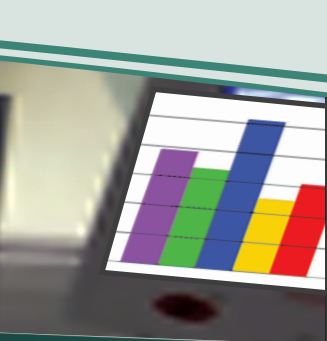
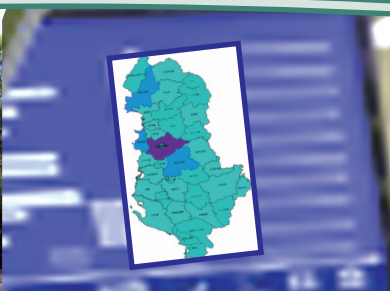


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Measurement of psychomotor development in early childhood

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Background

Psychomotor development is one of the most important components in determining the well developemnt of a child, but unfortunately, in our country by parents and educators, even by medical personnel, yet only primary evaluated continuously tracking physical development, and evaluation of psychomotor development of preschool children is sporadic and intuitive.

Through this paper aims to present the screening methods recommended by contemporary researchers in the field, questionnaires by age and stage of development, edition 3 (Age & Stage Questionnaires-3). Using this screening method solves the two main problems of the current evaluation of psychomotor development of children: firstly reduces subjectivity intuitionto and clinical observation by assessing psychometric dotted all sectors, and secondly provides quantified monitoring child development through charts of psychomotor monitoring found in the test booklet ASQ-3.

Implemented methods of monitoring the psychomotor development

Increasingly, screening psychomotor development is recognized as a key component of high quality child care, early identification while delays of development is essential for an optimal early intervention (Linda et al. 2009). The fact of not using a scientific method and standardized psychometric measurement of psychomotor development, makes his assessment of children even more vague and inaccurate. It does not achieve diagnosed of a large percentage of atypical developments, which become visible and measurable too late, when the child has already entered into primary education. There is a broad consensus on what the personnel of primary health service has a unique position to conduct screening on development diagnosis and to improve the situation of children with development tardiness (King & Tandon, 2010). The study of Julie McCrae (2011) reported a rate three times higher of the development issues when screening was carried out by specialized doctors and educators, than when conducted by the staff of the kindergarten (McCrae et al. 2011). Although health professionals agree on the importance of monitoring child development, there is still debate over the method by which it should be implemented.

They have suggested a number of models and ideas on this topic:

- Development Screening – this systematic process controls the development of apparently normal children (using tests, classifications, examinations or other procedures) to identify those children who are at risk for developmental problems.
- Monitoring of development – this series of actions includes the promotion of normal development and detection of developmental problems, as part of ongoing primary health care.

Depending on the purpose, each of these procedures is chosen according to type of study for child development. E.g. if you develop a population surveillance, in which the objective may be to identify children with more or less risk for developmental problems, the best choice would be screening. On the other hand, if we are interested in individual follow-up of children undoubtedly the preferred method would be to monitor the development (Pan American Health Organization, 2012).

Studies in psychomotor development of preschool children in our country

In 1992, Dr. Anastas Suli has conducted a screening study on psychomotor development of children through test DDST (Suli 1992). Test DDST (Denver Development Standard Test) has been recommended method about psychometric measurement of the time, and had already started since 1974. During the past two years, at primary care professionals disposal are established two important documents pursuing development standards in early childhood: “Report on the Review of Preschool children Standards in Albania” October 2013, and clinical practice guidelines “Well development of 0-6 years child in Primary Health Care” supported by UNICEF Albania. But none of them recommends a quantitative method to measure psychomotor development of children. Today, in the capital and across the country operate a large number of public and private development centers. The main aim of their work is multidisciplinary treatment of children with developmental problems, and part of their services (by them advertising on the website) is the measurement of psychomotor development of children. But despite the high number of functional centers, child development, author of the study failed to find publications on studies of psychomotor development screening for preschoolers.

In a study conducted by Hope and Homes Association with financial support from the EU in 2012, was reported that the Albanian pre school children system has scarce abilities to identify and treat children with communication problems, a problem that is estimated to affect 4% of children in the district of Elbasan (Erebara 2012). The survey and interviews in the field, noted that Albania does not have a reliable system to measure psychomotor development of children aged 3-6 years. The study reveals that the majority of educators are willing to devote the necessary attention to these children, but their knowledge on how to identify and treat this problem are not suitable. Doctors reported that they had easier to diagnose an autistic child than a psychomotor tardiness. This is a well known phenomenon also in the worldwide experience; the more severe the disorder of development, the easier it quickly identified by health professionals.

According to this study, in the case of Albania there still are no studies of social sciences or medicine on the extent of the difficulties and communication problems, as among children and among adults. It is worrisome that educators, teachers, doctors and families are often unaware of the existence of these problems and the possibility of treating them educationally as well as in medical aspect.

American Experience - a model that is standardized worldwide

In 2001 it was the first time when the American Pediatric Academy, recognizing the importance of early identification of children with developmental problems and the need for a more methodical evaluation, decided that all children to undergo psychometric screening as part of normal child care. ASQ-3 test is recommended by the American Pediatric Academy to be part of routine control of the child 0-3 years and for each age group personalized in test (Brooks 2010). Although across the world has some psychometric screening tests (Table 1), more and more researchers in this field agree that ASQ is-3 is the most appropriate test for the detection of retardness of psychomotor development (McKnight 2014). Screening instruments commonly used by American pediatricians were ASQ-3 and PEDS (Parents' Evaluation of Developmental Status). The failing rate in diagnosing development retardness varies from 22% of Peds to 11% of ASQ-3. Screening rate improved from 68% by diagnosis of patients with developmental problems before training the staff, in diagnosing 85% of them after training. During an almost experimental study, a group of specializants in pediatrics were trained in the use of three psychometric screening tests: Denver II, ASQ-3 and PEDS, to use them independently for screening their patients. 70% of them preferred to use ASQ-3 (Schonhaut 2013). Reliability and validity of ASQ questionnaire issued by assessment studies in countries such as Denmark, Norway, Chile, Australia and Korea, are the first steps to confirm the usability of ASQ's for industrialized countries in general. From numerous studies it has been demonstrated that ASQ-3 is a convenient measuring tool to identify children at risk for disorders, as well as children with normal development. Piek study in 2008, supports the idea that the ASQ-3 is suitable for predictive purposes, eg Information on the development detection engine that can provide educational results of cognitive development (Veldhuizen et al. 2014).

Observation vs. Screening

According to studies conducted in the USA, half of children with development retardness are not identified until entering preschool, where they undergo screening tests. One reason for the low rate of identification is the dependence of clinical observation, as the only method which has poor sensitivity. Reports have shown that clinical judgment alone, is insufficient and inaccurate. In a study conducted by Aylward, it was found that using clinical judgment alone was not understood about to 45% of children who need early intervention. Because child development is dynamic in nature, regular and repeated screenings, combined with clinical observations are needed to identify development retardness.

Barriers to the use of screening tests

Development retardness are fully identifiable with careful use of screening tests, but still in the USA only 23% of doctors in primary health care reported for the use of standardized screening tests. There are many barriers to use widely these tests including: limited and competitive clinical requirements, financial cost, adequate staff, lack of consensus on the most appropriate screening test, doctors lack of confidence due to inadequate training and expertise as well as the time limit to get over with each child, as most predominant obstacle.

Screening tests of psychomotor development

Universal cost-effective and time-efficient screening tests available for pre-school children are

limited. Existing ones, except strengths, have lots of weaknesses. The literature does not identify a standard criterion in the assessment of development. Standard criteria is defined as an ideal test:

- covers all sectors of development
- applied equally to all ages
- has validity of construct
- has a sensitivity and specificity close to 100%

The function of the screening test is to identify the sectors in which child development varies by defined age limit. Although his goal is to differentiate children that may have retradness by those who do not have, selected test should be a quality instrument that avoids optimal misidentification or overreference.

Psychometry measured by screening tests

The sensitivity, specificity and validity are elements that reflect the quality and potential use of a particular test. Table 1 compares the psychometric tests values for the screening of psychomotor retardadness. Accepted sensitivity in this area is 70-80%. Accepted standard for specificity is approximately 80%. A good screening test should be standardized on a large sample of children with representative characteristics of entire population.

Table 1. Comparison between most common screening tests of psychomotor development

Psychometric tests	<i>Sensitivity</i>	<i>Specificity</i>	<i>Validity?</i>	<i>Population based test</i>
Ages and Stages Questionnaire, edicioni 3	85 %	86 %	+	12,695 children with different ethnic and socio-economic profile
Parents' Evaluation of Developmental Status	74-80 %	70-80 %	+	771 children with different ethnic and socio-economic profile
Child Development Inventory	80-100 %	70 %	+	568 children with different ethnic and socio-economic profile in Minesota
Infant Development Inventory	75-85 %	70-77 %	-	86 infants in high risk from a perinatal clinic cohort
Bayley Infant Neurodevelopmental Screener	75-86 %	75-86 %	+	600 "normal" children from ggeneral population, and 303 children in high risk from a clinical cohort
Denver Developmental Screening Test II (DDST II)	56-83 %	43-80 %	-	2,096 children i Colorado different in ethnicity, residence, education, civilization and maternal education

Age & Stage Questionnaires (ASQ-3)

One of the most evaluated tests in the group of tests which is completed by parents is age and stage questionnaire (of development) - version 3 (Ages and Stages Questionnaire - ASQ-3). ASQ-3 is a screening tool, designed for children 1-66 months, who may need early intervention or special education services in early childhood. In other words, ASQ-3 is used to screen children and to assess whether or not they have typical development for the age-group. ASQ-3 consists of several questionnaires that can be completed by parents or childrens care-takers (who know them well). ASQ-3 screening system was developed by the "Center for Human Development" at the University of Oregon during the years 1980 to 1990, as a response to the growing need for early careful identification of children who have retardness or development disorders. This test has 21 questions sections according to age of the child, ranging from age 1 month to 5 years and a half. In this test psychomotor skills are divided into five sectors: communications, global mobility, fine mobility, problem solving / adaptive behavior, personal and social performance each of them with six questions of competence in all sectors. A stipple about pass/fail for each sector, as well as a stipple passes/fails in whole child development. Along with psychometric measurements, sections containing 10 more questions to assess general concern of parents.

The statement of the request of duty is for 4 grade level until the 6th level of 9-year education. In general it takes 10-15 minutes to parents to complete it. If the test is completed according the parent and child interview by a doctor, who put the child to demonstrate a psychomotor tasks can require 20-30 minutes or more, depending on the degree of cooperation of the child (the calculation is made by the author of this study).

Advantages of using the ASQ-3:

- Easy to use.
- Mostly recommended by dignified institutions. It provides reliable results.
- Tool that includes parents reporting.
- It is the only test that refers to the stages of development.
- Includes activity guide for children with stipple near and below the minimum.

Makes effective continuous monitoring of child development.

