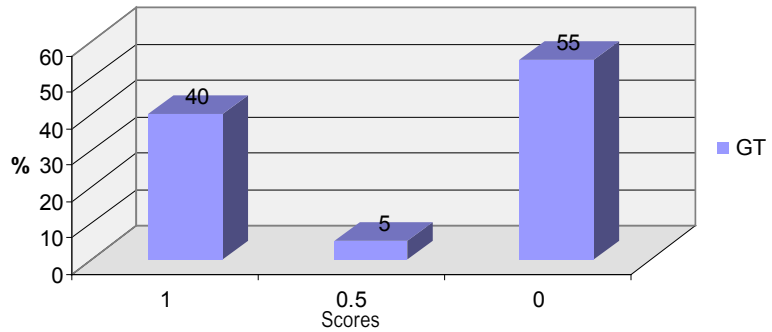
OR – organizational structure and administration  
 GT – general technical part  
 AS – ancillary services  
 IM – information management  
 DMS – disease management and patient safety

Diagram 4 Evaluation of the organizational structure. Positive, not exhaustive and negative responses (%)



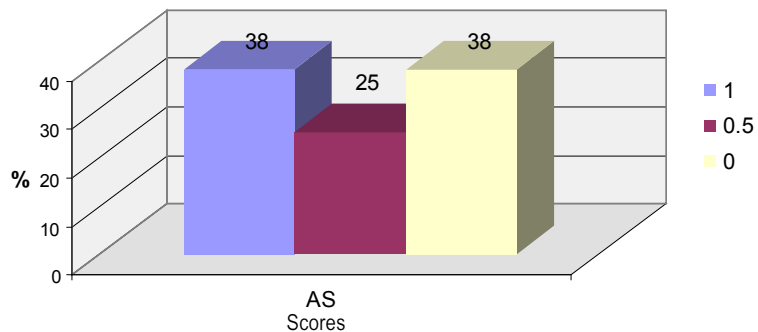
In evaluation of the organizational structure the responses to 1 and 0,5-point questions had equal percentage (31 and 31%). Frequency of negative 0-point responses was higher - 38%.

Diagram 5 General technical part. Positive, not exhaustive and negative responses (%)



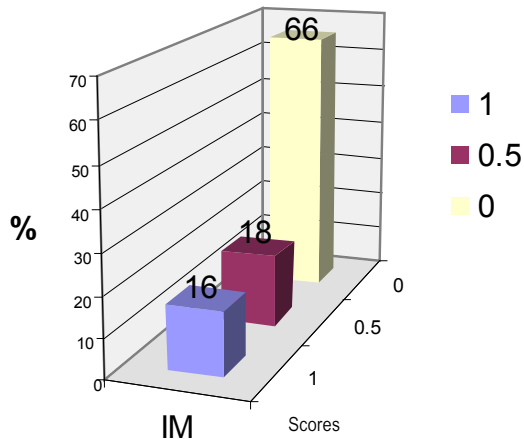
On the diagram 5, like on the diagram reflecting evaluation of the general administrative part, percentage of the negative responses exceed percentage of positive and incomplete ones, though in this case number of initiated and/or incomplete projects or plans (0,5-point) is significantly lower than the number of the implemented or unrealized administrative technical procedures.

Diagram 6. Ancillary services. Positive, not exhaustive and negative responses (%)



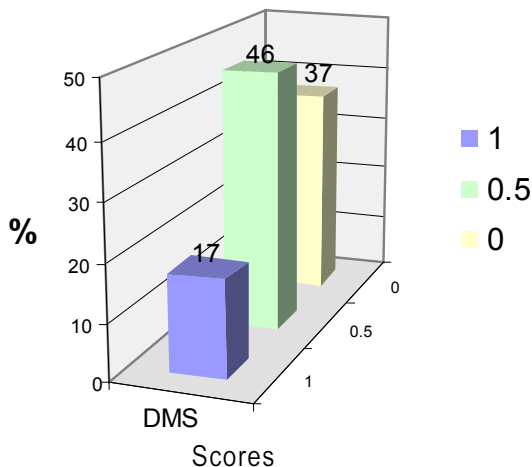
Evaluation of the Ancillary services revealed equal number of the positive and negative responses. 38% for negative responses is a poor result; moreover, the rest of 25% reflecting services that require significant effort worsens existing picture even further.

Diagram 7. Information management Positive, not exhaustive and negative responses (%)



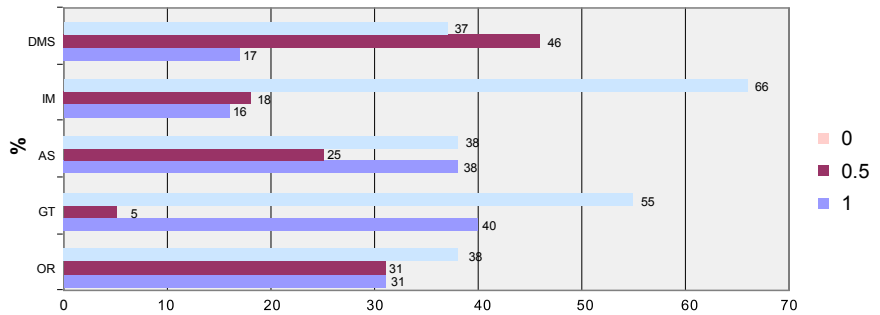
Frequency of negative responses concerning collection and storage of information, existence and analysis of standard forms significantly exceed positive ones; 66, 16 and 18 % respectively. Frequency of negative responses is equally high for paper-based and electronic carriers of information. Together with above the issue of administration and safety of standard information is a serious problem.

Diagram 8. Disease management and patient safety. Positive, incomplete and negative responses (%)



Frequency of incomplete issues concerning disease management and patient safety (46%) exceed frequency of positively (17%) and negatively (37%) evaluated administrative procedures, methodologies and activities. One of the main problems is the absence of modern standards and methods of disease management.

Diagram 9 Points distribution according to the fields (%)



OR – organizational structure and administration

GT – general technical part

AS – ancillary services

IM – information management

DMS – disease management and patient safety

The diagram reflects that the highest number of negative responses was received in the information management field – 66%, followed by technical field – 55%, organizational structure and ancillary services 38-38%; the lowest number of negative responses was received in the field of disease management and patient safety, though this indicator is also high – 37%.



## Recommendations for the Field of Health Care Administration

Code	Problem	Recommendation/standard	Implementation time-frame
OA. Organizational structure and administration			
OA.1	Organizational structure is incomplete, it is not presented as an organizational chart	Organizational structure presented schematically; links between the units reflects the hierarchy and accountability; it is easily perceptible for every employee	Short-term
OA.3	Competences of the staff are defined in general in orders, as well as in legislation, though descriptions of rights and responsibilities of the staff members, their job descriptions do not exist. Contracts for non-staff personnel do not exist as well.	Rights, obligations, responsibilities and accountability described in detail (with identification of their forms and periodicity)	Short-term
OA.4	Accountability system is presented in standard forms, filled by the medical unit of each penitentiary institution independently and sent to the Medical Department of the Ministry regularly. The forms cover main epidemiological parameters. Data processing practice and use of obtained analytical results is not applied in other parts of the process.	Standard accountability system with: <ul style="list-style-type: none"> <li>• definite periodicity;</li> <li>• responsible person;</li> <li>• defined information area;</li> <li>• initial analytical conclusion</li> </ul>	Medium-term
OA.5	Implementation of management information system is planned. Clear methodology has not been developed. The project is coordinated by the Informational Unit of the Ministry. The administration explained that the project implementation has not been started and consultations with the Medical Department concerning this issue have not taken place.	Details of the methodology for planning and design of the information system is given below (IM):	
OA.5.1	Electronic management information system is not planned. Coordination with the Department in relation to this issue is inefficient; their needs assessment has not been conducted.	Management of the electronic information system should ensure: <ul style="list-style-type: none"> <li>• reliability of information;</li> <li>• prevention of errors and falsifications;</li> <li>• coordinated collection of information;</li> <li>• accessibility of information from one part of the system to another</li> </ul>	
OA.7	Decision-making process is not clear. It is not structured, centralized, and unclear what kind of decisions can the employee take on site in critical situations.	Hierarchy system of made decisions. Defined according to positions and rights and responsibilities. Defined, strategic, tactic and critical decisions at the departmental level. Who, Does, What	
QA.8	The department does not participate in budgeting process.	Participation of the department in the budget forecasting process of the Medical Department. Identified priorities, problems, weaknesses. Fulfillment of the previous budget; analysis	

OA.8.1	Pricing of services is not performed	Calculation, estimation of service (in total) and service episode. Preparation for cost analysis	Medium-term
OA.16	No quality program in place. Control is inconsistent, based on periodic case-review principle provided by so called disease control group. Agency for Regulation of Medical Activities of the Ministry of Labor, Health and Social Affairs considers cases under appeal.	Operational program for quality assessment. Defined person responsible for quality monitoring. Internal audit system. Developed criteria for quality monitoring. Development of quality goals, constant comparison with quarterly and annual goals of quality	Medium-term
OA.16.1 OA.16.2 OA.16.3	Does not exist ethics, drug, risk management committees	Ethics, drug and risk management committees, methodology, guidelines, standards, action plan, appointed responsible persons, set goals	
OA.16.4	The rights of convicts, as patients are protected by general inspection of the Ministry, social service of the Ministry and the administration for protection of human right. Their activities are not differentiated and it is unclear which one participates in which case.	Law on patients' rights studied by all staff members. <ul style="list-style-type: none"> <li>• Informed consent of the patient or his/her custodian ;</li> <li>• Involvement of the patient and his/her custodian in treatment decisions;</li> <li>• Protected right for adequate evaluation and management of pain;</li> <li>• Maintained confidentiality;</li> <li>• Safety;</li> <li>• Adequate communication (diagnosis and other medical issues)</li> <li>• Relevant documentation prepared</li> </ul>	Medium-term
OA.17	Medical staff does not have a library and access to the internet. No motivation system for CME, CPD	Medical library with necessary literature; the internet, accessibility of medical websites. Use of electronic materials for continuous medical education and development	
GT	General Technical Part		
GT.3.2	Calibration/testing of equipment is not performed	Studied technical characteristics of equipment; testing of equipment, regular calibration, metrology. Estimated operational costs	Short-term
GT.3.4	Availability of manuals for equipment use	Discovered and studied instructional manuals for equipment and technologies	
GT.7.2 GT.7.3	Central oxygen and ventilation are unavailable	Provision of at least oxygen pillow	Short-term
GT.9	Medical Department does not have independent pharmaceutical storehouse. Necessary supplies of pharmaceuticals are placed in a special cabinet in the doctors' lounge. They are replenished on a monthly basis according to consumption.	Additional electronic registration of pharmaceuticals/prices/supplies/consumption (according to diseases and patients)	
GT.9.1	There is no special storage for medical documentation. The documents are stored on shelves in the Medical Department.	Archive of medical documentation, coded. Codes are part of the information system. Electronic search system. A person responsible for storage of documentation and the archive administration.	

