Shaping the medical and ethical opinions on transfusion in Poland (1900-1960)

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ABSTRACT
Transfusion as medical treatment developed and popularized after World War I. It was long-term process taking thirty years. At that time people worked on transfusion method, ethical aspects were discussed and legal norms were introduced. Discussions covered the forms of blood donation (paid and unpaid), principles for granting consent by blood donor, origin of blood (from sick people, from corpses, compliant with race), grounds for compulsory drawing blood. Transfusion was initially understood and treated as transplantation of living tissue. Recalled conditions shaped the principles of transfusion, that are binding until now.

Keywords: Blood, transfusion, ethics, law, medical treatment, war

1. INTRODUCTION
The purpose of this papers is presentation of historical note about transfusion, as well as ethical and legal dilemmas related with transfusion in the first decades of application. Medical and organizational discoveries will be presented, as well as ethical and legal considerations that shaped contemporary opinions on transfusion.

2. HISTORICAL ESSAY
Development of blood donation and haematotherapy in the twenty century depended from many factors. Now it is assumed, that discovery of blood groups by Landsteiner in 1901
was a cause for rapid advancement in worldwide transfusion medicine. Whereas, the weight of this discovery was initially underestimated [Kładna, p. 47-48]. The following factors influenced on the popularization of transfusion: discovering blood groups, making its conservation feasible (transfusion of blood conserved with sodium citrate - Albert Hustin and Luis Agote in 1914), and confirming the invariability of blood groups during human lifetime (Hirszfeld, Dungern 1910) [Paliga, p. 125-127].

Technical difficulties, unpromoted knowledge of blood groups, lacking capabilities for determination, failures despite transfusion according to imperfect knowledge (discovery of Rh took place 20 years later) led to many discussions on legitimacy for doing such treatments. Transfusion was dependant on the presence of living donor, what was not possible in every circumstances. Before World War I and at time of warfare, blood group tests for patients were found unjustified also from economical point of view [Schneider, p. 194].

The period of World War I was time of transfusions done on the unparalleled scale, as far that time. [Keynes, s.16-17]. Blood donors were usually nurses, sisters or sick people.

At onset of war, transfusion was done with direct method connecting the donors and recipients vessels with means of tubes of various kind [Guillot, Dehelly, Morel, p. 63, 216, Bernheim, p. 91]. Another method were devices altering direction of blood flow, in the following period of war - there were experiments introducing conserved blood to transfusion.

After the end of war worldwide scientists made efforts perfecting the indirect transfusion method - with conserved blood. In Poland, after winning independence in 1918, blood was generally transfused in military hospitals and on Surgical Wards. On the pages of medical magazines (i.e. “Lekarz Wojskowy”), the knowledge obtained from practical experiments was shared, reports from treatments were made and discussions were held on the applicability of fresh and conserved blood with purpose of settling new primacy in transfusion methodology (Bolesław Szarecki, Tadeusz Sokolowski, Henryk Gnoiński, Julian Aleksandrowicz, Tadeusz Tempka Wit Rzepecki and others).

In the thirties of the twentieth century works on transfusion were accelerated, what resulted from political climate and inevitability of approaching war. In USSR, and then in other European countries, including Poland - works were conducted on using blood from blood-letting, sick people or corpse blood. Bolesław Popielski worked in Poland on the case of using blood from corpses.

Reports on the methods of blood conservation and on storage capabilities were published. Experiences from Spanish War (1936-1938) ended disputes on the primacy of methodology (fresh versus conserved blood in transfusion) with advantage to conserved blood [Palfreeman, p. 2-4].

**Blood donation**

In the independent Poland, medical personnel and students were blood donors. They donated blood for various reasons. One of the most important reasons was mission, good intentions and awareness of participation in pioneer medical activities. Another factor could be some kind of “moral compulsion” (sometimes described in diaries) or making for a living. In the interwar period blood prices were high and contractual. In 1933 in Warsaw 1 cm³ of blood costed 0.75 PLN, but higher prices also existed.¹ Family of sick person paid for blood.

¹ Labourer earned 150 PLN, engine driver 400 PLN, judge 500 PLN, professor 1200 PLN - usually 500 cm³ was transfused.
Lists of professional donors were kept in duty rooms of hospital wards. Donor was notified in case of need, who then reported for direct transfusion. It should be clearly stated, that there were more transfusions in Poland with this transfusion method until World War II. Sick people or families paid for blood. Charity movement - unpaid blood donation - did not exist. Introducing honourable blood donation was postulated in the interwar period by i.e. B. Szarecki, T. Sokółowski, Franciszek Zalewski. These doctors appealed to humanistic motives, generous gift of human being for other human without respect to social position or race. Unpaid form of blood donation was of minor interest.

In the thirties the number of blood donors increased, accordingly with popularization of transfusion and increased demand. On the verge of war the Polish Red Cross actions were conducted, at time of which blood was collected free of cost [Paliga, p. 161-174].

