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SUSTAINABLE DEVELOPMENT and CHILD SECURITY

“children’s rights must be defended since embryo”

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XXI century has its challenges, what obliges each of us to professionally assess reality and have our own idea about sustainable development of region. Because of this I want to tell you:

At present it is undoubtful that development of science is approaching its top heights. Particularly usage of gene engineering makes it possible to create a new human being. Today there exists a method for artificial fertilization and the newborns are already in evidence. In the XX century we became witnesses of human being’s stepping out of the rocket into the space and even visiting other planets.
Let me explain how I personally interpret SUSTAINABLE DEVELOPMENT AND CHILD SECURITY.

- First of all SUSTAINABLE DEVELOPMENT AND CHILD SECURITY should be based on the maintenance of bioethical standards.

- Secondly, SUSTAINABLE DEVELOPMENT AND CHILD SECURITY must be determined together with social-economic and ecological environment.
Our intention

- Proceeding from above, said our intention was to discuss several important topics regarding health care in order to carry on necessary preventive measurements.
Which is based on:

- precise medical statistics;
- higher medical technologies;
- modern computer treated analysis (on prognosis and new programs), which underlie our conclusions.
In order to estimate this necessary to discuss:

- general situation in the region
- expected life span and death-rate
- expected span of healthy life
- classes of diseases, such as:
  a) infectious diseases – tuberculosis passing through sexual way (including HIV/AIDS), malaria, diseases which might be prevented by means of vaccine prophylaxis (diphtheria, hepatitis, poliomyelitis)
  b) non-infectious diseases (cardiovascular diseases, tumors, obesity, diabetes mellitus)
  c) psychic health
  d) accidents and traumas
For estimation of situation in public health in the region it is necessary to analyze data of separate groups of population: the I group comprises data about children’s health:
In this group death-rate of newborns and children aged 5 years are important. Neonatal mortality, especially at earlier stage, determines a general level of newborns’ mortality. It is clear, that in those countries, where mortality of newborns is high, its decrease may be achieved by reduction of mortality level in newborns, while decrease of mortality in newborns is achieved by attenuating of neonatal mortality level. While estimating children’s health it is necessary to consider children’s nutrition, including nursing during the first year of life and deficit of microelements in children’s feeding; children’s diseases (their course). All above mentioned indices depend on amount of the needed bed-places for children in hospitals, which should be considered together with social-economic and ecological conditions of the region.
At the same time, mortality rate in mothers, children immunization, carrying out preventive measures against tuberculosis and HIV/AIDS stipulate state of infant health.
In 2007-8 our research group conducted the project "Role of viral pathogens among infants with systemic infections"

- supported by the Georgian Research and Development Foundation (GRDF). Our US partner is the research group at the Department of Microbiology, Virology, Immunology and Molecular Diagnostics of the School of Medicine, University of Pittsburgh at Magee-Women's Hospital
Conclusion

In parallel we are implementing the diagnostic and preventive measures for such an important infection as one induced by Human Immunodeficiency Virus (HIV). Until now in Georgia this infection was not seriously considered in pediatric clinical practice. Our activities in this field give us opportunity to perform the early diagnostics of this infection and through this contribute to the prevention of the HIV epidemic in our country.
Demolition of the USSR and regaining of independence of Georgia have brought to its population political disorders, civil war and disorganization of economics. As a result of conflicts and separative movements in South Osetia and Abkhazia there took place fierce struggles and processes of forced migration. At present, as is known, Abkhazia and South Osetia are occupied by Russian Federation and governed by puppet governments, which are not recognized by the International Commonwealth.

It is important that problems concerned with health, nutrition, education, as well as to defence and development of children are more acute in the occupied regions than in other regions of Georgia. The International Commonwealth had better expand its own role in these zones for solving the problems of defence of children’s rights.

And indeed “Child has the right to be defended since embryo”.
We can't avoid families of war heroes, war veterans and members of their family while we talk about occupation of Abkhazia and south Ossetia. I think that special program must be worked out for this contingent, in which governmental as well as non-governmental organizations must take part (from Georgia or other countries)
Let me come back to the following:

- Several important International Meetings were held, such as: Yokohama World Congress held in 2001, which was directed against sexual exploitation of children for commercial reasons and a special session of General Assembly of UNO held in 2002 devoted to children. Obligations of governments and civil communities of different countries concerning defense of children’s rights were corroborated at these meetings and measures for their fulfillment were taken.

