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TABLE OF CONTENTS

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ORIGINAL RESEARCH

HEALTH POLICY INFORMATION

Influenza Surveillance in Albania for the 2014 – 2015 Season

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Abstract

Influenza surveillance provides a powerful tool for gathering information at the right time in order to cope with the current situation and the measures planned in the future. During the period October 2014 - April 2015, 487 samples taken from infected persons suspected with flu across the country were analyzed. About 38% of these samples tested positive for influenza virus. Among the positive cases, 86% were infected by the virus of influenza A and 14% from Influenza virus B. subjects aged 15 years and over resulted the most infected. In recent weeks of the surveillance, there was an increase in cases of the virus B. These data suggest the continuation of monitoring the flu situation in our country and taking measures to deal with the situation.

Introduction

Influenza surveillance is conducted in all countries of the European Region of the World Health Organization (WHO) to monitor the flu and people's health security. This surveillance is standardized and provides timely information on the time, the spread, impact and severity of seasonal flu, and acts as an early warning system for new types of viruses that can appear, such as pandemic virus in 2009 and bird flu viruses (Broberg, Snacken & Adlhock 2015; FluNews Europe). Also, it allows surveillance data comparison among different countries of the European continent (Meerhoff et al. 2015).

Influenza surveillance has two principal components:

- Epidemiological surveillance; and,
- Virological surveillance

The main purpose of surveillance of influenza is to minimize the impact of the disease, providing useful information to the Public Health Authority and the Ministry of Health (MOH) in order to plan the best suitable control measures and for intervention, resource allocation for health care, and providing recommendations for the management of cases (ECDC 2015).

The specific objective of Surveillance of influenza is to provide data on time and with high quality of viral isolates in order to perform the following functions:

- Describe the seasonality of the flu;
- To signal the beginning and end of the influenza season;
- Identification and monitoring of groups at high risk of serious acute respiratory diseases (SARD) and mortality;
- To define the basic levels (baseline) and influenza activity SARD to assess the impact and severity of flu in any season and signaling epidemic activity;
- Determining the disease burden of influenza to assist decision-makers in the prioritization of resources and planning of public health interventions;
- Identify local circulation type and subtype influenza viruses, their links with regional patterns and global expansion;
- To assist in the understanding of the relationship between strains of virus and the severity of the disease;
- Monitoring of antiviral sensitivity;
- Facilitate the selection and provision of vaccine strains;

•Antigenic characterization, genetic composition of the viruses circulating and monitoring changes of the antigenicity of influenza viruses;
•To provide a platform for evaluating the effectiveness of the intervention.

Material and Methods

Influenza surveillance data during the season 2014 – 2015 comprise upper respiratory infections and lower ones, reported through the ALERT system which is a system of early warning; sentinel surveillance of influenza-like illness (ILI) in the city's sentinel surveillance of Tirana and of severe acute respiratory illness (SARI), performed at several regional hospitals in the country. in the University Hospital Center "Mother Teresa". and in the University Hospital of Lung Disease (UHLD). The data were collected throughout the year and during the flu season, during the weeks 20-40 with a weekly frequency of reporting by health care providers out of the patients who meet the case definition of respiratory samples taken associated with individual file reporting ILI and SARI. The file contains socio-demographic data of patients, epidemiological data, clinical signs and symptoms, vaccination status, associated diseases and risk factors, the use of antiviral therapy and the completion of the patient. All collected samples were tested for respiratory flu in the national laboratory of the Institute of Public Health (Weekly epidemiological record 2015).

Results

Figure 1 below shows the number of samples analyzed by weeks to subjects suspected of being infected with the flu in the country, according to the results of the laboratory (ILI).

Figure 1. Number of samples incoming weekly by popull suspected with influenza and laboratory results (ILI).
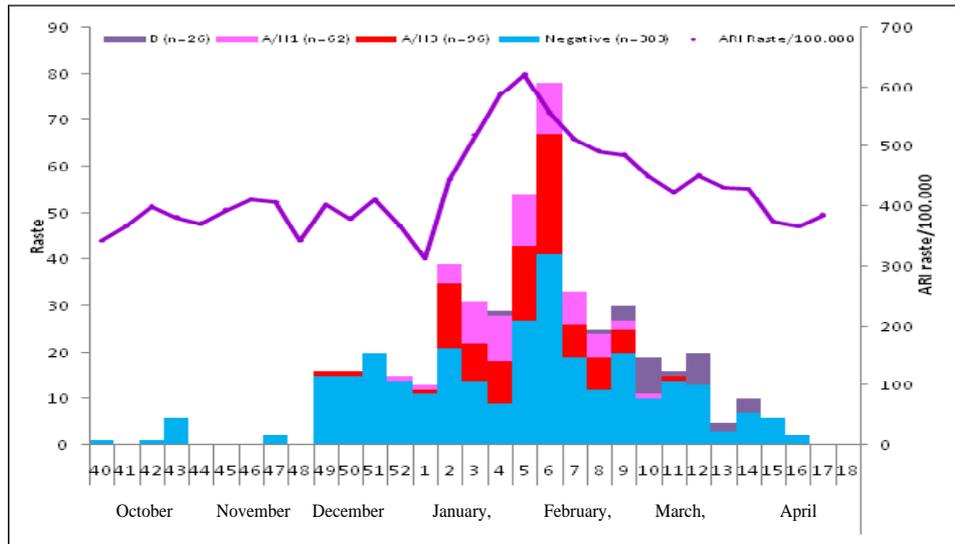
From the beginning of October 2014 to the end of April 2015 in IPH came: 487 samples of suspected flu of which 184 (38%) have tested positive for influenza viruses, and the rest of 303 cases (or 62%) proved negative on these tests. Meanwhile, 158 (86%) of 184 positive samples resulted with a flu virus, of which:

• 96 (61%) of the positive samples were subtype A / H3 (96/158);

• 62 (39%) samples were subtype A / H1 (62/158);

• 26 (14%) samples have proved positive for the Influenza B virus (26/184)

Figure 2 shows the distribution of the samples tested in the country (n = 487 subjects / samples) during the same period (October 2014 - March 2025), according to results of laboratory and age group.

Figure 2. Distribution of the samples tested by age group and laboratory results.
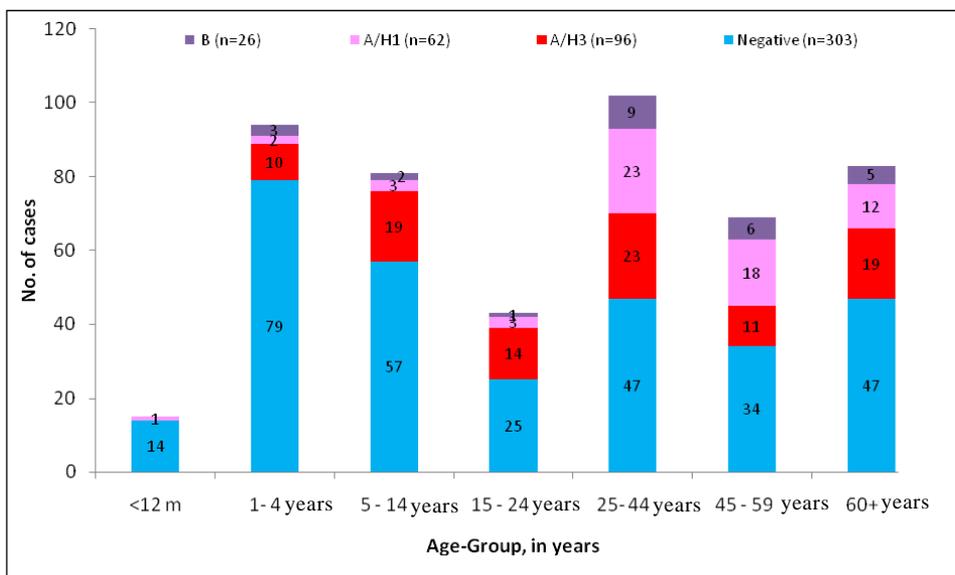
Positive cases of flu viruses towards total sample according to age group:

- <12 months with 1 case or 7%;
- 1-4 years-old with 15 cases or 16% (12 cases of the virus A and 3 cases of the virus B);
- 5-14 with 24 cases or 30% (22 cases of the virus A and 3 B virus cases);
- 15-24 with 18 cases or 42% (17 cases of the virus A and 1 case with virus B);

- 25-44 with 55 cases or 54% (46 cases of the virus A and 9 cases of the virus B);
- 45-59 years with 35 cases or 51% (29 cases of the virus A and 6 B virus cases);
- 60+ years with 36 cases or 43% (31 cases of the virus A and 5 cases of the virus B).

Age groups of over 15 years were found most infected by the flu, given that in this age group the proportion of persons positive was higher compared to those of under 5 years old.

