WASABY

Project WASABY: WAter and Soil contamination and Awareness on Breast cancer risk in Young women

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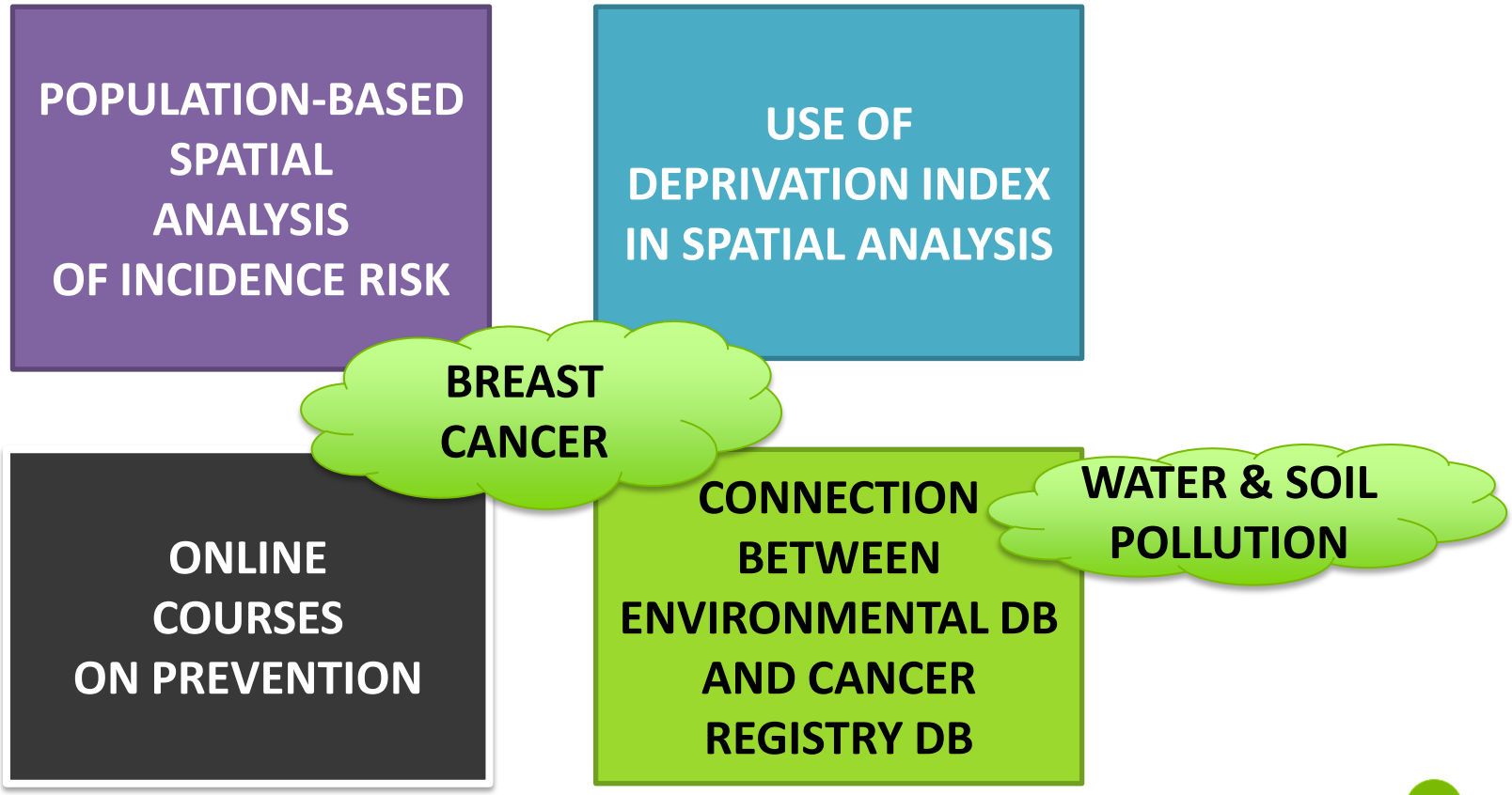
What is WASABY?

"Strange" call: an Horizon subject for a Public Health DG Santé call:
Water & Soil (WS) pollution & Breast cancer (BC) in young women

How we interpreted the call requirements:

- Identify areas at risk for BC → use of population-based data from cancer registries
- Promote BC preventive actions for girls in areas at higher risk → not necessarily on W&S contaminants
- Call for pilot studies → ecological studies on association between WS and BC risk
- Call in public health → use the example of BC to promote cancer registry activities on spatial analysis

IN SYNTHESIS



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Who is Involved?

