PRESENT SITUATION OF TRANSPLANT COORDINATORS IN EUROPE

SÁNDOR MIHÁLY, PETRA BAKOS, JÁNOS MÁRTON

Hungarian National Blood Transfusion Service, Organ Coordination Office
in co-operation with

George Kyriakides (Cyprus), Premsyl Frýda (Czech Republik), Dorte Mathiasen (Denmark), Monika Olafsson (Finland), Marie Thuong (France), Gia Tomadze (Georgia), Franz Schaub (Germany), Alessandro Nanni Costa (Italy), Sergej Trushkov (Latvia), Julija Sirokova (Lithuania), Tasch Egide (Luxembourg), Anthony Bugeja (Malta), Monika Olafsson (Norway), Agnieszka A. Krawczyk (Poland), Rosana Turcu (Romania), Beatriz Domínguez-Gil (Spain), Åsa Klitthammar (Sweden), Dagmar Vernet (Switzerland), Dave Colett (United Kingdom)

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Summary - Our work group used a questionnaire with 20 questions to evaluate the present situation of transplant coordinators in Europe. According to the 20 answers there are 1601 coordinators for a population of 436 million (3.67 pmp). Seventy-nine per cent of coordinators work in hospitals, 70% are employed part-time, and 60% are women. About half of them have qualified as doctors with different specializations, but a large number are nurses (46%). The majority of the coordinators (44%) have been employed for three years. National and regional training schemes are used for special further education in more than 68%, and TPM is the dominant international course of qualification. Sixty-six per cent of coordinators are paid by hospitals in 66%, and 76% receive a fixed salary.

Introduction

The first successful kidney transplantation was performed at Boston in 1954, followed by liver, heart and lung transplant programmes a decade later. The transplant coordination system was set up as a new independent territory to organise, support and facilitate the whole donation and transplantation process just about one generation later. Nowadays, transplant coordination is divided into different areas of work using different designations. The development of coordination, and the operation of a coordination network with different levels at various places could increase the number of donors, while the quality and safety of donation is also raised. A growing number of patients on the waiting lists need urgent and continuous efforts. The economic benefit of these programmes (supported by economists calculating net present value) convince the decision-makers to promote donation programmes on a financial basis (as much budget as the expected savings). In these circumstances, we have a chance to make periodic assessments of the present situation of transplant coordinators to investigate the relations between structure, process and results.

Mailing address: Sándor Mihály, Hungarian National Blood Transfusion Service, Organ Coordination Office, H-1113 Budapest, Karolina út 19-21. Hungary; e-mail: mihaly.sandor@ovsz.hu

Objective

The last European survey on transplant coordination was published in 2004. In the meantime several changes have

taken place in and around transplant coordination in recent years. Some organisations have ceased to operate, others have changed, grown or merged into other associations. The new Directive of the European Parliament and the Council on standards of quality and safety of human organs intended for transplantation will be announced in the near future. This renewed environment led us to estimate the status of transplant coordination in the second half of 2008.

Material and methods

The Organ Coordination Office prepared a questionnaire of 20 questions on the basis of the previous queries published from Spain, Switzerland and the US. Our new questionnaire was distributed to the 27 EU member states, Georgia, Norway, and Switzerland for the first time in July 2008. We circulated the questionnaire among the ETCO National Key Members, EOEO representatives and DOPKI EU project partners.

We asked all responding partners to take into consideration the type of questionnaire, which was a snapshot survey, therefore we were interested only in currently active coordinators. Questions are raised about the different profiles of transplant coordinators, professional background, distribution of further training programmes used to become transplant coordinators. We also asked about the type of dedication, (full-time or part-time job), and work experience which are regarded as important factors to promote efficiently the whole process from brain death recognition till successful organ transplant. The employer and the payment structure were also queried as probably important features for obtaining the maximum benefit.

