



## «PUBLIC HEALTH AIMED AT THE FINAL STAGES OF PREGNANCY AND THE BEGINNING OF BABY'S LIFE»

Kocaeli, Turkey

*Period of implementation: 2005 (launch) | Study case written in 2010*

With the objective of achieving the Millennium Development Goals, the Kocaeli Metropolitan Municipality aimed at reducing mortality rates for newborn infants. In Turkey, approximately 1,400,000 babies are born each year, and 17.6 per 1000 of them (30,380 babies in 2008) lose their lives before reaching their first year of life. In other countries, the mortality rate is much lower. Among the proposals put forth in order to eliminate this identified social problem, were the ideas that the expectant mothers should be monitored by health professionals and that they should gain the habit and possibility of having sufficient nutrition during their pregnancy and breastfeeding periods. This project takes into account the last three months of pregnancy and the first three months after birth. For the last three months before birth and the first three months after birth, mothers are given 12 L of milk per month and 72 L of milk per person total. In addition, the health of the mothers is monitored by health professionals and protective vaccinations for the baby are provided. Between 2006 and 2010, over 128,000 prospective mothers and babies who live in the Kocaeli metropolitan region have benefited from the project.



The **Inclusive Cities Observatory** was launched in 2008 by the UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights with the aim of creating a space for analysis and reflection on local social inclusion policies. The initiative was developed with the scientific support of Professor Yves Cabannes (University College of London) and the Centre for Social Studies (CES) from the University of Coimbra. At present, the Observatory contains more than sixty study cases mostly developed between 2008 and 2010. Even though many of these cases refer to policies that have already come to an end, they still have much to offer: from capitalizing on the learning acquired by other local authorities to discovering suggestive and alternative means to address social inclusion challenges from a local perspective.

## Context

### *Regional context*

The province of Kocaeli, with a population of 1,502,123 (Turkish Statistical Institute 2010), is one of the 81 provinces of Turkey and is located at the crossroads of a heavily used transportation gateway from Europe to Anatolia, Asia, and the Middle East. Its capital is İzmit, with a population of 248,424 inhabitants, which is sometimes also referred to as Kocaeli. The short distance to major metropolises and the Marmara Sea have facilitated Kocaeli's development as an industrial, commercial, transportation, and logistics centre. In addition to the C-100 and TEM (Trans European Motorway) connecting Asia with Europe, Kocaeli is also part of an extensive railway network. The International Atatürk Airport and the International Sabina Gökçen Airport are, respectively, 90 km and 50 km from İzmit. The province of Kocaeli plays an important role in the Marmara region and serves the inland Anatolia with 5 public and 35 privately owned ports and docks and logistical infrastructure all along the Gulf of İzmit.

The province of Kocaeli, with a GDP value of approximately three times the national average, ranks number one in GDP per capita. With approximately 1600 industrial enterprises active in the region, Kocaeli accounts for 13% of Turkey's manufacturing industry and 16% of its foreign trade volume. Kocaeli hosts Turkey's most important and largest industrial potential. This potential creates a need for organizing both the industry and its infrastructures. There are 15 organized industrial zones (6 are active), two tax-free industrial zones, and three technology parks. Kocaeli also boasts good infrastructures such as dams, natural gas, telecommunications, electricity, and a waste incineration plant. Today, the region's industries employ 171,714 people. Many vocational schools and vocational and technical higher educational institutions support the province's human resources. The two universities in Kocaeli, with 50,000 students combined, and Scientific Research Centres play important roles in providing the qualified human resources required.

### *Development context*

One of the Millennium Development Goals to eliminate poverty and the consequences caused by poverty by 2015 is to reduce mortality rates for newborn infants and to have mothers give birth to their babies under the supervision of a doctor, with medical care and proper nutrition. In Turkey, approximately 1,400,000 babies are born each year, and 17.6 per 1000 of them (30,380 babies in 2008) lose their lives before reaching their first year of life (OECD 2009). In other countries, however, the mortality rate is much lower. For example, in developed countries such as Sweden, Germany, and Great Britain, the infant mortality rates are around 3 per 1000, 4 per 1000, and 5 per 1000 respectively (OECD 2009). In less developed countries of Europe such as Czech Republic, Greece, and Spain, the infant mortality rate is 4 per 1000, in Poland it is 7 per 1000 (OECD 2009). These comparative rates show that Turkey has a far way to go, and decreasing the infant mortality rate is of utmost and vital importance to the country.