Psychometric sectors of ASQ-3:

Each questionnaire ASQ-3 consists of 30 development elements, distributed in five sectors:

- Communication: vocalization, hearing and understanding of things that are required.
- Global mobility: the major movements of the arms, body and legs.
- Fine mobility: movements of hands and fingers.
- Troubleshooting: learning and playing with toys.
- Personal-social: individual and social game play with other children.

In the last section of each questionnaire parents are asked to reflect any general concern that they may have on child development.

ASQ-3 format

Each of the 21 questionnaires is clearly labeled to show which is the age of children which can be used (e.g. questionnaires for 36 months children may be used for children between 34 months and 16 days to children 38 months and 30 days). All psychomotor tasks are grouped by sector and are listed starting from the simplest tasks. For every task parents are asked to reflect on the specific behavior of their children, and to report whether they perform these activities regularly (coded “yes”, “sometimes” and “not yet”).

Calculating the points of ASQ-3

When calculating scores, tasks coded with “Yes” get 10 points, coded tasks “Sometimes” receive 5 points, and tasks coded with “Not yet” receive 0 points. Thus each sector can take a maximum 60 points and total psychomotor development of the child can be estimated with 300 points.

Interpretation of points ASQ-3

- In general, children are divided into three categories:
- Children with total points over the minimum (cut-off) - the area of normality.
- Children with total points close to the minimum (cut-off) - the area of monitoring.
- Children with total points below the minimum (cut-off) - the area of treatment.
- If a child scores in one or more sectors fall in the area near the minimum (-1DS to -2DS) it is recommended that the child must be monitored, repeat the test often and parents must be involved in health education activities on the needs of the child psychomotor development and his way of stimulation.
- If a child scores in one or more sectors fall below the minimum (under -2DS) it is recommended that the child must be referred for further evaluation.
- Also, even if the childrens evaluation points fall close to the minimum in all areas and the parent has reported a problem in the overall development of the child, this child must be referred again to the specified health follow-up, depending on the child’s medical judgment.
- Children under and above the minimum should be taken into consideration to undergo diagnostic assessments (non-screening test as in the case ASQ-3). However, the children with the minimum point should continue to be followed up to ensure that progress is continuing.

Who can effectuate the screening?

One of the advantages of screening test “Age and Stages” is that many trained professionals and pre-professionals can effectively treat test. Best practice is that the person recommended to administrate screening test, is to communicate with care-takers (parent, teacher) and be capable to collect information from the care-takers during the screening process. Some states in the USA, use public health nurses for the application of this test, as well as social workers dealing with children, etc. Also, the best practice is the inclusion of care-takers in this screening, after they enable preliminary guidance on the screening process, growth and normal development of the child.

The validity of the test Age & Stage Questionnaires-3

The overall specificity of the ASQ-3 is 86%, with an average sensitivity of 85%. Its validity was measured by comparing the Battelle Development Inventory. Test-retest and internal reliability is strong ($r = 0.94$). Studies on the applicability of ASQ-3 in Primary Health Care Centres demonstrated that it was practical, cost-effective and do not hinder the normal activity of the Health Care Centre.

Reliability of Test ASQ-3

Reliability measures the sustainability and stability of measurements. Overall reliability over 90% is considered excellent, 70-90% is considered high, 50-70% medium and below 50% low reliability. Results of the reliability of ASQ-3, measured by different methods are:

- Test-retest reliability = 92%
- Credibility among researchers (parents and professionals) = 93%
- Internal Consistency = medium to high.

Validity of Test ASQ-3

- Validity has to do with the fact that as the measuring instrument measures exactly what it aims to measure. The validity of criteria (such as the “gold standard” is used standardized test Developmental Battelle Inventory) = 82.6-88.9%
- Sensitivity = 82.5-89.2%
- Specificity = 77.9-92.1%

Conclusions

As conclusion we can say that the use of this screening method solves two main problems of current assessment of psychomotor development of children, first conceal subjectivity and intuition of clinical observation by assessing psychometric dotted of all sectors, and secondly provides quantified monitoring development of child through monitoring charts in the psychomotor test booklet ASQ-3. This testing facilitates structured communication between parents and health professionals, improve follow-up of child development by parents and professionals as well as increased awareness of parents about their children’s development. This is currently more standardized screening psychomotor test, which is continuing to be standardized across the world. Findings of this study recommend the systematic use of ASQ-3 in primary health care in Albania, as an integral part of the evaluation of the development of children 0-6 years old, as well as creating databases with graphs monitoring of psychomotor development of children, in order to evaluate the test and its standardization of the Albanian population.

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The Surveillance/Investigation of Epidemic Outbreaks in the year of 2013

Eugena Erindi¹

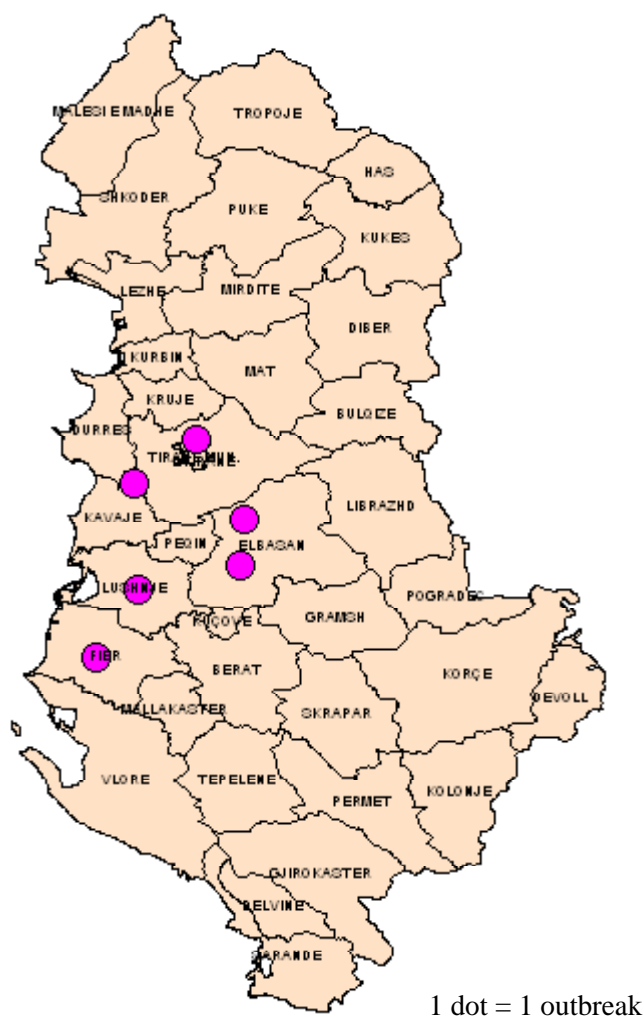
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Introduction

The diseases of nutritive nature include intoxications and infections deriving as a result of contaminated food consumption (World Health Organization, 2008). The above intoxications often are known as “nutritive poisoning.” One of the primary causes of these diseases is *Salmonella*, and a lot of its subtypes are known (Tibayrenc 2007).

Salmonella enteritidis is one of the serotypes of *Salmonella* bacteria most spread all over the world (Cohen 2003). Eggs are one of the main sources connected to the infections of *Salmonella enteritidis*. Bacteria can cause disease if the contaminated eggs are consumed uncooked. However, intact eggs (shell intact) may also be infected by the bacterium *Salmonella* as this can contaminate the egg to embryo, namely before the creation of the egg-shell *lëvozhgës* (Heymann 2008). Therefore, there is no way to determine if an egg is infected just starting from its outer appearance (color, size, shape, taste, or the source of the egg). The foods most affected by this bacterium, except eggs, are chicken meat, unpasteurized milk, pork, beef, etc (Talley et al. 2007).

Six epidemic outbreaks of food nature were reported in the Department of Coordination and Control of Infectious Diseases in our country during 2013, which appear geographically in the following map:

Figure 1. The localities where epidemic outbreaks of food origin have occurred

In general, the objectives of the epidemiological investigation of outbreaks are summarized as follows:

- Identify the source of the outbreak,
- Assessment of proliferation, and
- Taking the necessary measures to control and prevent similar outbreaks in the future.

Data collection is mainly realized in a retrospective way, because of the already occurring relevant event. The aim of data collection is the identification of potential food and circumstances of relevant caused explosions. It is necessary to accurately define the “case”, namely signs and symptoms that must be present to an affected individual, so that he/she may be a subject affected by the outbreak of food epidemic nature in question. Naturally, the identification of the case varies according to the affliction (microorganisms the outbreak causes) and a series of other characteristics of afflicted individuals, as well as the timing and the country where the outbreak has happened.

In the following sentences, we describe the epidemic outbreaks of food nature in Albania of the year 2013, in which *Salmonella* is included.

Outbreak 1 – Alimentary Intoxication

Location: Rremas Municipality, Lushnja

Time period: 14-16 July 2013

Lushnja district epidemiologist announces on 07.14.2013 for 6 cases (children) from the village of Kamenica, the Rremas municipality Rremas in Lushnja district, who have consumed all together some watermelon. After two hours the children have shown clinical signs, such as: headaches, moderate temperature, vomiting and diarrhea. Children were presented to the district hospital for treatment, mainly perfusion. In the place of outbreak, epidemiological investigation was conducted and samples were taken (feces) from patients, for bacteriological examination at the Institute of Public Health (IPH), which resulted positive for *Salmonella enteritidis*.

Outbreak 2 - Toxic - alimentary infection during a lunch in a restaurant

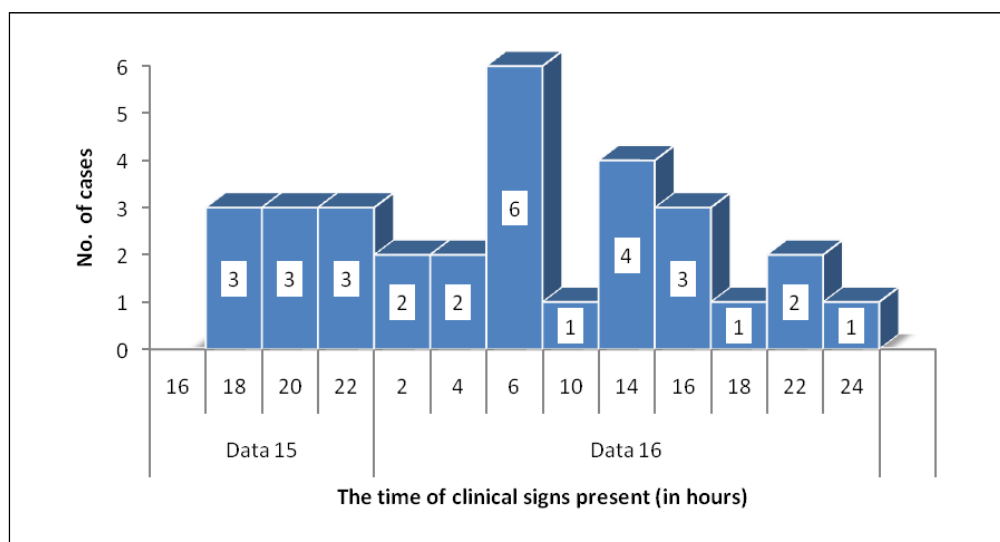
Venue: City of Elbasan

Time period: 15-17 July 2013

A retrospective cohort study was conducted in order to identify potential food and circumstances causing this outbreak. The case determination was: each individual developed diarrhea associated with one of the following clinical signs: fever, abdominal pain, vomiting within three days of consumption of foods, during lunch at the restaurant in question. Bacteriological analysis was performed on all samples, taken by members at lunch to identify the causes of this toxic- alimentary infection. For each participant at lunch was completed a standardized questionnaire that included demographic data, clinical and linked to the consumption of various foods. The data were analyzed in EPI - Info program.