AS		Ancillary Services	
AS.1.1.	Medical Department does not have its own express-laboratory to perform at least routine tests. Small lab service provided through the donor funding comprises HIV testing.	Blood testing device, strips for testing glucose in blood and urine	
AS.3	The institution does not have a morgue; (only one case)	Separate room with medical table, where it would be possible to store a corpse during period of time stipulated in the law	
IM		Data Management, Information and Documentation	
IM.1	There are no special guidelines or detailed instructions developed for management of medical information, though information management is generally regulated by relevant order of the Minister of Justice. Types of documentation and special forms are specified by the recommendation of the Medical Department. See order and recommendations	Orderly methodology of medical information, following chapters are included in the guidelines: Data organization and analysis; Data clarification and interpretation; Comparison of internal and external information for producing reports; Reports of different types (individual, general clinical, organizational, statistical) Data confidentiality, safety, integrity; Unified definitions of data; Methods for obtaining information; Relevant expertise and means for transforming data into information and for analysis; Accurate and timely transfer of information; Adequate means for interpretation and integration; Coding system	
IM.4	The institution does not have information about immunization status of convicts. The institution does not manage and supervise process of immunization. Medical Department provides only anti-tetanus and anti-rabies vaccination when necessary.	Communication and obtaining information (according to patient's home address) on the patient's immunization status. Vaccination when necessary; supply of relevant vaccines	
IM.6	Information about treatment undertaken in other medical institutions is returned in the form of "discharge report". Not standardized	Standard form about treatment undertaken in other medical institutions.  Detailed description of investigations, interventions. Copies of X-ray, US-tests, CT and MRI scans. Standardized reports	
	There is no electronic database of medical records of the convicts. There is no any other electronic database for processing general medical data. Such type of database is unavailable to the Medical Department of the Ministry as well. Information that penitentiary institutions have sent to the Ministry stays on the papers, limiting possibilities of its use.	Electronic database of medical data. Information: passport data, medical (according to systems). Complete information about undertaken investigations and interventions. Possibility of integration of this information with administration and financial parts.	

IM. 11.1-11.9	Collection and processing of medical information is not performed; neither for medical, nor for financial and/or managerial purposes	Total number of patients (hospitalized, outpatient) according to years Main DRG groups Occupancy rate Bed occupancy by DRG ALOS ALOS by DRG Number of operations performed(annual) Mortality rate Mortality by DRG Acute and planned operations ratio Information on prescribed and used drugs	
IM.12.1	Medical service is not in touch with financial data and is involved neither at planning, nor at implementation levels.	Medical staff involved in the process of budgeting and target planning. Medical staff participating in pricing process	
IM.12.3	Evaluation of utilization is not performed.	Internal control of financial expenditure of medical services in relation to results and target indicators. Constant monitoring of utilization Utilization review process. Responsible person appointed	
IM.12.4-IM.12.1.1	Medical Department has scarce information for adequate financial administration	Calculated: administrative costs; equipment costs; costs of pharmaceuticals; costs of investigations; depreciation of buildings; depreciation of equipment; bed-day cost. Hospitalization cost	
DMS	Disease Management and Clinical Safety		
MDS.1	Clinical standards are unavailable in the institution. Medical staff is eager to be equipped with clinical guidelines and to participate in appropriate trainings!!! Diagnostic standards are not used as well.	In parallel with existing  Regular screening of skin diseases, oral health, TB; medical examination of physical status.	
DMS.2	Periodic health checks are limited to investigations upon admission to the institution and upon discharge from the institution. In other cases these investigations are performed when necessary. Following investigations are performed: 1. medical examination of physical status 2. TB test 3. psychological screening 4 HIV test (voluntary)	Waiting time identified reliably, based on adequate information.  Average waiting time for planned procedures - 3 days	
DMS.3	4-5 days when planned hospital services are needed. 2-3 days when planned outpatient services are needed.	Percentage of delayed planned operations, analysis of their possible causes	
DMS.3.1	Percentage of delayed planned operations is unknown	Percentage of delayed planned operations, analysis of their possible causes	
DMS.4	Doctor availability. Only two doctors; are not fully accessible, while shifts - once in 3 days - therefore, one shift without a doctor?	24-hour accessibility of medical personnel	

DMS.4.1	Average time from first presentation of disease to the doctor visit is not identified accurately (does not rely on data). With local doctors - the same day, with consultants - 2-3 days	Consultant accessibility in 1-2 days. Detailed analysis of time necessary for response to health need and provision of service. When necessity occurs - prescribed procedure of call, person responsible for notification. Pointing out notification, call, and time of doctor consultation.	
DMS.4.2	Physical accessibility of specialist is partly met.	100% accessibility of specialist in case of necessity. Responsible person	
DMS.5.1	Medical service does not have designated person to identify adequacy of prescribed/undertaken treatment	Operational quality assurance system; internal medical audit system; person responsible for monitoring	
DMS.6	Average time for preliminary diagnosis	Studied problem. primary diagnosis - 1 day, final diagnosis - 2-3 day (95%) cases	
DMS.9	Accuracy of diagnoses made by personnel (coincidence of their diagnoses with the diagnoses made in other institutions after referral) These data (since 2002) are not systematized.	Quality monitoring, evaluation. Analysis of diagnose accuracy, needs assessment. Relevant training	
DMS.14	No special training or study course for the personnel regarding management of emergency cases since completion of basic medical education.	Training/study course considering modern specificities and standards	
DMS.15	No resources and equipment necessary for emergency medical service. Only Ambu and bandage	Portable respirator, defibrillator, with relevant small resuscitation and surgical sets. Small sterilization room; trained personnel; responsible person	
DMS. 16	Blood supplies are not stored	Identification of ABO and Rh factor of all convicts upon admission. Blood supply or communication and provision in cases when blood is necessary. Person responsible for blood transfusion	
DMS.17	There is no official form of the list/supply of necessary first aid drugs, it is case-based (needs to be revised)	Defined list of first aid drugs (including adequate painkillers)	
DMS.18 -DMS.19	Internal and external quality systems are not functional	Established system for quality evaluation and permanent monitoring, regular evaluation by external auditors	
DMS.20-DMS.21	Patient safety standards are not developed	Patient safety is the priority. Standards of nosocomial infections, standards of safe treatment, intervention, transfusion. Regular trainings; person responsible for monitoring	



# Part 3

## Physical Health of Juvenile Convicts

### Methodology

Aim of the study was to investigate physical and mental health of juvenile convicts in the institution; study disease management and adequacy of existing medical documentation.

To achieve this in-depth study of the institution's medical documentation has been undertaken in parallel with identification of physical development data of the convicts. Specific group underwent clinical laboratory tests (complete blood count, fasting blood glucose, urinalysis, Mantoux skin test) and instrumental investigations (chest X-ray).

Following convicts were omitted from the study, in particular, those who: 1. refused to participate in the study and 2. were had to leave the institution due to various reasons.

As the study was limited in time, we considered it necessary to identify target group (N=94) out of the rest of 124 convicts; this was done using appropriate statistical method <sup>1</sup>:

$$(1) \quad n1 = \frac{n2}{1 + \frac{n2-1}{Pop}}$$

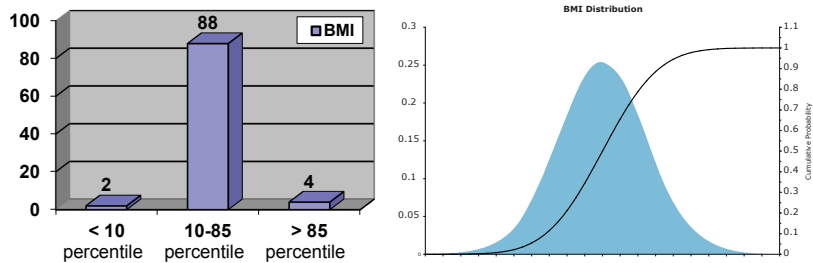
$$(2) \quad n2 = \frac{Z^2 * (p) * (1-p)}{C^2}$$

\* pop - target population, Z - z value (1.96, as pre-selected confidence level is 95%), C - confidence interval (4.99), p - response distribution (50%), n2 - primary sample, n1 - final sample

### General data on physical development

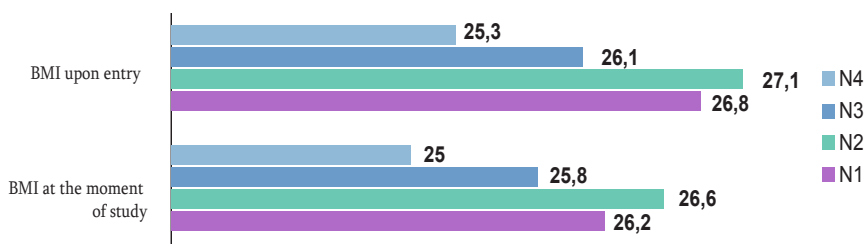
Data of physical development were compared to age-related standards adopted in the USA<sup>2</sup>, as similar statistical data for local population was unavailable. Mean age of the target group was 201.88 months (16.8 years), standard deviation - 9.74 months (0.8 years).

For the evaluation of physical development we applied identification of body mass index (BMI). This indicator enables to evaluate relation and correlation between body weight and height, and to identify deviations from the norm. Results of the study were distributed in following manner:



\* First diagram shows BMI distribution in the target group according to three categories (<10, 10-85 and >85 percentiles), second diagram reflects distribution of individual data.

Distribution of 95% of results was between 18.53 and 24.81 (average BMI - 21.67, standard deviation -1 .57), this corresponds to the age norm. Four cases of overweight were observed (BMI > 25.0) – this was also revealed at the time of admission to the institution. Progression did not take place. On the contrary, slight lowering of BMI was observed.



### Medical Documentation <sup>3 4 5</sup>

The institution uses a medical card that includes following information:

1. Convict's identification data (e.g. name, family name, DOB, etc.)
2. General data on physical development at the time of admission to the institution
3. Past medical history, including known physical and/or mental health problems
4. Records reflecting following information during the stay in the institution: major complaints, new diagnoses and/or undertaken therapy
5. Results of TB screening questionnaires
6. Results of clinical examinations, laboratory tests and instrumental investigations
7. Consultant records
8. Discharge summaries of hospital and/or ambulatory care undertaken during the stay in the institution

Medical card does not include information on physical and/or mental health screening undertaken upon admission to the institution and immunization status (it is noteworthy that at present special screening forms to be filled upon admission of the convicts to the institution are

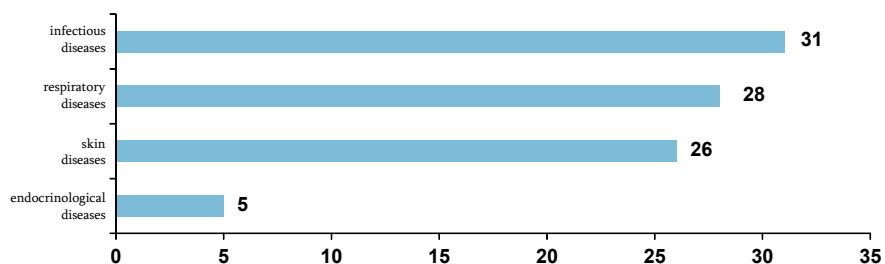


unavailable).