Figure 3 shows the distribution of the samples analyzed according to their locality.
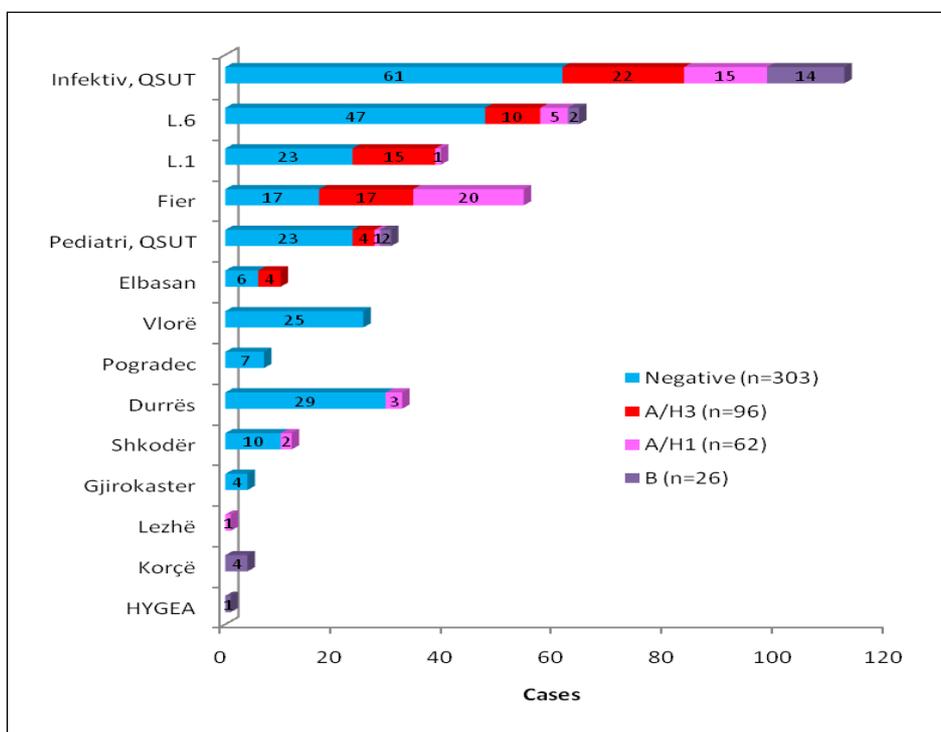
We can note that most of the samples came from the Infectious Disease Department of Hospital UHCT 112 (23%) samples, SUSM with 92 (19%) samples, and health centers No.6 with 64 (13%) samples. Positive for influenza virus resulted:

- 41 (45%) of the samples taken in SUSM;
- 51 (46%) of the samples taken at the Infectious Disease Dept., University Hospital Center;
- 17 (27%) of the samples collected at the health center no. 6;

- 16 (41%) of the samples collected at the health center no. 1;
- 37 (69%) of the samples taken in Fieri;
- 7 (23%) of the samples taken at the pediatric hospital, University Hospital Center;
- 4 (40%) of the samples taken in Elbasan;
- 3 (9%) of the samples taken in Durrës;
- 2 (17%) of the samples taken in Shkodra;
- 4 (100%) of the samples taken in Korça;
- 1 sample taken in Lezha;
- 1 sample taken at Hygeia Hospital.

Figure 4 below shows the distribution of the samples by the presence of severe acute respiratory illness (SARI).

Figure 4. Severe acute respiratory illness SARI
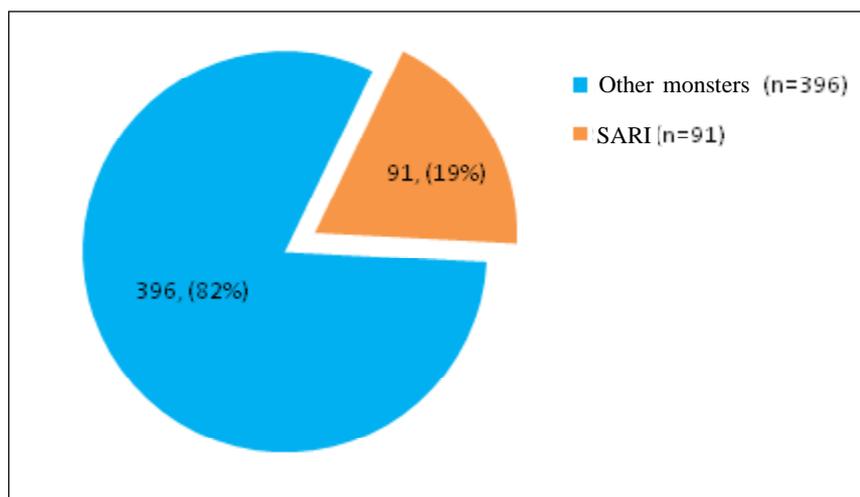
91 (19%) from suspected flu patients have presented complications (SARI). In total, 21 (23%) of the samples proved positive for influenza viruses: 12 (57%) A / H3, 7 (33%) A / H1 and 2 (10%) B. It was noted that virus B 53 (58% of the cases) pertaining to pediatric age group 0-14 years manifested SARI. Samples positive for Influenza viruses have resulted in age groups:

- <1 years - 1 (10%);
- 1-4 years - 3 (11%);
- 5-14 years - 6 (38%);
- 25-44 years - 3 (23%);
- 45-59 years - 4 (57%);
- 60vj + - 4 (25%).

It was noted that most of the samples taken for SARI were from Durres Regional Hospital with 27 (30%) samples, Vlora regional hospital with 25 (27%) samples and SUSM with 24 (26%) samples. Positive for influenza viruses have resulted:

- 11 (46%) of the samples taken in SUSM;
- 3 (11%) of the samples from the Durrës Regional Hospital;
- 2 (29%) sample UHCT Infectious Disease Hospital.;
- 3 (60%) samples from pediatric hospital of UHCT;
- 1 (100%) sample from the regional hospital of Elbasan and 1 (100%) sample from the settlement 6.

Summarizing, it was noted that the trend in the number of samples taken follows the trend of respiratory infections. In the European region the flu activity presents a declining trend in all European countries. In the European Region, like in our country, circulate around three viruses: A (H3N2), A (H1N1) and B virus, A (H3N2) prevailing.

In Albania it was noted that in recent weeks B virus cases have increased, mimicking tendencies observed in the region, as well as in the European region. In recent weeks, it was recognized an increase in the number of cases of the virus B

Summary Box

What is known about this issue?
There are circulating some seasonal flu viruses every year, but surveillance of influenza should be the constant and uninterrupted time, as consequence of the daily vaccines of necessity and the circulating strains of influenza viruses for load reducing sickness.

What is new and innovative in this report?
Influenza A viruses (H3N2, H1N1) and B are present in our country. During the period October 2014 - April 2015 it was noted an increase in the presence of the virus of influenza B. Influenza viruses A and B affect more persons of 15 years and over. About 19% of persons were suspected for flu complications i (Severe Acute Respiratory Illness-SARI) and in 23% of these cases influenza virus was isolated.

What are the implications for public health?
Based on data and trends regarding influenza viruses circulating in Albania, it is necessary to create preparedness plans for dealing with influenza and to continue monitoring the situation carefully.

Measures taken

Influenza is one of the most unpredictable diseases because the viruses that cause it are in a constant process of changes called antigenic "drift" and that affect the timing of the occurrence of influenza, as well as the severity of the disease (Takashita et al. 2015). Influenza causes a high level of morbidity and mortality with a high economic cost in connection with medical expenses and loss of life (Lackenby et al. 2008, European monitoring of excess mortality for public health action 2015). Based on surveillance of influenza and taking into account the potential of influenza viruses to cause epidemics and pandemics in each country, have been drafted preparedness plans dealing with the flu (Martirosyan et al. 2012). Also, influenza activity is monitored through specific indicators which are: epidemic threshold, trend, geographical spread, intensity, and impact. Plan preparation for improved endurance flu was done and updated with new elements of Surveillance (Vega et al. 2013). In the 2014-2015 season Surveillance, it is seen that the flu improvement compares to previous years in terms of the percentage of positive samples for influenza viruses.

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Economic burden of heart failure in the Albanian population

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Abstract

Clinically, heart failure is a difficult disease to treat, very expensive, that cause invalidity, and fatality. This disease remains suchlike, regardless powerful effects have brought new generations of medical treatment. Using the best techniques of treatment and early diagnosis of heart failure, they are strictly necessary to improve the current situation. However, these interventions may not be sufficient. The dramatic deterioration prognosis and quality of life when a patient progresses from asymptomatic dysfunction of left heart ventricle to heart failure, raises the hypothesis that only a well-organized prevention program will effectively reduce the financial burden of this disease in public health. Furthermore, the economic consequences development of heart failure suggest that such efforts are likely to be cost-effective.

Economic burden of heart failure in the regional hospitals of Albania

Table 1 presents the expenditures involving the treatment of heart failure in the regional hospitals in Albania for the year 2014. These data were available from the national Health Insurance Fund in Albania (Albanian Health Insurance Fund).

Table 1. Economic burden of heart failure in the regional hospitals in Albania in 2014

REGION	Number of patients	Total expenditure	Mean cost (ALL)
Berat	123	8,913,731	72469.36
Elbasan	34	1,980,434	58248.06
Korça	37	2,564,625	69314.19
Dibra	0	-	-
Vlora	25	1,459,840	58393.6
Shkodra	99	7,265,492	73388.81
Durres	238	16,044,862	67415.39
Kukes	4	159,587	39896.75
Gjirokaster	11	666,211	60564.64
Lezha	no data	-	-
Fier	46	1,966,333	42746.37

There is evidence of considerable difference in the treatment of heart failure in various regions of Albania. On average, the cost for treatment of heart failure was the highest in Shkodra region and the lowest in Kukes region. These regional differences, among other things, may be related to lack of strict protocols and guidelines for treatment and management of heart failure in Albania.

On the other hand, Table 2 presents the expenditures involving the treatment of heart failure in district hospitals in Albania for the year 2014. These data were also available from the national Health Insurance Fund in Albania (Albanian Health Insurance Fund).

Table 2. Economic burden of heart failure in the district hospitals in Albania in 2014

DISTRICT	Number of patients	Total expenditure	Mean cost (ALL)
Tropoje	15	848,690	56,579
Librazhd	7	291,686	41,669
Sarande	21	1,335,269	63,584
Delvine	2	216,518	108,259
Tepelene	2	164,503	82,252
Laç	10	484,387	48,439
Mirdite	6	373,365	62,228
Kuçove	10	293,502	29,350
Gramsh	20	857,712	42,886
Kavaje	13	778,227	59,864
Kruje	2	76,744	38,372

Similar to the situation in regional hospitals, there is a substantial difference in the treatment of heart failure in various districts of Albania. Hence, on average, the cost for treatment of heart failure was the highest in the district of Delvina and the lowest in the district of Kucove. The difference between these two extreme districts is more than threefold, which points to

huge variations in the treatment of heart failure. As pointed out earlier, notwithstanding the role of other factors, these differences may be related to the absence of stringent protocols and guidelines for treatment and management of heart failure in Albania.

Summary Box

What is known about this issue?
Heart failure is one of the most difficult diseases to be treated successfully, it is very expensive, and cause invalidity, and fatality, despite major developments in clinical and pharmaceutical field. This disease induce a significant economic burden in its treatment and complications that it causes.