In total, the people who participated in lunch were $n = 41$. Of these 4 people at lunch were of the restaurant staff and 37 invited participants. 31 of these (75.6 %) persons showed clinical signs, 29 (93.5 %) of whom were hospitalized, and 2 (6.5 %) persons were ambulatory cured.

From persons participating in the lunch most were females 36 (87.8 %), and only 5 (12.2 %) were males. Their age ranged from 12 to 62 years (median age 59 years). The average age was 46.8 ± 14 . Figure 2 presents the epidemic curve of this outbreak. What I noticed was that the first signs started about 4 hours after digestion of food, in patients who were hospitalized to the emergency regional hospital of Elbasan. The average incubation period was 16.9 ± 9.2 hours. All participants of this lunch, did show up at the clinic within 48 hours of food consumption.

Figure 2. Epidemic curve, Elbasan, July 2013

Clinical signs that dominated the patients were diarrhea in 30 (96.7 %) cases, vomiting in 24 (77.4 %) cases, fever in 19 (61.3 %) of cases and abdominal pain in 17 (54.8 %) cases.

Foods consumed

From the epidemiological investigation and statistical analysis of data about 14 kinds of foods and beverages were consumed at lunch, three of them had statistically significant relation with the disease. Thus, individuals who had consumed tiramisu (dessert prepared in the restaurant) had 5.8 times higher risk to develop the disease, than those who had not consumed tiramisu, (RR = 5.8, 95 % CI = 1.63-20.5, $p < 0:01$), followed by the consumption of pizza “capricious-type” with (RR = 1.6, 95 % CI = 1:12 to 2:02, $p < 0:01$) and pizza “4 seasons-type” (RR = 1.5, 95 % CI = 1.11-1.96).

Laboratory results

There were gathered in total 32 samples of feces from different members at lunch, of which 23 (71.8 %) tested positive to *Salmonella enteritidis*. All persons who were with positive *Salmonella enteritidis* had consumed the dessert: tiramisu.

Outbreak 3 - Alimentary Intoxication

Location: Municipality Peze, Tirana

Time period: 19-20 August 2013

On 08.20.2013, we were informed of some cases of alimentary intoxication from Tirana district. Following information received and identification of infectious cases hospitalized in Tirana hospital, it was recorded that 4 people were admitted of adult age group, coming from Small Peze village, of Peza municipality. Cases presented clinical abdominal pain, fever, profuse diarrhea and vomiting. The epidemiological investigation came into the conclusion that they had sought medical help in the Peza health center also, together with two other cases, but they were not hospitalized, while 9 cases were treated in the infectious hospital 19.08.2013 late in the evening and afterwards they were dismissed from the hospital.

The cases were geographically distributed in Vaqarr, Peze Helmes and another case in Baldushk. All the cases belonged to members of two major families.

From the questionnaire conducted together with the hospitalized cases, it resulted that both families had consumed purchased pastries and cakes from each-other's family, one family in Vaqarr and the other in Peze Helmes. From the further investigation on the spot, it resulted that both desserts were sold by the same Vaqarr-based pastry maker.

For a total of 15 cases during this intoxication, there were taken some feces samples for the examination of microbial cultures and investigation was conducted simultaneously concentrating on the shop and Vaqarr Health Centre, from where we took other food samples, as well as personnel feces samples for the culture examination.

Outbreak 4 - Cases of acute gastroenteritis presented in the Hospital of Infectious Disease, Tirana University Hospital Center.

Place: National Dajti Park, Tirana

Time period: 23-24 August 2013

After being informed by the hospital of infectious disease for several cases of acute gastroenteritis, presented in this hospital, IPH team went to the hospital to conduct an epidemiological investigation. From the data collected from the register of visits, medical records and contact with physicians, it resulted that currently there were two people who were hospitalized. In the meanwhile six people came for a visit, and returned home in good health after they had taken the therapy.

History of cases

On 24.8.2013 a group of about 25 people that were relatives to each other from Shkoza, Tirana, organized a picnic in open nature in Dajti mountain from 15:00-19:00. During the picnic time, they had consumed different foods that were taken from home, and were prepared on the spot during the picnic. The consumed foods are listed in the following :

- Goat meat on a grill; tomato salad; green salad; white cheese; feta cheese; baked potatoes on charcoal; grilled vegetables (eggplants, peppers, squash); purchased water; wine; Tirana beer; brandy; fanta; cola; sprite; grapes; watermelon; melon; dessert (éclair).
- The average age of patients was 39.1 ± 18.1 years old (range 18-58 years old). The distribution of 8 cases according to the group age was: one case (12 %) ≤ 20 years; 3 cases (38 %), 21-30 years old, and 4 cases (50 %) : 51-60 years old.

Figure 3 shows the epidemic curve of this outbreak (time of onset of signs and symptoms). The average incubation period was 42.7 ± 10.8 hours (range 26-53 hours).

Figure 3. The epidemic curve, Tirana, August 2013

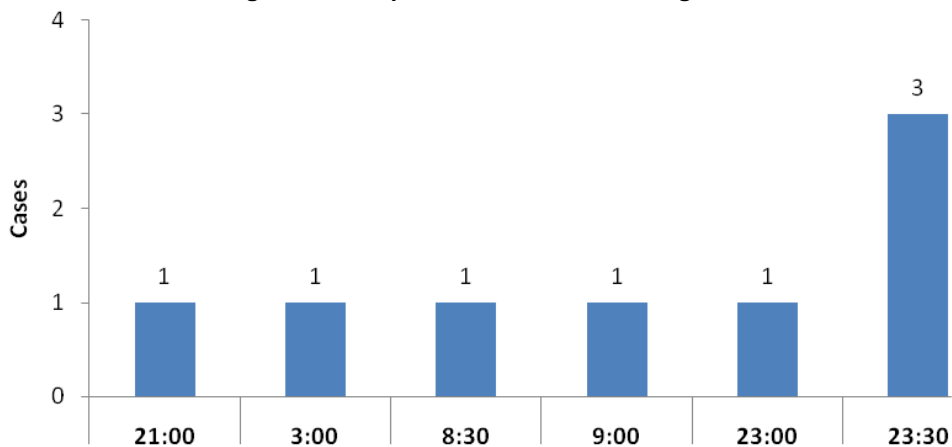
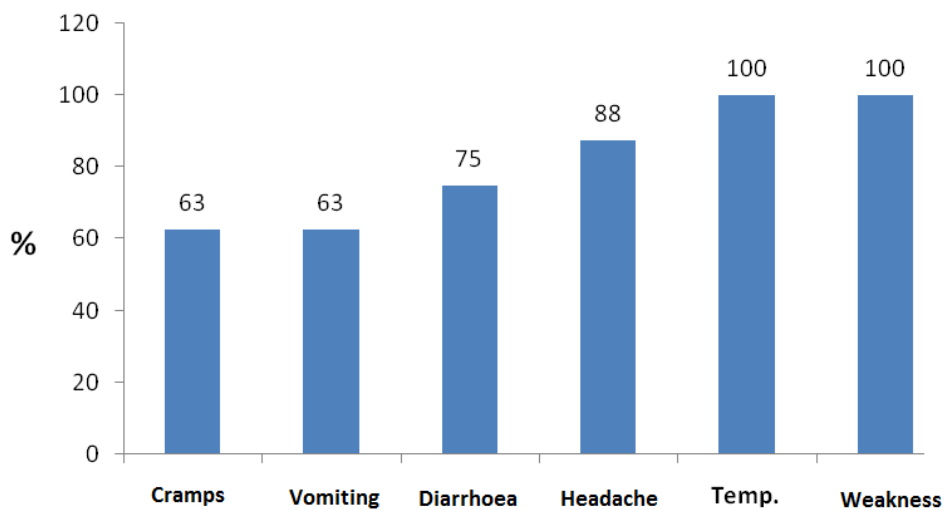


Figure 4 below shows the distribution of the clinical signs and symptoms, among cases affected by the outbreak. Cramps and vomiting have been shown in 5 (63 %) cases; diarrhea was present in 6 (75 %) cases; headache was present in 7 (88 %) cases and fatigue and fever was present in 100 % of cases.

Figure 4. Frequency of clinical signs and symptoms among cases, Tirana



All participants in the picnic had consumed foods except the cake mentioned above (éclair) that was purchased at the bar near the area of “Fresku” (the patients did not reveal the name of the bar, because they were relatives).

Table 1. The connection between dessert consumption and the clinical signs of gastroenteritis

		Clinical Signs		
		Yes	No	Total
Consumption of Dessert	Yes	6	2	8
	No	2	15	17
Total		8	17	25

Relative risk (RR) was estimated at 6.3, with a confidence interval of 95 % CI : 1.6 - 24.8 (p< 0:01). It is obvious that the reason of the outbreak was the gastroenteritis factor of the above mentioned dessert, which must have been contaminated. From the hospitalized patients and those who went back were also taken 3 samples (rectal swabs) for examination in IPH. The Epidemiology Service DPH of Tirana was informed for the cases and the investigation in the dessert shop.

Outbreak 5 - Acute Gastroenteritis in a wedding

Location: Cakran Municipality, Fier

Time period: 26-28 August 2013

Upon notification by the Directory of Public Health (DPH) Fier, for some acute gastroenteritis cases that were detected in the Regional Hospital of this district, the IPH team went to conduct an epidemiological investigation.

At a wedding in a local village of Gorishovë in the municipality of Cakran in the district of Fier, about 320 people participated from the surrounding villages. The ceremony lasted for about 5 hours starting at 12⁰⁰ noon. The offered menu contained 12 types of foods cooked in the restaurant, and 4 types of drinks consumed during lunch.

Among the 320 people presented at the wedding ceremony, 165 of them sought medical help. The average age of patients was 31.9 ± 19.6 years (range 1-80 years), of whom 85 (51.5 %) were females and 80 of them (48.5 %) were males. The distribution of cases affected by this outbreak according to their age group is represented in Table 2. It is notable the predominance of cases in the age group of 11-20 years and 41-50 years (24.1 % and 18.4 % of the total number of cases, respectively).