## Physical Health

Prevalence and incidence of the health problem in the target group

Disease	Incidence (2009 - June, 2010)	Prevalence (during the study)
Scabies (ICD 10: B86)	24	0
TB (ICD 10: A15-A19)	7	7
Acute upper and lower respiratory infections (ICD 10: J00 - J22)	26	15
Asthma (ICD 10: J45)	0	2
Pyoderma (ICD 10: L08.0)	25	0
Atopic dermatitis (ICD 10: L20)	1	0
Overweight (ICD 10: E66.9)	0	4
Increase in blood glucose level (ICD 10: R73)	1	1
Epilepsy (ICD 10: G40)	0	1



## 1. Infectious and Parasitic Diseases

### *Scabies*

Scabies was diagnosed in 25,5% of the convicts during their stay in the institution. Diagnosis and treatment in each case is timely and adequate, though rates of this infection (primary, as well as recurrent) indicate inadequacy of preventive measures, in particular: isolation of an infected convict for the first 8-12 hours of therapy onset and separate washing and drying of his linen and towels. Scabies “outbreak” management plan is not developed as well.<sup>6</sup>

### *Tuberculosis*

Penitentiary system is one of the significant risk factors for development of tuberculosis throughout the world. Therefore, TB management issues in the institution were regarded as one of the most significant topics of the study. According to current situation, TB screening involves filling of specially developed questionnaire and sputum analysis in the risk group revealed on the basis of the questionnaire results. This approach has not verified existence of the disease in any of the convicts.

For investigation of this problem in the framework of our study we applied internationally recognized approach to TB screening and diagnostics.<sup>7 8</sup>

After evaluation of TB risks (positive symptoms, questionnaire results, contact with TB patient) we revealed high risk group (N-16) that underwent TB skin tests (Mantoux tuberculin skin test). Positive response (>10 mm infiltration) was observed in seven convicts out of the 16. Chest X-ray has been performed to differentiate latent infection from active. In all seven cases we could not reveal radiological signs of active TB and therefore, latent TB was diagnosed.

№	Mantoux Test	Chest X-ray ± sputum analysis	Final diagnosis
017	12 mm	Negative	Latent TB
021	20 mm	Negative	Latent TB
022	25 mm	Negative	Latent TB
034	20 mm	Negative	Latent TB
043	25 mm	Negative	Latent TB
044	23 mm	Negative	Latent TB
053	23 mm	Negative	Latent TB

Thus, seven new cases of TB were verified that could not be identified prior to our study. Our study indicates clearly that only symptomatic screening by means of questionnaire at this stage is not sufficient for identification of TB cases. Likewise, given the specifics of the mentioned investigation, in case of positive symptoms only sputum analysis is insufficient for identification of TB cases.

## 2. Skin Diseases

### ***Pyoderma***

Pyoderma was diagnosed in 26,5% of the convicts during the stay in the institution; 12% of the cases are recurrent. Epidemiologically pyoderma is associated with complications such as acute post-streptococcal glomerulonephritis. One convict from the target group had this complication, although its association with pyoderma has not been studied.

7, 5% of convicts had both pyoderma and scabies during the stay in the institution. Pyoderma was also identified in 25% of patients with scabies. These data raise suspicion about existence of secondary bacterial infection as one of the leading causes of high rates of pyoderma.<sup>9 10 11</sup>

To test this hypothesis it is necessary to study epidemiological characteristics of pyoderma prior to and after controlling scabies in the institution.

### **3. Respiratory Diseases**

#### ***Asthma***

Convicts did not have asthma attacks during their stay in the institution. The diagnosis is solely based on medical history. The diagnosis has not been verified by spirometry; this makes validity of the diagnosis doubtful.

### **4. Endocrine and Metabolic Disorders**

#### ***Increase in blood glucose levels***

Increased blood glucose levels were identified during testing of fasting blood glucose in the target group. High figure of blood glucose (5.7 mmol/L) was verified by the repeat test. (Fasting glucose as well as glucose tolerance tests were performed). Management of this problem is based on 12:

- Lifestyle changes (correction of body weight, daily exercises of moderate intensity)
- Testing of blood glucose and glycosylated hemoglobin annually

### **5. Neurologic diseases**

#### ***Epilepsy***

One convict in the target group has epilepsy (ICD 10: G40) controlled with carbamazepine. Fits were not observed during the stay in the institution. In the framework of our survey we studied occurrence of the drug side effects; though these were revealed neither by symptoms, nor by laboratory tests.

## Recommendations - Physical Health of Juvenile Convicts

Problem	Recommendation	Responsible Unit	Implementation timeframe
The institution does not have special screening forms for the evaluation of convict's health upon admission; this fact hinders implementation of standardized medical care	Admission health screening form, developed and implemented	the Ministry, administration of the institution	?
The institution does not have a plan (initial and periodic) for evaluation of the convicts' health; this fact hinders implementation of standardized medical care	Convicts' health evaluation policy (initial and periodic), developed and implemented	the Ministry, administration of the institution	?
Immunizations relevant to age and environment of the convicts are not performed in the institution; this places them under high risk of infectious complications	Developed infection control policy, list of essential immunizations, and implemented immunization practice	the Ministry, administration of the institution	?
Dermatological infections prevail in the institution, both bacterial (pyoderma) and parasitical (scabies). Infection control plan has not been developed.	Scabies eradication plan developed and implemented. Relationship between pyoderma and scabies in the institution studied.	the Ministry, administration of the institution	?
Only specially developed TB symptom screening questionnaire is used for TB screening in the institution that is insufficient at this stage.	Re-evaluation of TB screening policy and implementation of Mantoux tuberculin skin testing practice (initial and periodic)	the Ministry, administration of the institution	?
Only sputum bacteriology test is used for TB diagnosis characterized by frequent false-negative results. Often verification of the diagnosis is impossible.	Standard and step-wise approach to TB testing and diagnosis, developed and implemented.	the Ministry, administration of the institution	?
Isolation of the convict at the period of TB diagnosis (e.g. positive result on screening) is impossible.	Infection control policy (including TB) developed and being implemented. Space allocated to isolate convicts with communicable infections.	the Ministry, administration of the institution	?
Convicts in the institution are under increased risk of infection with TB and their massive screening has not yet taken place.	Massive TB screening with Mantoux tuberculin skin test planned and implemented.	administration of the institution	?

## გამოყენებული ლიტერატურა

- 1 Bartlett, J. E., II, Kotrlik, J. W., & Higgins, C. (2001). Organizational research: Determining appropriate sample size for survey research. *Information Technology, Learning, and Performance Journal*, 19(1) 43-50.
- 2 National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000). <http://www.cdc.gov/growthcharts>
- 3 National Commission on Correctional Health Care Standards, 2008
- 4 ACA Standards for Juvenile Correctional Facilities, 2003
- 5 State of Montana Department of Corrections Policy No. 4.5.37 – Offender Health Record Format and Content
- 6 Clinical Practice in Correctional Medicine, 2nd edition by Michael Puisis, 2006 (pages 247 – 249)
- 7 American Thoracic Society (ATS) and CDC. Diagnostic standards and classification of tuberculosis in adults and children. *Am J Respir Crit Care Med* 2000; 161. <http://ajrcm.atsjournals.org/cgi/content/full/161/4/1376>
- 8 Prevention and Control of Tuberculosis in Correctional and Detention Facilities: Recommendations from CDC. *MMWR* July 7, 2006 / Vol. 55 / No. RR-9 <http://www.cdc.gov/mmwr/PDF/rr/rr5509.pdf>
- 9 Lawrence G, Leafasia J, Sheridan J, et al. Control of scabies, skin sores and haematuria in children in the Solomon Islands: another role for ivermectin. *Bull World Health Organ*. Jan 2005;83(1):34-42.
- 10 Skin disorders, including pyoderma, scabies, and tinea infections. *Andrews RM – Pediatr Clin North Am* – 01-DEC-2009; 56(6): 1421-40
- 11 Feldmeier H, Singh Chhatwal G, Guerra H. Pyoderma, group A streptococci and parasitic skin diseases -- a dangerous relationship. *Trop Med Int Health*. Aug 2005;10(8):713-6.
- 12 David M. Nathan, MD, Mayer B. Davidson, MD, Ralph A. DeFronzo, MD, Robert J. Heine, MD, PHD, FRCP, Robert R. Henry, MD, Richard Pratley, MD and Bernard Zinman, MD., Impaired Fasting Glucose and Impaired Glucose Tolerance – Implications for care. *Diabetes Care* March 2007 vol. 30 no. 3 753-759



# PART 4

## MENTAL HEALTH NEEDS OF JUVENILE CONVICTS

Special thanks to the pediatrician – Ms. Manana Elephterova and a psychologist – Ms. Thea Panchulidze, from Avchala Juvenile Facility, for their attentive support and professional cooperation. The aim of the survey was to identify the range of mental health needs of juvenile offenders/convicts residing in Avchala detention facility.

## **Research Methodology**

We proceeded from the position that while conducting the given pilot research within prison system, a two - stage procedure for identifying mental health problems should be used.

The above mentioned two - stage procedure for identification of mental health problems consists of initial screening (a patient's assessment by means of special questionnaire), which enabled to "filter" the selected number of underage group, pick out the persons who seemed to have more problems than others, and gain an approximate impression about the nature of the revealed problems (initial screening). During the second phase of the given procedure, in - depth interview, which gives us possibility to look into the problem more profoundly and evaluate severity of the problem better, is conducted according to the problems revealed in the initial screening blocks.

Before carrying out the described procedure, we decided to conduct the interviews with the main stakeholders - a pediatrician and a psychologist working in the given institution

### **Interviews with a pediatrician and psychologist**

The initial interviews with pediatrician and psychologist were conducted for identification of any formal diagnosis of mental illness, nature of it and the particular symptoms that a juvenile experiences, also details about any medication. We have inquired about any contact with, or referrals to, mental health services. The psychologist was asked about the observed patterns of MH problems in in-mates.

The information that was provided was recorded and used also during interviews with juveniles.