Fondazione IRCCS "Istituto Nazionale Tumori" (Italy)

WASABY Referents: Paolo Baili, Roberto Lillini, Paolo Contiero

Lubeck University (Germany)

WASABY Referent: Alexander Katalinic

Association of European Cancer Leagues (Belgium)

WASABY Referent: David Ritchie

Caen University (France)

WASABY Referent: Guy Launoy

Oncology Institute in Ljubljana (Slovenia)

WASABY Referents: Tina Žagar , Vesna Zadnik

Plus, a growing number of cancer registries in Europe. **Why not get involved?**

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AIMS

The project has a three-year duration, from the 1st of January 2018, with the following aims:

- To increase spatial analysis activities across European CRs
- To improve the use of deprivation indexes in spatial analysis
- To enlarge the utilization of the European Deprivation Index (EDI)
- To prepare a useful web instrument to promote BC-preventive actions among young girls
- To pilot the connection between databases of WS pollutants and CR databases

METHODS OVERVIEW

- We do not want to compare CR data among countries (as in EUROCARE, CIVC, CONCORD, etc.)
- We would like to try to compare CR data in a country, but also this request is not mandatory

- So each CR can have different data
- Different methods can be applied

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TARGET GROUPS

Public Health Managers

POPULATION BASED DATA

- WASABY aims to study, standardize and promote new analytical methods that optimize the use of population-based CR data for the improvement of the European citizens' health
- European cancer information system improvement as an added value

RISK MAPS

- National and regional health policy makers receive a tool enabling them to target breast cancer preventive actions
- WASABY method can be translated to any cancer site

TARGET GROUPS

Cancer Registries

- WP4, WP5, WP6 and WP7 are built around a topic of public health high relevance: **the study of cancer risk using geographical analysis at a European level**

In WASABY, cancer registries are actors and receivers: their activity is promoted and innovative methodology is developed

1) the definition of a replicable model of spatial analysis to be used by CRs
2) methodology for correlating CRs data with environmental data

Young Girls & Adolescents

In Year 3, WASABY is expected to launch online courses and a smartphone app aimed to increasing awareness about breast cancer risk among young girls

WORK PACKAGES (WP1, WP2, WP3)

Three horizontal Work Packages (WPs), dealing with coordination, communication and dissemination, evaluation.

- WP1 – Coordination (WP Leader: Fondazione IRCCS "Istituto Nazionale Tumori", Analytic Epidemiology and Health Impact Unit - INT– Referent: Paolo Baili)

- WP2 – Dissemination (WP Leader: Association Europeenne des Ligues Contre le Cancer ASBL – ECL – Referent: David Ritchie)

- WP3 – Evaluation (WP Leader: Universität zu Lübeck – GER – Referent: Alexander Katalinic)

WP4 - Management and coordination of CR data collection and exchange, definition of spatial analysis model on cancer incidence data (WP Leader: Fondazione IRCCS "Istituto Nazionale Tumori", Analytic Epidemiology and Health Impact Unit – INT – Referent: Roberto Lillini)

Objectives

- To manage data from Cancer Registries (CRs)
- To coordinate the data flow (data exchange) between WPs
- To define the model for spatial analysis on cancer incidence data

Main actions

- Survey to European CRs aimed to: a) identify CRs interested to participate in the action and b) collect information on relevant data availability in the CRs
- Writing of the data collection protocol
- Report on the model designed and validated for incidence rates maps
- Collection (and linkage where necessary) of data coming from CRs, on deprivation indexes coming from WP-5 and environmental data defined in WP7

WP5 - Deprivation indexes (SES) computation and creation of a European network of experts on deprivation and methodological issues (WP Leader: Université de Caen Basse-Normandie – FRA – Referent: Guy Launoy)

Objectives

- To individuate, for countries participating in the study, a Deprivation Index for smallest possible geographical unit (depending on availability of census data) with the aim of including deprivation as confounder in spatial analysis for breast cancer risk
- To create a network of experts across Europe, working on the estimation of socioeconomic deprivation and discussing on methodological issues

Main actions

- Identification of a list of experts covering each involved country for the collection of data on deprivation indexes or the deprivation indexes estimate
- Use of EDI in the participating countries (where available)
- Computation of EDI for those countries where it can be estimated (after check of data availability)