Table 2. The distribution of cases according to the age group

Age Group	N	%
≤10	24	13.8
11-20	42	24.1
21-30	27	15.5
31-40	21	12.1
41-50	32	18.4
51-60	12	6.9
>60	16	9.2
Total	165	100.0

In total, 52 patients were hospitalized or about 30 % of their total (Figure 5). From the total of 52 patients hospitalized in the Department of Pediatric Infectious Diseases, 27(52%) patients in total (24 in Fier and 3 in Vlora district) were accommodated, while in the Department of Infectious Diseases were hospitalized in total 25 (48%) of the patients (22 in Fier and 3 in Vlora district). Patients admitted to the Pediatrics constitute 77 % of the total pediatric patients aged 1-14 years (27/35) and patients admitted to the Infectious Disease hospital constituted 18 % of total patients aged ≥ 15 years (25/139).

Figure 5. Number of patients hospitalized in the Department of Pediatrics and Infectious Diseases.

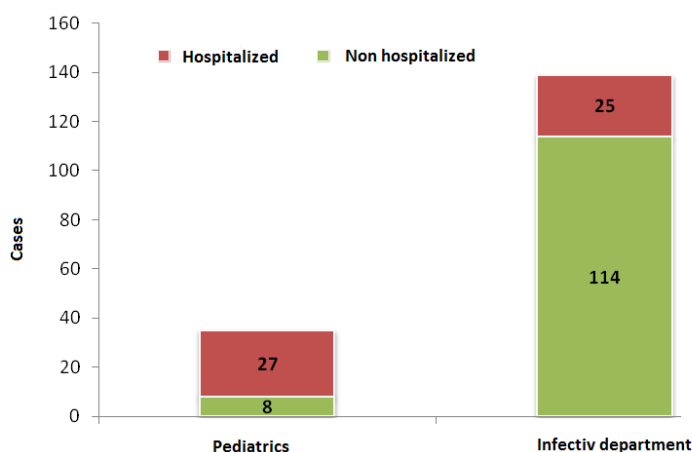
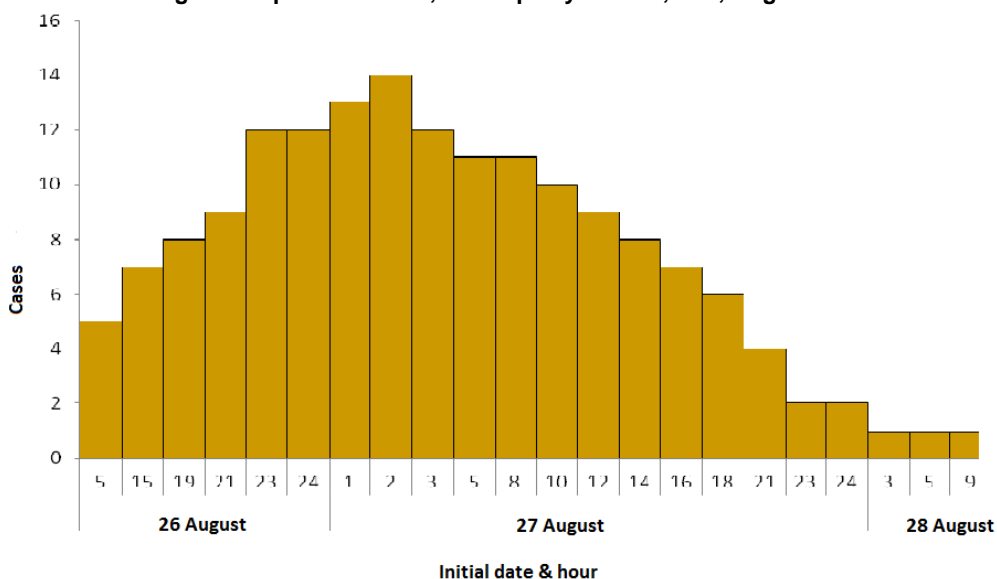


Figure 6 shows the epidemic curve of the outbreak. Epidemic curve is typical of exposure to the source point. The average time of incubation was 39.5 ± 13.9 hours.

Figure 6. Epidemic curve, Municipality Cakran, Fier, August 2013



Persons presented in hospital have shown clinical signs, where the most frequent was fever in 156 (94.5 %) cases, the fatigue was noted in 149 (90.3 %) cases, abdominal pain in 138(83.6 %) cases, headache 121 (73.3 %), vomiting has been recorded respectively in 54 (32.7 %) and diarrhea cases have been recorded respectively in 50 (30.3 %) (Figure 7).

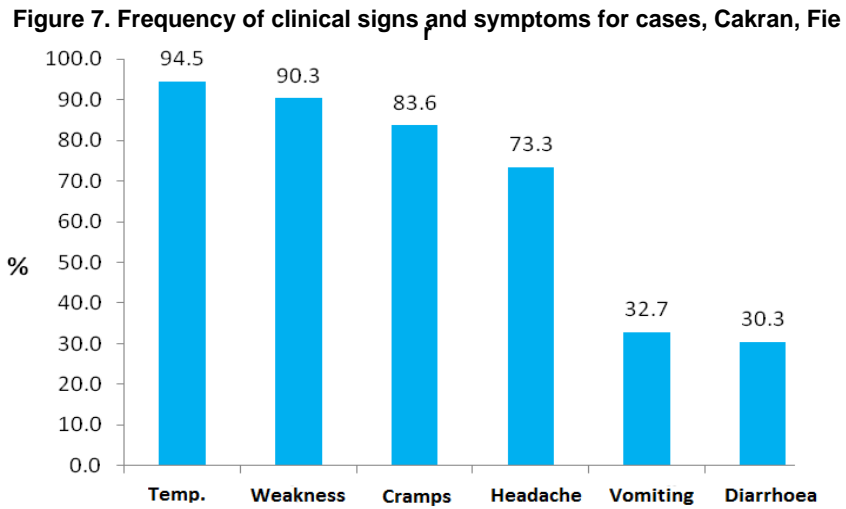
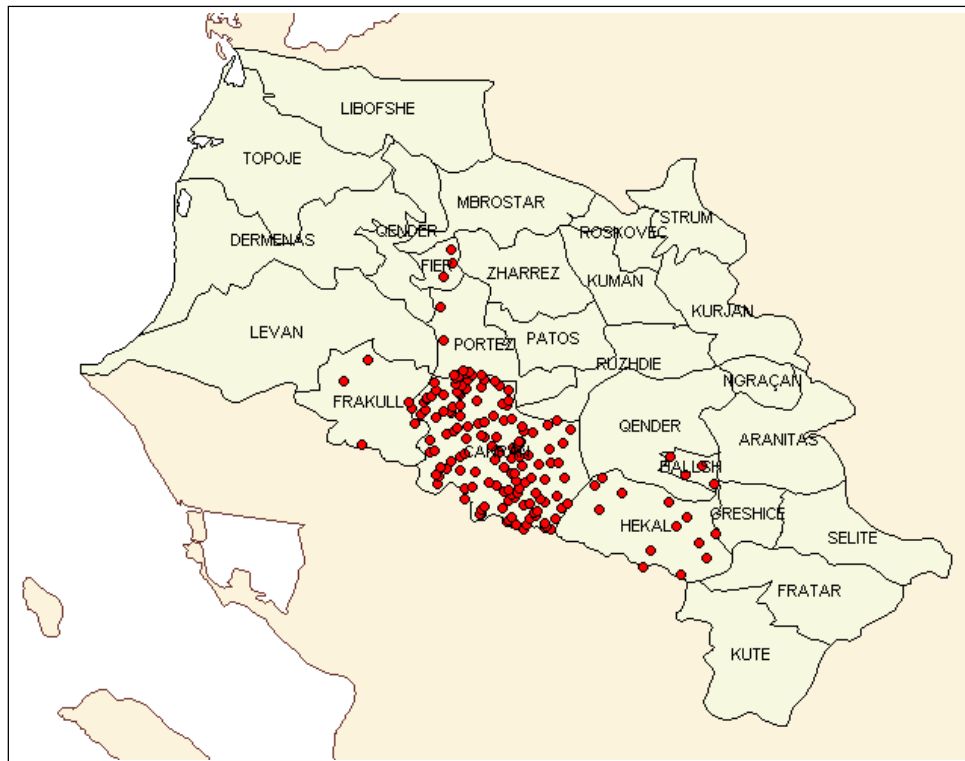


Figure 8, below shows the geographical distribution of cases of this outbreak.

Figure 8. Distribution of cases affected by the outbreak in Cakran, Fier, according to their residence



Laboratory examinations

Of the 16 samples analyzed, 9 (56.2 %) of them tested positive for *Salmonella enteritidis*.

Conclusions

From the epidemiological investigation of these outbreaks, we can say that the cause was *Salmonella enteritidis*, which relates to the consumption of foods prepared and stored in restaurants that were inappropriate. The specialists of food section of IPH did not succeed to collect the samples of food, for they were not present at the time of inspection.

The measures taken were:

- Closing of the respective restaurants in both districts where cases of the outbreaks were identified;
- Monitoring of positive cases until the time of becoming negative;
- Monitoring the ongoing situation .

Outbreak 6 – Food Intoxication

Location: Cërrik, District of Elbasan

Time period: 9-10 October 2013

On date 10.10.2013, we were informed by the DPH of the district of Elbasan for some hospitalized patients with a diagnosis of infectious “gastroenteritis” who are frequenting the spa in Cërrik. On receiving the notice, the working group of IPH composed of an epidemiologist and laboratory workers, went to the source point for epidemiological investigation. The investigation was conducted by the epidemiologist in collaboration with the district hygiene person in charge.

History of the cases

Hospitalized patients went on vacation in Tregan village near spa, where they were living in a two-storey house. A total of 22 people were vacationers that stayed in this house. Vacationers lived in 5 rooms and cooked in their rooms, each room was separated in a particular way from other rooms and the people who lived there temporarily did not exchange their cooked food between them.

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The evaluation of water supply and the sanitation of flooded areas in Kamza Municipality, Tiranaregion

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Background

Following the Order of Ministry of Health No. 550, Prot, date 17.10.2013 “On measures to be taken in aid to flooded areas population in some habitation zones in Tirana Peripheries”, the Sector of Water and Sanitation in the Department of Health and Environment, in 29 – 30 October 2013 was engaged in monitoring water consumption supply, the water of family wells, the sanitation of used waters and urban solid garbage in some of the over-flooded areas of Kamza Municipality and concretely in areas of New Valias, Old Valias, the area of fruit cultures and Bathore, and especially in Municipality District No.7, where the number of flooded habitations have been much bigger. In evaluating the quality of water consumption of the affected population from the phenomenon of flooding, our work was focused in these directions (World Health Organization 2003):

- The hygiene-sanitary evaluation of the water supply network in afflicted areas from flood waters and the taking of samples of drinking water from water springs – endpoints, in the following zones (World Health Organization 2000):
 - The Old Valias,
 - The New Valias, (the area of Valias mine)
 - The area of fruit cultures (homes over the sewer that collects waste waters and of rainwater +water supply network water).
- In Bathore (district No. 1; No. 3; the district No. 7 that is separately supplied from Bovilla water supply network, and in part is supplied by different wells. In this area flooding caused major problems);
- The evaluation of quality of water supply and family wells in affected flooded areas, (samples taken, and the following sanitary -hygiene evaluation of wells);
- The evaluation of hygiene-sanitary system of used waters in affected flooded areas (Hutton 2001).