### **Brief description of the instruments / questionnaires**

The questionnaires were elaborated in Great Britain on the basis of widespread ASSET<sup>6</sup> instruments, which were translated and retranslated back, adapted and added special block for the purpose to reveal behavioural disorders and antisocial personality disorders.

The brief primary questionnaire represents the instrument consisting of 10 sections and is intended to exclude rapidly the existent disorder by means of leading 2 criteria of each disorder type (time of assessment 10 -15 minutes).

The questionnaire comprises of several blocks, in order to reveal the following mental health problems/disorders:

*Alcohol abuse, drug addiction, depression, traumatic experience / post traumatic stress disorder, anxiety / excessive nervousness / stress, self - damage, conduct disorders and antisocial personality disorders, attention deficit and hyperactivity syndrome and psychotic disorders.*

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<sup>6</sup> Asset is a structured assessment tool to be used in England and Wales on all young offenders who come into contact with the criminal justice system. We have used SQIFA and SIFA screening interviews as a base for developing our instruments.



One of the blocks studies experience of the provided medical examination and treatment by means of “yes” or “no” answers; in all other sections the replies were evaluated through the three - point (0-1-2) rating scale, where 0 means “No”; 1 - “Sometimes” and 2 - “Yes, often”.

In each section 2 points were evaluated as the condition that requires conducting of a an in-depth questionnaire:

0 or 1 = no problem in this area.

2 or 3 or 4 = possible problems, full screening interview should be carried out.

Full screening interview implies in-depth study of the disorders mentioned above by focusing on symptoms manifested in the past 2 months.

Below is an example of one of the sections of the screening instrument - studying self-damaging behavior

Assess self - damaging behaviour: self - punching, self - beating, inflicting wounds to yourself, drug overdose ,jumping into water with the purpose of drowning, using firearms and etc.  
Related problems: assess depression, anxiety, post trauma stress in the appropriate sections (3, 5, 6).

During the last 2 months

Have you ever thought to inflict damage to yourself because of the experienced hardship? For example, after argument, or when you are extremely angry, furious, or after you got into trouble.

People inflict damage to themselves in different ways; they burn themselves, slash, cut and scratch their bodies, bash their heads against hard surfaces or hit the wall. Have you ever tried to do anything like this? Frequently / how often?

Have you ever decided or tried to commit suicide or inflict damage to yourself? Frequently / how often? What happened after this?

Have you ever desired to commit suicide? Are you thinking of committing the same action now?

<b>Change motivation</b>	<b>Not at all</b>	<b>Minor problem</b>	<b>Considerable problem</b>
<b>Does it disturb you?</b> Ask a question / confirm with everybody (If the respondent has no motivation at all, move to the next section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you are offered help, would you accept it or not?	No <input type="checkbox"/>	It is possible <input type="checkbox"/>	Yes <input type="checkbox"/>

**Provided care / help**

How do you think, have people tried to help?  
What kind of aid have you been provided with from your family members, friends?  
What assistance have you been rendered from specialists?

Working with the given instrument took approximately 45 - 60 minutes - to fill all the sections; but in most cases the adolescents had problems in the 1 - 2 or 3 blocks, thus there was no need to fill out the entire forms.

Each young person was given the opportunity to discuss all issues raised by the Screening Tool. It was made clear to each young person that they are not required to disclose any information that they do not want to discuss during the screening interviews.

A young person could opt out of the interview at any time if he decided he did not want to participate. The best interests of the young person were paramount at all times during the screening process.

It should be noted that the given instruments have already confirmed their reliability, validity and diagnostic benefit at the time of studying the mentioned above population.

### **Selection of the target group for the study/Sampling**

In order to evaluate the mental health needs of juveniles sampling was carried out using the same methodology as during the study of physical health needs of the juveniles.

Juveniles, who had to leave the institution during the research period owing to different reasons, were excluded from the selection process.

Juveniles, who refused to participate in the given research, were also excluded.

Out of the total amount of 124 juveniles, a sample of 94 was selected using the reliable statistical method (see Part I of the research). 3 juveniles refused to give their informed consent and take part in the research; therefore, 91 individuals took part in the study. among them in - depth interview was needed to be conducted with 65 (71,43%) adolescents. In total, 156 questionnaire forms were filled out.

### **Confidentiality**

Clear statements were made about who has access to information and where information is recorded.

We have explained that information obtained will not be used against the young person in any way, and survey will be used for improving MH services in general.

It was important to clarify that one was required to share information if a young person is at risk to themselves or others, or if they are at risk of abuse by others.

### **Coding system and anonymity**

This refers to a unique identification number for each young person.

Unique ID numbers were provided to each juvenile by simple method of placing three - digit figures (001 - 002- etc.) along the line of his surname in the list that the pediatrician prepared in advance. The names and surnames were not written in the questionnaires - they were processed anonymously.

## The procedure

The given research was being carried out in June – August of 2010, directly in the Juvenile Special Facility

After obtaining the appropriate permission, the research goals were presented to the pediatrician and the psychologist. Special training was carried out on using the research instruments in order to provide them with possibility to be able to conduct the interview independently. The main principles such as, confidentiality, one - to - one interview without participation of other persons and etc., were explained. All the questions and provisions were discussed, coding rules were analyzed and method of filling in the questionnaire was realized.

The questionings started after the professionals' interviewing, when they identified the problems of those adolescents who have relatively severe mental health problems.

The researcher with the participation of the paediatrician or the psychologist carried out the first sessions. Afterwards they were working alone with juveniles. The following supervision sessions were provided on regular basis.

## Main findings

The research outcomes revealed that post traumatic stress symptoms and conduct and antisocial personality disorders are the leading problem areas among juveniles placed in the Special Facility.

## Outcomes

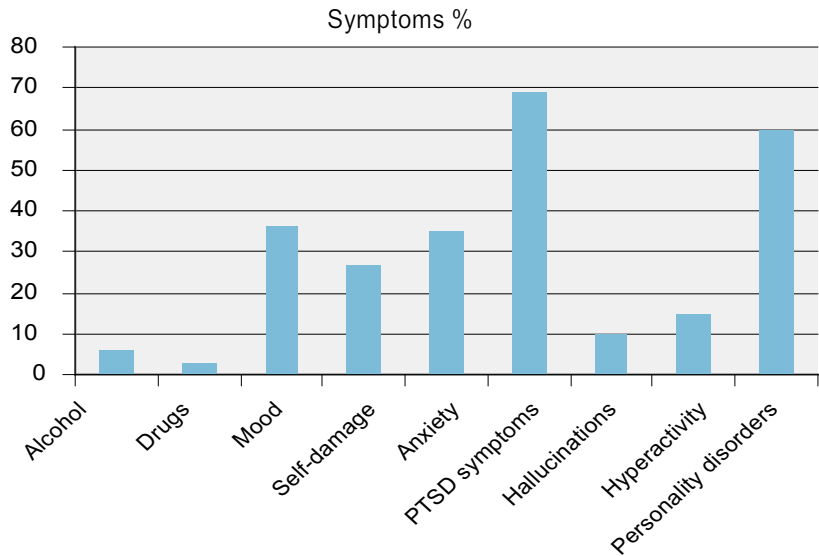
Post traumatic stress symptoms and behavioral and antisocial personality disorders were revealed among the research respondents at the highest frequency (see table 1). Alcohol and drug / substance abuse was revealed in the smallest amounts.

In 8 cases hallucinations, delusions and paranoid beliefs are revealed. Hyperactivity is characteristic for 11 adolescents and self - damaging behavior characterizes 18 adolescents; anxiety is typical for 24 respondents; low mood is also revealed in 24 adolescents.

Table 1. Allocation of the problem sphere frequency and percentage

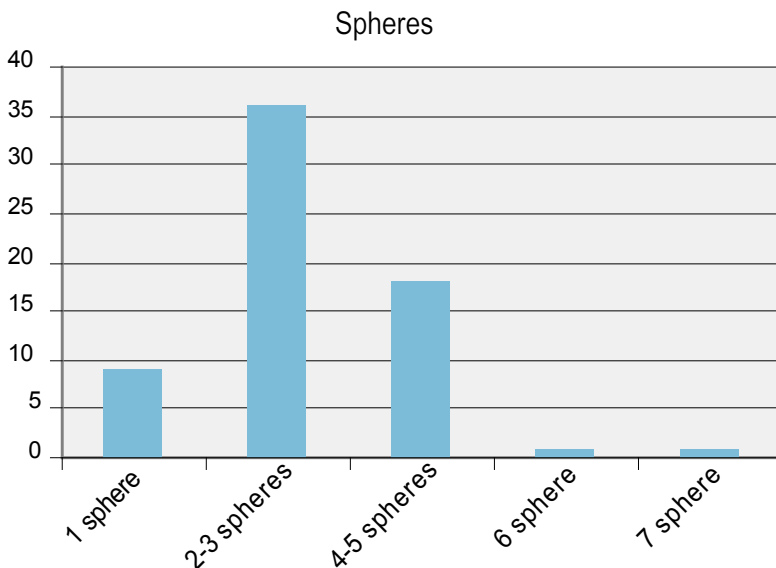
Problem spheres	Frequency	%
Alcohol	4	6
Medicines / drugs	2	3
Mood	24	36
Self - damage	18	27
Anxiety	24	36
PTSD symptoms	46	70
Hallucinations	8	12
Hyperactivity	11	16
Personality disorders	40	61

Diagram 1. Percentage allocation of the problem spheres



From among the mentioned above problem spheres not one but mainly several spheres can be simultaneously revealed in adolescents. Only in the cases of 9 adolescents just one problem sphere was registered, among them post traumatic symptoms in 6 cases; only one case of low mood, self - damage and personality disorders. In most cases adolescents (36 respondents) are characterized with 2 - 3 groups of problem spheres. 4 -5 spheres characterize 19 adolescents (see diagram 2).

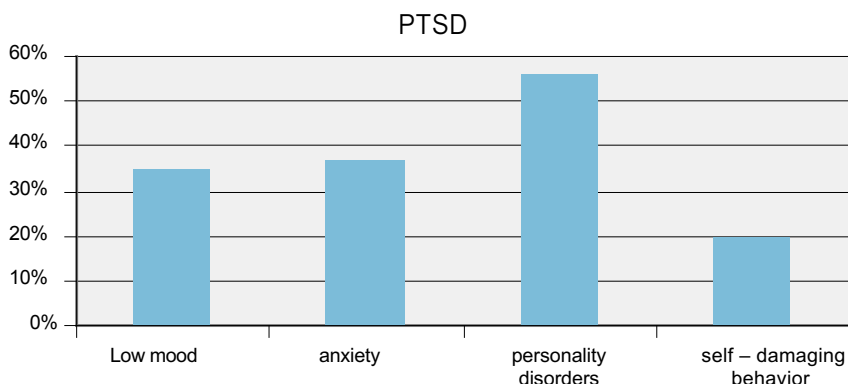
Diagram 2. Allocation of problem sphere frequency



Those adolescents, who are characterized with PTSD, are also frequently characterized with low mood (35 %), anxiety (37 %), behavioral and antisocial personality disorders (56 %), also self - damaging be-

havior (20 %). In our research selection the mentioned above problem spheres are in most cases revealed in complex.