## Policy development

Infant mortality rate is a very important criterion to assess the level of development of a country. This project takes into account the last three months of pregnancy and the first three months after birth. Mothers have a pregnancy period under the control of a doctor, who observes both mother and baby for a period of three months after birth. For the last three months before birth and the first three months after birth, mothers are given 12 L of milk per month and 72 L of milk per person total. In addition, protective vaccinations for the baby are provided.

After the expectant mother applies to the health center, a Pregnancy Follow-up Card is prepared and the expectant mother is given information. Afterward, she is sent to Health Centers, and the information and data gathered in the Provincial Health Directorate are given to the Department of Health and Social Services of the Metropolitan City Municipality of Kocaeli. Then, a tender is opened for the amount of milk that is needed. Later, after the award of the contractor, milk slips are prepared according to the lists coming from the Health Centers, and the milk is distributed to the Health Centers. The milk is also distributed to markets with which an agreement is made. The mothers are delivered the milk slips for the relevant months, and they are directed to the related markets. After the mothers receive their milk, the remaining slip coupons are collected, an accrual memorandum is prepared, and the payment is realized. The project is being carried out in 12 townships of Kocaeli, involving 117 Health Centers and 72 markets with which agreements have been made.

### *Background*

On 2-3 June 2005, the Kocaeli Metropolitan Municipality organized a national symposium on 'Poverty and its Effects on Children'. One of the most important findings of this symposium was that the pregnant women and their infants in the socially deprived and economically poor families had insufficient food and inadequate nutrition, which adversely affects the health of both the mother and the infant. In the organization of the symposium, a wide range of agencies and institutions participated: the governorship of Kocaeli, the General Directorate of Social Services and Child Protection Establishment, Work Group on Child Poverty of the Social Policy Forum of Boğaziçi University, Ege University, Hacettepe University, Kocaeli University, Sabancı University, United Nations Development Program's Representative in Turkey (UNDP), International Labor Organization (ILO), Kocaeli Bar Children's Rights Commission, Kocaeli Regional Directorate of Social Services and Child Protection Establishment, Turkish Economic and Social Studies Foundation (TESEV), Reinstated Education and Health Association, Social and Cultural Life Improvement Association, and Face-to-Face Association.

Among the proposals put forth in order to eliminate this identified social problem, were the ideas that the expectant mothers should be monitored by health professionals and that they should gain the habit and possibility of having sufficient nutrition during their pregnancy and breastfeeding periods. Participants from the Kocaeli Metropolitan Municipality stated that the expectant mothers and mothers with newborn babies who should be breastfeeding should have the possibility of consuming milk, and their consumption of milk should be increased. Participants determined that it was possible to organize such a program and the work started immediately following the symposium, with the first application beginning in 2005

### *Policy goals*

The general aim of this project is to reduce the infant mortality rate to the average level of EU countries (4.7/1000 in 2006) (Eurostat 2010) until 2015. The more specific objective is to provide all the prospective mothers who live in Kocaeli under medical supervision during their pregnancies. A second purpose of the project is to increase the consumption of milk, which is nutritionally beneficial and balanced, and to accustom people to developing the habits of drinking milk and proper nutrition more generally. This objective was influenced by low figures of annual milk consumption per capita: in Turkey this figure is only 6 L, compared to 139 L in Finland and 108 L in Spain.

### *Stakeholders, beneficiaries and participatory methodologies*

#### **Actors and partners in the implementation**

Health and Social Services Department of Kocaeli Metropolitan Municipality; Health Directorate of Kocaeli Province; Ministry of Health; village clinics

### **Beneficiaries**

Between 2006 and 2010, the policy benefitted 128,674 prospective mothers and babies who live in Kocaeli Metropolitan Municipality.

### **Participatory processes Implemented**

The 'Milk to My Mother, Health to Me' project was created as an outcome of the 'Effects of Poverty on Children' symposium that was organized by Kocaeli Metropolitan Municipality in June 2005. In the symposium, participants discussed the factors affecting the minds and bodies of children and tried to find solutions. One of the subjects discussed in the symposium was inadequate nutrition and incorrect habits. The topic was evaluated by academics from different universities and representatives from non-governmental organizations and relevant public institutions. It was concluded that the project would be effectively launched and managed under the slogan of 'milk for healthy mother and healthy baby'. It was highlighted in the symposium that insufficient and bad nutrition weakened the immune system, increased infant infections, and raised the mortality rate for babies. In addition, it was determined that adequate nutrition is of great importance to the mother's health in the long-term.