- Let me finish the above said by the words of Anders Johns (Secretary general, Interparliament Union) and Carol Belam (Executive director, Children Fund of UNO):

  “In spite of the mentioned obligations and promises, children still suffer from violence, cruel treatment and exploitation. It is clear that our efforts are as necessary today as fifteen years ago. We will be able to create a suitable world for children in case if each child is protected from exploitation, violence, cruel treatment and ignorance.”
With the support of UNICEF (in 2001-2) we have fulfilled a project “Social-psychological, medical-prophylactic and rehabilitation measures of children and adults in Penitentiary Institutions”.

- one of the main goals of which was the study of drug addiction and toxemia problems in above mentioned contingent.
Analysis of data obtained has shown that:

1. In children and adults of such category we deal with yet unformed person, subjected to definite changes.
2. While considering obtained results the I, II and III necessary stages were outlined, where:
   - The I stage stipulates pretrial period.
   - The II stage stipulates measures to be taken during trial.
   - The III stage – after being sentenced.
3. Most children formally refuse the fact of smoking, hashish and glue tasting, but it is not true. The majority of them before the arrest used different toxic substances (glue, petroleum), which need a great attention at the I-II-III stages.

- Thus, investigations carried out have shown that there is a necessity of taking prophylactic measures against toxemia and drug addiction in children and adults in order to avoid formation of groups of persons committing a criminal offence.
I want to admit that today situation is very different. Because educational system is fastly, positively reformed. That is also followed by increased rate of children involved in sports. That’s why it is extremely important that nowadays second phase of project “united scientific governing of medicine, sports and education” is already being done (it must be admitted that NGOs are widely involved for optimisation administrational governing). Activity will not, must not and can’t be slowed.
In 2010 following project was accomplished by GRDF grant:

“Assessment of Anthropological, Physical and Functional Indices in Sportsmen Receiving Amino Acid Rich Beverage “Iveriuli Phyto” During the Training “
(Social Pediatrics Protection Fund,)

- **Objective of the work:** amino acid, mineral and vitamin rich natural energetic beverage “Iveriuli-phyto” and study its role in sportsmen rehabilitation considering the initial health indices.

- **Conclusion:** Use of beverage “Iveriuli Phyto” in sportsmen was found to improve work ability, adaptation mechanisms for trainings and contest by helping restoring processes during intensive physical load.
Pediatric Profession and education also has it’s challenges

- for optimal pediatric treatment services at least 5 things must be noted:

1. pediatrician must be good professional, who will give valueable treatment to infant, child or teenager with context of family, society and environment.
2. Since infant age to teenage a child must be able to get first aid from doctor he/she wishes twenty-four seven.
3. education of a pediatrician must involve deepening knowledge about normal development of a child, child diseases, fact-based governing, technical habits. In addition, pediatrician must know new fields which determine changes in pediatric healthcare.
4. Preparation of a pediatrician must be focused on producing general habits and knowledge, despite which carrier he/she will choose in the future.
5.36 month residency is only a part of the way to mastering pediatric profession. Constant medical education and using informational technologies has a big part in successful carrier of a pediatrician.
It is also very important to plant institutions, by which a child will be able to receive first aid twenty-four seven. By using this model parent and pediatrician cooperate constantly for healthiness of a child. Developing economy and changing ways of compensation and quantities of work will help to use pediatrician more effectively for satisfying children’s need.
That’s why pediatrician needs to widen his sphere of competention and pick up new functions, like:

- pediatrician as medical treater in the first circe of chain.
- pediatrician as consultant
- pediatrician as social consultant
- school pediatrician
- pediatrician as a treater at home
- pediatrician as social medicine practitian
- pediatrician in administrational medicine
- pediatrician as an assesser of quality of pediatric job.
- pediatricians who work in villages.
for future strategies to improve pediatric education following programs are needed:

1. Organizational structure must be improved. This will help to detect pediatricians' competence at any level.

2. Coordinational process, which will determine that accredited educational programs give competent experience and education, must be renewed. Certification of doctors must be linked to all above said by thinking through adequately.
all these concepts and recommendations are meant to strengthen pediatric educational processes, to prepare pediatricians for future difficulties. we hope that successful medical job of a pediatrician will help the most defenseless part of our population.
We talked about Pediatric job and education.

