

# PanCareSurFup Bulletin, Issue nr. 10

### PanCare Childhood and Adolescent Cancer Survivor Care and Follow-Up Studies

Dear Friends,

In this tenth Bulletin we learn more about the progress in Work Package 5 from the Work Package leader Prof Stanislaw Garwicz as well as get a description of the history of paediatric oncology treatment and its consequences. I hope and think you will find it interesting reading.

PanCareSurFup is moving along well as we approach summer. Most data providers are extremely busy collecting treatment data for the case-control studies and it is proving to be quite a task due to the complexities in accessing older patient records and getting all the necessary permissions from both National and Regional regulatory bodies. Regular web meetings are held to keep track of the progress. The guidelines work in WP 6 is continuing well and we hope to see the result of the work on male and female gonadal toxicity in the near future. In WP 7, work in under way towards an International Conference in Brussels to be held May 23-24, 2016; please mark these dates in your calendars! Here we hope to disseminate and show much of the results from our project, so it should be an exciting meeting.



I would like to take this opportunity to wish you all a continued nice Spring and a long and relaxing Summer.

All the best! Lars Hjorth Coordinator PanCareSurFup

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More information on project partners

# Latest developments in PanCareSurFup

### Work Package 7 - International Conference 2016

The dissemination Work Package is working to organise the PanCareSurFup International Conference in Brussels (Belgium) to be held on May 23-24, 2016. Please mark these dates in your calendar today, as this will be the most exciting meeting of our project, where all partners will be offered the opportunity to present the results achieved during the project duration, and in relation to the PanCareSurFup project as a concept.





### Open Space Summit - Little People Romania

The NGO "Little People" from Romania organised on 20th December 2014 in Bucharest, Romania, a "Open Space Summit" for survivors and young patient advocates aged 17 to 31. Participants from 15 European nations (Bulgaria, Czech Republic, Greece, Hungary, Ireland, Italy, Lithuania, Moldova, Poland, Romania, Serbia, Slovenia, Spain, Sweden and the United Kingdom) took part in this very interesting event, whose focus was to assess the most urgent unmet needs that young people across Europe identify, and allow free discussion on various topics. The 17 breakout sessions led by the participants during the event resulted in a detailed report of all discussions, mainly concerning age appropriate and equally accessible cancer treatment across Europe, long-term follow up and quality of survivorship, as well as the political and regulatory representation of young people with cancer. Please contact "Youth Cancer Europe" (contact@youthcancereurope; katie@thelittlepeople.ro) for more information.

# PanCareSurFup Partners

In this edition of the Bulletin, the dissemination team interviews Professor Stanislaw Garwicz, PanCareSurFup leader for Work Package 5.

# Professor Garwicz – in the PanCareSurFup research consortium you are the leader for Work Package 5 investigating "late mortality", but what is your professional background?

A: I'm a paediatrician who since early 1960-ies has been working in the field of paediatric oncology. At that time the speciality barely existed and nobody talked or even thought about curing a child with leukaemia. It is true that more and more cytostatic drugs were available after the initial discoveries of Sidney Farber in Boston in the late 40-ies and longer and longer remissions could be obtained. However, not until the systematic work of Donald Pinkel in Memphis during the 1960-ies which resulted in the first curative treatment for ALL (acute lymphoblastic leukaemia) that the philosophy of treatment changed from merely prolonging life to curative intent.

In Sweden, the systematic work in paediatric oncology started 1967 when Swedish Children's Leukemia Group (SBLG) was formed and the development continued in 1974 when a group (VSTB) oriented towards treatment of children with solid tumours was founded. These two groups worked hard to develop childhood cancer treatment protocols and to ensure a national adherence to the guidelines.

The centralization of care and therapy was a very important step in Swedish childhood cancer history, a process that took less than 10 years to implement. In this way more and more children with cancer could achieve prolonged remissions and some of them were truly cured. We had very good exchange of ideas and support in the international organization SIOP (International Society of Paediatric Oncology) founded in 1969 and later in the Nordic Society for Paediatric Haematology and Oncology (NOPHO) which we started in 1982.

#### When did you start to think about late complications?

A: In the 1970-ies the main effort was directed towards improving survival rates using multi-modality treatment with maximally tolerated doses of chemotherapy and radiotherapy. Quite soon we realized that the advances of curing childhood cancers came with a price tag, and the cost was paid by the survivors themselves in the form of late complications. Clinical observations initiated a series of research projects towards elucidation of various aspects of these unwanted effects. We and many others world-wide found a broad range of disturbances affecting almost all the organs in the body. There were psychological and cognitive dysfunction, endocrine disorders, cardiac events, infertility, development of second malignant neoplasms (SMN) and many other complications. With time it became apparent that about 2/3 of all childhood cancer survivors suffered from late effects originating from their cancer treatment, of which about half were severe or life threatening.

The age of the patient at the time of primary treatment, modality of the treatment as well as doses have been shown to impact if and how late complications will occur. When this knowledge became evident paediatric oncologists tried to modify treatment protocols as much as possible in order to avoid unwanted late effects and at the same time maintaining good survival rates. For example, radiation therapy could be avoided or doses and volumes were limited for some diseases and stages and the same applied for cytostatic drugs. At the same time it became more and more apparent that the children who were cured from cancer needed long-term follow-up in adult life.