In the beginning stage of the project, media outlets were used to announce the project and it was promoted by the news and commercials in newspapers and television channels. As well, information meetings were held with non-governmental organizations with regard to mothers' health and these organizations were also helpful in the promotion stage.

The mothers that are beneficiaries of 'Milk to My Mother, Health to Me' health project living in the low-income regions were brought to the Health Centres in order to receive their milk and health supervision. The mothers who come to the Health Centres are informed of the rights of mother and child, are made aware of the work of the relevant local non-governmental organizations, and are encouraged to participate in their activities. These efforts encourage the mothers and prospective mothers to be more knowledgeable citizens. They also participate in KOMEK courses organized by the Kocaeli Metropolitan Municipality in order to provide them with employment skills, which have received good feedback. The Health Centres attempt to reach out to people who have newly arrived in the province and other groups (Roma people).

## *Institutionalization and financing*

### **Institutionalization processes**

The policy 'Milk to My Mother, Health to Me' began in 2005. A protocol was signed with the public institutions responsible for health centres in order to supply the mothers with milk within the scope of project and to bring the mother candidates to health establishments for regular health supervision. In this way, health agencies were brought into the project, and dialogues were organized to inform health employees about the project. The protocol signed by the President of Kocaeli Metropolitan Municipality and the Governor of Kocaeli has been efficient and effective for managing these dialogues.

Initially, a pilot project targeted the low-income mother candidates in disadvantaged regions located near 50 Health Centres. After some initial deficiencies issues were addressed, the project was expanded to cover all of the province of Kocaeli and include all candidate mothers, regardless of their income level.

## Financing

The policy has been funded by the Kocaeli Metropolitan Municipality.

## Outcomes and reflections

### *Key results and achievements*

In 2004, before the start of the project, a total of 19,546 pregnant women were supervised 99,071 times in health establishments. This means that, proportionately, each pregnant woman and baby was supervised, on average, 5.07 times during the gestation period and after delivery. Through the project, this rate has been gradually increased and, in 2009, 27,011 pregnant women were seen for medical check-ups 161,480 times (Provincial Health Directorate data). This means that, proportionately, each pregnant woman and baby was monitored 5.98 times by the health establishments.

For the healthy nutrition of candidate mothers, it is necessary to drink two glasses of milk daily (12 L of milk monthly). Through this project, this has been possible for the last three-month period of pregnancy and the first three-month period following delivery. In this way, the project contributes to reducing infant and mother mortality rates.

### *Main obstacles*

Most obstacles have involved the distribution of milk. Following the implementation of the project as a pilot in 2005, it was learned that distributing milk to the mothers had been difficult due to an insufficient number of milk distribution points. Later on, this problem was overcome by increasing the number of milk distribution points. However, some problems were encountered in creating the distribution network. The market owners that are milk distribution points initially did not accept the program's offer due to low income margins and the extra burden. These markets were identified and visited by the project team. They were told that this is a social responsibility project and the problem was solved by convincing them of this greater social importance.

There have also been difficulties in monitoring the milk distribution. During the first years of the project, the beneficiaries were called one by one by telephone to define the difficulties experienced during the milk distribution, which is not feasible when the number of recipients increases.

There were difficulties in determining how many mothers had milk and how many mothers did not have milk, and how many mothers had gone to a Health Center. This problem was solved through developing and using a comprehensive computer program to manage the program; which provided necessary data for evaluating its operations.

Finally, there have also been some difficulties in financing the project to date, and for a desired expansion of the project in the future. The total cost of the project between the years of 2006 and 2010 was over €7 million (see Table 1). Going forward, if sufficient financing from the Kocaeli Metropolitan Municipality is secured, the duration of the project will be raised from 6 to 12 months: 6 months for pregnancy and 6 months for nursing period.

## Further information

This case was researched and written by Muzaffer Sabur under the supervision of Dr. Mauro Serapioni and Dr. Nancy Duxbury at the Centre for Social Studies, University of Coimbra, Portugal, in 2010.

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