People simultaneously worked on the shape of first Blood Donors Act. Abuses without such regulation existed - excessive blood donation, forged test results towards venereal diseases etc. The first legal act related with haematotherapy was Minister of Social Care Ordinance on August 5, 1937, named “About Blood Donors”. It was Act with short content regulating the duty of keeping the registers of blood donors, extent of blood donor tests and its frequency, including pattern of membership ID [Paliga, p. 158-159].

After the World War II, within 10 years, indirect transfusion method was popularised with conserved blood and blood banks were established.

Paid blood donation still existed in Poland in the first years after the World War II. Cost of blood in 1950 amounted to 1.35 PLN per 1ml, the limit of 8 donations in 1 year was stipulated, blood was donated in each 6 weeks or less frequently, in the amount of 250-300 ml. Stations conserved the blood after collection, but donors were also directed by stations for direct transfusion [Rutkiewicz, p. 210-211]. Changes in the organization of blood donation took place after establishing the Haematology Institute in 1951. The structures of Blood Service were created according to USSR pattern. In the post-war reality blood donation was a tool uniting the human masses. Blood donation and Red Cross movement were ideal tools for spreading the socialistic propaganda. The picture of blood donor, morally responsible for classes, was created.

3. DELIBERATIONS ON THE HISTORICAL EVOLUTION OF ETHICAL AND LEGAL OPINIONS ON TRANSFUSION. CONSENT FOR BLOOD DONATION, LACKING CONSENT, MANDATORY BLOOD COLLECTION FROM DONOR

Comments on ethical aspects occurred altogether with first works on transfusion in the nineteenth century. The more important matter in the nineteenth century was admissibility of animal blood for transfusion to human being (animal blood has been transfused worldwide since the eighties in the nineteenth century). Karol Marcinkowski was first Pole who wrote about philosophical dilemmas related with transfusion [Marcinkowski 1836].

In the beginning of the twentieth century discussions on morality of sole treatment took place. There were questions on compliance of blood donor’s consent (giving own blood) with public order [Sawicki, p. 155].

Ethical and legal deliberations on blood donation were strictly related with political systems. In Nazis Germany in the thirties of the twentieth century “the Aryan paragraph” was used, according to „Volk Und Rase” principle. Blood segregation methods existed in the America with regard to race. Transfused blood was compliant in terms of group and race, both
In thirties of the twentieth century Anti-Semitic moods were present in every European country in major or minor extent. In Poland, before World War II, segregation of blood donors took place according to origin. Separate banks or lists did not exist. Many doctors, pioneers in Polish transfusion medicine were of Semitic origin.

In thirties in the USSR and in Italy existed massive organizations uniting blood donors. We can tell about the transformation of symbolic brotherhood of blood into social brotherhood. There were accidents of people forced to blood donations, according to evidences from European press. People were simultaneously curious, whether a doctor compulsorily collecting blood from human being without consent had acted according to law [Carnelutti, p. 89].

After World War II, at times of political changes in Poland, discussions started on the responsibility of people refusing donation of own blood. Human life was of superior value, according to doctors and general society’s morality at that times.

Different court judgements from that times are evidence of magnitude of problem and of differences in opinions - connection of the right of individual for self-determination and saving the life.

The case on ethical aspects in compulsory blood donation and sanctions after refusal took place in the fifties. The case was settled by Supreme Court in 1961. It pertained to child in life threatening condition. Mother could not be a donor because of different blood group, whereas father (who did not recognize own child) refused donation of own blood. During court session there were attempts for response to question, whether duty of saving somebody’s life had been more important than autonomy of individual, will and self-determination in such individual. The question on criminal sanctions forcing a human being or citizen to violation to the integrity of body, leading to forced blood donation, existed.

In such exemplary case the important circumstance was kinship and matter of responsibility and guardianship. Court of first instance convicted father for intentional offence of forborne aid to person in life threatening condition. The art. 247 of Criminal Code from that times was referred. Judgement was challenged. Supreme Court ruled in 1961 that “refusal of giving own blood for transfusion to other human being who is in the state of direct life threatening condition can be recognized as crime stipulated in art. 247 of Criminal Code” [Sawicki, p. 156-157].

Another case from the fifties was the case of blood collection from obstetrician for scientific and research purposes, without her consent. Court decision was different in this case. Court ruled that in the conditions of higher necessity doctor cannot collect blood from donor without consent, for human life saving purposes [Sawicki, s 156].

**4. CONCLUSION**

Blood and its properties has raised emotions since ages. It had symbolic religious meaning and biological importance was also sensed.

In the fifties of the twentieth century ethics was discussed and there were cases in court in the area that is currently taken for oddity, namely direct compulsion for collecting blood for life saving transfusion purposes or for scientific researches from an individual who does not give consent. Now, forced blood donation is recognized by us as breach to human being autonomy and will.
Perfecting transfusion methods, creating blood banks, elaborating acts regulating the matters of blood and tissue donation, act on patient’s rights, all of this contributed to the fact that compulsory blood donation concern ceased to exist. Altogether with the increased accessibility of blood, disputes and discussion on moral and legal aspects related with forced blood donation ceased, because the subject of dispute also ceased.

References


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