What is new and innovative in this report?
There is a significant difference between the treatment of heart failure in various regions and districts of Albania, which can be related to lack of strict protocols and clear treatment guidelines. Economic burden of heart failure in Albania is higher than in Montenegro and Macedonia, but it is lower than in other regional countries.

What are the implications for public health?
Based on data and trends, relating to financial costs on the increase of heart failure treatment, it is necessary to organize prevention programs which will affect in reducing morbidity and financial burden.

Economic burden of heart failure in the Albanian population vis-à-vis the other countries in South Eastern European region
At a global scale, the overall cost of HF in 2012 is estimated at $108 billion annually (Cook et al. 2014). With an aging, rapidly expanding and industrializing global population this value will continue to rise.

In terms of the economic burden of heart failure, Albania resembles the pattern of low-income countries. Hence, high-income countries spend a greater proportion on direct costs: a pattern reversed for middle and low-income countries including Albania.

It should be noted that in the low-income countries including Albania, the persistence of so-called "pre-transitional" diseases such as rheumatic heart disease, endomyocardial fibrosis, tuberculous pericardial disease and anemia remain important etiologies in heart failure. However, this difference in heart failure etiology according to economic status is likely to change. As the less economically developed countries continue to industrialize, "pre-transitional" risk factors are likely to increase by traditional cardiovascular risk factors, increasing the disease burden in enormous populations.

Table 3 presents the estimated economic burden of heart failure in Albania and in the other countries of the South Eastern European region (Institute for Health Metrics and Evaluation 2013).

Table 3. Estimated economic burden of heart failure in countries of South Eastern Europe

Country	Direct cost of heart failure ($ million)	Indirect cost of heart failure ($ million)	Overall costs of heart failure ($ million)	Ratio: direct vs. indirect cost
Albania	**1**	**8**	**9**	**1:8**
Bosnia and Herzegovina	2	10	12	1:5
Croatia	63	34	97	1.9:1
Greece	383	149	532	2.6:1
Macedonia	1	6	7	1:6
Montenegro	0	3	3	-
Serbia	4	22	26	1:6
Slovenia	58	27	85	2:1

The estimated economic burden of heart failure in Albania is higher than in Montenegro (the lowest in the region) and Macedonia, but lower than in the other countries of the region. In particular, Greece has the highest economic burden of heart failure in the region, largely due to the direct cost.

As for the ratio between direct vs. indirect cost of heart failure, Albania exhibits, by far and large, the highest burden of indirect cost in the region, followed by Macedonia and Serbia and next Bosnia and Herzegovina.

On the other hand, Croatia, Slovenia and Greece have a higher direct cost of heart failure compared to the indirect cost. As a matter of fact, the highest burden of direct cost of heart failure in the region is evident in Greece.

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Estimated incidence and prevalence of heart failure in Albania

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Abstract
Heart failure (HF) is a major problem for public health, with a prevalence of over 23 million cases worldwide, which is coming on the increase. Although evidence seems hopeful and report that age adjusted incidence of heart failure may have declined, HF yet bear significant morbidity and mortality. Heart failure presents a significant burden on the health care system, and is responsible for significant financial expenses, and considerable levels of hospitalizations, and outpatient visits. Heart failure is not an single entity, but a full clinical syndrome that can present different characteristics depending on such factors like age, gender, ethnicity, ejection fraction of left ventricule (EFLV), and etiology of heart failure itself.

Estimated data on the prevalence of heart failure in the Albanian population

According to the most reliable estimates, the extrapolated prevalence of heart failure in Albania is 62,555 cases for a population of about three million inhabitants (Statistics by Country for Heart failure 2015).

This estimated number of cases with heart failure in Albania is calculated based on the prevalence of heart failure in US, UK, Canadian, or Australian statistics. These statistics were extrapolated using the population of Albania (Statistics by Country for Heart failure 2015; Institute of Statistics 2012). It should be noted, however, that such extrapolation is automated and does not take into account any genetic, cultural, environmental, social, racial or other differences across the countries. Furthermore, the extrapolation does not use data sources or statistics about Albania other than its overall population (Institute of Statistics 2014).

Based on these considerations, the extrapolated data for Albania may not be highly accurate and only give a general indication (or a rough indication) as to the actual prevalence of heart failure in Albania.

Estimated data on the incidence of heart failure in the Albanian population

According to the same estimates mentioned above, the extrapolated incidence of heart failure in Albania is 7,167 new cases annually in a population of about three million inhabitants (Statistics by Country for Heart failure 2015).

The term "incidence" of heart failure means the annual diagnosis rate, or the number of new cases of heart failure diagnosed each year (i.e., people getting heart failure e.g. in Albania).

On the other hand, the word "prevalence" of heart failure usually means the estimated population of people who are managing heart failure at any given time (i.e. people with heart failure e.g. in Albania).

Hence, these two statistics types can differ: a short disease like flu can have high annual incidence but low prevalence, but a life-long disease like diabetes has a low annual incidence, but high prevalence.

Prevalence of heart failure in the Albanian population vis-à-vis the other countries in South Eastern European region

Table 1 and Figure 1 present the estimated prevalence of heart failure in Albania and in the other countries of the South Eastern European region (Institute for Health Metrics and Evaluation 2013; Institute for Health Metrics and Evaluation 2014):

**Table 1. Prevalence of heart failure in Albania and other countries
of South Eastern Europe**

Country	Extrapolated number of people with heart failure
Albania	**62,555**
Bosnia and Herzegovina	7,193
Croatia	79,356
Greece	187,897
Macedonia	36,001
Serbia and Montenegro	191,045
Slovenia	35,496

Figure1. Prevalence of heart failurein countriesof South Eastern Europe
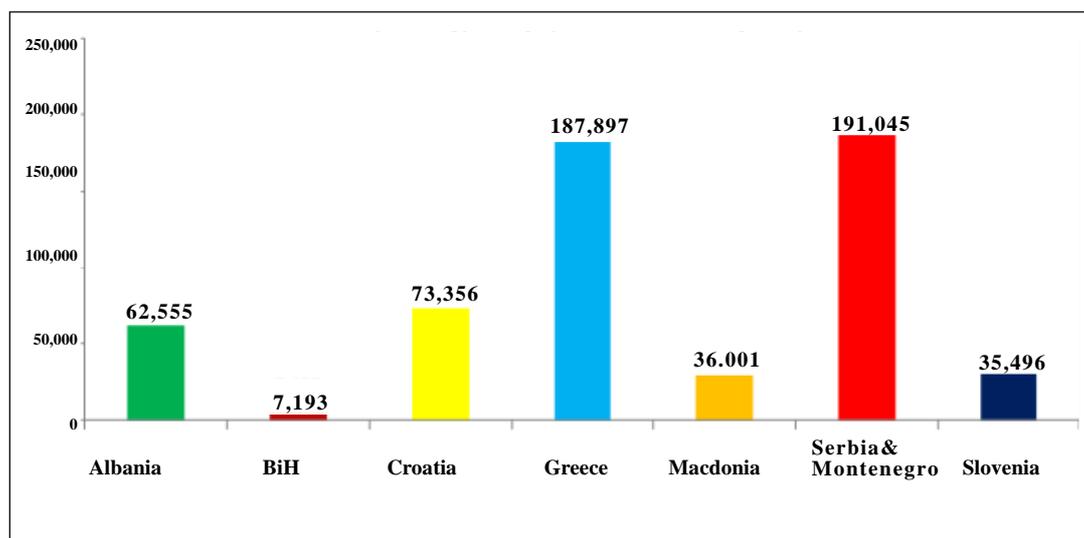
The estimated number of people with heart failure in Albania is considerably higher than in Bosnia and Herzegovina (the lowest in the region), Slovenia and Macedonia, but lower than in Croatia, Greece, or Serbia and Montenegro (the highest in the region).

Summary Box

What is known about this issue?
Heart failure continues to be a major problem for public health, with a high worldwide prevalence of the disease, which is coming on the increase. Also heart failure represents a significant burden for system health care, being responsible for significant financial expenses, in the level of treatment of disease itself and its consequences.

What is new and innovative in this report?
The number of individuals with heart failure and disease incidence in Albania are higher than in Bosnia and Herzegovina, Slovenia and Macedonia, but lower than in Croatia, Greece or Serbia and Montenegro.

What are the implications for public health?
The high number of cases of heart failure and comparatively high incidence of this disease, should serve as a wake-up call for health care system in Albania to investigate the causes and possible solutions to the problem

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*Incidence of heart failure in the Albanian population vis-à-vis the other countries in South Eastern European region*
Table 2 presents the estimated incidence of heart failure in Albania and in the other countries of the South Eastern European region (Institute for Health Metrics and Evaluation 2014):

Table 2. Prevalence of heart failure in Albania and other countries of South Eastern Europe

Country	Extrapolated annual number of new cases with heart failure
Albania	**7,167**
Bosnia and Herzegovina	824
Croatia	9,092
Greece	21,529
Macedonia	4,125
Serbia and Montenegro	21,890
Slovenia	4,067

Similar to the prevalence data, the estimated number of new cases with heart failure annually in Albania is considerably higher than in Bosnia and Herzegovina (the lowest in the region), Slovenia and Macedonia, but lower than in Croatia, Greece, or Serbia and Montenegro (the highest in the region) (Statistics by Country for Heart failure 2015).

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Evaluation of Adolescents' Births and Abortions in the District of Tirana, for the Period 2009 – 2012.

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Abstract

Teenage pregnancy is an important medical problem and a public health one, too, mainly in countries with low and middle average income. Information regarding abortion in adolescence for Albania is incomplete. Our aim was to shed light on abortion in adolescents in Albania during the period 2009-2012 based on an analysis of data reported in the abortion surveillance system. During the 2009-2012 periods about one in 20 abortions performed in our country was in adolescents 15-19 years old, while in Tirana teenage abortion rate against the total number of abortions was 3.4%, 3.7%, 3.3% and 1.8% for 2009, 2010, 2011 and 2012, respectively. Among teenage girls who have committed abortion around two-thirds of them live in urban areas. Educational campaigns, information and enhanced awareness are needed, in order to reduce the number of unwanted teenage pregnancies, abortions and their complications in our country.