Diagram 3. Percentage allocation of different problem spheres characterizing the adolescents having PTSD



### **PTSD and personality disorders**

Proceeding from the research outcomes, two problem spheres, which are represented in our selection as having the highest frequency - PTSD and behavioral and antisocial personality disorders, were selected for the detailed analysis.

### **PTSD**

On the first question of the PTSD problem sphere: “have you ever had serious and dangerous accident?” 68 % of the respondents states that have experienced such events. In the most cases the adolescents do not name the concrete case but, particularly, these accidents were generally as follows: death of close people and / or witnessing fact of family violence.

The adolescents have clearly defined different feelings at the time of thinking about the certain traumatic event. Most frequently they report that feel regret and sorrow in relation to the event occurred. Also various feelings / emotions, such as nervousness, anger directed towards themselves, offence, longing, aggression, shame, hatred, fear were named in relatively small amount. During the research one more small group was also revealed (4 respondents), in which replies having somatic content were unified: “when I think about it, I become nervous, my heart beats faster”, “while thinking of it, I begin slashing my hands”, “I suffer from low mood, can’t do anything and want to sleep”, “I start sweating and become nervous”.

Among the somatic complaints caused by post traumatic stress symptoms, mainly sleep - related problems are named, however, type of the problem concretely is not stated. In one case fear of darkness was named, in several cases the adolescents noted that they had nightmares: “I permanently die in my dreams”.

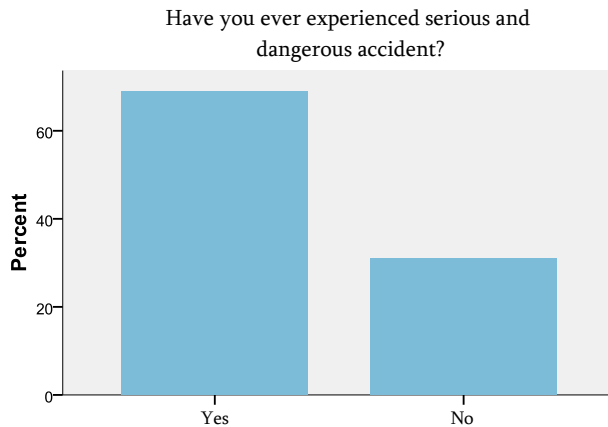
Two different types of answers of positive and negative content were mostly given by the adolescents to the question - “how all these affect

your life?" The answers having negative content outnumbered those of having positive content – “all these get on my nerves and annoys me”, “I’m sad and angry”, “this affects my psychics, after all these I became nervous”, “I feel sick”. The answers of positive content are as follows: “being here affected me positively because now I know what I will do and what I won’t”, “things changed in a positive way because I could realize something”.

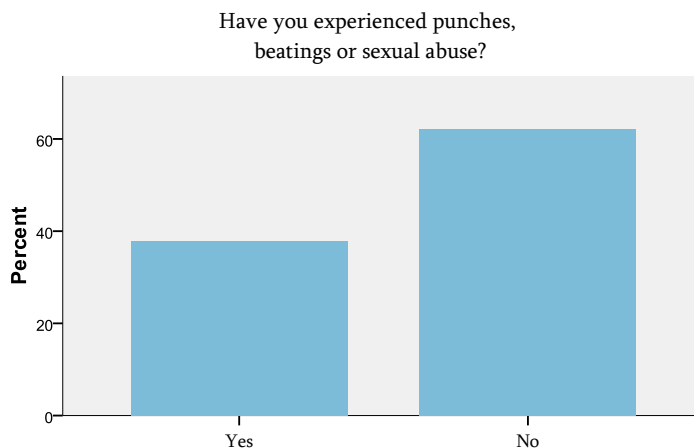
Concerning the provided assistance, the adolescents stated that they had been generally given verbal help and verbal support from their close people and family members; only one respondent gave the concrete answer: “...they have always tried to draw my attention towards positive”.

For the majority of the respondents these traumatic experiences and related to them different symptoms are disturbing and they are perceived as the concrete problem (small and / or big) (see the diagram).

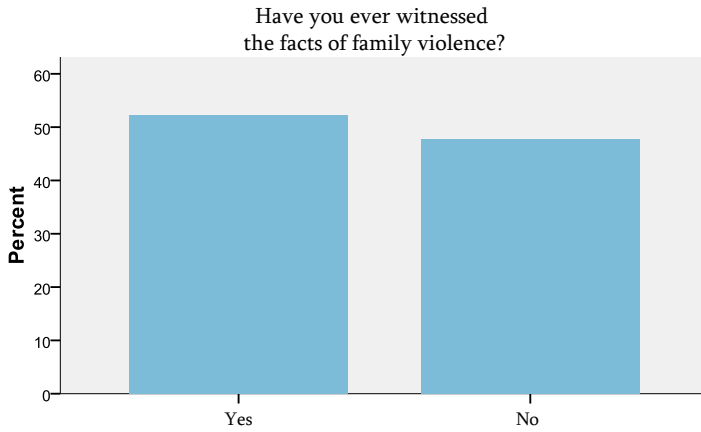
68 % of respondents have experienced serious and dangerous accidents



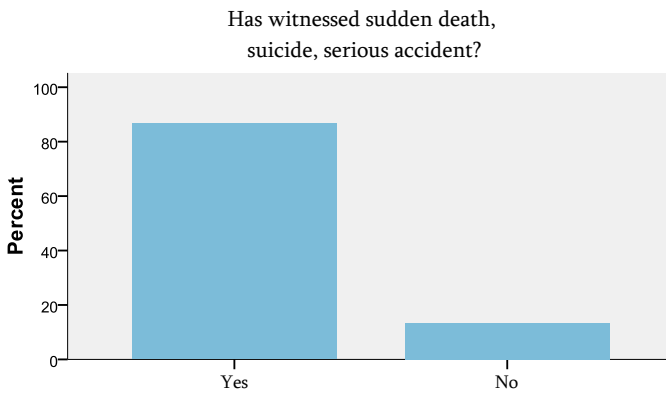
37.8 % of the adolescents have experienced punches, beatings or sexual abuse



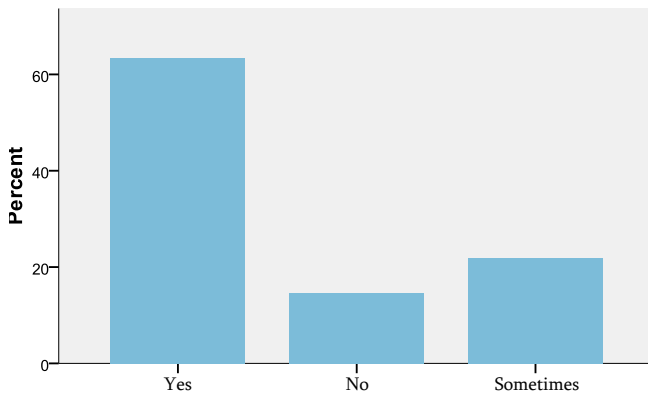
52.3 % reports that has witnessed facts of family violence.



86.7 % has witnessed sudden death.

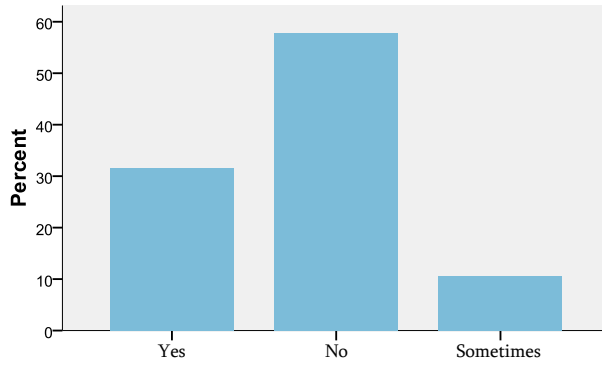


63.4 % says that thinks a lot about the given (traumatic) event. .



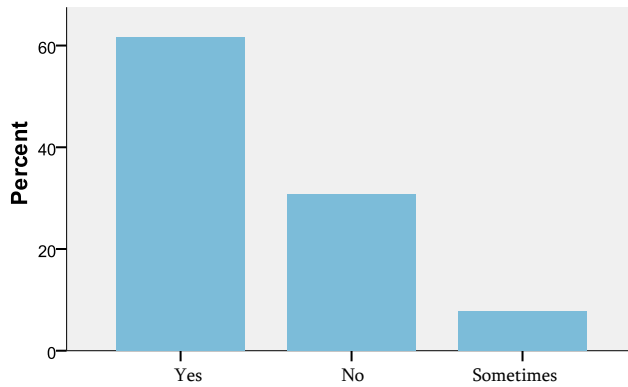
31.6 % of adolescents has sleeping problems.

Have You sleeping problems?



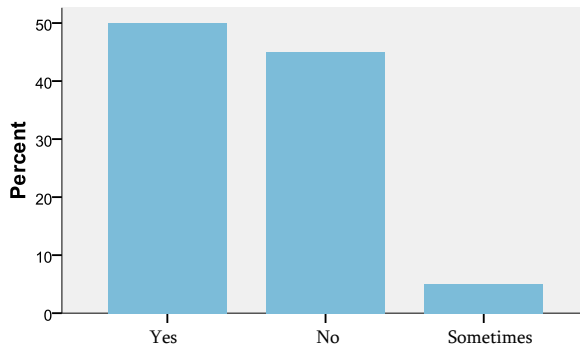
61.5 % becomes annoyed when anything reminds him / her of the given (traumatic) event

Do you become annoyed when anything reminds you about the given event?



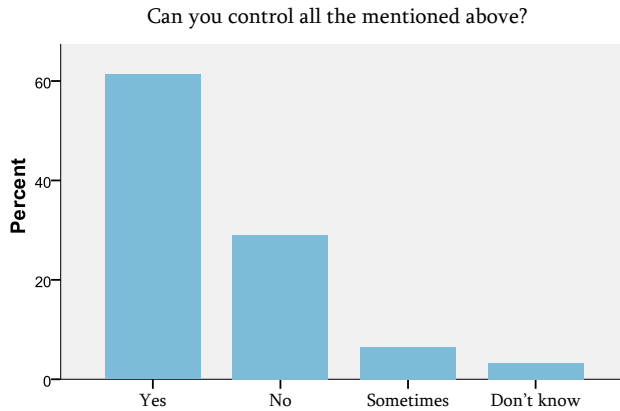
50 % tries to avoid the places that remind him / her of the given event

Do you avoid the places or anything that remind you of the given event?