The working group in collaboration with the Directory of Water-supply utilities in Kamza Municipality, made the inspection of water supply in Valias, where there are 4 supplying stations. During the inspection, only 2 of them were capable to function.

The stations of pumping in Valias after their chlorination and in family wells of different areas, and namely areas of old Valias, New Valias, fruit cultures as well as in Bathore, were selected for water sampling for bacteriological analyses, as well as for chemical and physical laboratory analyses.

Table 1. The places of water well samples in the once flooded areas

No	The place of taken sample	The water sample taken from:	The depth of the well (m)
1	The pumping station, Valias	Water canal	
2	Kamëz	Water canal	
3	Old Valias	Water well	30 – 33 m
4	New Valias	Water well	30 – 33 m
5	Fruit Culture	Water well	30 – 33 m
6	Bathore (Neighbourhood no 1,3 and 7)	Water well	7 – 10 m

Information was collected from habitants of areas that were actually using the water of wells to clean the environment around their house and to wash their clothes, as well as consuming drinking water from the water transporting vehicles, that have provided it in continuity to the population. Relying on the information obtained from different people, it resulted very few resident families have done their wells disinfection.

In the Bathore area the water supply is taken from Bovilla water-springs, and the water supply from network is available only for a definite time of around 20 minutes (especially in the morning). The supply of drinking water of the residents is covered by Bovilla water-springs, from water transporting vehicles and packaged water . The water of private wells is used for local usage.

Figure 1. The places where samples of water wells were taken in the once flooded areas (Valias- Fruitcultures-Bathore)



The drainage system of waste water and other waste

Actually, the system of waste water drainage in Kamza comprises around 35 km of canal lines. In inspected areas, there is still present a sanitary and hygiene problem of canal system, where there is not covered all the area with the canal system. (Valias, Fruit-Culture).

In Figures 2 and 3 is given the picture of the main canal collector of Valias, which in the moment of inspection was cleaned from urban garbage. In this collector there is drained the urban waste of the areas of Bathore.

Figure 2 and 3. The pictures taken from the waste collector of liquid overfloodings of Valias



In the area of Old Valias, the New Valias and fruit cultures area, the flow of waste waters was collected in septic ground wells, and their cleaning was done 1-2 times in a month.

In Figure 4 and 5 are shown the panoramic views in fruit cultures areas, where the canal of waste waters is flowing (Figure. 4-5). The information on the problematic environment that has a negative impact in public health of two main urban canals of Valias and of the fruit cultures area has already been reported in conclusions of the previous inspections.

Figure 4 and 5: The big canal of urban waste drainage in fruit cultures area, Kamza Municipality



Eventuating the inspection of 10. 29-30.2013, in the area of fruit cultures, the draining canal (as it is quite visible from the photos) was full of urban garbage.

As a result of the houses built close to each-other, there is observed a hygiene sanitation problem of septic ground wells by newly-built water wells that have been introduced from families of such areas. In the meanwhile, the problem of hygiene and sanitation in the areas has remained the management of solid urban garbage (the lack of the the organized garbage collection and withdrawal and sewage of Kamza locality).

In Tables 2-5 and beyond, are presented the analytical bacteriological results of water samples of Valias and fruit cultures areas (Table 2), the chemical and physical analyses of water samples in Valias and fruit cultures areas (Table 3), the bacteriological analyses and chemical-physical ones of family wells in the area of Bathore and Kamza (Table 4) and those of the physical-chemical water samples that are taken in the water system of Bathore and Kamza area, as well as in the flooded areas (Table 5)

Table 2. The results of bacteriological analyses of samples that have been taken from Valias and fruit cultures areas.

No.	The place of the taken sample (Valias, fruit cultures).	Coliforme Totale	E. Coli	Str. Fecal
1	The pumping station, after chlorination (Valias)- water well holes	0	0	0
2	Fam. Lek Mhilli (Old Valias) – water wellholes	Extremely large number	Extremely large number	Extremely large number
3	Fam. Edmir Mahmutaj (Old Valias) – Water wellholes	15	5	11
4	Fam. Rasim Xheçuka (Old Valias) – water wellholes	76	16	14
5	Fam. Ali Aziraj (New Valias) water wellholes	1	0	0
6	Fam. Ismail Jahelezi (F) –waterhole fruit culture	18	10	34

Table 3. The results of physical and chemical analyses of the taken samples in Valias – fruit cultures areas.

No	Chemical Indicators	The Station of pumping Valias	The family of Lek Mhilli	The family of Edmir Mahmutaj	The family of Rasim Xheçuka	The family of Ali Aziraj	The family of Ismail Jahelezi
1	The taste and the window (thinnes number)	Normal	Normal	Normal	Normal	Normal	Normal
2	The color and view (mg/l scale) Pt/Co)	Normal	unclear	Normal	Normal	Normal	Normal
3	pH (pHunits)	7.43	7.44	7.52	7.42	7.5	7.48
4	Electric Conductivity (μ S/cm)	860	880	880	800	860	1080
5	Suspension Liquids (mg/l)	0	49	0	0	0	0
6	unclearness (FTUunits)	0	24	0	0	0	0
7	Total Alkalinity (mg ekv/l)	6.1	8.2	8.1	8.2	8.3	9.1
8	Carbonate (mg/l)	0	0	0	0	0	0
9	Bicarbonate (as HCO ₃ ⁻)	366	486	492	486	498	546
10	Ammonia (mg/l)	0.25	0.64	0.12	0.12	0.12	0
11	Nitrates (mg/l)	0	0.03	0	0	0	0.013
12	Nitrates (mg/l)	traces	1.3	traces	traces	traces	traces
13	Total hardness (^o German)	29.5	17.6	28.1	28	30.94	32.34
14	phosphate (mg/l)	0.72	0.6	0.63	0.73	0.96	0.8
15	Organic Liquid (mg/l)	0.64	0.96	0.48	0.48	0.32	0.4
16	Chlorine (mg/l)	53.1	46.09	42.5	49.6	53.1	120.5

Table 4. The results of bacteriological analyses and physical-chemical analyses of water, of samples taken in date 10.30.2013, during the inspection of hygiene and sanitation in areas of Bathore and Kamza.

No.	The place of taking the samples (Bathore, Kamza)	Total Coliforme	E. Coli	Str. Fecal
1	Water well-hole, The Mustafa Family (Bathore)	540	360	310
2	Water well-hole Family Selimi (Bathore)	23	7	18
3	Water well-hole Family Murati (Bathore)	102	2	98
4	Water well-hole, the Prençi Family (Bathore)	7	2	4
5	Water supply for Z. Terbo Bar (Kamëz)	16	1	13

Table 5. The results of physical-chemical analyses of the taken samples in the Bathore and Kamza area.

No.	Chemical Indicators	Mustafa Family (Bathore)	Selimi Family (Bathore)	Murati Family (Bathore)	Prençi Family (Bathore)	Z.Terbobu business (Kamëz)
1	pH (pH units)	7.4	7.23	7.45	7.51	7.5
2	Electric conductivity (μ S/cm)	1130	910	1140	1100	900
3	Hanging Liquids (mg/l)	3	0	0	Footsteps	2
4	unclearness (FTU scale)	1	0	0	24	1
5	Total Alcaline (mg eqv/l)	-	-	-	-	8.8
6	Carbonate (mg/l)	-	-	-	-	0
7	Bicarbonate (such as HCO_3)	-	-	-	-	528
8	Ammonia (mg/l)	0.25	0.051	0.064	0.05	0.06
9	Nitrates (mg/l)	0.01	0.006	0.0038	0.0025	0.28
10	Nitrates (mg/l)	traces	traces	traces	traces	traces
11	phosphate (mg/l)	0.79	0.83	0.8	0.83	0.84

Analytical Conclusions

- The analysis of the water samples of the existing wells such as in Valias, Fruit-culture and in Bathoreareas has shown that water of the family wells is contaminated with Coliform faeces and faeces Streptococcus. Meanwhile, from the physical-chemical analyses of water samples, it was observed the ammonia presence;
- From the microbiological analyses of the taken water samples from Valias water-source, where the water sample of the pumping station (after chlorination) results bacteriologically clean, whereas the water sample is taken in the Kamza water-source which presents bacteriological contamination.

Conclusions and Recommendations

- The actual system of water chlorination, with direct injection into the main canal of water-source, from the pumping station of Valias, does not warrant a safe disinfection of water;
- The water of family wells results with bacterial contamination (excluding here the sample of water of the A. Azirajt family). Because of that the water should not be used for drinking, but only for communal consumption;
- The close distance of septic ground holes from water wells, of only 30 meters, does not warrant the safe supply of clean hygienic water;
- The sanitation-hygiene situation of urban waste waters drainage and of solid garbage evacuation in flooded areas represents a big factor of risk for the public health of the respective above mentioned areas;
- Therefore to Kamza Municipality, which is the administrative unit of above mentioned areas affected from floods, pertains the immediate obligation of under-taking measures for water urban systems renewal, in ensuring the regularity and functionality of canal system, with the main aim of avoiding the flooding of contaminated waters, of the creation and maintenance of hygiene and sanitation situation of population, protecting the public health from infective contagious diseases;
- As we have early mentioned in the above information, the Kamza Municipality must undertake strict measures in order to supply the population with drinking disinfected water, to ensure its cleaning to comply with hygienic requirements and safety rules;
- Therefore, further inspection of water supply system must be accomplished in Kamza area so that to assess all possible damage, and to eliminate the fundamental defects, by eliminating the bacterial contaminated water and ensuring hygiene and drinking water supply safety;
- Under the authority of Kamza Municipality, must be taken such measures also for the urban garbage containers and their safe evacuation far from the inhabited centers;
- Also, it is recommended the monitoring of drinking water from water transporting vehicles operating in Kamza Municipality areas.

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Epidemiological report of the outbreak of dysentery in the district of Vlora

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Background

Shigellosis or bacillary dysentery is an infectious disease caused by gram-negative bacteria of the Shigellosis genus that belongs to the bacteria family (World Health Organization 2008). Four recognized species of genus Shigellosis disenteriae, *Shigella flexneri*, *Shigellosis boydii* and *Shigella sonnei* and are pathogenic to humans. Infection is spread via gastrointestinal tract of a sick person or from healthy carriers (Cohen 2003). Symptoms of infection caused by Shigellosis include diarrhea (often with blood), fever and stomach cramps starting a day or two after exposure to the bacteria. The incubation period lasts 5 to 7 days (Haley et al. 2010).