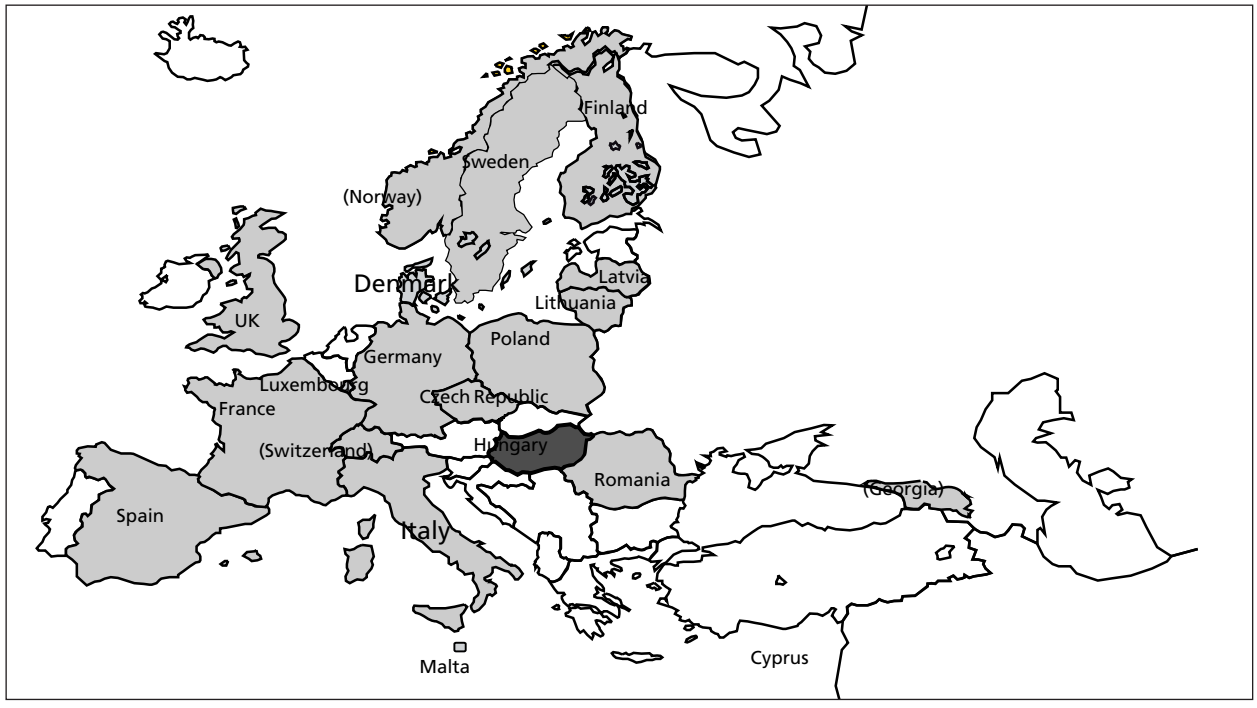
Main characteristics

The 20 incoming questionnaires were evaluated in the study from the 30 countries addressed. The 20 replying countries cover 436 million citizens (85%) of the whole population (Figure 1). Cadaver donations were 7702 in 2007, there are 2577 donor hospitals and 322 transplant centres. From all questionnaires returned 1601 transplant coordinators were referred.

The mean age of coordinators was 40 years. It also emerged that women prefer working in this position (male/female ratio: 60% women, 40% men, no. 1183) (Figure 2).

Results

The highest donation rate was found in Spain with 34.29 donors per million population (pmp), while the European mean rate was 17.65 donors pmp. It is important to pay respect to current legislation (opt-in or opt-out system) during the evaluation the number of donors year by year (Figure 3). The number of donor hospitals varied widely from country to country depending on the health care and hospital net-



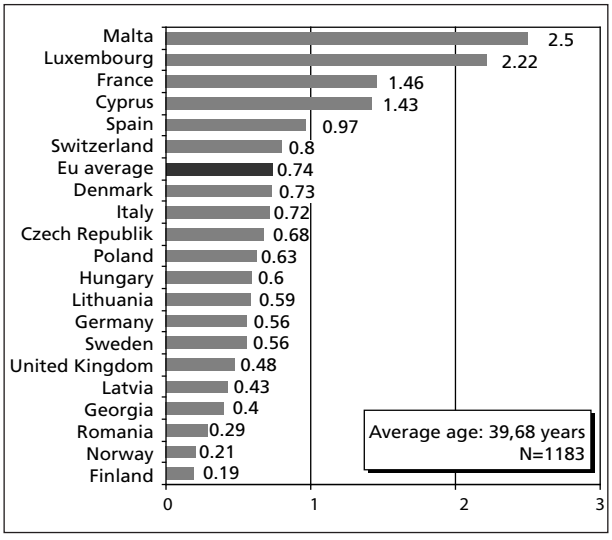


FIGURE 2 - Distribution of gender and average age of tx coordinators.