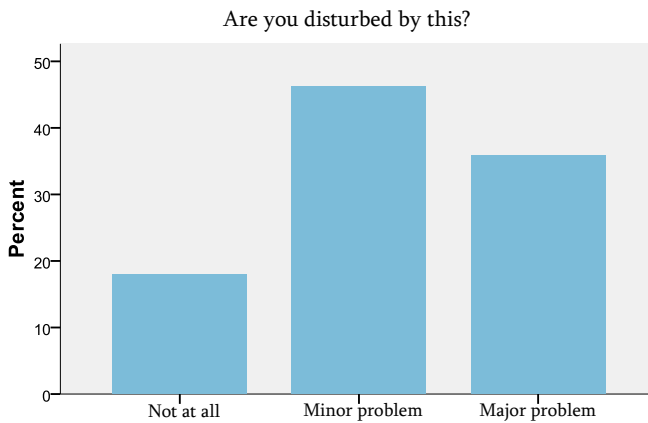


61.3 % can control all the mentioned above

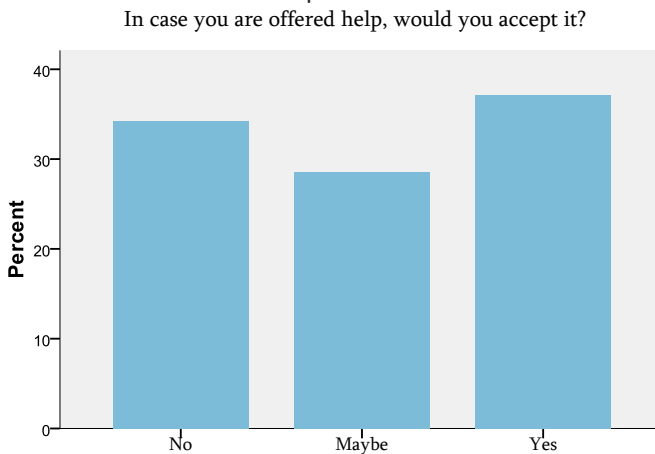




Concerning the change motivation, for 35.9 % of the adolescents this represents a considerable problem, for 46.2 % - this is a minor problem.

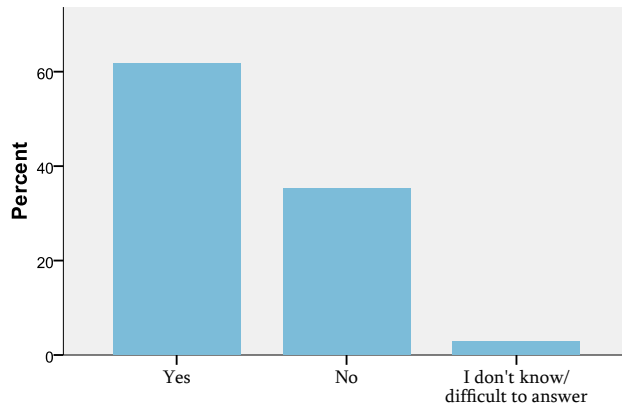


37.1 % states that would accept assistance



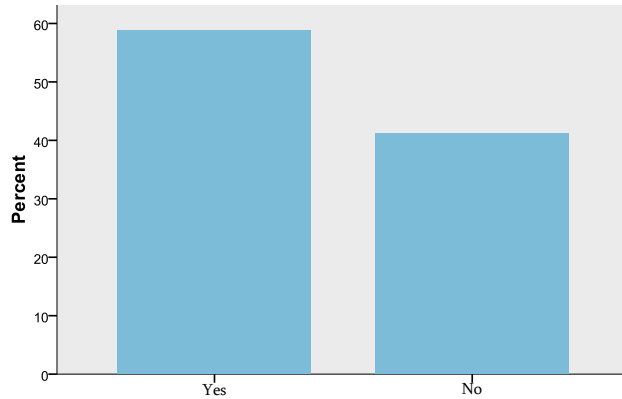
61.8% of the adolescents reports that in general people have tried to help them

People have tried to help You?



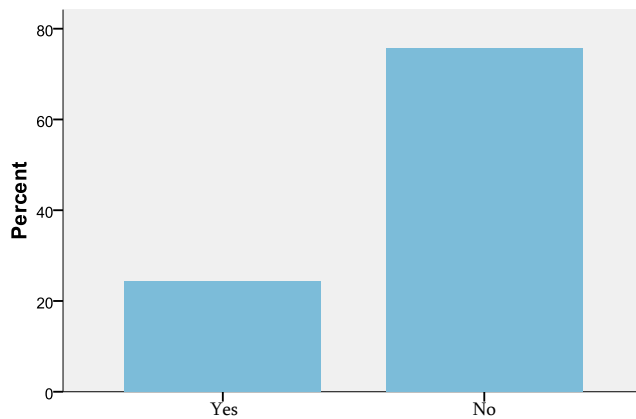
58.8 % has accepted help from family members and friends

Have you ever accepted help from family members, friends?



The majority of adolescents - 75.8 % has not been provided with any kind of assistance from a specialist

Have you been provided with assistance from specialists?

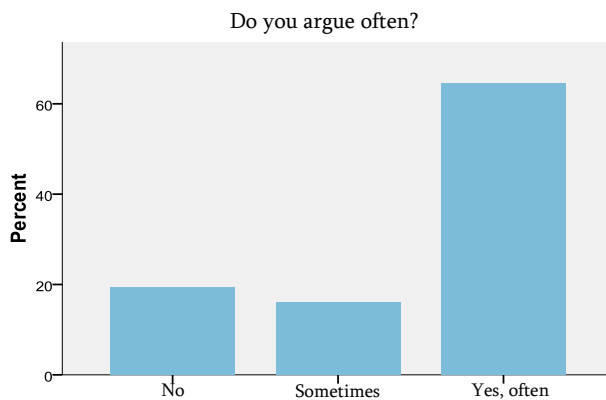


### Behavioral and antisocial personality disorders

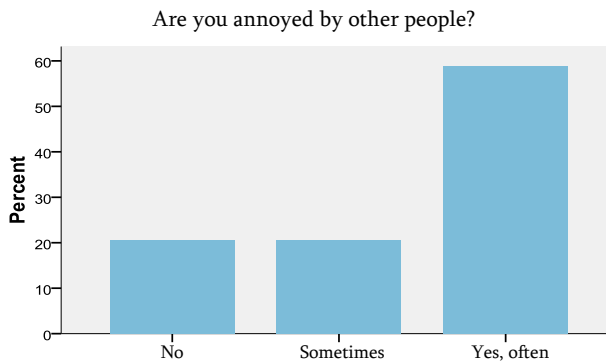
The adolescents often have positive replies on the majority of the problem sphere symptoms. Percentage wise the outcomes of the given answers fluctuate from 30 % to 60 %. The positive answers concerning the following symptoms are: argumentation, getting hurt easily, having rows with elders, getting annoyed from others, aggressiveness, being out of balance, insulting others physically, damaging other people's belongings, swearing and cursing, using bad language, defiance and provoking behavior and etc. (see the diagrams)

Incitement to fight is less expressed among adolescents, the majority of young people states that he or she does not represent a fight instigator (66.7 %).

For (64.5 %) frequent argumentations are characteristic, also 16.1 % reports that sometimes argues

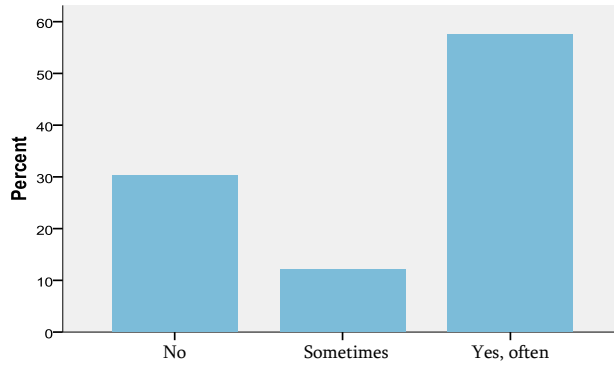


58.8 % is frequently annoyed by other people, and 20.6 % states that this happens only sometimes.



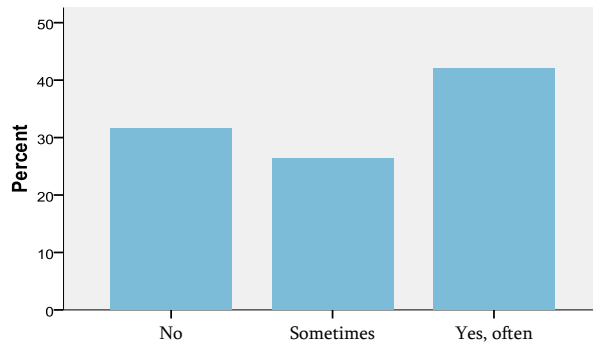
57.6% of adolescents easily get hurt by other's words or behavior

Do you easily get hurt by others words or behavior



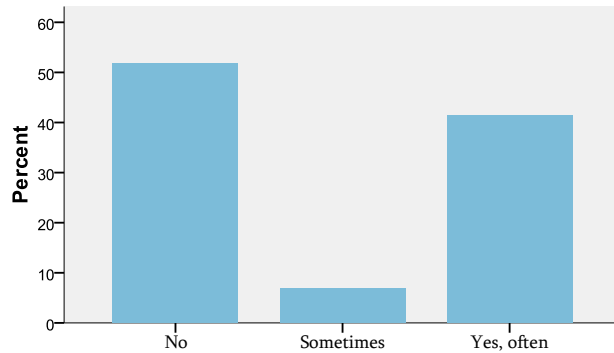
42.1 % often argues with elder people, 26.3% does this sometimes

Do you often argue with elder people?



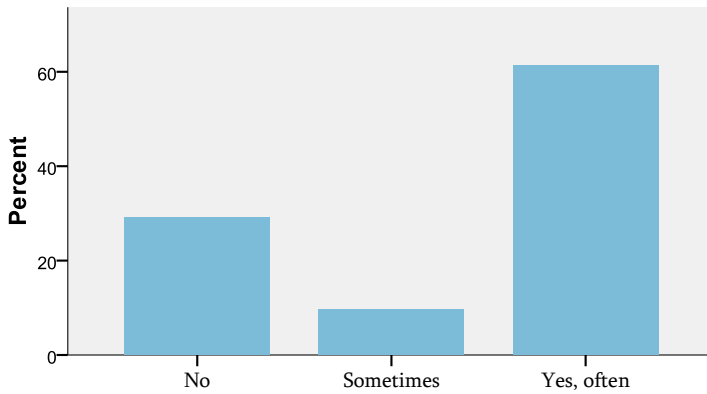
41.4 % is often aggressive towards others

Are you aggressive towards other people?