Problems with drinking water have always been the main way of transmission of diarrheal diseases in our country (Tibayrenc 2007). The reason lies primarily in the old and overused network of drinking water supply in almost all urban areas and mixing of drinking water with sewage water by leakage (CDC, 2012). Another reason is the existence of domestic wells and septic tanks built not according to the appropriate parameters which leads to the mixing with waste waters and therefore the emergence of several events of diarrhea (Von Seidlein et al. 2006). One such case was reported in September in the city of Vlora.

In the city of Vlora, Bishan Health Care Centre (HCC), on the 24.09.2014, the first case with gastrointestinal problems was reported with diarrhea and high temperature which was followed by new cases that were added every day. During the period 30.09.2014 to 05.10.2014 there have been new cases in Bishan, Fitore and Novosela. Cases began to increase on the 06/10/2014, during the night in Vlora Pediatric Hospital, 5 children were hospitalized from Novosela with gastroenteritis, a viral infection case, and another child hospitalized with meningal syndrome. The strains isolated for examination in DFS-Vlore and samples taken from the hearth led to the conclusion that people were sick with *Shigella sonnei*. The Institute of Public Health was informed about the situation and a group of experts went to the city of Vlora to undertake a specialized investigation regarding the situation created in the district of Vlora.

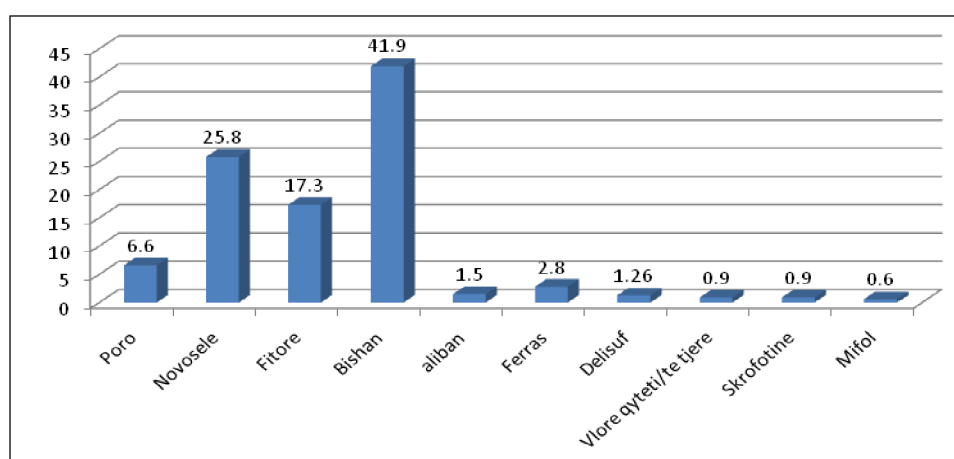
The epidemiological service of the city of Vlora and the Institute of Public Health in the municipality of Novosela conducted an investigation on 06 and 07.10.2014. The first contact was realized in a Health Center, where morbidity information was taken from the Health Center of Novosela from a survey on school children. Some of the children were diagnosed with the illness. Novosela School (secondary +elementary+ kindergarten) has around 500 pupils. Investigation was conducted at the primary and secondary school and kindergarten of Fitore village, attended by 150 school and kindergarten pupils, and in that of Bishan attended by 250 pupils. The reason for the occurrence of dysentery was the mixing of ground water with sewage water in these villages of Vlora. The descriptive analysis, person-place-time, the age distribution of clinical cases recorded up to that moment was as follows: (Table 1).

Table 1. Distribution of cases by age-groups, Vlora 2014

	Age Group (years old)					Total
	1-4	5-14	15-44	45-60	Over 60	
No.of cases	9	82	31	3	2	127

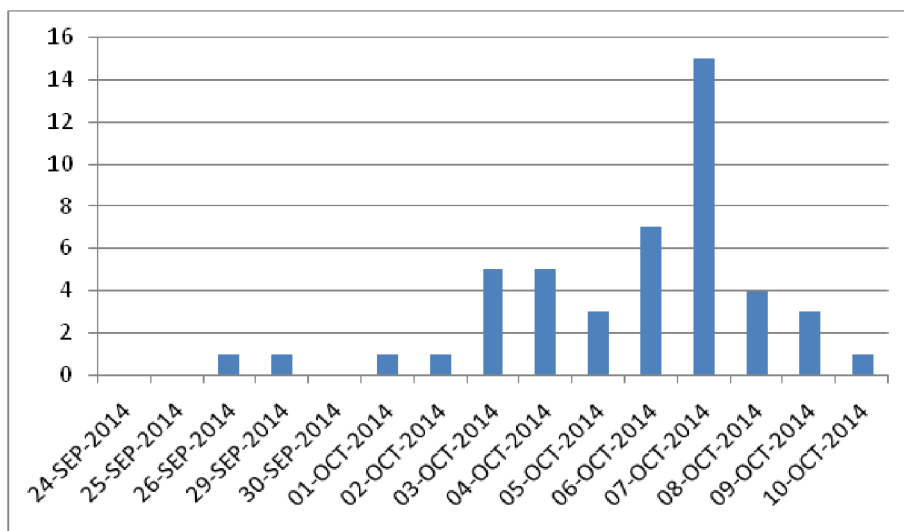
The age group up to 18 years-old has 113 cases or 89% of morbidity. In many cases we have in Bishan, Novosela and Fitore, these are the most affected villages because defect of waste water and sewage water precisely occurs in these villages. Clinical cases presented high fever, nausea, vomiting, abdominal pain and diarrhea. Some reports include even patients with diarrhea with blood. Examinations taken: Mainly from hospitalized patients and 4-5 samples during investigations into Novosela from patients who came for a visit to H. C. The distribution of cases by residence was recorded as follows: (Figure 1)

Figure 1. The distribution of cases by residence, 2014



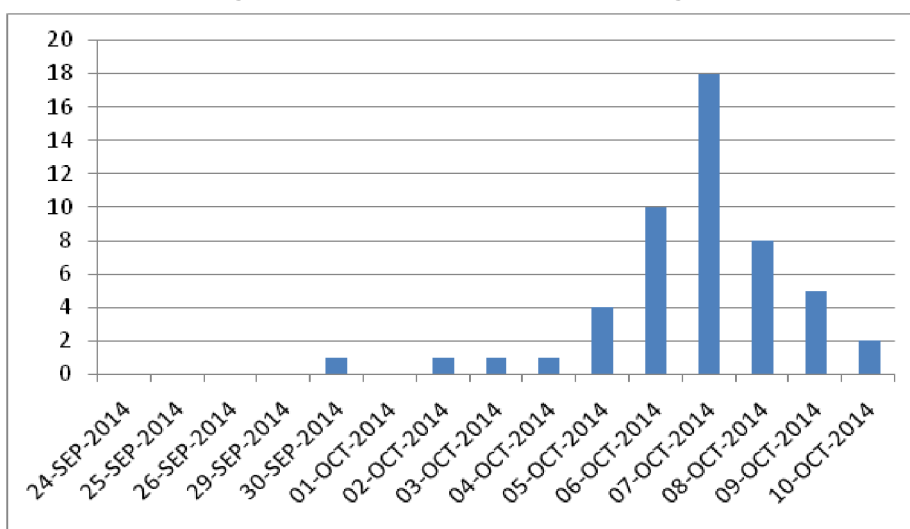
Affected villages are Novosela, Fitore, Bishan and Poro. Here we have the distribution in each of the cases shown graphically by villages. (Figures 2, 3, 4 and 5)

Figure 2. Distribution of cases Novosela Village.



Novosela is a village that was affected, with more cases. From short anamneses were reported that sick persons were selected manifesting diarrhea, abdominal pain, high temperature. Health center doctor informed us that the number of cases has declined because people have information about the situation and have started to treat themselves, and some also refer to pharmacists to take medication. The families who had a sick person in family were advised to clean the toilets more times per day and not use water to drink.

Figure 3. Distribution of cases Fitore Village.



From the epidemiological investigation of cases surveyed the results show that there were not family or school events for common food intake. In general, households consume dairy products, horticulture from their properties. In a shop near the school there were no packaged products for sale after expiration date. A part of the hospitalized cases (of Fitore) stated that the water network supply was unclean and not transparent.

Bishan Village

In this village there was the first reported case. Water supply network in Bishan was damaged because of the road repairs.