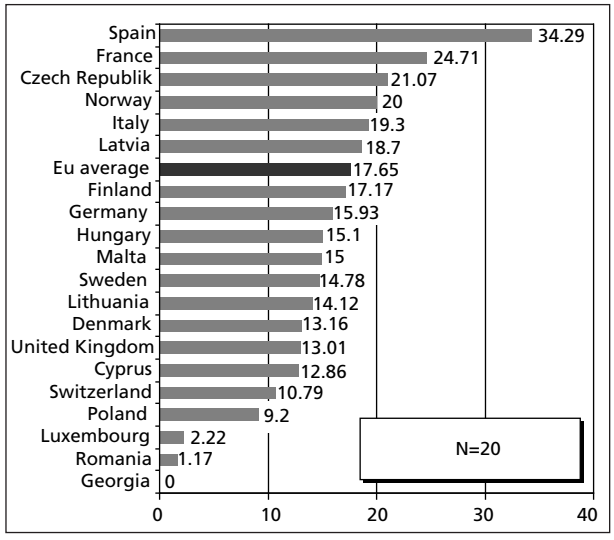


FIGURE 3 - Number of cadaver donors pmp 2007.

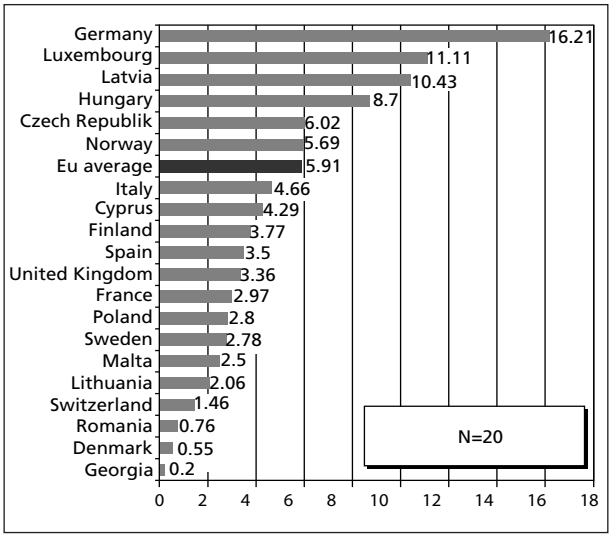


FIGURE 4 - Number of donor hospitals pmp.

work. But in general we can conclude that one possible way that might help to increase the donation rate in countries with initially higher results than the EU average is the lower number of donor hospitals pmp. In these countries the practice and experience may be concentrated in larger hospitals. There are 2577 hospitals which could have cadaver donors in Europe. Germany is the first on the list more than 16 hospitals pmp, while the EU average is just below six. In countries with longer experience in organ procurement programmes, only accredited hospitals are entitled to explant organs, whereas in other countries donor referral is possible even for all ICUs, or similar units (Figure 4).
Easy access to transplant centres can ensure the possibility to perform transplantation for patients with end-stage organ failure on waiting lists. The concentration of transplant

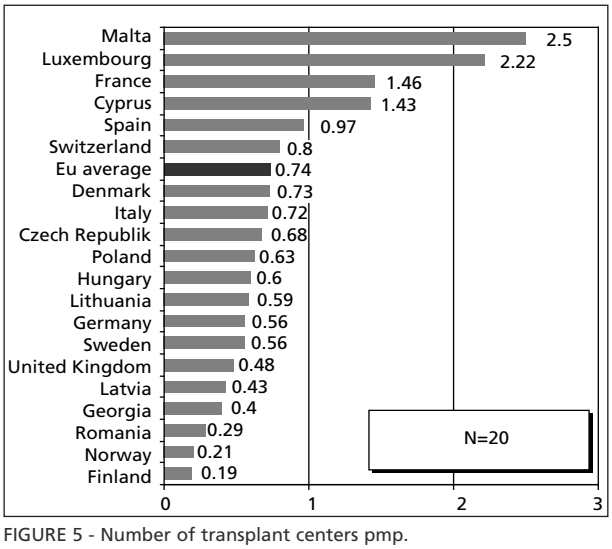


FIGURE 5 - Number of transplant centers pmp.