Introduction

About 16 million adolescent girls give birth each year around the world and most of them are from countries with low and middle economic average income. About 3 million girls in the group-age 15-19 undergo unsafe abortions each year. Complications during pregnancy and childbirth are the main causes of death among girls aged 15-19 years in countries with low and middle economic average income. Still birth and neonatal deaths are 50% higher in babies of teenage mothers than in infants of women aged 20-29 years. Babies of teenage mothers are more likely to have low birth weight. Worldwide, one in five girls aged up to 18 years has a child, and this figure rises to one in three girls in the poorest regions of the world. In every country of the world, births to teenagers are more likely to occur in the poorest regions, with low education and in rural areas (WHO 2012).

Various factors influence teen births. In different societies, girls can be placed under pressure to marry and give birth at an early age to children, or they may have limited opportunities of education and employment. In countries with low

incomes and high economy over 30% of girls marry before age 18, and about 14% of the girls before the age of 15 years. Birth rates among teenage women are higher among women with low education than among those with secondary education and higher education. Some teenage girls are unaware of how to avoid an unwanted pregnancy, or are not ready to receive and use contraceptive methods. However, even where contraceptives are widely available, sexually active adolescents are less likely to use contraception than adults. In Latin American countries, in Europe and in Asia only 42-68% of adolescents who are married or in a relationship use contraceptives, while in Africa the level of contraceptive used in this category goes to 3-49% of individuals (WHO 2012).

Mediterranean countries, such as Italy and Spain present a low level of pregnancies in adolescents (6 births per 1,000 women aged 15-19 in 2002 in both countries) (UNFPA 2007) level which may be attributed to traditional values and social stigma. Also both countries present low levels of abortion for that age group. However, Portugal has a high percentage of adolescent pregnancies (17 births per 1,000 women aged 15-19 years in 2002) (UNICEF 2001).

In Eastern Europe, Romania and Bulgaria have the highest teen birth rate, respectively with 39.3 and 46.7 teenage births per 1,000 women. We should emphasize that the two countries have a large number of Roma population, population to which marriage and fertility are observed in adolescent age (Jordan & Isaev 2010; Lee 2014).

Pregnant adolescents more than other women tend to abort for many reasons thereof:
• Some are concerned, that the coming into being of the child will change the course of their lives. They think, that the unprepared teenagers are not able to assume the responsibilities of raising a child;

• Lack of money, the support of family or a partner are also reasons that push adolescents to perform abortion;
• Adolescents who decide to conceive a child in most cases are forced to abandon school and seek assistance from the state or family for the child (Welton 2013).

As elsewhere in the world, also in Albania, teen pregnancies constitute a social and health problem, since pregnancy in adolescence endangers not only the health of the mother but also that of the child, thus constituting indirectly also a problem for the community. In our country according to the most recent study conducted in 2009 (Institute of Statistics, Institute of Public Health and ICF Macro, 2010), the current use of any method of contraception among women aged 15-19 is 6.7%. 88.9% of women between the ages of 15-19 have never used contraception. About 91% of women between the ages of 15-19 who live in urban areas have never used contraception and 87.7% of women of this age are living in rural areas. 5.3% of women of the age group 15-19 years were married and 2.2% were cohabiting. About 0.3% of men of age group 15-19 years were 0.6% of married and cohabiting. 41.8% of married women between the ages of 15-19 were using a traditional method and 12.8% of married women of this age group are using modern contraceptive methods. 16.6% of currently married women between the ages of 15-19 have an unmet need for family planning. Age-specific fertility among women aged 15-19 dropped from 50 births per 1,000 women in the 10-14 years preceding the survey (year 08-09) to 20 births per 1,000 women in the period 0-4 years before the survey, i.e. a decrease of 60%. Total fertility rate in urban areas was 10 per 1,000 teenage women, almost twice lower than in rural areas (Institute of Statistics, Institute of Public Health and ICF Macro, 2010).
Methodology

The study aims to identify the trend of births and abortions for the period 2009-2012 in Tirana (two maternity hospitals) and the identification of socio-demographic characteristics of this age group.

The study will provide data related to residence (urban-rural), marital status, and other data related to the teen type performed abortions, because in our country there is a lack of reliable studies focused on adolescent births and abortions,

This is a transversal study conducted at the national level. Data on fertility at the national level are taken by the Ministry of Health, and Tirana data on fertility are taken from the statistical offices of the two university obstetric-gynecology hospitals in Tirana. The data on abortions are derived from Abortions Surveillance System (Institute of Public Health) in our country, the Department of Epidemiology and Health Systems at the Institute of Public Health.

The surveillance system includes all abortions and spontaneous abortions on request up to week 22 of the pregnancies carried out in our country. Abortions are reported by ICD9 system. The official document for abortions reporting is a tabbed-file of abortion, which must necessarily be filled out by a specialist doctor who performs abortions. Completing accurately all the sections contained in the file of abortion is not only a methodological condition for any maternity or licensed private clinic abortion, but also a legal obligation to provide valuable data ad information. Abortion file does not contain identity (name) of the women, to preserve its confidentiality (IPH).

In this study, data on abortions and births were analyzed for the period 2009-2012. The level of reporting of abortions varies by region of the country and the Department of Epidemiology and Health Systems estimates that this surveillance covers over 80% of all abortions that have been performed in our country (IPH).

Data were analyzed using SPSS statistical package 15. Data analysis was carried out as follows: for all variables frequencies were estimated in order to identify all the missing data and outlier values. The data on abortions are analyzed according to different socio-demographic characteristics such as maternal residence (urban-rural), mother's age category, marital status and type of abortion (both at the request of the woman and spontaneous).

Results

Childbearing begins relatively late in Albania. According to the Demographic and Health Survey conducted in 2008-09 in Albania, three-quarters of women aged 20-24 years have never given birth. Only 3% of adolescents have had children, including 2% who have been mothers at the time of the study. The proportion of women who have children under the age of 25 has fallen rapidly, while the proportion of women aged over 35 years has increased.

Among the factors for such a change are: the increase of women with higher education level, the increase in employment of women, the increase in professional career, the higher cost of raising a child, and instability in a relationship.

Age-specific birth rate for women aged 15-19 has dropped from 50 births per 1,000 women in the 10-14 years before the survey to 20 births per 1,000 women in the period 0-4 years before the survey, i.e. a decrease of 60% (Institute of Statistics, Institute of Public Health and ICF Macro, 2010). The percentage of young women who have children increases rapidly with age, from almost none for women aged 15 years, in 12% of women aged 19 years. Adolescents in mountainous areas are more likely to have a child while those who live in Tirana city are less likely (4% compared with less than 1% respectively - data according to the Institute of Statistics, Institute of Public Health and ICF Macro, 2010).

Our study is focused on two UHTC in which are recorded births, abortions at the request of the woman for the age group 14-24 years, during the

period from 2009 to 2012, since these maternity hospitals have the highest number of births in country ranking. Also there are analyzed abortions in adolescents (15-19 years) by type of abortion, residence and marital status taken from the abortion surveillance system.

Table 1. Births and Abortions for the Time Period of 2009-2012

	Year 2009		Year 2010		Year 2011		Year 2012	
Births in Albania *	34 044		33 856		34 297		34 974	
**Abortions in Albania ** **	9 200		8 085		8 307		7 846	
	No.	%	No.	%	No.	%	No.	%
Total Births in Tirana (No. and % to country total) * **	10 559	31.0	11 031	32.6	11 181	32.6	11 456	32.8
**Total Abortions in Tirana (public and private sector No. and % to country total) ** **	3 895	42.3	3 629	44.9	3 807	45.8	3 642	46.4
**Total abortions in adolescents (15-19 years) in Tirana (No. and % to the total abortions in Tirana) ** **	133	3.4	134	3.7	125	3.3	66	1.8
Births for the age-group 14-24 years in Tirana (No. and % to the total in Tirana) * **	3793	36.9	4186	38.4	4631	41.5	4917	43.0
Abortions in age-group 14-24 years in Tirana (No. and % total in Tirana) * **	987	31.3	801	27.7	762	26.3	644	22.6
Induced abortion 14-24 years in Tirana (No. and % to the total of age-group 14-24 years) * **	467	47.3	312	39.0	300	39.4	250	38.8

*Health Ministry

** The Abortion Survellance System, IPH

*** Data Bases from two Marternities of Tirana

From data analysis it was noted a slight increase in the general number of births from 2009 in 2012, while the number of abortions has been declining during the same period of time.

Births in Tirana, which account for about 30% of the total number of births in the country, have undergone a slight increase from year to year, following the trend in the slight increase in fertility in our country, and the fact that some of the women choose the capital to perform their births, hoping in providing better health care during childbirth.

Births to women aged 14-24 in Tirana now show a slight increase representing about 43% of total deliveries of Tirana for 2012, while in 2009 they stood at 36.9% value.

Abortions in adolescents (15-19 years) constitute about 3% of total abortions in Tirana.

Abortions performed by females in Tirana from 14-24 years, have shown a downward trend for the period 2009-2012. They account for about 22.6% of total abortions of Tirana for 2012, while in 2009 accounted for 31.3% of them.

Among the total abortions performed in Tirana by females 14-24 years, 38.8% of them are women who requested termination (2012), while the rest are miscarriages. This figure is lower than that of 2009, in which abortions at the request of women of 14-24 years old accounted for 47.3% of total abortions performed by women in that age group.