Figure 4. Distribution of cases Bishan Village

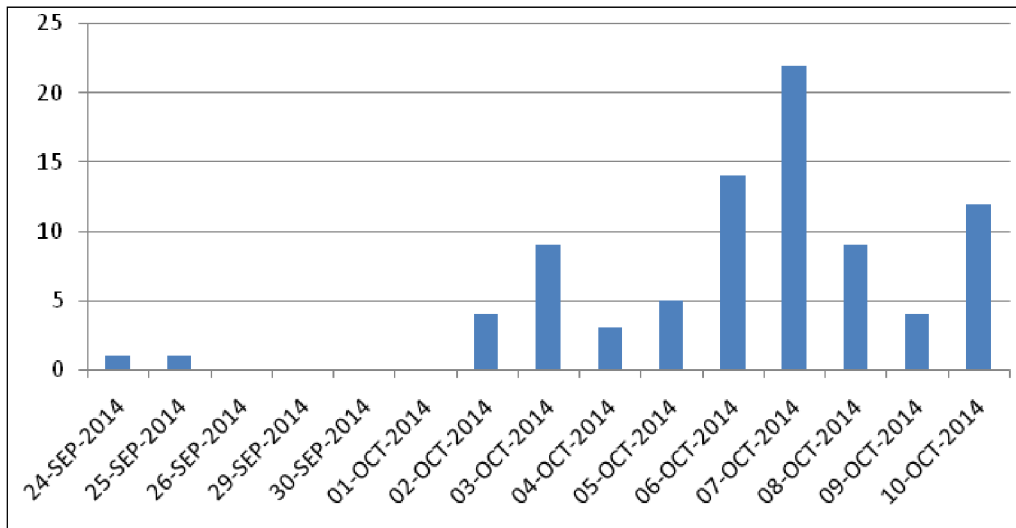
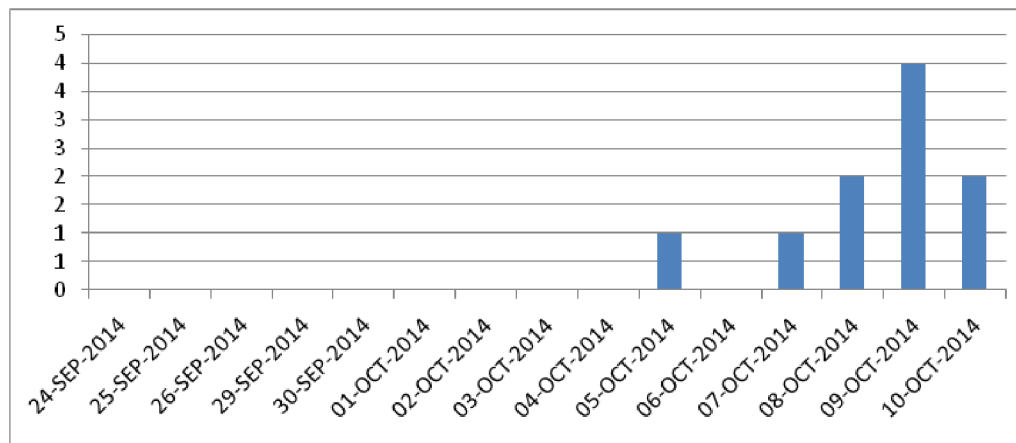
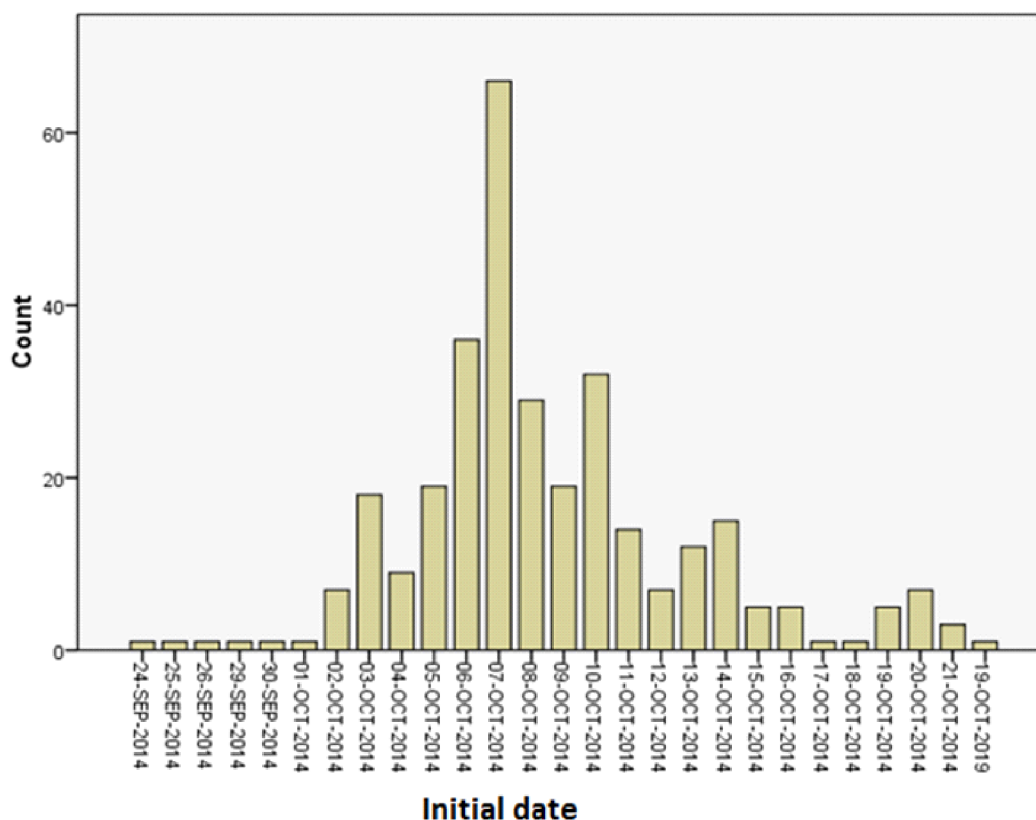


Figure 5. Distribution of cases Poro Village.

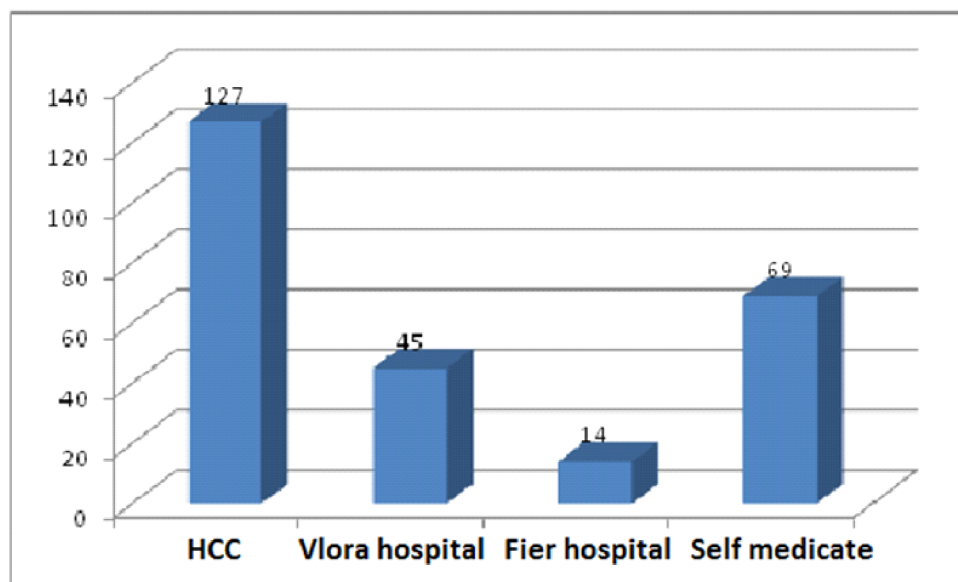


According to information collected continuously from epidemiologist at the end it turned out there were recorded 317 cases with gastrointestinal problems. The epidemiologic distribution curve of cases which had its peak on Oct. 7 follows below.

Figure 6. The epidemiologic distribution curve of cases



New cases were added every day, some were hospitalized and the rest addressed to the Health Center. Many cases referred to the pharmacist to pick up medication. The following figures indicates cases of requested assistance for treating people with gastrointestinal problems. Most of them were visitors and have received treatment at health centers in the villages where they live. A part of them were hospitalized for a specialized medication in the Regional Hospital Vlore and Fier Hospital. 27% of the people with symptoms have not sought medical care. They were incidentally caught as cases of nurses and doctors in areas during their examinations of at-risk families. The data show that analysis of the feces bacteriology and virology were taken mainly for hospitalized cases.

Figure 7. The institutions which are providing health care.

Water supply network was fixed and the number of cases decreased. The obtained situation was managed very well by the epidemiology service. Such cases originating from hydro outbreaks indicate that the pipe-line network is isolated only by mortar and has many problems.

From the epidemiologic investigation and analysis the data shows that the infection diseases in Vlora in 2014 were caused by *Shigella sonnei* spread by water route. The reason was the accidental mixing of drinking water with sewage water in these villages of Vlora

Anti-epidemic measures

- Interventions required in the pipeline network.
- Disinfection of identified foci,
- Closing of schools and nursery areas affected by the contamination.
- Rising awareness and training the general population on the situation and the measures

needed to be taken such as:

Increasing level of personal hygiene, at home and at work. (Hand washing under appropriate guidelines, disposition of waste (human and pets)).

Fixing drinking water supply routes to stabilize the situation with hydro network.

Seeking specialized medical help to the doctors instead of asking it at the pharmacy.

As a result of measures and instructions undertaken, the situation was stabilized and is getting back to normal.

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The Ottawa Charter for Health Promotion – an actual guide

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The first International Conference on Health Promotion was held in the meeting in Ottawa, Canada on 17- 21st day of November 1986 (World Health Organization, Ottawa 1986). This was the first global level engagement on health promotion.

The Ottawa Conference built on the progress made through the Declaration on Primary Health Care at Alma-Ata of 1978, the World Health Organization's Targets for Health for All document. This conference was primarily a response to growing expectations for a new public health movement around the world and intersectoral action for health, listed below:

- First International Conference on Health Promotion in Ottawa, Canada, 17-21 November 1986;
- Second International Conference on Health Promotion in Adelaide, Australia, 5-9 April 1988;
- Third International Conference on Health Promotion in -Sundsvall, Sweden, 9-15 June 1991;
- Fourth International Conference on Health Promotion in -Jakarta, Indonesia, 21-25 July 1997;
- Fifth International Conference on Health Promotion in -Mexico, 5 – 9 June 2000;
- Sixth International Conference on Health Promotion in - Bangkok, Thailand, 7-11 August 2005;
- Seventh International Conference on Health Promotion in - Nairobi, Kenya, 26-30 October 2009;
- Eighth International Conference on Health Promotion in - Helsinki, Finland, 10-14 June 2013.

Each of these conferences was focused on key strategic targets of Health Promotion.

This conference in Ottawa was primarily a response to growing expectations for a new public health movement around the world. Discussions focused on the needs in industrialized countries, but took into account similar concerns in all other regions (Canadian Medical Association 2008).

It built on the progress made through the Declaration on Primary Health Care at Alma-Ata, the World Health Organization's Targets for Health for All document, and the recent debate at the World Health Assembly on intersectoral action for health (Greenberg et al. 2003).

In the First International Conference was launched the Ottawa Charter on Health Promotion as the symbol of Health Promotion, that is recognized also as the logo of Health Promotion today.

Ottawa Charter

Health Promotion

Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.

Prerequisites for Health

The fundamental conditions and resources for health are:

- peace,
- shelter,
- education,
- food,
- income,
- a stable eco-system,
- sustainable resources,
- social justice, and
- equity.

Improvement in health requires a secure foundation in these basic prerequisites: advocate, enable, and mediate.

1. Advocate

Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioral and biological factors can all favor health or be harmful to it. Health promotion action aims at making these conditions favorable through advocacy for health.

2. *Enable*

Health promotion focuses on achieving equity in health. Health promotion action aims at reducing differences in current health status and ensuring equal opportunities and resources to enable all people to achieve their fullest health potential. This includes a secure foundation in a supportive environment, access to information, life skills and opportunities for making healthy choices. People cannot achieve their fullest health potential unless they are able to take control of those things which determine their health. This must apply equally to women and men.

3. *Mediate*

The prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by nongovernmental and voluntary organization, by local authorities, by industry and by the media. People in all walks of life are involved as individuals, families and communities. Professional and social groups and health personnel have a major responsibility to mediate between differing interests in society for the pursuit of health.

Health promotion strategies and programs should be adapted to the local needs and possibilities of individual countries and regions to take into account differing social, cultural and economic systems.

Health Promotion Action Means:

1. *Build Healthy Public Policy*

Health promotion goes beyond health care. It puts health on the agenda of policy makers in all sectors and at all levels, directing them to be aware of the health consequences of their decisions and to accept their responsibilities for health.

Health promotion policy combines diverse but complementary approaches including legislation, fiscal measures, taxation and organizational change. It is coordinated action that leads to health, income and social policies that foster greater equity. Joint action contributes to ensuring safer and healthier goods and services, healthier public services, and cleaner, more enjoyable environments.

Health promotion policy requires the identification of obstacles to the adoption of healthy public policies in non-health sectors, and ways of removing them. The aim must be to make the healthier choice the easier choice for policy makers as well.

2. *Create Supportive Environments*

Our societies are complex and interrelated. Health cannot be separated from other goals. The inextricable links between people and their environment constitutes the basis for a socio-ecological approach to health. The overall guiding principle for the world, nations, regions and communities alike, is the need to encourage reciprocal maintenance - to take care of each other, our communities and our natural environment. The conservation of natural resources throughout the world should be emphasized as a global responsibility.