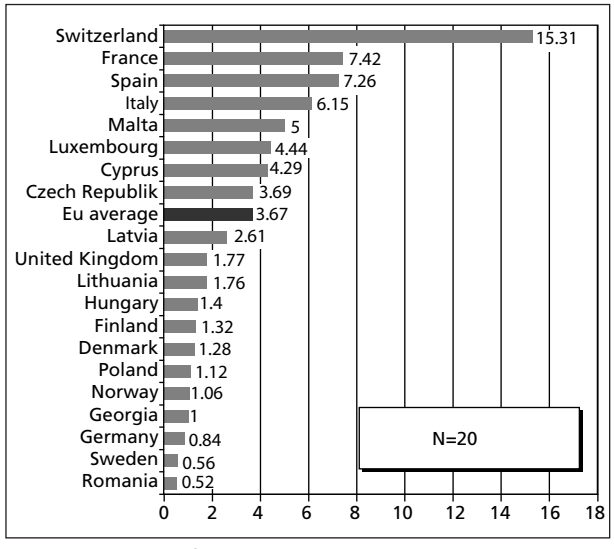


FIGURE 6 - Number of tx coordinators pmp.

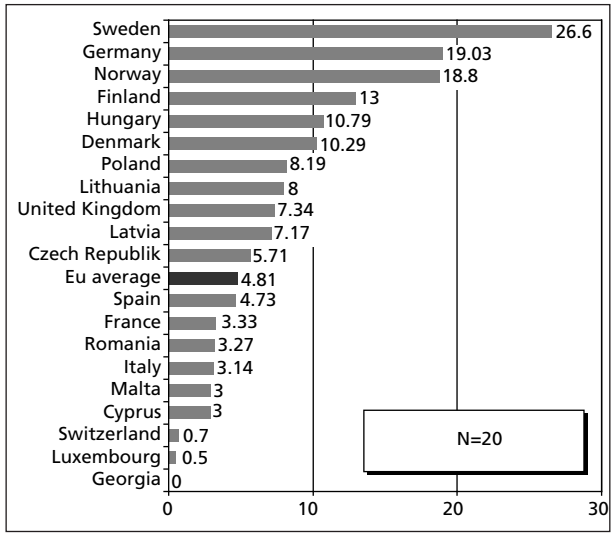


FIGURE 7 - Number of donors per coordinator.

centres pmp is between 0.19 and 2.5 with a mean of 0.74 pmp. High numbers of small countries can be misleading, but France has the first reliable data with 1.46 transplant centres pmp (Figure 5).

The number of transplant coordinators varies widely among countries, and the first positions have changed since the publication of the last survey. Switzerland has the highest concentration with more than 15 transplant coordinators pmp, but the second result is less than half the previous one. Although we still have a very impressive result for France and Spain with more than seven specialists pmp. The EU average is 3.67 (Figure 6).

The number of donors per coordinator year by year can be interpreted in two different ways. On the one hand Scandinavian countries and Germany have higher donor rates per coordinator where these employees' work is very effective: one coordinator promotes a large number of donor organs (Figure 7). On the other hand the social and financial benefit of one transplanted organ is higher than the annual salary of one coordinator, so it is useful to employ as many coordinators as possible. It is not a problem when the donor rate per coordinator is low, because they can concentrate better on each case to increase the rate of procured organs per donor.