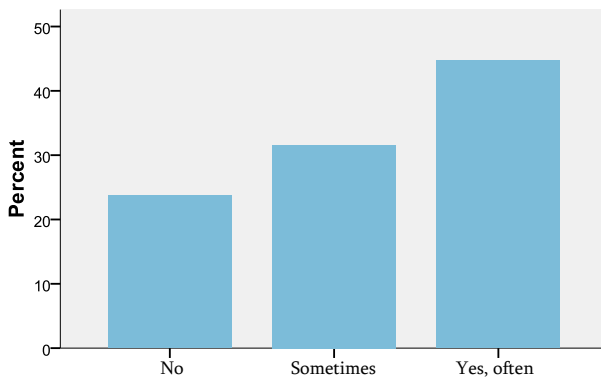
61.3% often gets out of balance (loses temper)

Do you often get out of balance?



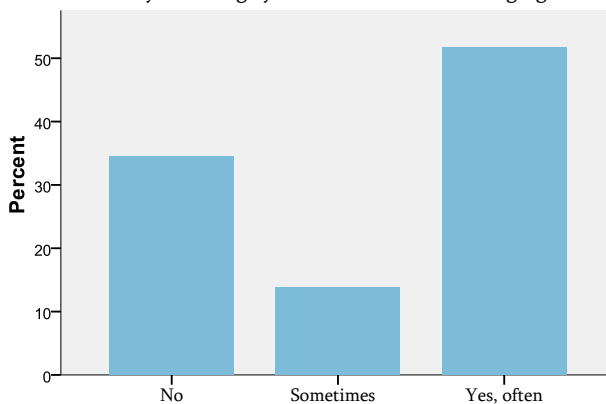
44.7 % says that is able to insult others physically..

Can you insult others physically?



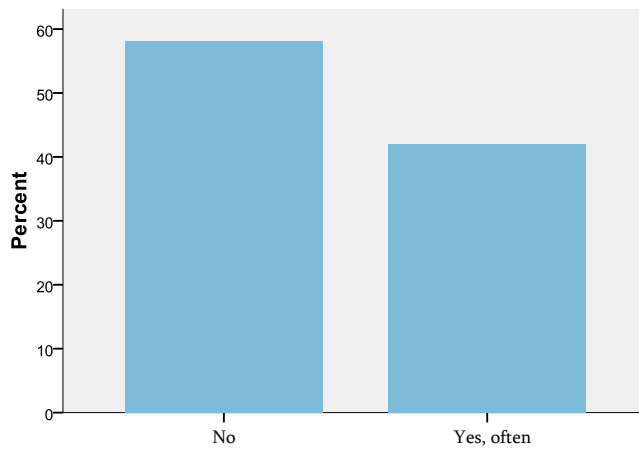
51.7 % frequently damages others' or their own belongings

Do you damage your own or others' belongings?



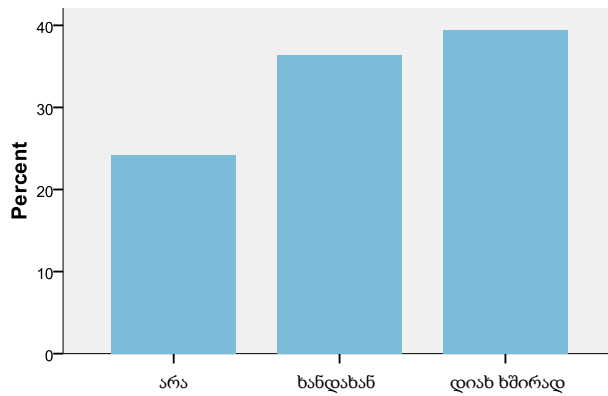
58.1 % notes that takes no delight in destroying others' belongings, but 41.9 % enjoys it

Do you enjoy destroying others' property?



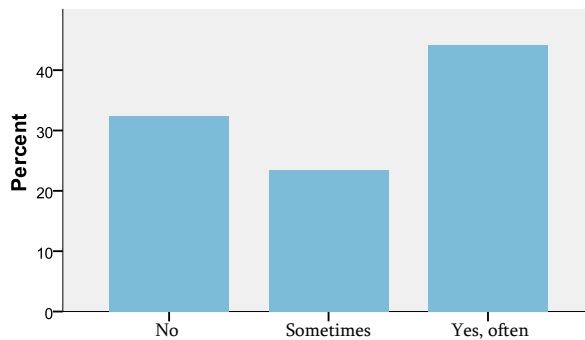
39.4 % of respondents frequently swears, 36.4% - does it sometimes

Do you swear?

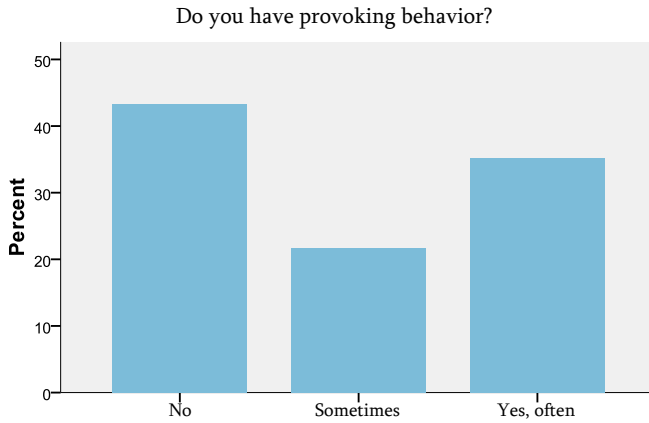


44.1 % frequently uses bad language, 23.5 % does it only sometimes.

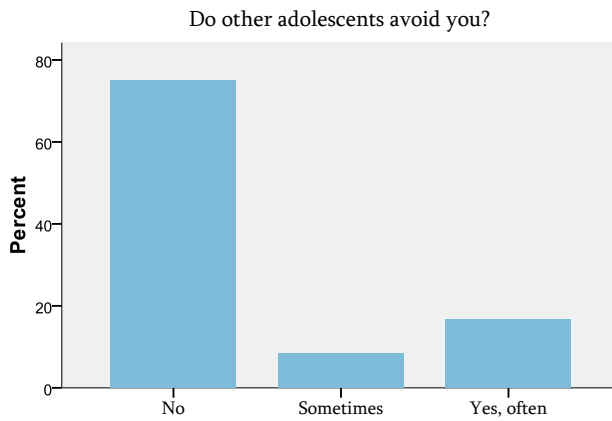
Do you often use bad language?



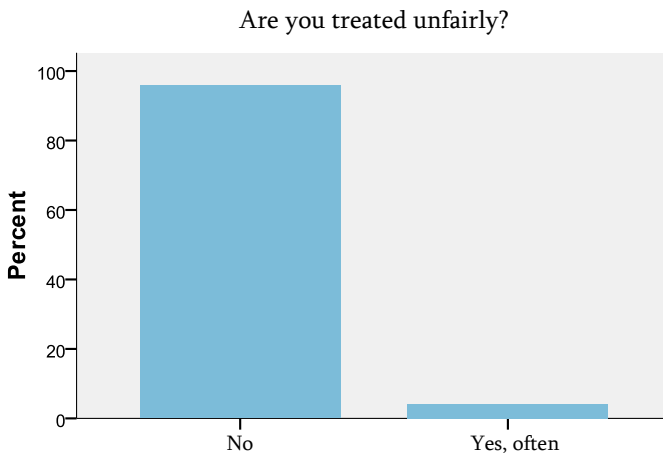
35.1 % is defiant and is often characterized with provoking behavior, 21.6 % - behaves like this sometimes



The majority of the interviewed respondents (75 %) considers that other adolescents do not try to avoid them

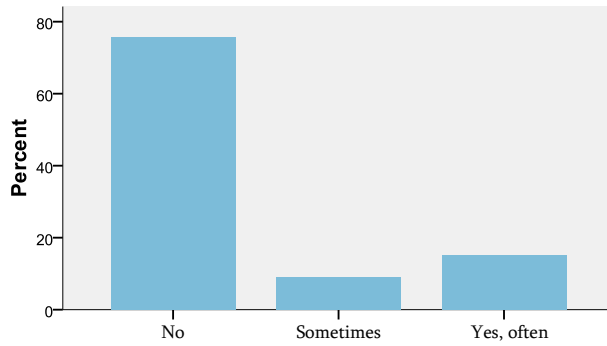


95% thinks that others do not treat them unfairly



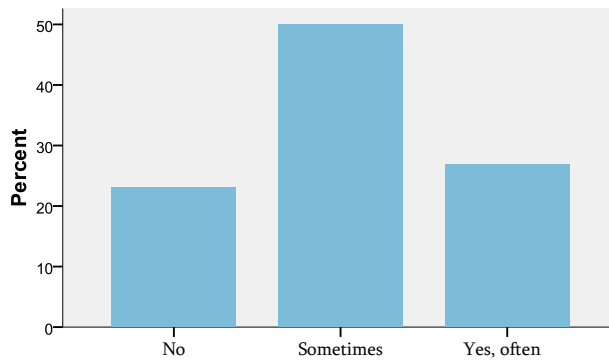
75.8% believes that they are not accused of things

### Are you accused of things?



50 % of the respondents reports that sometimes tells lies, 26.9 % noted that frequently lies

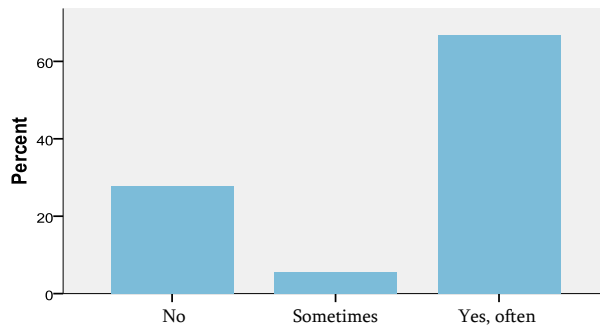
### Do you lie?



Concerning fraud, 84 % states that others don't report them to cheat. 12.5 % says that they can cheat others.

81.1% of adolescents don't put the blame of doing things on others; 66.7% has taken somebody else's belongings frequently

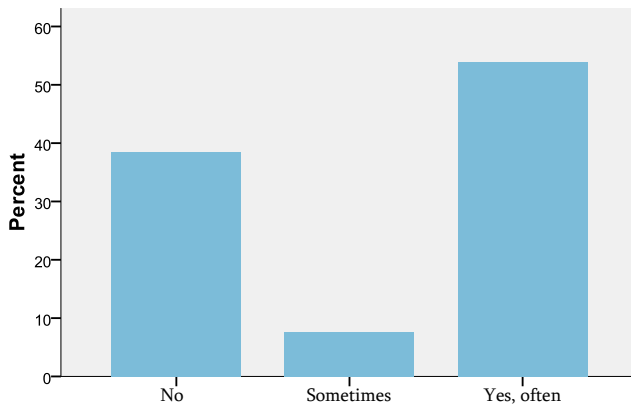
### Have you ever taken somebody else's belongings?