Changing patterns of life, work and leisure have a significant impact on health. Work and leisure should be a source of health for people. The way society organizes work should help create a healthy society. Health promotion generates living and working conditions that are safe, stimulating, satisfying and enjoyable.

Systematic assessment of the health impact of a rapidly changing environment - particularly in areas of technology, work, energy production and urbanization - is essential and must be followed by action to ensure positive benefit to the health of the public. The protection of the natural and built environments and the conservation of natural resources must be addressed in any health promotion strategy.

3. Strengthen Community Actions

Health promotion works through concrete and effective community action in setting priorities, making decisions, planning strategies and implementing them to achieve better health. At the heart of this process is the empowerment of communities - their ownership and control of their own endeavors and destinies.

Community development draws on existing human and material resources in the community to enhance self-help and social support, and to develop flexible systems for strengthening public participation in and direction of health matters. This requires full and continuous access to information, learning opportunities for health, as well as funding support.

4. Develop Personal Skills

Health promotion supports personal and social development through providing information, education for health, and enhancing life skills. By so doing, it increases the options available to people to exercise more control over their own health and over their environments, and to make choices conducive to health.

Enabling people to learn, throughout life, to prepare themselves for all of its stages and to cope with chronic illness and injuries is essential. This has to be facilitated in school, home, work and community settings. Action is required through educational, professional, commercial and voluntary bodies, and within the institutions themselves.

5. Reorient Health Services

The responsibility for health promotion in health services is shared among individuals, community groups, health professionals, health service institutions and governments.

They must work together towards a health care system which contributes to the pursuit of health. The role of the health sector must move increasingly in a health promotion direction, beyond its responsibility for providing clinical and curative services. Health services need to embrace an expanded mandate which is sensitive and respects cultural needs. This mandate should support the needs of individuals and communities for a healthier life, and open channels between the health sector and broader social, political, economic and physical environmental components.

Reorienting health services also requires stronger attention to health research as well as changes in professional education and training. This must lead to a change of attitude and organization of health services which refocuses on the total needs of the individual as a whole person.

6. Moving into the Future

Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created by caring for oneself and others, by being able to take decisions and have control over one's life circumstances, and by ensuring that the society one lives in creates conditions that allow the attainment of health by all its members.

Caring, holism and ecology are essential issues in developing strategies for health promotion. Therefore, those involved should take as a guiding principle that, in each phase of planning, implementation and evaluation of health promotion activities, women and men should become equal partners.

Commitment to Health Promotion

The participants in this Conference pledge:

- to move into the arena of healthy public policy, and to advocate a clear political commitment to health and equity in all sectors;
- to counteract the pressures towards harmful products, resource depletion, unhealthy living conditions and environments, and bad nutrition; and to focus attention on public health issues such as pollution, occupational hazards, housing and settlements;
- to respond to the health gap within and between societies, and to tackle the inequities in health produced by the rules and practices of these societies;
- to acknowledge people as the main health resource; to support and enable them to keep themselves, their families and friends healthy through financial and other means, and to accept the community as the essential voice in matters of its health, living conditions and well-being;
- to reorient health services and their resources towards the promotion of health; and to share power with other sectors, other disciplines and, most importantly, with people themselves;
- to recognize health and its maintenance as a major social investment and challenge; and to address the overall ecological issue of our ways of living.

The Conference urges all concerned to join them in their commitment to a strong public health alliance.

Call for International Action

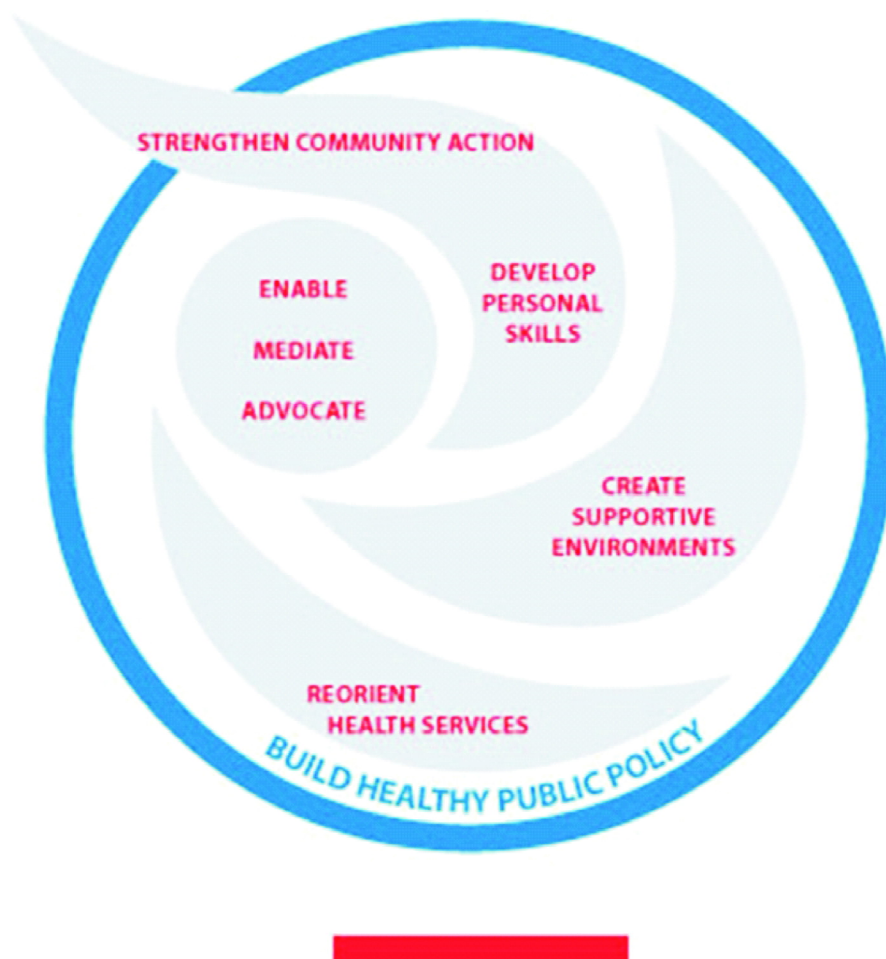
The Conference calls on the World Health Organization and other international organizations to advocate the promotion of health in all appropriate forums and to support countries in setting up strategies and programs for health promotion.

The Conference is firmly convinced that if people in all walks of life, nongovernmental and voluntary organizations, governments, the World Health Organization and all other bodies concerned join forces in introducing strategies for health promotion, in line with the moral and social values that form the basis of this CHARTER, Health For All by the year 2000 will become a reality.

Health Promotion Emblem

A brief explanation of the logo used by WHO since the First International Conference on Health Promotion held in Ottawa, Canada, in 1986. Select an element of the logo for the specific explanation of that part or simply read on for the complete explanation.

Logo of Health Promotion



This logo was created for the First International Conference on Health Promotion held in Ottawa, Canada, in 1986. At that conference, the Ottawa Charter for Health Promotion was launched. Since then, WHO kept this symbol as the Health Promotion logo (HP logo), as it stands for the approach to health promotion as outlined in the Ottawa Charter.

The logo represents a circle with 3 wings. It incorporates five key action areas in Health Promotion (build healthy public policy, creates supportive environments for health, strengthen community action for health, develop personal skills, and re-orient health services) and three basic HP strategies (to enable, mediate, and advocate).

The main graphic elements of the HP logo are:

- a. one outside circle,
- b. one round spot within the circle, and
- c. three wings that originate from this inner spot, one of which is breaking the outside circle.

a) The outside circle, originally in red color, is representing the goal of “Building Healthy Public Policies”, therefore symbolizing the need for policies to “hold things together”. This circle is encompassing the three wings, symbolizing the need to address all five key action areas of health promotion identified in the Ottawa Charter in an integrated and complementary manner.

b) The round spot within the circle stands for the three basic strategies for health promotion, “enabling, mediating, and advocacy “, which are needed and applied to all health promotion action areas. (Complete definitions of these terms can be found in the Health Promotion Glossary, WHO/HPR/HEP/98.1)

c) The three wings represent (and contain the words of) the five key action areas for health promotion that were identified in the Ottawa Charter for Health Promotion in 1986 and were reconfirmed in the Jakarta Declaration on Leading Health Promotion into the 21st Century in 1997.

More specifically:

- the upper wing that is breaking the circle represents that action is needed to “strengthen community action” and to “develop personal skills”. This wing is breaking the circle to symbolize that society and communities as well as individuals are constantly changing and, therefore, the policy sphere has to constantly react and develop to reflect these changes: a “Healthy Public Policy” is needed;
- the middle wing on the right side represents that action is needed to “create supportive environments for health”
- the bottom wing represents that action is needed to “reorient health services” towards preventing diseases and promoting health.

Overall, the logo visualizes the idea that Health Promotion is a comprehensive, multi-strategy approach. HP applies diverse strategies and methods in an integrated manner - one of the preconditions

“for Health Promotion to be effective” (Jakarta Declaration 1997). Health Promotion addresses the key action areas identified in the Ottawa Charter in an integrated and coherent way.

The term Health Promotion (HP) was, and still today is sometimes, narrowly used as equivalent for Health Education (HE). But HE is one of several key components and action areas of HP as illustrated by the HP logo (see the key action area of “develop personal skills”).

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Greenberg, MT, Weissberg, RP, O'Brien, MU, Zins, JE, Fredericks, L, Resnik, H et al. 2003. Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58, 466–474.

<http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>

**Abortions in the last trimester of the year of 2014
(The data based on the Abortion Surveillance
System)
An Update of the Activities and continuing process**

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On behalf of the Abortion Surveillance System, during the last trimester of the year 2014, we have registered the abortion files that have arrived by simple mail from the districts of the country and we are working to collect the data, so we can analyze them by SPSS. In total, 3426 abortion files were registered at IPH during 2014, out of which 2575 abortion files are registered at IPH during the first six months of the year 2014. The remaining work for the data reporting of surveillance of the abortion of 2 maternities in Tirana, which perform the highest number of abortions in the country, is being added as we speak.

The work of surveillance of the abortion depends mainly on all country maternities' reports. The collection of abortion files and their recording with the registered abortion number is made every three months in the office of maternity statistics. Regarding the private clinics, this year we have not had any information, following the take-away of their licenses and attribution of the right for the interruption in pregnancy only to the hospitals with beds. We, up to now, haven't had any reports on their behalf.

This report has been made according to the electronic software of abortion, as well as according to snail mail. 13 districts of the country have reported electronically, whereas in the meantime the other districts have reported by mail. The percentage of the reports declared through the abortion file is 80.4% for all the country.

All the database of files has been recorded in the system, and the work for their unification and analysis still continues. The highest numbers of abortions have occurred in Tirana, whereas the reporting of the files continues for this district at a rate of about 45%, given that in many occasions the abortion files have not been duly completed. As far as districts go, the percentage of the files reported is higher, and it reaches up to 100%.

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