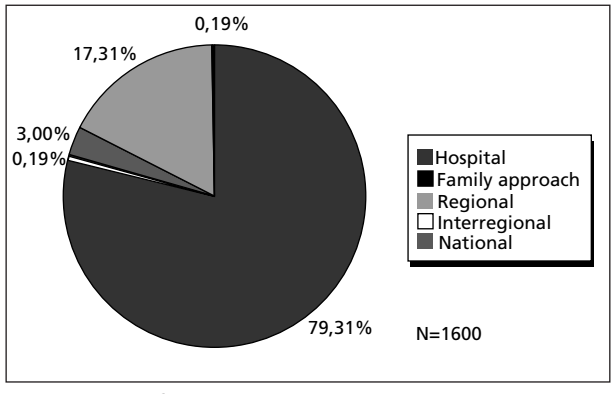


FIGURE 8 - Role of the transplant coordinators.

There is a wide range of tasks for different types of coordinators, and because of the different characteristics it was not always easy to fit a category. Almost 80% of coordinators work in hospitals, 17% work as regional and the remaining 3% belong to the national level. European countries prefer to locate coordinators in hospitals where possible donors can be recognised and managed. Regional coordinators usually work for the transplant unit, which satisfy the transplant demand of the covered territory. National coordinators receive the donor reports and responsible for allocation on national basis (Figure 8).

Almost 46% of coordinators have different kind of nursing qualification. These professionals usually underwent special training courses to be coordinators and a college or university degree is preferred for selection in this group. Thirty-seven per cent of ICU doctors work as transplant coordinators and just below 13% of other physicians are selected (Figure 9). We must add that 70% of coordinators are employed part time as coordinators. Obviously they are the hospital coordinators (Figure 10).

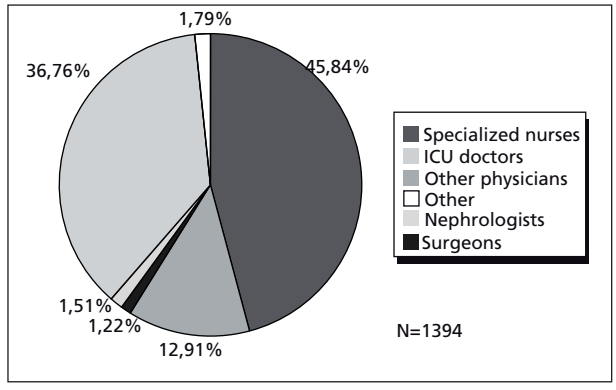


FIGURE 9 - Professional background of transplant coordinators.

The training courses at national or regional levels have been raised very much in recent years and became the most important part of education for coordinators. This result refers to the recognition in many countries where it was decided to train coordinators independently. Transplant Procurement Management (TPM) training is the most remarkable international initiative in this field (Figure 11).

A coordinator can promote the donation and transplant process in an effective way about one year after starting work. Work experience can help to make really good decisions during the process of the organisation to cut the time needed safely maintaining high quality standards.

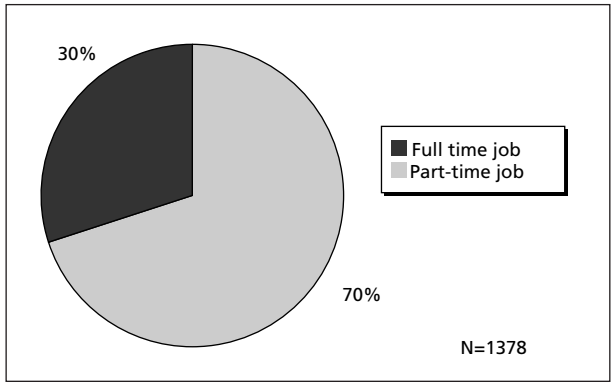


FIGURE 10 - Distribution of full or part-time employment.

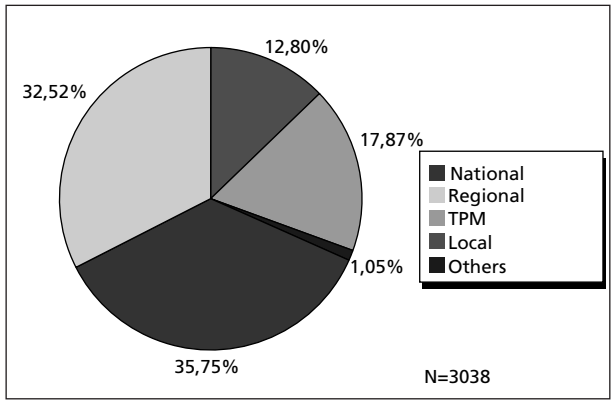


FIGURE 11 - Distribution of coordinators training by types.