Figure 1. **The birth level of teenagers (15-19 years old) for the period 1980-2011.**
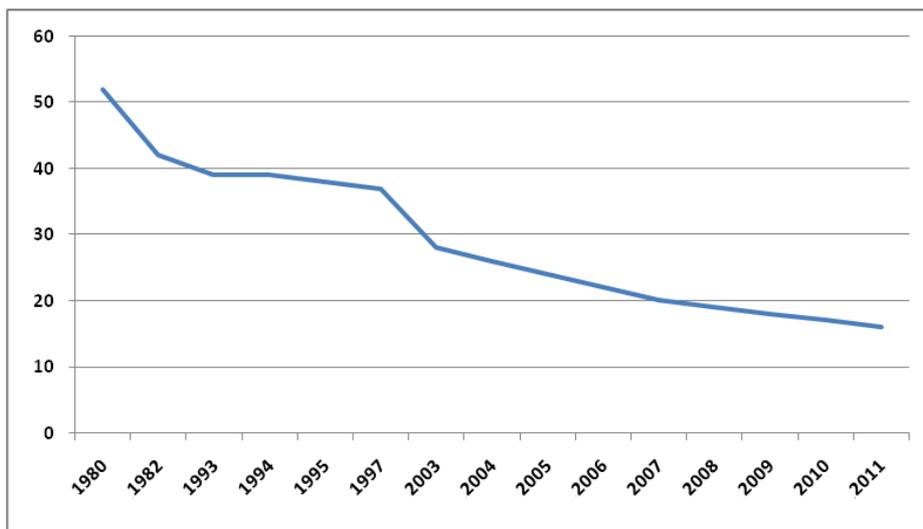
Source: World Bank indicators (http://data.worldbank.org/indicator/SP.ADO.TFRT). Level of Birth at teenagers=Birth of 1000 women at the age of 15-19 years old.

This chart is a clear reflection of the descending trend that has undergone fertility in adolescent ages, from 52 births per 1,000 women aged 15-19 in 1980 to a rate of 16 births per 1,000 women in the same age-group in 2011, therefore a decrease of 70%.

Figure 2. Births and abortions for females of 14-24 years for the period 2009-2012 in District of Tirana.
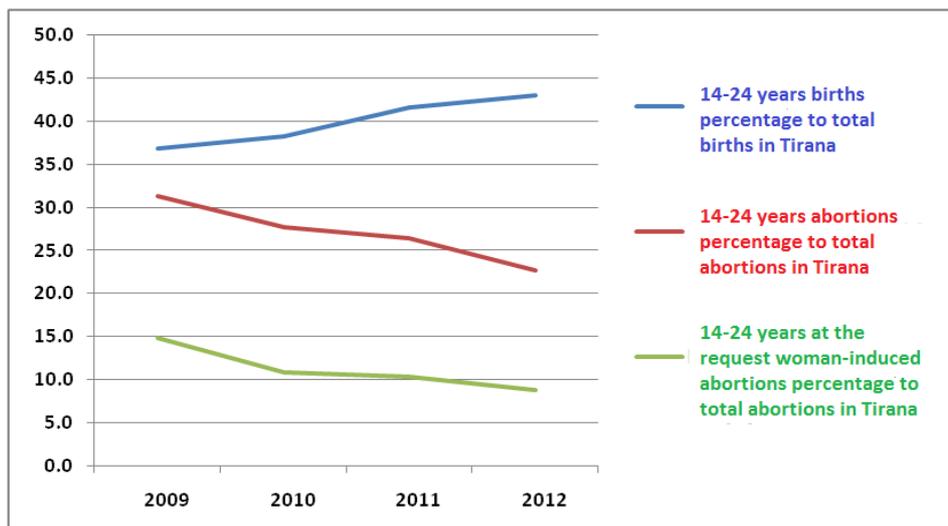
The chart shows that births to women 14-24 years age group in Tirana have increased about 6%, and abortions (spontaneous and at the request of the woman-induced abortions) among women of this age group have shown a decline of about 9%, this decrease can be explained by increased knowledge and highest use of contraceptive methods in women of this age

group compared with other age-groups. The percentage of induced abortions at the request of women 14-24 years old, to total Tirana abortions has fallen by 6% from 2009 to 2012. Also, the decreasing trend of abortions in this age-group is a reflection of the trend in the reduction of abortions across the country.

While in the years immediately after the legalization of abortion the induced abortions at the request of women constituted a higher percentage than spontaneous abortions, in recent years and in particular for the 2009-2012 period there is an increase in the level of spontaneous abortions compared to those with induced-request of women in all age-groups. This increase in spontaneous abortions leaves room for further investigation and study, if the factors affecting the health status of the mother and / or fetus are related, or another explanation is the manner of

reporting attributed to abortions by obstetrician - gynecologist medical doctors.

Indicators related to abortions in adolescents (age-group 15-19)

Based on data from the Abortion Surveillance System in our country, we noted that abortions in teenagers have been decreasing in District of Tirana. For the year 2012, there were 66 abortions in the age-group 15-19 years, a figure which represents about half of the abortions that we have had in 2009 in this age-group (i.e. 133 abortions). This is explained, perhaps, by the increase in awareness on the use of contraceptive methods in the young people of this age-group.

Indicators regarding teenage abortions were analyzed based on the files of abortion, the only official document for reporting abortions from all maternities in the country and private clinics licensed for abortion.

Figure 3. Teenage abortions according to the type of abortion (spontaneous and induced) for the period of 2009-2010 in our country.
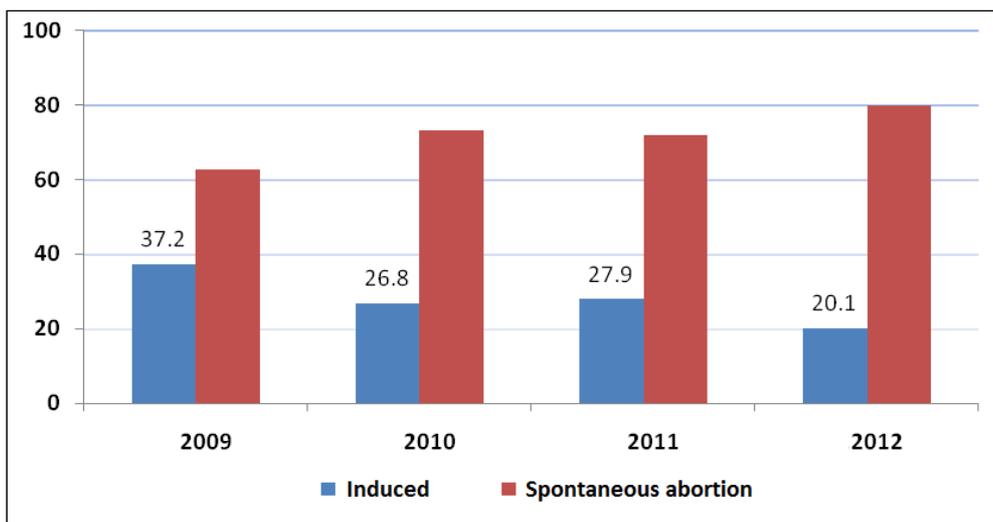
As we can observe from the graph data during the years, we see an increase in spontaneous abortions versus induced adolescent request. Abortions on induced-request for 2012 account for about 20.1% of abortions in this age-group,

while in 2009 they accounted for about 37.2% of abortions. The increased performance of the level of spontaneous abortions for the period 2009-2012 leaves room for further studies to investigate the causes.

Table 2: The level of abortions (in %) in adolescents in Tirana and in all the country for the period 2009-2012.

| Age-Group 14 – 19 vjeç	Year 2009	Year 2010	Year 2011	Year 2012
Tirana	4.0	4.0	5.0	3.0
All Country	4.8	5.1	5.1	4.1

Abortions performed on teenagers occupy a small percentage in our country, around 5% of total abortions and for the district of Tirana (including private clinics licensed to abortion) about 4%, a figure explained since in our country the highest percentage of abortions is occupied by 20-34 years age-group.

Occupied percentage of abortions performed in Tirana versus abortions across the country, is explainable by the fact that the two maternity hospitals in Tirana and private clinics licensed to abortion (which are concentrated mostly in the capital) perform the highest number of abortions.

Table 3. The abortion percentage of adolescents according to their inhabitation, for the period of 2009-2012 in all the country.

Inhabitation	Year 2009	Year 2010	Year 2011	Year 2012
Urban	64.0	64.6	63.2	65.1
Rural	36.0	35.4	36.8	34.9

Figure 4. Abortions in adolescents (15-19 years old) for the period of 2009-2012, according to the (Urban-Rural) location in our country.
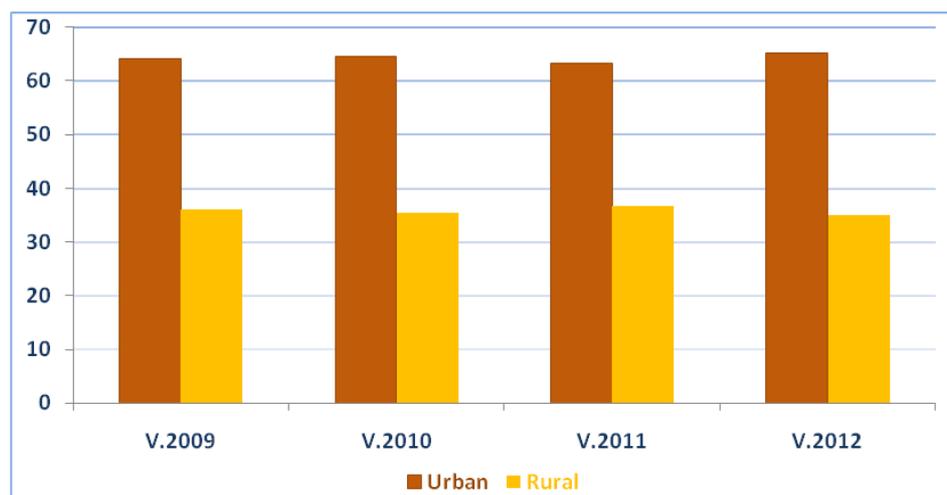
The percentage of abortions in adolescents who live in urban areas is much higher than among those who live in rural areas, explained by the fact, that during the demographic transition occurring in our country, most of the population was concentrated in urban areas. Urban-rural ratio has changed these past 10 years in favor of urban settlement, as well as the population has shifted from rural to urban areas, in order to find employment, education and a better life.