WP6 - Methods of spatial analysis with CR data (WP Leader: Onkoloski Institut Ljubljana – SLO – Referent: Tina Žagar)

Objectives

- To determine methodologies suitable to perform spatial analysis with cancer data, using breast cancer incidence as an example

Main actions

- Organization of a group of experts in spatial analysis techniques able to be performed with routinely data collected by CRs
- Organization of meeting/conference calls for the group of experts to define the methods suitable for risk analysis of cancer incidence provided by CRs according to availability of data at different spatial aggregation level, with emphasis on small-area level, and to identify useful open source software(s)
- Analysis of breast cancer incidence data, also comparing different methods. Discussion with the CRs personnel for interpretation
- Practical handbook (including details on data preparation) for CR's personnel and other researchers aimed to promote spatial analysis of CR data in general

WP7 - Collection of scientific evidence on breast cancer risk factors, identification of available databanks on water & soil pollutants, pilot environmental study (WP Leader: Fondazione IRCCS "Istituto Nazionale Tumori", Environmental Epidemiology Unit – INT – Referent: Paolo Contiero)

Objectives

- To collect scientific evidence on breast cancer risk factors
- To identify available databanks with environmental pollutants data
- To perform a pilot environmental study

Main actions

- Scientific literature review on breast cancer and environmental factors. A report is produced to help identify the risk factors in relation to the environmental databanks search
- Search of European and national environmental databanks
- Design of protocol for pilot environmental study
- Data collection and analysis of pilot environmental study in the area identified by the Steering Committee. Data on pollutants are geo-coded using the same software identified by WP6

WASABY'S STRATEGY FOR EACH CR

In the first year will try to involve only those CRs able to analyze data by the smallest unit (S.U.) and not by municipality (with the exception of a few peculiar cases)

We have to stress the importance of geo-coding the residence address at date of diagnosis

Ten months into the project, we shall evaluate:

- Number of CRs able to participate
- Number of countries able to participate
- Number of CRs performing spatial analysis for the first time

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SOME EARLY RESULTS

On 19th of February 2018 the Steering Committee approved the data collection protocol, now available on www.wasabysite.it

The project and its protocol were approved by the INT Ethical Committee.

The WASABY website was launched in March.

A leaflet illustrating the project can be downloaded from the website.

SOME EARLY RESULTS

All the participating CRs answered exhaustively to the information survey. The results were published on the corresponding Report, available on the WASABY website.

The Varese Cancer Registry group collected, checked and arranged their dataset of young women breast cancer cases (2679 cases from 1996 to 2012), completing the information about census tract, where lacking.

The discussion about socio-economic deprivation, data availability and geographic level of information disaggregation started, involving WP5, WP4 and some CRs.

The environmental review already selected some relevant articles and publications (11 out of 81).

SOME EARLY RESULTS

24 CRs from 9 countries already confirmed their participation.

Nation	Cancer Registry	Nation	Cancer Registry
Belgium	Belgium	*Poland*	*Kracow*
Germany	Bremen	Poland	Kielce
Germany	Schleswig-Holstein	Poland	Silesia
Italy	Napoli 3 South	Portugal	Central Portugal
Italy	Palermo	Portugal	Northern Portugal
Italy	Parma	Slovenia	Slovenia
Italy	Ragusa	Spain	Basque Country
Italy	Siracusa	Spain	Castellon-Valencia
Italy	Trento	Spain	Girona
Italy	Umbria	Spain	Granada
Italy	Varese	Spain	Murcia
Lithuania	Lithuania	UK	Northern Ireland
Poland	Greater Poland		

NEXT STEPS

The very next steps of the project (till the end of 2018) will be:

- final definition of the participating CRs list
- collection of local Ethical Committee approval where needed
- definition of the help procedures for aiding the CRs in the geo-coding and in the preparation of cancer maps and/or EDI
- constitution of the groups of experts on socio-economic and spatial analysis
- start of the CRs data collection and database for spatial analysis
- start of the socio-economic data collection

The project leaders will be glad to accept the adhesion of other European CRs.

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“Depending on when in her lifespan a woman integrates risk-reduction behaviours, the majority of breast cancer can be prevented”

Colditz G, CA Cancer J Clin, 2014

Visit our website to learn more www.wasabysite.it

Co-funded by
the Health Programme
of the European Union

EU funding disclaimer: This project has received funding from the 3rd European Union Health Programme 201-2020 under Grant Agreement PP-2-5-2016 (# 769767)