- We can't avoid the need of education and job of hospital nurses in Georgia.

- A professional hospital nurse plays the most important part in united scientific governing of medicine, sports and education:
  - in medical departments (clinics, ambulatories etc)
  - in educational system ( schools, nursery and etc.)
  - in Sports system ( physical therapist and etc)
Let’s get back to important determinants of healthcare:

- An important determinant of health is physical environment, hygienic plan of action at present must be a strategic direction for all regions and countries. During last years quite new approaches and principles in health defence sphere were formulated in the documents and programs of WHO, including European Conferences on environment and health defence - Frankfurt (1989), Helsinki (1994) and London (1999).
An important determinant of health is physical environment, hygienic plan of action at present must be a strategic direction for all regions and countries.

- According to these principles, sectors of environment and health defence were imposed responsibility for elaboration and fulfillment of such mechanisms in human health and environment defence policy and spheres of its management, which in respect of ecology should provide a stable development, effective prevention of harmful environmental factors on human health and control on it.
There must be elaborated and accomplished such a policy in the sphere of environmental and health defence, which, in regard to ecology, provides a stable development, effective prophylaxis of environmental factors having a harmful effect on human health and its control, as well as creation of available safe environment based on principles of justice.
The following indices should be studied which will elucidate:

- a) effect of environmental factors on indices of human health state;
- b) reveal territories and regions, which are distinguished by a high level of pollution and harmful influence on human health.
It is necessary to consider and estimate the following:

- a) systems of management of environment hygiene;
- b) resources for accomplishment of policy of environmental and health defence
- c) besides, concrete priority factors of the environment
concrete priority factors of the environment, particularly:

- **Water.** Problems of improvement of water-supply of populated places as well as questions of sanitary state and measures for prevention from pollution of sea-side regions and other recreation objects.
- **Air.** Degree of atmospheric air pollution of populated places and sanitary defence measurements.
- **Stable debris’s and soil contamination.** Questions of chemical safety and defence of the environment (soil, air, water) of inhabited places from domestic agricultural and industrial toxic debris.
- **Food-stuffs.** Measures for reducing risk of influence on health; state conception of safe feeding of population is presented.
- **Ionizing and non-ionizing irradiation.** Radiation background. Sources of ionizing and non-ionizing irradiation existing in the country. Measures to be taken.
- **Natural calamities and industrial accidents.** Topics of readiness for expected natural calamities and industrial accidents as well as readiness for prophylaxis and their liquidation.
- **Industrial and domestic environment.** Labor conditions of employed population, prophylactic measures for professional diseases, traumatism and poisoning; Creation of physical, social and psychological environment desirable for health in inhabited places.
- **Towns and large populated places.** Hygienic-ecological problems created in big towns, ecopathology with preventive measures.
- **Temperature of the environment** - In the XXI century a great attention should be devoted to the problems of global heating, resulting in natural calamities and spread of different diseases. Therefore, measures against expected epidemic should be taken.
Introduction of high technologies in investigations, existence of precise medical statistical database, creation of modern computer programs and their usage (prognosis of disease course, establishment of risk factors and groups, etc) – that is all on the basis of which it will be possible to solve many problems existing in the XXI century.
Proceeding from the above-said, development of sciences and monitoring on them appear to be a main task, which takes into account creation of safe environment for human health, improvement of life conditions. At the same time it is necessary to carry out possible eco-pathological preventive measures, which should be considered as a principal strategy of the XXI century.
To sum up, the foundation of regions sustainable development is children’s security, which is based on united scientific governing of medicine, sports and education which is itself based on new technologies, with consideration of social-economic environment and particles of healthcare.
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