Table 4. The abortion level in adolescents according to the civil status, for the period 2009-2012 in all the country.

Civil Status	Year 2009	Year 2010	Year 2011	Year 2012
Single	21.4	22.1	21.1	21.7
Married	74.7	73.7	75.7	76.7
Divorced	2.1	1.5	1.2	1.6
Widowed	0.0	0.0	0.0	0.0
Undecleared	1.8	2.7	2.0	0.0

It is clearly observed that among adolescents, the highest percentage of performing abortions is among married women (76.7% for 2012) compared to 21.7% which is the percentage of abortions performed by single adolescent females.

Figure 5. The abortion percentage according to age-specificity for the period of 2010-2012. in adolescents in our country.
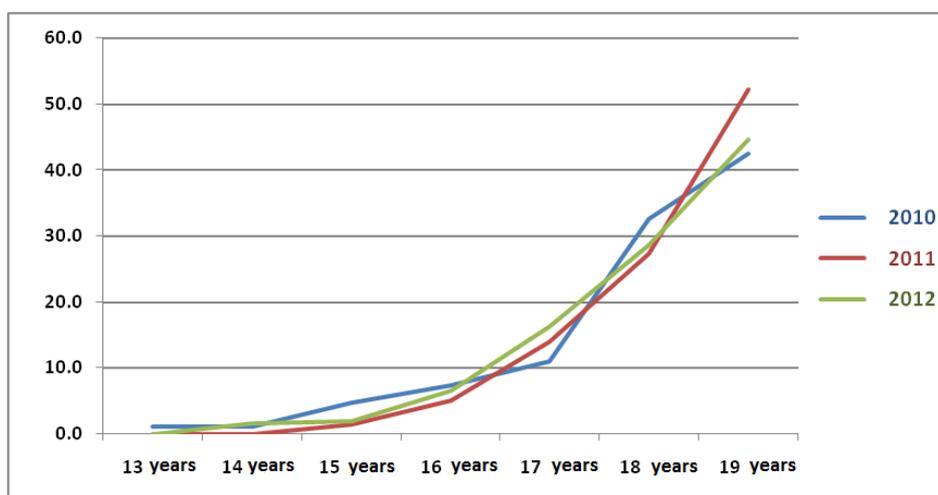
In our country, girls that are in early adolescence, before the age of 16, perform a very small number of births and abortions simultaneously. The highest percentage among abortions performed by adolescents, are abortions performed by girls aged 18 and 19 years old, the age at which usually begins the marriage and the birth of children's (picture above clearly shows immediate increase of abortions after the age of 17-years old).

In conclusion, we emphasize the need for further studies on adolescent births, since by the way of reporting through the maternities, we do not have specific data for this age-group of 15-19, but data include mostly women aged 20-24, age at which most of the women are married and have children. Moreover, more focused research is needed on the specific needs of adolescents associated with unwanted pregnancies and their decisions to carry out an abortion. Their documentation and proposed recommendations would help policymakers to design policies and health services for adolescents and youth.

Summary Box

What is known about this issue?
Pregnancy in teens affects millions of girls every year, mainly in countries with low and middle average income. Complications during pregnancy constitute the main cause of death in girls aged 15-19 years in these countries. Prevention of this phenomenon is essential for public health.

What is new and innovative in this report?
In Albania, abortions among teenagers account for about 5% of the total number of abortions. The percentage of abortions in teenagers who live in urban areas is much higher than in those who live in rural areas (for 2012, 65.1% and 34.9% respectively). Induced abortions with teenage females' request have been steadily decreasing for the period 2009 -2012 (figures 37.2% and 20.1% respectively).

What are the implications for public health?
More serious effort to prevent teen pregnancies is needed, through information and education in the community or in high-risk groups, promoting the use of contraceptives and avoiding risky behavior that have the potential to reduce unwanted pregnancies in

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Recommendations

•   Focus on effective programs to prevent teen pregnancies.

•   Engaging the community in preventing teen pregnancies. We should work towards informational programs for parents so that their communication with adolescent children to be effective.

•   Increased use of contraceptive methods for sexually active adolescents by providing free contraceptives to adolescents, educating them about the use of contraceptive methods, focusing more on the groups with the highest risk.

•   Promotion of strategies that help young people to avoid situations leading them to risky behavior.

•   Increased support organizations whose missions include prevention of pregnancies, STIs, birth control and abortions among adolescents.

•   Identify the most endangered groups for pregnancy / or abortions (as i.e. Roma community) and provide support for them.

•   Promotion of marriage after the age of 18, through information and empowerment of girls and influencing cultural norms that support early marriage.

•   Reduction of performing sexual intercourse under the effect of violence, alcohol and drugs, through educational programs and involvement of men, to critically evaluate gender differences.

•   Reduction of the number of abortions among adolescents, through informing them of the consequences of pregnancies leading to disruptions, identifying barriers to the provision of safe abortion and information about health centers that provide abortion services.

•   The need for further studies focused on the specific needs of adolescents associated with unwanted pregnancies and abortions.

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WHO Fact sheet N°364 May 2012

Preparation for emergency against Ebola virus

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Abstract

Outbreaks of infectious diseases and disasters can affect geographic distribution at any time, causing considerable human suffering and death, and economic loss. Outbreaks of Ebola hemorrhagic fever virus, constitute a major problem for public health in sub-Saharan countries of Africa and beyond. The mode of transmission and dissemination aggressiveness did not present the same characteristics as that of many years ago and for this reason international health agencies and public health authorities of all nations that were affected or not, tried to prepare plans and action plans to be used in case of emergency. Ministry of Health, Institute of Public Health and of Epidemiology and Department of Control of Infectious Disease, the infection control sector health care, in 2014, implemented a disaster preparedness plan which was based on the definition of operational capacities enabling timely detection, investigation and reporting of possible cases of Ebola hemorrhagic fever in an effective and safe way, in giving a quick response which would prevent a larger explosion (Action Plan disease Ebola).

Introduction

Outbreaks of Ebola hemorrhagic fever virus (EVD), constitute a major problem for public health in sub-Saharan countries of Africa. Since 1976, when Ebola virus fever, was discovered, the disease geographically included mainly the sub-Saharan Africa. Thus, Sudan (1976, 1979, 2004), Democratic Republic of Congo (DRC) (1976, 1977, 1995, 2007.2012), Gabon (1994, 1996, 2001, 2002), Uganda (2000, 2007, 2012), Republic of Congo (2001, 2002, 2003, 2005), Guinea (2013, 2014), Liberia (2014) and Sierra Leone (2014) have reported outbreaks of the Ebola virus.

Ebola is a severe illness caused by the Ebola Virus, a virus with a high infection rate, fatal and with a mortality rate up to 90%, but which is preventable. Ebola can be spread thanks to direct contact with bodily fluids (blood, saliva, urine, semen, etc.) of an infected person and by contact with contaminated surfaces or equipment, including body fluid soiled gauze of an infected

individual. Ebola virus can be eliminated easily by heat, alcohol products, solutions sodium hypo-chloride (bleach), or calcium hypo-chloride (Whitening Powder) in appropriate concentrations.

Risk assessment, preparedness plan and infection control measures are crucial steps to limit the spread of infection in the national and international level. Also if the measures for prevention and control of infection are strictly implemented, they significantly reduce or prevent the spread of the virus, thereby they protect health personnel and other persons.

Methods

The evaluation and trend tracking Ebola outbreak was applied for this exercise, according to official sources of the World Health Organization (WHO) and the European Centre of Infectious Disease Control (ECDC). Assessment plans covering provisions to Ebola to minimize the time spread by implementing control and prevention measures of infectious diseases by WHO and ECDC guidelines were used, together with the adaptation of the health care protocol of control and prevention of the infection

The main reason and details

Epidemic disease caused by Ebola virus (Ebola Virus Disease, EVB) in West Africa is believed to have started in December 2013, although the first case was reported in March of 2014. For months there was a stable transmission which continued in Guinea, Liberia and Sierra Leone as well as its entry into Nigeria. This outbreak according to the World Health Organization was the largest outbreak of this disease that has ever happened, where were calculated thousands of cases and thousands of deaths in these countries (Figure 1).

Figure 1. Geographical distribution of countries affected by Ebola.
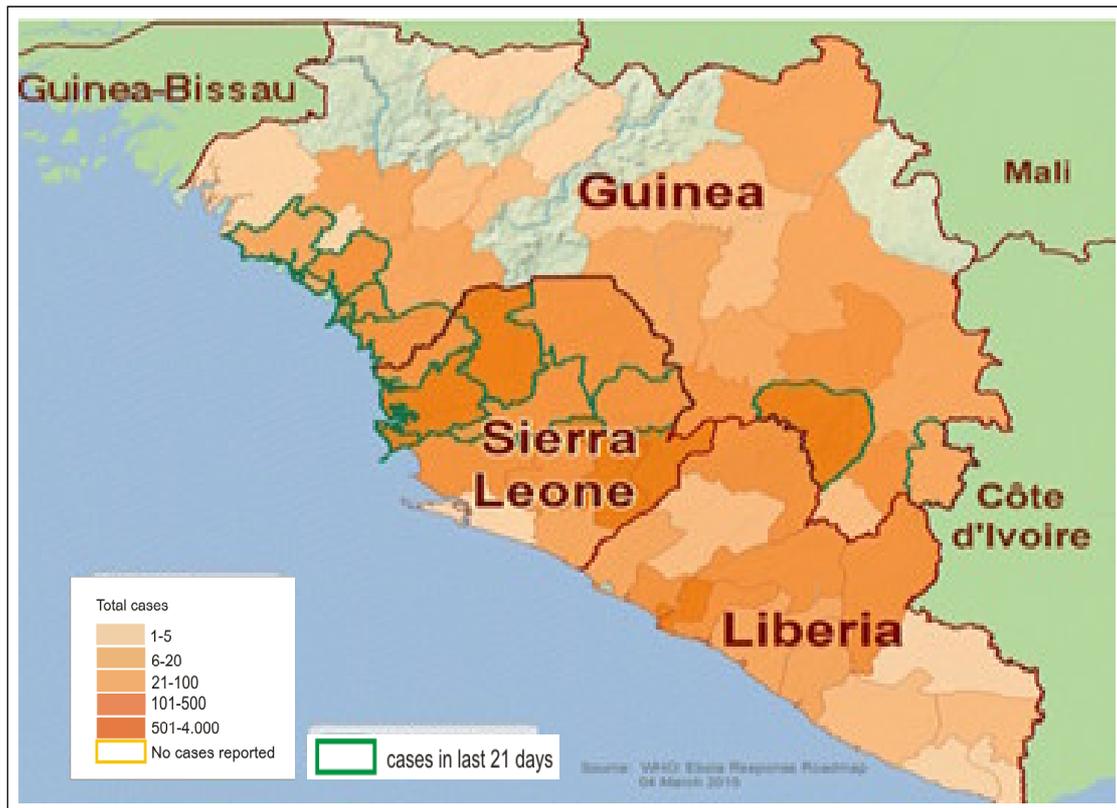
The blast, which appeared for the first time at this high level in West Africa was not yet under control in moments of assessment and preparedness for the epidemic and yet the situation remained tense, with the appearance of new cases reported daily from the areas now known as new epidemic in countries affected or new areas much "hotter" as Nigeria.