53.8% has frequently taken things out of their homes.

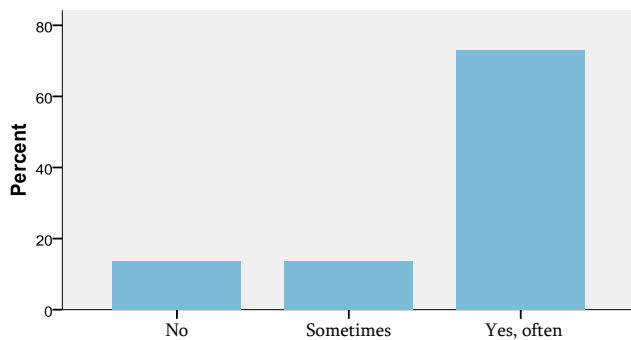


Have You taken things away from your home?



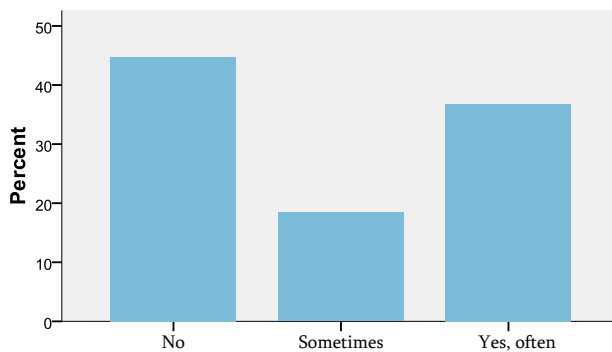
73 % states that frequently misses or missed the school lessons

are you skipping classes?



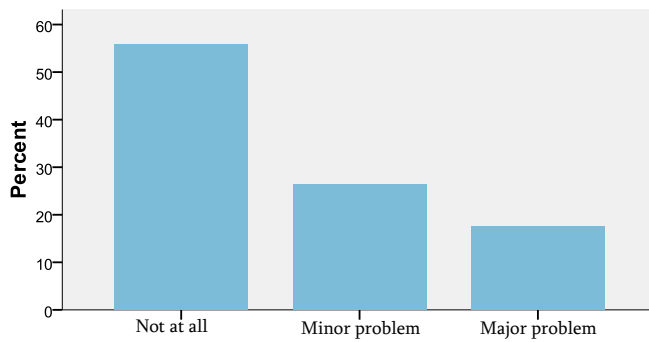
44.7% does not enjoy breaking rules. 36.8% often takes delight in doing it, 18.4 % enjoys it only sometimes.

do you enjoy breaking rules?



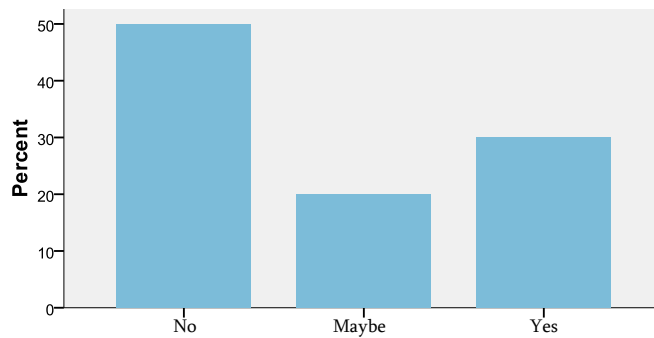
Change motivation on the given scale is significantly different from the index of the change motivation for post traumatic stress symptoms' scale. On the personality disorder scale the given index is even lower - for 55.95% all mentioned above do not represent any problem at all, for 26.5 % - represent a minor problem and only for 7.6 % - these all is a considerable problem.

Does it disturb you? (Change motivation)



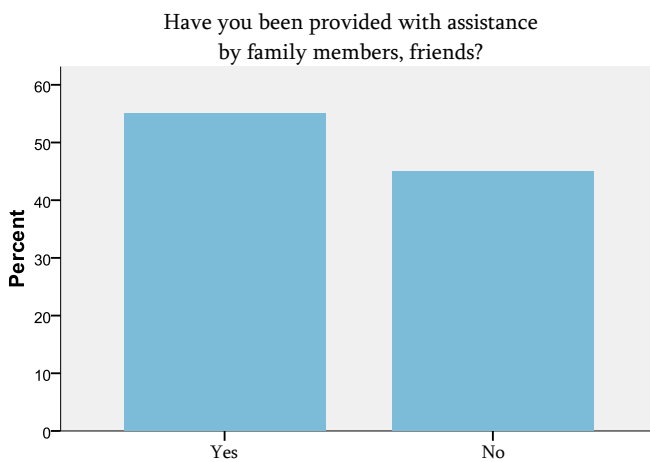
50 % of adolescents says that he / she would not accept the offered help, 20 % thinks that they might accept it and 30 % - would accept it definitely

In case you are offered help, would you accept it or not?

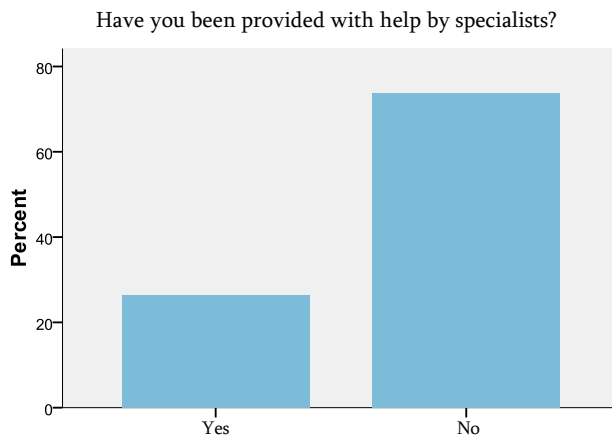


47.6% states that in general people have tried to help them; the same number of respondents that makes up 47.6 % says that people have not made an attempt to render assistance to them.

55 % has been provided with assistance (mainly verbal) by their family members, friends



The majority of the adolescents (73.7%) have not been provided with help by a specialist .



## Discussion

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There are definition considerations with regard to juvenile delinquency. Generally, juvenile delinquents are defined as offenders aged 7 to 12 years who engage in delinquent behavior proscribed by law and who could be brought before the juvenile courts for such behavior (Loeber@Farrington, 2001). The other, broader definition describes delinquent behavior as type of behavior that is deviated from established social, cultural and legal norms in the given society.

The United Nations World Youth Report (2005) states, "Juvenile delinquency covers a range of different violations of legal and social norms, ranging from minor offences to severe crimes committed by minors. Quite often youth take advantage of illegal opportunities and get involved in crime, substance abuse and violent acts against others, especially their peers. Statistically young people constitute the most criminally active segment of the population, although eventually most young people will desist from criminal and deviant activity".

Behaviors defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and the International Classification of Disorders (ICD-10) that are related to disobedience, defiance, losing one's temper, aggression and/or oppositional defiant or conduct disorders may be precursors to later involvement in delinquency for some children.

These issues make it somewhat difficult to determine exactly what behaviors should be included in a count of delinquent behavior.

It is documented by the international research that young people who have become involved in the youth justice system have aggravated MH problems. This includes young people:

- experiencing problems with depression
- suffering from anxiety
- suffering from post-traumatic stress disorder (PTSD);
- having problems with hyperactivity;
- displaying psychotic-like symptoms.

We also know that mental health problems can also co-occur with drug and alcohol misuse. This may increase the risk of offending behaviour.

In our study juveniles exposed mainly 3 type of MH problems: traumatic symptoms/post traumatic stress symptoms; conduct disorders and antisocial personality disorders.

## Traumatic symptoms

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Research has consistently shown that youth, especially boys, who experience some type of trauma, are at an elevated risk of juvenile delinquency (Hoffman & Cerbone, 1999; Smith & Thornberry, 1995). Approximately one half of the male victims of child maltreatment, defined to include physical or sexual abuse and neglect, later became juvenile delinquents (Lemmon, 1999; Smith & Thornberry, 1995; Widom, 1989a). In addition to being a victim of violence, youth who experience stressful life events, such as parents divorcing, losing a loved one, and living in a violent home or neighborhood, may be at a higher risk of engaging in antisocial behavior (Eitle & Turner, 2002; Hoffman & Cerbone, 1999). Using mostly male samples, the link between trauma and delinquency was first documented in the early 1960s and has been reconfirmed during the past four decades by more than two dozen studies (e.g., Falshaw, Browne, & Hollin, 1996; Widom, 1989b). A review of this literature suggests that the types of trauma linked to delinquency may range in magnitude from minor to severe stressors that may occur at any developmental stage in childhood and/or adolescence (Maschi, 2006).

Trauma theory helps to explain some of the adverse socioemotional factors associated with the consequences of trauma for victims. According to trauma theory, the role of affect regulation has been found to be associated with histories of trauma (van der Kolk, 1987). Briere (2002) defined *affect regulation* as an “individual’s capacity to control and tolerate strong (especially negative) affect, without resorting to avoidance strategies such as dissociation, substance abuse, or external tension-reducing behavior” (p. 180). Research on the short- and long-term effects of trauma on youth has consistently found the emotional, psychological, and physiological symptoms of anger, depression, anxiety, and hyperarousal are characteristics common among traumatized children and adolescents (Briere, 2002; Pearlman, 1998; van der Kolk, 1987). These findings suggest that affect and emotion is an important factor that should also be addressed when adopting a framework that seeks to understand the long-term consequences of trauma on delinquency.

In addition, research on trauma has shown that impaired social relationships, such as conflictual relationships with prosocial peers and association with delinquent peers have been found to be independently associated to trauma and delinquency (Akers & Lee, 1996; Elliott & Menard, 1996; Warr & Stafford, 1991). The trauma literature often views maladaptive emotions and peer relations as consequences of trauma and often stops short of exploring the potential mediating effects that problematic peer relations may have on delinquency. In contrast, the criminological perspective, general strain theory, proposes a causal ordering in which negative life events lead to a negative emotional response (conditioned by delinquent peer exposure), which in turn leads to maladaptive behavior, such as delinquency (Agnew, 1992).

Despite the link and strong association established the further study is needed to explore this sphere and establish a clear pattern. We also need to find out and distinguish whether traumatic experiences were happening in childhood (and what type), in teens or it is related to detention and violence within the police or penitentiary systems.

# Conduct Disorders

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The Oxford Handbook of Psychiatry (2005) states that Conduct Disorder (CD) is the most common reason for psychiatric evaluation of children and adolescents in USA and Europe. It has an earlier onset and is more common in boys than in girls.