## Tell us more about organizing the long-term follow-up of childhood cancer survivors. Was it easy?

A: Not at all! It was quite controversial to follow-up apparently healthy persons and there were no generally accepted guidelines how the follow-up should be performed. Moreover, "adult" physicians (general practitioners, internists and others) were not interested in the task and did not have enough knowledge to perform it. The solution here in Lund was to start a "late effect clinic" in the Department of Oncology in 1987. An "adult" oncologist was responsible for the clinic and always had a paediatric oncologist, who knew the patient from the start, at her/his side.

The model has been functioning quite well but must of course be based on local conditions. The most important part of this work was achieving a general acceptance of the guidelines and showing the necessity of follow-up care of childhood cancer survivors. For this purpose we started in 2001 the Swedish Working Group on Long-term Follow-up after Childhood Cancer (SALUB) with myself as its first chairman. Some years ago an English version of the guidelines was published (http://www.blf. net/onko/page6/page14/files/Salub\_5\_2010\_Eng.pdf).



In April 2007 my co-workers organized the first European Symposium on Late Complications after Childhood Cancer (ESLCCC) in my honour. It has since then grown in reputation and played a vital role in bringing together the expertise in the field providing a forum for discussion between professionals from different disciplines. The symposium in Lund was well frequented and paved the way for Lars Hjorth, Riccardo Haupt and Rod Skinner to start PanCare in 2008 together with interested colleagues and researchers from around Europe. Pancare is a multidisciplinary pan-European network of professionals, survivors and their families that aims to reduce the frequency, severity and impact of late side-effects of the treatment of children and adolescents with cancer. To achieve equity of access to care for childhood cancer survivors across Europe is another of its important objectives. PanCareSurFup is the first of its research projects.

## How come that in PanCareSurFup you are leading work package 5 investigating "Late mortality"?

A: Taking into account the growing knowledge of various late complications in childhood cancer survivors, the natural question emerged if their life expectancy is comparable to the general population or if they are dying earlier than expected. In the Nordic countries we have besides excellent population-based cancer registers also population-based mortality- and cause of death registers. Using these registers we performed a large study which was published in the Journal of Clinical Oncology 2001 (Möller et al). Late mortality in this context means death occurring more than 5 years after cancer diagnosis. We found that death among childhood cancer survivors occurred 11 times more often than in the general population and this was mainly due to high excess mortality from relapse of the primary cancer, especially between 5 and 10 years after diagnosis. It means that the survival of more than 5 years from diagnosis is not equal to "cure" from the primary cancer.

With longer follow-up after diagnosis other causes of death increased, among them death due to second malignant neoplasms and due to non-cancer causes e.g. pulmonary and cardiac diseases. Interestingly enough, suicide was not more frequent among childhood cancer survivors than among the background population. The good news of the study was that overall late mortality was significantly lower in patients treated during the most recent period of time, 1980 to 1989, compared with those treated from 1960 to 1979 and there was no increase in rates of death due to cancer treatment. In other words, the modern therapy was more efficient in eradicating primary cancer without increasing risk for other death causes. Another finding in the study was the discrepancy between the official cause of death and the cause assessed by scrutinizing the death certificates. We found an overestimation of primary cancer as a cause of death and an underestimation of the late effects of cancer treatment as a cause of death. A second investigation performed in the Nordic countries (Möller et al., Acta Oncol. 2004) showed that late mortality was significantly higher in Denmark and Finland than in Norway and Sweden for cohorts of survivors diagnosed in the 1960-ies. These differences diminished over time and had disappeared for patients diagnosed and treated in 1980-1989, the last period studied. The convergence of mortality rates was most probably the effect of a closer collaboration among Nordic paediatric oncologists organized in NOPHO. This led to the development and implementation of common protocols for treatment and follow-up of childhood cancers in all the Nordic countries.

## What do you expect to achieve with your PanCareSurFup "Late mortality" project?

A: The obvious conclusion is that there is a need to investigate the experience of survivors in many European countries where such studies have not yet been conducted. Heterogeneity in treatment practices and protocols over time and



across countries may well have varying impact on late mortality. Moreover, we are assessing accessibility of data on mortality and causes of death in different European countries knowing that in many countries such studies have been impeded by legislation on data protection and logistics barriers. To study the long-term risk of lethal conditions in survivors as a direct consequence of the cancer treatment earlier in their lives is in their best interest. Hopefully our results will generate knowledge which will be useful for development of follow-up guidelines and will favour introduction of health promotion measures, both by primary and by secondary prevention.

## And finally, please describe one of your proudest moments or an achievement you are particularly proud of.

A: I was very proud receiving, together with some other senior Nordic colleagues, an award for "The Outstanding Pioneer Contribution to the Development of Childhood Cancer Care". In the everyday clinical life I have always been moved when my former patient sends me a picture of her (because it is most often a "she") new-born baby, reporting that both the child and the mother are doing well – that makes me as proud as if I were the grandfather.

The picture of Stanislaw Garwicz was taken in the courtyard of the Children's Hospital in Lund by the photographer Magnus Torle for the interview in "Barn&Cancer" #5, 2009.



Professor Stanislaw Garwicz

### For more information, please contact:

PanCareSurFup, Work Package 7 'Dissemination' c/o Lars Hjorth, Coordinator, PanCareSurFup, lars.hjorth@skane.se Project Manager, Helena Linge, Project Manager, helena.linge@med.lu.se Momcilo Jankovic, WP Leader, m.jankovic@hsgerardo.org



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