The number of cases and deaths under reclassification which changed each day, retrospective investigation and laboratory results presence were always based on official information received from the Ministries of Health, WHO, and the countries affected.

That was done in the framework of an international World Health Organization emergency which warned all states on preparedness to detecting, investigating and handling cases of confirmed and suspected Ebola virus (EVD) in order to prevent further spread through international travel.

Presentation of preparedness plan of Ebola in Albania

Such a level of risk of Ebola spreading in the world, made the possibility of Albania to be included in a series of emergency measures to cope with Ebola virus multi-institutional involvement.

This risk was low, since most human infections come from direct contact with bodily fluids or secretions of affected patients especially in hospitals (nosocomial transmission) and as a result of unsafe procedures, the use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated body fluids.

There was an increase in the level of response in Albania trying to ensure a better coordination between various governmental structures. There were prepared various agreements and guidelines, from which we can mention:

• Multi-institutional agreement between the structures of the Ministry of Health, Institute of Public Health, State Health Inspectorate, the Border Police, Civil Aviation and Airport "Mother Teresa";

• Guidelines for the border police and State Health Inspectorate.

In a parallel way it was conducted the risk assessment for Albania, the group reconvened on outbreaks control and it was developed a detailed action plan to respond to the epidemic, was drafted an initial management protocol which defined categories of risk from the low level to the highest relying random defined risk. Some of the activities carried out in this context are summarized below:

• The assessed deficiencies and the existence of elements to cope with main risks of Ebola virus at central and regional hospitals, at the port and land border, as claimed the premises of isolation or quarantine, transport logistics for suspected cases and trainings of border health personnel and healthcare knowledge in preventing infections and lack of implementation of infection control measures;

• shortcomings were evaluated in the laboratory of virology at the Institute of Public Health (IPH) in relation to the diagnosis of Ebola, as well as the department of infectious disease control, IPH is a part of a European network of diagnostics of dangerous diseases, tried diagnostic capabilities to build viruses Ebola or similar to it. But in this context it should be noted that the diagnosis of Ebola was secured at Hamburg laboratories or Marburg in Germany and Porton Down, United Kingdom PHE (UK);

• The protocol was revaluated for epidemiologic investigation and tracking of contacts, even though it is a routine practice already consolidated in terms of hemorrhagic fever in Albania.

By the first 2855 cases registered in the last epidemic of Ebola and Marburg fever in West Africa during 2014, 9% were health workers. To provide health employees in specified areas

or points of high risk, with a tool that will enable them effectively in the fight against epidemics of Ebola hemorrhagic fever virus, the Department of Epidemiology and Control of Infectious Diseases relying the ECDC and WHO recommendations, prepared and adopted the document "Protocol for the improvement of health care for patients suspected or confirmed with Filovirus Hemorrhagic fever, concentrating on Ebola" (Figure 2).

This protocol provides a summary of the measures of control and prevention of infection in people who care directly or indirectly for patients suspected or confirmed with hemorrhagic fever, including Ebola, Marburg hemorrhagic fever, in health care centers (WHO 2014). This includes also some instructions and guidelines for individuals who implement and manage measures of control and prevention of infections. Measures which do not apply only to medical personnel, but to each person who is in direct contact with these patients (eg. visitors, family members, volunteers) and to all persons who are not in contact with patients, but that may be exposed to the virus through the contact in the environment (i.e. sanitary housing cleaners, guards).

These standard procedures are designed mainly for health professionals (medical doctors and staff nurses) and also medical staff of the central and intermediate levels, which are responsible for the control of epidemics, including the endurance of emergency groups appointed, according to the International Health Regulation (IHR). Also they adapted the material (Figure 2) as:

• Check-list of evaluation for patients infected with the Ebola virus;

• Leaflets on hand washing technique;

• Leaflets on the technique of safely making the blood sample of the suspected patients that are infected with pathogens with high transmission rate through the blood;

Figure 2. Parts from the materials at the stage of emergency preparedness against Ebola virus.
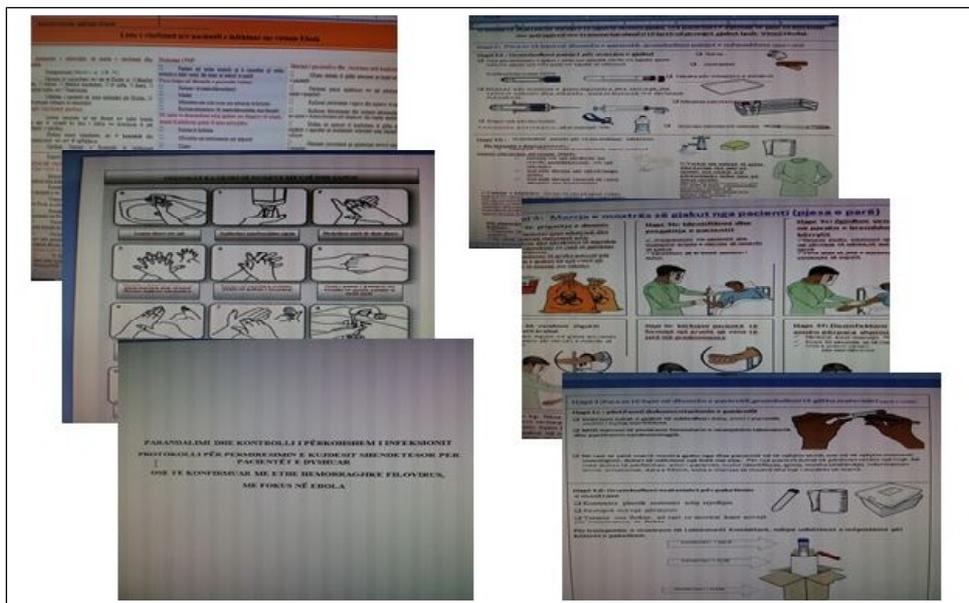
In case of EVD and clinical signs which appeared in Albania, therefore secondary transmission to those who would take care of both in domestic and / or health care centers cannot be excluded (Briand et al. 2014). If there was a suspected case with EVD, then public health workers and those of health care, needed to take measures to prevent the transmission or reduce it toward the minimization. For the performance of emergency preparation measures to Ebola, Ministry of Health and Institute of Public Health, based on a special fund for this emergency, provided full sets of personal protective means in terms of health care prevention and control of infections.

• Theassessed deficiencies in epidemiolo gical services for personal protective tools at the port and land border, deficiencies which were recovered by the Personal Protective Asset Management Plan in central and local levels;

• The estimated fusions for personal protection tools which lacked in IPH and in this context of emergency preparedness to Ebola it was ensured another quantity of their stock;

• There were strengthened the health capacities in terms of EVD and control measures and prevention of infection as in health care services and public health at central and local levels, being conducted by IPH cycle training and teleconferencing from the World Health Organization;

• It took a series of measures in terms of updating information and communication / media informing the public for the correct preparation to Ebola virus emergency.

Comments

So we can say that the outbreak of the Ebola virus in West-African nations was as an "awakening" call for international health agencies and public health authorities of the affected nations and not only, but throughout the public health structures in the world (Frieden et al. 2014).

This outbreak showed us that even a disease that is almost forty years old, can still create "havoc" in such a measure, which forces us to declare an international public health emergency (CDC 2014; Briand et al. 2014). And it is understandable, that the existence of an effective system of public health care delivery is a must to successfully counter the outbreak of the epidemic and it is extremely difficult to develop into operational such systems, after the crises occurred, and the lack of such systems can allow less infectious diseases (as well as all the factors do not favor rapid transmission), to grow at an exponential rate all the same (CDC 2014b; WHO 2014b).

So relying on a systematic framework to fight even a single case, essentially we rely on the preparation and strategies for quick response to emergency mobilization of human resources, to implement response measures to Ebola, on coordination and management of the crisis at different levels.

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Mental Health in Children

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Abstract

Mental health is an important component of the health of children by influencing almost every aspect of their lives. One in five children in the world experience different degrees of mental health disorders, and the burden of morbidity and mortality from these causes is growing. For these reasons, the state of children's mental health is a serious concern for public health and the health system in general. Although records are incomplete, it is thought that mental health disorders affect a significant number of children in our country. Mental health support is essential for addressing the phenomenon and related consequences, including appropriate parental communication, mental health promotion and specialized medical assistance.

Introduction

Mental health is an important part of the overall health of the child. In fact it has a significant impact on physical health as well as in the possibility of the children to be successful in school, work and society (Kessler et al. 2007). Mental health as well as physical affects how the individual thinks, feels and acts (Emerson & Hatton 2007). Specialists have determined that, on a global level, one in five children suffers from mental health problems. Unfortunately, it is thought that this figure will increase. The World Health Organization estimates that by 2020 mental health problems in children will be 50% more than compared with all other health related problems. According to this issue, mental health problems will be one of the five major reasons that cause illness, disability and death (World Health Organization 2013).