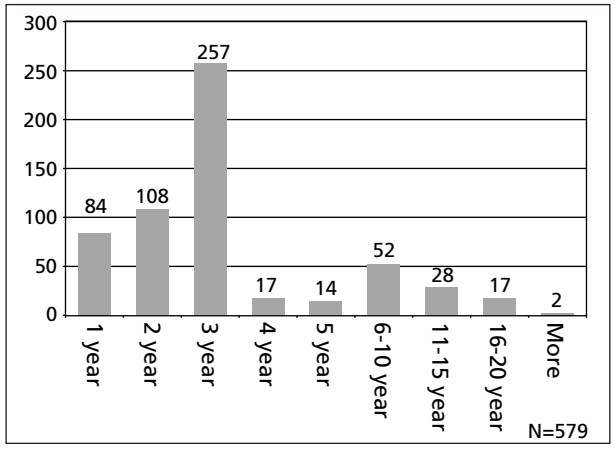


FIGURE 12 - Professional experience of transplant coordinators in years.

Working as a coordinator in a full-time capacity is very emotionally and physically frustrating, and the situation is the same for others who do their part-time job alongside their colleagues with full-time responsibility. Therefore it is important to note that a significant part of the coordinators (44%) finish their activities after the third year (Figure 12).

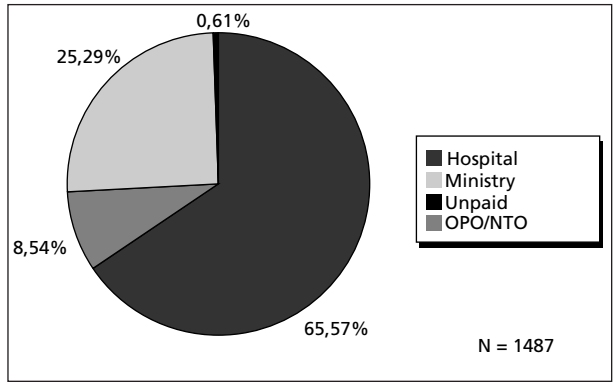


FIGURE 13 - Who pays the transplant coordinators?

A large proportion of coordinators (66%) receive their salaries from the hospital, and 25% from the ministry. Only in 9% of the cases are salaries received from the coordinator organisation. Just three countries have some coordinators without a salary (Figure 13).
It could be surprising that coordinators receive a fixed salary in 76% of cases. The adaptation of a mixed system, which means a fixed part of a salary with a bonus of extra payment based on the quality of their work (23%) (Figure 14).

Conclusions

Some important changes have taken place during recent years in transplant coordination. For example, the number of coordinators increased significantly in Switzerland, and the national and regional training became the preferred education for coordinators.
We can get up-to-date information on transplant coordination in Europe if we repeat this or a similar questionnaire in about every five years. It is suggested data be collected again just after the adaptation of the new directive, or rather just after the deadline of the obligatory legislative harmonization of the directive in the Member States.

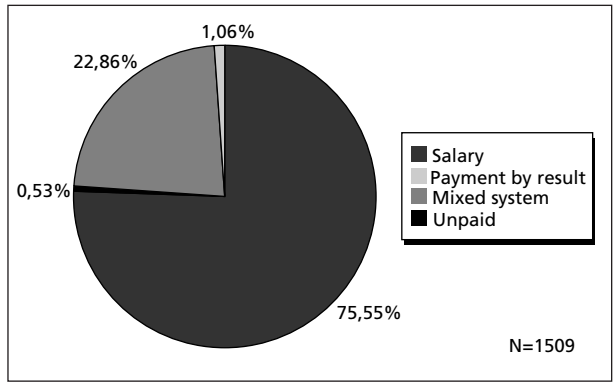


FIGURE 14 - Payment structure of transplant coordinators.

This questionnaire can be one of the useful tools in developing the coordination system in a region or in a country and can also evaluate our position in Europe together with the relation between the indicators and donation and transplantation activity.

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