While it is still not entirely clear why this number is growing so rapidly, many experts think that this is related to stress in children and families and to a better diagnosis of these problems. This makes the child to have problems in the ability of the child to meet his/her potential, including the effects on health, education, work or the justice system.

However, despite the uncertainties concerning cause and effect data, we can affirm that mental health problems can cause problems such as

substance abuse, problems at school, invovement in criminal activities and suicide. Similarly, less than half of recorded cases receive any treatment and only 20% of them receive appropriate treatment for this problem. All children have the right to be happy and deserve access to effective care for the prevention or treatment of mental health problems they may have. Nowadays, there are many children who live in poverty or in underdeveloped countries, who cannot meet these needs.

Specialists are working to change this situation. Thus, more and more importance is being paid to mental health problems of children and the capacity of the health system in general to tackle this "epidemic". Here, it is very important to have action plans to determine the causes of this epidemic, as well as the children receive appropriate services. For example, an ove weight boy who was prejudiced because of its weight can be withdrawn from society and may develop depressive symptoms, or may have hesitation to play with other children, which contributes even more to his health physical problems and as a result even to his mental health.

Types of mental health problems in children and risk factors

There are some forms of mental health problems that commonly affect children:

• Mood disorders, especially depression - is affecting more and more children, compared to earlier times. At the age of adolescence are noticed more cases of depression, than in childhood. Specialists explain the identity crisis, which could lead to lack of hope, motivation, not being understood, etc.;

• Self-damage - is a common problem of mental health in children. Some people find it difficult to manage intense emotions and can hurt themselves. This proves mostly rejection of taking responsibility (Mental Mental Health Foundation and the Camelot Foundation, 2006);

• Anxiety disorders - many children who change certain aspects of life such as: schools, society, etc., can display elements of this disorder (British Medical Association 2007);

• Post-traumatic stress disorder - mostly in children may occur as a result of involvement in an accident, serious events, physical or sexual abuse, etc.;

• Hyperactivity disorder - which is a disorder in children which appears through impulsive behavior, difficulties in concentrating attention, etc .;

• Eating disorders - usually begin in late childhood, or on the verge of adolescence. These problems are caused mostly by problems with weight, but also by a distortion of self-image.

In the meanwhile, there are several risk factors that increase the likelihood where children experience mental health problems (NICE 2011). Some of these factors include:

• Having an illness for a long time;

• Having a parent or family member with mental health problems, alcohol problems or trouble with the law;

• Experiencing the loss of a close person;

• Having parents separated or divorced;

• Being a victim of bullying, physical or sexual abuse;

• Living in poverty or the lack of a home;

• Experience of discrimination, perhaps because of race, of sexual orientation or religion;

• Caring for a relative or taking responsibility as an adult;

• Having ongoing difficulties in education.

How can parents help?

If children have a warm relationship, open to parents, there are more chances to discuss with them regarding their problems. One of the most effective ways in which parents can help is through by listening and taking their feelings of their children seriously. Children may need a hug, may need support to do something or they might want a practical help.

Usually, children's negative feelings pass. Parents should understand that it is necessary to intervene if the child continues to be anxious for a long time, if negative feelings continue preventing them to live their lives, if these negative feelings are damaging their family life, etc; or if the child is behaving in an inappropriate manner for his age group.

Where can we turn for a specialized psychologist for children?

A psychologist who works with children can be found at:

- School;
- Community mental health centers;
- In hospitals, where they collaborate with pediatricians and psychiatrist;
- In private clinics.

Promoting mental health in children

Psychologists who work with children and young people are also trained to take into account the emotional aspects of development, identity, social, cognitive and biological (Gulliver, Griffiths & Christensen 2010). Culture, ethnicity and language also have a significant impact on children's behavior as well; they influence the methods of prevention and treatment of mental health disorders.

Psychologists have developed several tools for assessing the protective and risk factors for mental health of children, so they can be tested for emotional problems as well as continuous monitoring of the progress of treatment. A child is likely to have better mental health when (Pappas & Frize 2010):

- Feels that others want, believe, and value him/her;
- He/she is interested in different aspects of life and hope and optimism;
- He/she is able to learn and take responsibility;
- There is a sense of belonging in the family and society;

- He/she accepts oneself, as well as the positive aspects of oneself;
- Feels that he/she has control in his life;
- He/she has the strength to cope with the negative aspects of life, and ability to solve problems.

Aspects that would help children have a good mental health; include (Green et al. 2005):

- One of the foremost physical health, eating in a balanced manner, engaging in regular physical activity;
- Having the time and freedom to play indoor and outdoor ;
- Becoming part in a family where members have an effective communication among them;
- Being in a school which cares for the welfare of students;
- Participation in various activities adapted to age groups.

Research in psychology have contributed to the development of a more effective treatment and prevention, in terms of mental health disorders in children, youth and their families. This includes programs aimed at children in school contexts and children transition into adulthood, future mothers, etc., (National Association of Special Schools 2013). There are several designed programs that effectively include families, schools and the community, which are a social support, and are very important for the long term well-being, by providing also a long-term well-being for children.

It is intended for these programs to be at the level of:

- Individual – for example: therapy counseling to those with mental health disorders;
- Peer – for example: backed programs aimed at improving social skills, communication, etc.;

• Family – for example: parenting based on emotional needs of children at each stage of development;

• Community – for example: violence prevention programs offered at various community centers;

• Reference systems – for example: coordination of health services in child protection systems, judicial education, etc.

For example, by designing a successful program which is focused on the family that aims to reduce alcohol use among teenagers, including parents and guardians, by training them parenting skills and setting necessary limits, clear expression expectations regarding substance abuse, communication for establishing the discipline. At the same time was accomplished the training for the young people on the development of resistant behavior, as well as development of negative attitudes towards alcohol (McManus et al. 2009).

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Health 2020, European Health Policy Framework in Support of Government and Social Measures for Health and Welfare (Summary)

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Abstract

"Health 2020" is the new framework of European health policy, which was created from World Health Organization (WHO), to achieve the highest possible health standards for each human being, as well as for health improvement and welfare of populations, the reduction of inequalities in health and strengthening the public health, by keeping in forefront the initiative of "Health for All." "Health 2020" also provides a platform for regional cooperation by opening up opportunities for experience exchange in improving the efficiency of local health systems. The knowledge of this strategy helps the health professionals, policy-makers and decision-makers, in the way their decisions should be oriented in line with these objectives.

Introduction

Health 2020 discusses the health vision as a dynamic network of stakeholders at all levels of society and aims to support the common shared goal across the region. Health 2020 is based on the values enshrined in the Constitution of the World Health Organization (WHO): "Achieving the highest health standard possible is one of the fundamental rights of every human being" (Health 2020).

In the framework of Health 2020, health is considered as a major source and social wealth. Good health significantly affects the economic development of a country. Good health contributes to increased productivity, a more efficient workforce, healthy aging and less expense for illness and social benefits, and thus less tax loss (Health 2020).

Health 2020 serves as a unique regional resource that helps us all to learn from the experience gained in practice, to redefine priorities and to identify the best ways to coordinate actions among stakeholders in all sectors, to improve the health and well-being of the individual and population (Health 2020).

The main goal of the Health 2020 is not to create uniform health systems in national and local level, but their improvement in a uniform way. In achieving this goal, Health 2020 values the great diversity of health care systems and is based on this diversity for the uniform improvement.

The approval of Health 2020 by all member countries determines the two common objectives:

• Improvement of health for all and reducing inequalities of health status;

• Improvement of participatory leadership and governance on health (Health 2020).

Setting targets for the reduction of inequalities in health can help to promote action and is considered one of the main ways to assess the health development at all levels. The treatment of social inequalities contributes greatly to the health and welfare. Taking action for social and environmental determinants can affect in effective way, in the treatment of many inequalities. For example, the data indicate that the programs which address the welfare of children produce better results in health and education (Health 2020).

Ministries of health and public health institutions are more and more involved in undertaking intersectional approaches and acting as intermediary locators and health advocate. Empowering people, citizens, consumers and patients is critical to improving the health outcomes, health system performance and patient satisfaction.

There are four policy areas where Health 2020 is based on:

• Investing in health throughout all life and in empowering people. The support of good health throughout life leads to increased life healthy years and increased life expectancy, which can produce significant economic, social and individual benefits (Health 2020);

• Treatment of major health challenges related to communicable diseases and non-communicable diseases in the European region. This requires a combination of interventions to successfully treat large burden of noninfectious diseases in the region. These interventions include: statements and existing strategies regarding the control and prevention of non-infectious diseases, as well as health promotion. Health 2020 supports continuous strong efforts to fight infectious diseases through building information and capacity supervision and treatment of serious viral and bacterial threats (Health 2020);

• Strengthening health systems focused on people, public health capacity, as well as preparation, monitoring and response to emergencies. Health 2020 reconfirms commitment of WHO and Member States for universal coverage. Primary health care is the cornerstone of health systems in the 21st Century. In this function, health systems should be financially viable, appropriate and focused intentionally on people and informed on their data. Achieving better results in health requires strengthening the functions and capacities of public health that can only be achieved in reformation of education and training of public health professionals (Health 2020);

• Creation of reviving communities and supportive environments. Renewal is considered as a key factor for the protection and promotion of health and wellbeing at the individual and community levels. Creating social and physical liable environments can only be achieved through collaboration among environmental and health sectors. Interdisciplinary and intersectional collaboration among human health, environmental and animal promotes the affectivity of public health (Health 2020).

These policy areas are set by member states at the global level and are geared to handle specific requirements and experiences of the European region. Policy areas are interconnected, independent, but simultaneously supportive of one - another.

Success in achieving the goal of Health 2020 requires common goals and broad collaborative efforts from people and organizational societies of each country: governments, NGOs, private sector, science and academia, health professionals and each individual. The combination of individual and collective efforts will help in achieving the goal of Health 2020.

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